**WOOD BUFFALO ENVIRONMENTAL ASSOCIATION**
**MONTHLY AMBIENT AIR QUALITY MONITORING REPORT**
**August 2026**

## REPORT HISTORY

### Revision 01 – Resubmission of Fort Hills Monthly Report Section

During the review of the August 2026 monthly report, it was identified that a portion of the AMS 23 – Fort Hills section was incorrectly replaced with information from AMS 30 – Ells River. As a result, AMS 30 – Ells River information was duplicated within the report, while the corresponding AMS 23 – Fort Hills information was not displayed in the affected section. The issue was limited to this portion of the report, and all other reported information remained unaffected.

On October 5, 2026, the August 2026 monthly report was revised to restore the correct AMS 23 – Fort Hills information and remove the duplicated AMS 30 – Ells River content. The revised report was reviewed to confirm that the affected pages were corrected and that the remaining report content was not impacted.

Corrective actions have been implemented to strengthen the report review and verification process and help prevent similar report-generation issues in future submissions. No additional reporting issues were identified following the correction.

The revised August 2026 monthly report was resubmitted to ETS on October 6, 2026.

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Wood Buffalo Environmental Association

# AUGUST 2026

# MONTHLY REPORT

CONTINUOUS MONITORING

September 29, 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association

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Alberta Ambient Air Quality Guidelines and Objectives .....

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September 29, 2026

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**RE: Monthly Ambient Air Quality Monitoring Report August 2026**
**Wood Buffalo Environmental Association**

Enclosed is the August 2026 Ambient Air Quality Monitoring Report for the continuous ambient air quality monitoring stations of the Wood Buffalo Environmental Association (WBEA) regional air quality monitoring network. The WBEA works closely with Alberta Environment and Protected Areas (AB EPA) and funding for this work was provided by the Oil Sands Monitoring Program (OSM). It is independent of any position of the OSM Program.

The continuous ambient air quality monitoring network stations are:

| | |
|---|---|
| AMS 01 – Bertha Ganter – Fort McKay | AMS 21 – Conklin |
| AMS 03 – Lower Camp (Meteorology) | AMS 22 – Janvier |
| AMS 04 – Buffalo Viewpoint | AMS 23 – Fort Hills |
| AMS 05 – Mannix | AMS 25 – Waskōw ohci Pimâtisiwin |
| AMS 06 – Patricia McInnes | AMS 27 – Jackfish 2/3 |
| AMS 07 – Athabasca Valley | AMS 29 – Surmont 2 |
| AMS 08 – Fort Chipewyan | AMS 30 – Ells River |
| AMS 09 – Barge Landing | AMS 31 – Blackrod |
| AMS 11 – Lower Camp (Air Quality) | AMS 32 – Pihew Point |
| AMS 13 – Fort McKay South | AMS 33 – Monday Creek |
| AMS 14 – Anzac | AMS 34 – Hangingstone Expansion |
| AMS 17 - Wapasu | AMS 505 – Sawbones Bay |
| AMS 18 – Stony Mountain | AMS 506 – Jackfish 1 |
| AMS 19 – Firebag | AMS 508 – Kirby North |
| AMS 20 – MacKay River | AMS 513 – EBRT |

The WBEA submits this report on behalf of its members and for some members to satisfy the requirements contained in their EPEA Approvals (as amended):

| Industry Operators | EPEA Approval No. |
|---|---|
| Athabasca Oil Operations | 289664-01-00; 241311-01-00 |
| Canadian Natural | 153125-01-00;20809-02-00;149968-01-05; 224816-01-00; 237382-01-00; 308463-00-00 |
| Cenovus Energy Inc. | 48522-02-00; 206355-01-00 |
| Chemtrade Logistics | 404827-00-00 |
| CNOOC International | 137467-01-00, 236394-01-00 |
| Connacher Oil and Gas Ltd. | 240008-01-00 |
| ConocoPhillips Company | 48263-01-00 |
| Greenfire Resources Operating Corporation | 153105-01-00 |
| Hammerstone Infrastructure Materials Ltd. | 189942-01-00 |
| Harvest Operations Corp. | 246984-01-00 |
| Imperial Oil Limited | 46586-01-00 |
| Inter Pipeline Limited | 73203-02-00 |
| IPC Canada Ltd. | 301778-00-01 |
| Keyera Energy Ltd. | 187-03-03; 462683-00-00 |
| MEG Energy Corp. | 216466-01-00 |
| Parsons Creek Aggregates | 231302-00-00 |
| PetroChina Canada Ltd. | 254465-01-00 |
| Suncor Energy Inc. | 94-03-00; 80105-01-00; 151469-01-00; 48408-02-00 |
| Surmont Energy | 318401-00-00 |
| Syncrude Canada Ltd. | 26-03-00 |
| Titan Tire Reclamation Corporation | 364232-00-00 |

| Government and Non-Government Organizations | |
|---|---|
| Alberta Energy Regulator | Keyano College |
| Alberta Environment and Protected Areas | Parks Canada |
| Alberta Primary and Preventative Health Services | Regional Municipality of Wood Buffalo |
| Alberta Health Services | Lac La Biche County |
| Environment and Climate Change Canada | |

| Indigenous Communities | |
|---|---|
| Athabasca Chipewyan First Nation | Fort McKay Métis Nation |
| Chard Métis Nation | Fort McMurray 468 First Nation |
| Chipewyan Prairie Dene First Nation | Lakeland Métis Nation |
| Christina River Dene Nation Council | McMurray Métis |
| Conklin Métis | Mikisew Cree First Nation |
| Fort Chipewyan Métis Nation | Tthebatthie Denesųłiné Nation (TDN) |
| Fort McKay First Nation | Willow Lake Métis Nation |

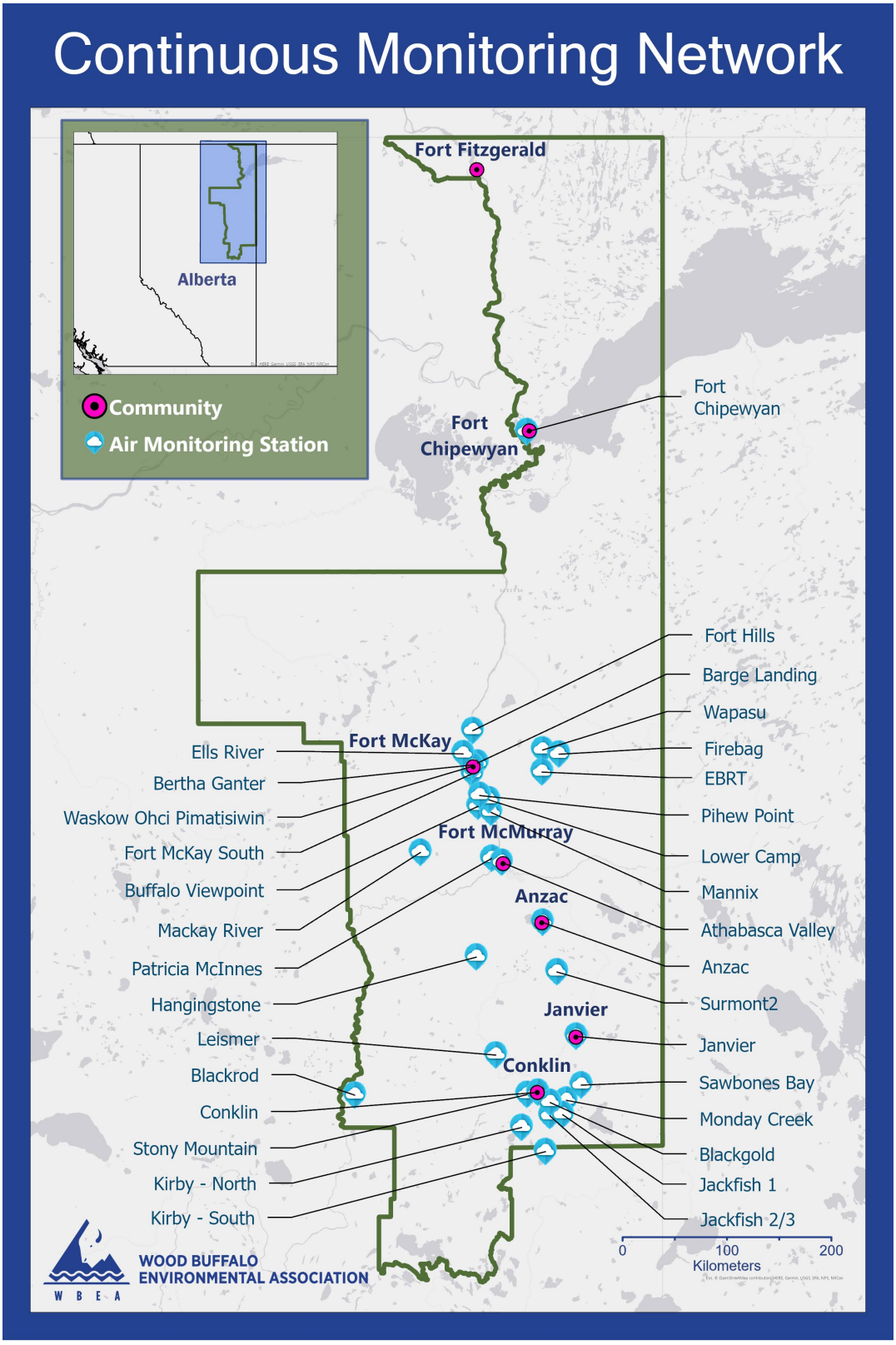



Figure 1. Map of WBEA Continuous Monitoring Network

The following operational notes are provided as per the Air Monitoring Directive requirements.

## 1.0 Concentrations in Excess of Alberta Ambient Air Quality Guidelines and Objectives

There were no ambient concentrations in excess of the Alberta Ambient Air Quality Objectives or Guidelines (AAAQO/AAAQG) as indicated in the Air Monitoring Directive Section RC 15-F for CO, $NH_3$, $NO_2$, $O_3$, and $SO_2$.

There were eighteen ambient ground-level concentrations in excess of the 1-hour H2S objective reported to AB EPA; following data validation and processing, the sixteen exceedances were confirmed.

There were four ambient ground-level concentrations in excess of the 24-hour H2S objective reported to AB EPA; following data validation and processing, the two exceedances were confirmed.

There were forty-one ambient ground-level concentrations in excess of the 30-minute TRS guideline reported to AEPA; following data validation and processing, thirty-six exceedances were confirmed.

There were thirty-one ambient ground-level concentrations in excess of the 1-hour $PM_{2.5}$ guideline reported to AB EPA; following data validation and processing, the exceedances were confirmed.

There were eleven ambient ground-level concentrations in excess of the 24-hour $PM_{2.5}$ objective reported to AB EPA; following data validation and processing, the exceedances were confirmed.

A detailed summary of ambient concentrations in excess of the Alberta Ambient Air Quality Objectives (AAAQOs) and Ambient Air Quality Guidelines (AAAQGs), including site, parameter, date & time, reference number, exceedance period, reported and final concentration and status, are included in Appendix I of the report.

## 2.0 Data Processing and Validation

Concentrations reported in near real-time are raw values. The final values are determined after processing data for reporting. For all parameters, except $PM_{2.5}$, the final 5-minute data values are determined by subtracting the daily zero responses, interpolated to the time of each raw 5-minute value, from the raw 5-minute data values. The $PM_{2.5}$ analyzers do not have the capability of performing zeros, therefore, the raw 5-minute values are validated through a comparison with associated parameters at the same, or a nearby, AMS. The final 5-minute data values are then rounded to one decimal place greater than the reporting precision indicated in the Air Monitoring Directive (AMD). The final 1-hour data values are calculated from final 5-minute data values and then rounded to reporting precision. The final 24-hour data values are calculated from the final 1-hour values.

After data processing and validation, $NO_2$ concentrations are re-calculated from baseline-corrected $NO_X$ and NO concentrations. Specifically, the NO concentration is subtracted from the $NO_X$ concentration to determine the $NO_2$ concentration.

## 2.1 Revisions to ETS Electronic Transfer System – Data and Monthly Reports

There were no revisions to historical data stored in the Electronic Transfer System with this monthly report.

## 3.0 Operational Status

### 3.1 Continuous Monitoring

In August 2026, there were 3 instances of monitoring instruments operating less than 90% of the time and 1 instance of AMD non-compliance.

<table>
<tr><th>Station</th><th>Parameter</th><th>Details</th></tr>
<tr><td>AMS 8</td><td>TRS</td><td>The TRS analyzer at the Fort Chipewyan AMS operated for less than 90% of the time in August and September 2026, which is a contravention of the Air Monitoring Directive (AMD) (2016, as amended), Chapter 6, Clause DQ 4-C. This incident was verbally reported to Alberta Environment and Protected Areas (AB EPA) on September 11, 2026 (reference number 458748).<br><br>On August 24, the TRS analyzer failed to meet the AMD span criteria. On August 25, a technician attended the site to investigate the issue and determined that the TRS converter had failed. On September 4, the TRS converter was replaced, and a multipoint calibration was completed to verify proper analyzer operations. The analyzer returned to normal operation on September 4, 2026, at 11:00 MST. Data was invalidated back to the last acceptable analyzer span on August 23. A total of 213 hours of TRS data were invalidated for August resulting in 71% operational time for the month of August, and an additional 81 hours were invalidated for September. The final operational uptime for September 2026 will be confirmed upon completion of the monthly data validation process.</td></tr>
<tr><td>AMS 30</td><td>$PM_{2.5}$</td><td>The PM2.5 analyzer at Ells River air monitoring station (AMS) operated for less than 90% of August 2026, which is a contravention of the Air Monitoring Directive (2016, as amended), Chapter 6, Clause DQ 4-C. This incident was verbally reported to Alberta Environment and Protected Areas (AB EPA) on September 18, 2026 (reference number 459027).<br><br>During August, the PM2.5 analyzer experienced intermittent communication failures with the station data logger, resulting in periods where valid PM2.5 data were not recorded. The analyzer was reset each time communication was lost to restore normal operation. To address the issue, WBEA installed a remote switch that allows the analyzer to be reset remotely, helping to restore operation in a timely manner when communication failures occur. In addition, a six-hour station power outage occurred on August 25, resulting in further data loss. Following data validation, these events resulted in 90 invalid hours and an operational time of 88% for August 2026. WBEA continues to investigate the intermittent communication issue and is evaluating further changes to the communications configuration to mitigate the potential for recurrence.</td></tr>
<tr><td>AMS 3</td><td>AT/RH, WS/WD/VWS</td><td>The RH, AT, WS/WD/VWS at the 20-, 45-, 100-, and 163-meter elevations at Lower Camp Met Tower operated less than 90% of August 2026, which is a contravention of the Air Monitoring Directive (AMD) (2016, as amended), Chapter 6, Clause DQ 4-C. This incident was verbally reported to Alberta Environment and Protected Areas (AB EPA) on September 18, 2026 (reference number 459026).<br><br>In August 2026, the Lower Camp Met Tower continued to experience operational issues resulting from the power surge in July, which damaged the overhead power lines and components of the data acquisition system (DAS). As a temporary measure, power was supplied to the tower by a generator; however, intermittent generator outages due to fueling and overvoltage issues, along with ongoing DAS failures, continued to affect the operation of the meteorological sensors throughout August. In addition, flatlining of the wind speed, wind direction, and vertical wind speed sensors at the 100- and 163-meter elevations persisted throughout the month.<br><br>Following data validation, the operational time for each meteorological sensor in August 2026 was as follows:
<table>
<tr><th>Sensor</th><th>20 m</th><th>45 m</th><th>100 m</th><th>163 m</th></tr>
<tr><td>Ambient Temperature</td><td>64.38%</td><td>64.38%</td><td>64.38%</td><td>64.38%</td></tr>
<tr><td>Relative Humidity</td><td>64.38%</td><td>64.38%</td><td>64.38%</td><td>64.38%</td></tr>
<tr><td>Wind Speed</td><td>64.38%</td><td>64.38%</td><td>0%</td><td>0%</td></tr>
<tr><td>Wind Direction</td><td>64.38%</td><td>64.38%</td><td>0%</td><td>0%</td></tr>
<tr><td>Vertical Wind Speed</td><td>64.38%</td><td>64.38%</td><td>0%</td><td>0%</td></tr>
</table>
WBEA is continuing to address the issues affecting the Lower Camp Met Tower. On September 17, 2026, WBEA staff installed replacement SDM serial converters for the 100- and 163-meter wind</td></tr>
</table>

| | | |
|---|---|---|
| | | sensors, which had been damaged during the power surge, and replaced the site modem. WBEA is coordinating with a third-party contractor to schedule replacement of the 100- and 163-meter wind sensors. |
| AMS 6 | TRS | The routine monthly multi-point calibration was not conducted on the TRS analyzer at Patricia McInnes for the month of August 2026, which is a contravention of Chapter 7, Clause Cal 2-G of the Air Monitoring Directive (AMD) (2016, as amended). This letter is a follow-up to the verbal report to Alberta Environment and Protected Areas (AB EPA) on September 10, 2026 (reference number 458654).<br><br>On September 9, 2026, during a compilation of network calibration summaries, it was identified that the monthly TRS calibration had not been completed in August 2026, with the last multi-point calibration having been conducted on July 27. The WBEA Technician responded promptly and conducted a monthly multi-point calibration the same day. Data validation for the period of July 1 to September 9, 2026, indicates that the monthly calibrations conducted on June 4, July 27 and September 9, each met the AMD guidelines specified in Chapter 7. All daily quality assurance checks during the time period from July 27 to September 9 were within AMD criteria, with daily zero and span median values of –0.06 ppb and 79 ppb, respectively (targets 0 ppb and 80 ppb, respectively).<br><br>In addition, during this period, there was one ground-level concentration exceedance of the maximum 30-min Alberta Ambient Air Quality Guideline (5 ppb) reported in the WBEA network. The highest 30-min concentration reported at Patricia McInnes during this period was 5.6 ppb. The TRS concentration measurement at the Athabasca Valley AMS, six kilometers southeast of Patricia McInnes station, recorded concentration of 6.1 ppb for the corresponding 30-minute interval on that day. The WBEA is currently investigating the root cause of the incident and, pending investigation outcomes, will update procedures and training to staff, as required, to prevent similar incidents from occurring in the future. |

## 3.2 Intermittent Monitoring

The results for time-integrated sampling of dustfall, precipitation, PAH, TSP, VOC, $PM_{2.5}$ ECOC, $PM_{2.5,}$ and $PM_{10}$ will be submitted in the 2026 Annual Report.

## 3.3 General Network Notes

The Ammonia ($NH_3$) analyzer currently operates on a 0 to 2500 ppb operating range with a detection level of 5 ppb in the WBEA network. In data processing, values less than five ppb have been considered below detection levels and are reported as zero.

Total hydrocarbon (THC), non-methane hydrocarbon (NMHC), and methane ($CH_4$) measurements are collected at some air monitoring stations in the WBEA network using the Thermo Environmental model 55i direct THC/$CH_4$/NMHC analyzer. This analyzer uses a Gas Chromatography (GC) based system, which resets the baseline value at the start of every run. This may cause the ambient background to indicate a response below the expected 1.8 ppm background level. When all measurable criteria indicate valid data during the QAQC and validation process, the data is reported without any additional flags. However, a response below the expected 1.8 ppm triggers an investigation of the analyzer to determine if there is an issue.

Monitoring notes, including changes to monitoring locations, methods, or equipment, and any reporting or monitoring irregularities, for the continuous monitoring stations, are provided on a station-by-station basis. Notes of each interrupted event are provided in chronological order, and meteorological parameters are mentioned last.

In December 2024, the Wood Buffalo Environmental Association began reporting the new Alberta Ambient Air Quality Guideline for Total Reduced Sulfur (TRS) which is a 30-minute average limit of 5 ppb to be used for odour management.

The WBEA is reporting $PM_{2.5}$ exceedances of the Alberta Ambient Air Quality Guideline and Objective (AAAQG&O) as per the Alberta Environment and Protected Areas Temporary Airshed Wildfire Bulk Reporting Protocol, effective from April 1 to October 31. This protocol requires only monthly notification of exceedances of the 24-hour AAAQO, removing the requirement for immediate notification and 7-day follow-up reports during this period. Fort Hills and Ells River air monitoring stations are included in this protocol for wildfire-related exceedances; however, for exceedances not attributed to wildfire smoke, these stations will continue to follow their site-specific reporting protocols as directed by the Alberta Energy Regulator.

### *Station 1, Bertha Ganter – Fort McKay*

The $NH_3$ analyzer required additional time to stabilize to levels below ambient concentrations following the automated daily spans and routine monthly multipoint calibrations. Additional time is required for stabilization after exposure to high concentrations of $NH_3$ gas, and this is an inherent behavior in the $NH_3$ analyzer operations due to the properties of the $NH_3$ gas. Data for 1-2 hours following the daily spans have been reported as invalid for a total of 52 hours this month.

Failure to record data of the $PM_{2.5}$ analyzer on August 5 resulted in 1 hour of invalid data.

Maintenance to clean the sample manifold on August 11 interrupted the normal operation of the $H_2S$, $SO_2$, TRS, THC, $O_3$, and $NH_3$ analyzers, resulting in 1 hour of downtime.

Maintenance to verify the daily QA response of the TRS analyzer on August 18 resulted in 1 hour of downtime.

Station power failure on August 25 interrupted the normal operation of the $H_2S$, SO2, TRS, THC, $O_3$, $NO_2$, $PM_{2.5}$ analyzers and precipitation collector for 6 hours, and the $NH_3$ analyzer for 5 hours.

Analyzer failure of the TRS analyzer due to a failed converter from August 25 to 27 resulted in 35 hours of invalid data. Subsequent maintenance to replace the converter on August 27 resulted in an additional 6 hours of downtime.

Analyzer failure of the TRS analyzer due to a failed converter from August 27 to 28 resulted in 18 hours of invalid data. Subsequent maintenance to replace the converter and pump on August 28 resulted in an additional 6 hours of downtime.

Maintenance associated with calibration of the $NH_3$ analyzer from August 25 to 26 resulted in 13 hours of downtime.

The surface leaf wetness sensor operated out of range on August 4 resulting in 1 hour of invalid data.

Flatlines in the output signal of the wind speed and wind direction sensors on August 10, 18, 22, and 30 resulted in 4 hours of downtime.

### *Station 3, Lower Camp – Meteorology*

Station power failure from August 7 to August 11 interrupted the normal operation of all meteorological sensors at all elevations for 94 hours.

Failure to record data from August 12 interrupted the normal operation of all meteorological sensors at all elevations for 2 hours.

Failure to record data from August 21 to August 24 interrupted the normal operation of all meteorological sensors at all elevations for 69 hours.

Station power failure from August 27 to September 1 interrupted the normal operation of all meteorological sensors at all elevations for 99 to 100 hours.

Flatlines in the output signal of the vertical wind speed, wind speed, and wind direction sensors at 100- and 163-meter elevations throughout the month resulted in 479 to 480 hours of downtime.

### *Station 4, Buffalo Viewpoint*

Station power failure on August 1 to 2 interrupted the normal operation of all air quality analyzers for 12 hours.

Maintenance to reinitiate the daily QA checks of all gaseous analyzers on August 2 resulted in 1 hour of downtime for each analyzer.

Failure of the DAS on August 8 interrupted the normal operation of the PM2.5 analyzer for 1 hour.

Station power failure on August 1 interrupted the normal operation of all meteorological sensors for 1 hour.

### *Station 5, Mannix*

Maintenance to clean the sample manifold of the $SO_2$ and THC/NMHC/$CH_4$ analyzers on August 21 resulted in 1 hour of downtime.

Flatline in the output signal of the vertical wind speed, wind speed, wind direction sensors at 90-meter elevation on August 2 resulted in 1 hour of invalid data.

### *Station 6, Patricia McInnes*

The $NH_3$ analyzer required additional time to stabilize to levels below ambient concentrations following the automated daily spans and routine monthly multipoint calibrations. $NH_3$ analyzers require additional time for stabilization after being exposed to high concentrations, this is due to the physical properties of the $NH_3$ gas. Data for 2-3 hours following each daily span has been reported as invalid for a total of 77 hours this month.

Maintenance to replace the actuator of the THC/NMHC/$CH_4$ analyzer on August 17 resulted in 6 hours of downtime.

Cleaning of the manifold on August 27 interrupted the normal operation of the $NH_3$, $O_3$, $SO_2$, THC/NMHC/$CH_4$, and TRS analyzers for 1 hour.

The relative humidity sensor operated out of range throughout the month resulted in 9 hours of invalid data.

### *Station 7, Athabasca Valley*

Stabilization period after a routine calibration on the CO analyzer on August 6 resulted in 2 hours of downtime.

An internal audit on August 20 and 21 interrupted the normal operations of all air quality analyzers for 1 to 4 hours.

Failure to record data of PM2.5 instrument on August 19 and 20 resulted in 17 hours of invalid data.

### *Station 8, Fort Chipewyan*

Maintenance to verify the daily QA check response of TRS analyzer on August 2 resulted in 2 hours of downtime.

Unstable operation due to converter failure of the TRS analyzer from August 23 to September 1 resulted in 213 hours of invalid data.

Unstable operation due to inconsistent response of the NO/$NO_2$/$NO_x$ analyzer on August 23 resulted in 9 hours of invalid data.

A flatline in the output signal of the wind sensor on August 13 resulted in 1 hour of invalid data.

Failure to record data of precipitation collector on August 13 resulted in 4 hours of invalid data.

Automated daily zero-response checks of the $O_3$ analyzer did not meet WBEA's QC acceptance criteria for the month of August. Therefore, the calibrator zeros of July and August multi-point calibrations were used to validate the analyzer baseline response.

Note: Ambient conditions such as high humidity, dry air, or wildfire smoke affected the span check performance of the TRS analyzer, resulting in non-compliance with AMD daily QA/QC criteria on August 1 and 19.

### *Station 9, Barge Landing*

Maintenance to verify the daily QA check response of the TRS analyzer on August 2 resulted in 2 hours of downtime.

Maintenance to clean the sample manifold on August 13 interrupted the normal operation of the $SO_2$, THC/NMHC/$CH_4$ and TRS analyzers for 1 hour.

Unstable operation due to a flatline in the output signal of the $PM_{2.5}$ analyzer on August 17 resulted in 1 hour of invalid data.

Maintenance to clean the sample manifold on August 25 interrupted the normal operation of the $NO/NO_2/NO_x$ and TRS analyzers for 1 hour.

Station power failure on August 25 interrupted the normal operations of all air quality analyzers for 7 hours.

Flatline in the output signal of the wind speed and wind direction sensors on August 30 resulted in 1 hour of downtime.

Note: Ambient conditions such as extreme cold and dry weather affected the span checks performance of the TRS analyzer, resulting in non-compliance with AMD daily QA/QC criteria on August 1-2 and 24.

### *Station 11, Lower Camp*

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 18 hours of invalid data.

### *Station 13, Fort McKay South*

Cleaning of the manifold on August 6 interrupted the normal operation of all analyzers for 2 hours.

Station power failure on August 25 interrupted the normal operation of all analyzers for 6 hours except the $THC/NMHC/CH_4$ analyzer which was interrupted for 7 hours.

Intermittent flatlines in the output signal of the wind sensor on August 25 resulted in 1 hour of invalid data.

### *Station 14, Anzac*

Unstable operation due to the daily span falling outside AMD criteria on August 24 and inconsistent response of the TRS analyzer from August 23 to 25 resulted in 49 hours of invalid data.

Cleaning of the manifold on August 25 interrupted the normal operation of the $O_3$, $SO_2$, $THC/NMHC/CH_4$ TRS analyzers for 1 hour.

### *Station 17, Wapasu*

Cleaning of the manifold on August 7 interrupted the normal operation of the $H_2S$, $NO/NO_2/NO_x$, $SO_2$, and $THC/NMHC/CH_4$ analyzers for 2 hours.

Unstable operation due to flatlining of the $PM_{2.5}$ analyzer on August 21 resulted in 1 hour of invalid data.

Maintenance to replace the relative humidity and ambient temperature sensors on August 20 resulted in 1 hour of downtime.

Unstable operation due to flatlining of the relative humidity and ambient temperature sensors on August 20 and 21 resulted in 21 hours of invalid data.

The relative humidity sensor operated out of range throughout the month resulting in 11 hours of invalid data.

Note: Ambient conditions such as high humidity, dry air, or wildfire smoke affected the span check performance of the $H_2S$ analyzer, resulting in non-compliance with AMD daily QA/QC criteria on August 24.

### *Station 18, Stony Mountain*

Flatlining in the output signal of the $SO_2$ analyzer on August 13 resulted in 1 hour of invalid data.

Unstable operation of $NO/NO_2/NO_X$ analyzer due to the daily span falling outside AMD criteria on August 20 resulted in 33 hours of invalid data.

Unstable operation due to intermittent flatlining of the $PM_{2.5}$ analyzer throughout the month resulted in 35 hours of invalid data.

Failure to record data of the $PM_{2.5}$ analyzer throughout the month resulted in 34 hours of invalid data.

Note: Ambient conditions such as high humidity, dry air, or wildfire smoke affected the span check performance of the TRS analyzer, resulting in non-compliance with AMD daily QA/QC criteria on August 2, 24 and 31.

### *Station 19, Firebag*

No operational issues to report.

### *Station 20, MacKay River*

Unstable operation due to excessive baseline drift of the THC analyzer on August 19 and 20 resulted in 31 hours of invalid data.

Maintenance to replace the wind speed sensor on August 11 resulted in 2 hours of downtime.

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 63 hours of invalid data.

### *Station 21, Conklin*

A flatline in the output signal of the wind sensor on August 20 and 27 resulted in 4 hours of invalid data.

The relative humidity sensor operated out of range throughout the month resulted in 37 hours of invalid data.

### *Station 22, Janvier*

Maintenance to verify the daily QA check response of the TRS analyzer on August 2, 28, and 30 resulted in 4 hours of downtime.

Failure to record data of the $PM_{2.5}$ throughout the month resulted in 53 hours of invalid data.

Note: Ambient conditions such as high humidity, dry air, or wildfire smoke affected the span check performance of the TRS analyzer, resulting in non-compliance with AMD daily QA/QC criteria on several days for the month of August.

### *Station 23, Fort Hills*

Cleaning of the manifold on August 10 interrupted the normal operation of the $H_2S$, $NO/NO_2/NO_X$ and TRS analyzers for 1 hour.

Flatlines in the output signal of the wind sensor on August 6-7and 17-18 resulted in 19 hours of invalid data.

### *Station 25, Waskōw ohci Pimâtisiwin*

Station power failure on August 25 interrupted the normal operation of $H_2S$ and $SO_2$ analyzers for 6 hours.

Cleaning of the manifold on August 28 interrupted the normal operation of $SO_2$ analyzer for 1 hour.

### *Station 27, Jackfish 2/3*

A flatline in the output signal of the wind sensor on August 13 resulted in 1 hour of invalid data.

### *Station 29, Surmont 2*

Maintenance to replace the reaction cell and o-rings of the $NO/NO_2/NO_x$ on August 12 and 13 resulted in 19 hours of downtime.

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 60 hours of invalid data.

### *Station 30, Ells River*

Cleaning of the manifold on August 12 interrupted the normal operation of all gaseous analyzers for 1 hour.

Maintenance to verify the daily QA check response of the TRS analyzer on August 24 resulted in 1 hour of downtime.

Station power failure on August 25 interrupted the normal operation of all air quality analyzers for 6 hours.

Maintenance to replace part of the sample manifold on August 27 interrupted the normal operation of all gaseous analyzers for 1 hour.

Unstable operation due to intermittent flatlining of the PM2.5 analyzer throughout the month resulted in 84 hours of invalid data.

Intermittent flatlines in the output signal of the wind speed and wind direction sensors from August 1 to 25 resulted in 8 hours of invalid data.

Note: Ambient conditions such as extreme cold and dry weather affected the span check performance of the TRS analyzer, resulting in non-compliance with AMD daily QA/QC criteria on August 2, 23 and 24.

### *Station 31, Blackrod*

Failure to record data of $H_2S$, $SO_2$ and THC analyzers on August 24 resulted in 1 hour of invalid data.

Failure to record data of the relative humidity and ambient temperature sensors on August 24 resulted in 1 hour of invalid data.

Maintenance to replace the relative humidity and ambient temperature sensors on August 24 resulted in 1 hour of downtime.

Note: Ambient conditions such as high humidity, dry air, or wildfire smoke affected the span check performance of the $H_2S$ analyzer, resulting in non-compliance with AMD daily QA/QC criteria on August 23.

### *Station 32, Pihew Point*

Unstable operations due to excessive baseline drift of the THC/NMHC/$CH_4$ analyzer on August 3 resulted in 11 hours of invalid data.

Maintenance to replace the support gas cylinder of the THC/NMHC/$CH_4$ analyzer on August 24 resulted in 3 hours of downtime.

Flatline in the output signal of the wind sensor on August 31 resulted in 3 hours of invalid data.

### *Station 33, Monday Creek*

Maintenance to verify the daily QA check response of the $SO_2$ analyzer on August 22 resulted in 1 hour of downtime.

Cleaning of the manifold on August 26 interrupted the normal operation of the $H_2S$ and NO/$NO_2$/$NO_X$ analyzers for 1 hours.

Flatline in the output signal of the wind sensor throughout the month resulted in 6 hours of invalid data.

Note: The daily span check for all gaseous analyzers was outside the 10% AMD criteria on August 22-24 due to an issue in the station zero air generator.

### *Station 34, Hangingstone Expansion*

No operational issues to report.

Note: The daily span check for all gaseous analyzers was outside the 10% AMD criteria on August 14 due to issue in the station calibrator.

### *Station 505, Sawbones Bay*

A flatline in the output signal of the wind sensor on August 14 resulted in 2 hours of invalid data.

### *Station 506, Jackfish 1*

Maintenance to verify the daily QA check response of the $NO/NO_2/NO_X$ analyzer on August 19 resulted in 1 hour of downtime.

Cleaning of the manifold on August 26 interrupted the normal operation of the $NO/NO_2/NO_X$ and $SO_2$ analyzers for 2 hours.

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 10 hours of invalid data.

The relative humidity sensor operated out of range throughout the month resulting in 26 hours of invalid data.

Note: The daily span check of $H_2S$ and $NO/NO_2/NO_X$ analyzer was outside the 10% AMD criteria on August 1 due to issue in the station calibrator.

Note: The daily span check of $NO/NO_2/NO_X$ and $SO_2$ analyzer was outside the 10% AMD criteria on August 6 due to issue in the station calibrator.

### *Station 508, Kirby North*

A flatline in the output signal of the wind sensor on August 11 resulted in 1 hour of invalid data.

### *Station 513, EBRT*

Note: The EBRT portable station commenced monitoring on August 11, 2026. Install calibrations were completed on August 11 & 12 and files are included with routine monthly calibration files, in the monthly calibration report for August 2026.

A flatline in the output signal of the wind sensor on August 14 resulted in 1 hour of invalid data.

If additional information is required, please contact the Wood Buffalo Environmental Association at (780) 799-4420.

Yours sincerely,

## Wood Buffalo Environmental Association

The representative of the Person Responsible for this monitoring program is Dianne McIsaac, Operations Manager, WBEA.
Level one (L1) data review was completed by the Field Technicians responsible for each respective air monitoring station. Level two (L2) data validation, report preparation, and submission were completed by Asad Hidayat, Denny Estador, Karina Fenwick, Parampreet Kaur and Shawn Jansen Van Beek of WBEA. The WBEA has retained the services of Air Resource Specialists (ARS) to conduct Level three (L3) review on its behalf. Contact information for WBEA staff is included below.


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I certify that I have reviewed and verified this report, and that the information is complete, accurate and representative of the monitoring results, reporting timeframe, and the specified analysis, summarization, and reporting requirements.




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R01_2608

August 2026

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| APPROVAL NUMBERS | REPORT DATE MONTH | YEAR |
|---|---|---|
| 289664-00-00<br>241311-00-00<br>20809-02-00<br>149968-01-00<br>237382-00-00<br>48522-01-00<br>240008-00-00 | 8 | 2026 |

CONTINUOUS AMBIENT MONITORING

| PARAMETER | STN. NO. | % TIME OPERATIONAL | 30-MIN AVERAGE | | ONE-HOUR AVERAGE | | 24-HOUR AVERAGE | |
|---|---|---|---|---|---|---|---|---|
| | | | MAXIMUM CONCENTRATION | NO. READINGS > REGULATION | MAXIMUM CONCENTRATION | NO. READINGS > REGULATION | MAXIMUM CONCENTRATION | NO. READINGS > REGULATION |
| SO2(ppb) | 1 | 99 | - | - | 39 | 0 | 4.9 | 0 |
| SO2(ppb) | 4 | 98 | - | - | 47.2 | 0 | 6.0 | 0 |
| SO2(ppb) | 5 | 100 | - | - | 32.6 | 0 | 4.3 | 0 |
| SO2(ppb) | 6 | 100 | - | - | 14.6 | 0 | 2.9 | 0 |
| SO2(ppb) | 7 | 100 | - | - | 10.9 | 0 | 1.6 | 0 |
| SO2(ppb) | 8 | 100 | - | - | 2.5 | 0 | 0.6 | 0 |
| SO2(ppb) | 9 | 99 | - | - | 26.2 | 0 | 2.9 | 0 |
| SO2(ppb) | 11 | 100 | - | - | 28.2 | 0 | 4.1 | 0 |
| SO2(ppb) | 13 | 99 | - | - | 51.7 | 0 | 5.8 | 0 |
| SO2(ppb) | 14 | 100 | - | - | 6.4 | 0 | 0.9 | 0 |
| SO2(ppb) | 17 | 100 | - | - | 6.3 | 0 | 1.9 | 0 |
| SO2(ppb) | 18 | 100 | - | - | 2.6 | 0 | 0.5 | 0 |
| SO2(ppb) | 19 | 100 | - | - | 8.3 | 0 | 1.4 | 0 |
| SO2(ppb) | 20 | 100 | - | - | 19.6 | 0 | 3.0 | 0 |
| SO2(ppb) | 21 | 100 | - | - | 2.4 | 0 | 0.8 | 0 |
| SO2(ppb) | 22 | 100 | - | - | 2.8 | 0 | 0.4 | 0 |
| SO2(ppb) | 23 | 100 | - | - | 10.5 | 0 | 2.4 | 0 |
| SO2(ppb) | 25 | 99 | - | - | 34.0 | 0 | 4.4 | 0 |
| SO2(ppb) | 27 | 100 | - | - | 12.4 | 0 | 4.3 | 0 |
| SO2(ppb) | 29 | 100 | - | - | 11.3 | 0 | 0.8 | 0 |
| SO2(ppb) | 30 | 99 | - | - | 13.9 | 0 | 2.4 | 0 |
| SO2(ppb) | 31 | 100 | - | - | 2.4 | 0 | 0.6 | 0 |
| SO2(ppb) | 32 | 100 | - | - | 33.3 | 0 | 5.6 | 0 |
| SO2(ppb) | 33 | 100 | - | - | 9.0 | 0 | 1.5 | 0 |
| SO2(ppb) | 34 | 100 | - | - | 11.8 | 0 | 3.0 | 0 |
| SO2(ppb) | 505 | 100 | - | - | 32.4 | 0 | 7.1 | 0 |
| SO2(ppb) | 506 | 100 | - | - | 8.7 | 0 | 2.3 | 0 |
| SO2(ppb) | 508 | 100 | - | - | 8.4 | 0 | 1.5 | 0 |
| SO2(ppb) | 513 | 100 | - | - | 18.1 | 0 | 1.7 | 0 |
| H2S(ppb) | 1 | 99 | - | - | 12.1 | 1 | 1.8 | 0 |
| H2S(ppb) | 4 | 98 | - | - | 4.8 | 0 | 1.0 | 0 |
| H2S(ppb) | 5 | 100 | - | - | 32.2 | 1 | 2.2 | 0 |
| H2S(ppb) | 11 | 100 | - | - | 14.0 | 1 | 2.9 | 0 |
| H2S(ppb) | 17 | 100 | - | - | 1.7 | 0 | 0.5 | 0 |
| H2S(ppb) | 19 | 100 | - | - | 2.5 | 0 | 0.6 | 0 |
| H2S(ppb) | 20 | 100 | - | - | 0.7 | 0 | 0.3 | 0 |
| H2S(ppb) | 23 | 100 | - | - | 5.8 | 0 | 1.1 | 0 |
| H2S(ppb) | 25 | 99 | - | - | 8.5 | 0 | 1.8 | 0 |
| H2S(ppb) | 27 | 100 | - | - | 2.3 | 0 | 0.3 | 0 |
| H2S(ppb) | 29 | 100 | - | - | 0.9 | 0 | 0.3 | 0 |
| H2S(ppb) | 31 | 100 | - | - | 0.7 | 0 | 0.2 | 0 |
| H2S(ppb) | 32 | 100 | - | - | 27.1 | 13 | 3.3 | 2 |
| H2S(ppb) | 33 | 100 | - | - | 1.7 | 0 | 0.3 | 0 |
| H2S(ppb) | 34 | 100 | - | - | 1.1 | 0 | 0.3 | 0 |
| H2S(ppb) | 505 | 100 | - | - | 2.7 | 0 | 0.8 | 0 |
| H2S(ppb) | 506 | 100 | - | - | 9.5 | 0 | 1.3 | 0 |
| H2S(ppb) | 508 | 100 | - | - | 1.0 | 0 | 0.2 | 0 |
| H2S(ppb) | 513 | 100 | - | - | 1.2 | 0 | 0.4 | 0 |
| TRS(ppb) | 1 | 90 | 9.9 | 3 | 7.3 | - | 1.1 | - |
| TRS(ppb) | 6 | 100 | 2.5 | 0 | 2.1 | - | 0.7 | - |
| TRS(ppb) | 7 | 100 | 2.9 | 0 | 2.3 | - | 1 | - |
| TRS(ppb) | 8 | 71 | 0.8 | 0 | 0.8 | - | 0.3 | - |
| TRS(ppb) | 9 | 99 | 6.7 | 2 | 5.1 | - | 1.3 | - |
| TRS(ppb) | 13 | 99 | 10.7 | 13 | 7.9 | - | 2.6 | - |
| TRS(ppb) | 14 | 93 | 1.8 | 0 | 1.4 | - | 0.7 | - |
| TRS(ppb) | 18 | 100 | 0.4 | 0 | 0.3 | - | 0.3 | - |
| TRS(ppb) | 21 | 100 | 0.8 | 0 | 0.6 | - | 0.3 | - |
| TRS(ppb) | 22 | 99 | 0.5 | 0 | 0.3 | - | 0.2 | - |
| TRS(ppb) | 23 | 100 | 7.6 | 2 | 6.2 | - | 1.4 | - |
| TRS(ppb) | 30 | 99 | 12.2 | 16 | 12.1 | - | 1.6 | - |
| THC(ppm) | 1 | 99 | - | - | 3.0 | - | 2.6 | - |
| THC(ppm) | 4 | 98 | - | - | 3.2 | - | 2.5 | - |

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| APPROVAL NUMBERS | REPORT DATE MONTH | YEAR |
|---|---|---|
| 289664-00-00<br>241311-00-00<br>20809-02-00<br>149968-01-00<br>237382-00-00<br>48522-01-00 | 8 | 2026 |

CONTINUOUS AMBIENT MONITORING

| | | | | 30-MIN AVERAGE | | ONE-HOUR AVERAGE | | 24-HOUR AVERAGE | |
|---|---|---|---|---|---|---|---|---|---|
| | PARAMETER | STN. NO. | % TIME OPERATIONAL | MAXIMUM CONCENTRATION | NO. READINGS > REGULATION | MAXIMUM CONCENTRATION | NO. READINGS > REGULATION | MAXIMUM CONCENTRATION | NO. READINGS > REGULATION |
| 240008-00-00 | THC(ppm) | 5 | 100 | - | - | 3.2 | - | 2.4 | - |
| 48263-01-00 | THC(ppm) | 6 | 99 | - | - | 4.0 | - | 2.6 | - |
| 224816-00-00 | THC(ppm) | 7 | 100 | - | - | 2.6 | - | 2.3 | - |
| 151469-01-00 | THC(ppm) | 9 | 99 | - | - | 3.2 | - | 2.4 | - |
| 189942-00-00 | THC(ppm) | 11 | 100 | - | - | 3.4 | - | 2.5 | - |
| 206355-00-00 | THC(ppm) | 13 | 99 | - | - | 4.2 | - | 2.6 | - |
| 46586-00-00 | THC(ppm) | 14 | 100 | - | - | 2.4 | - | 2.2 | - |
| 73203-02-00 | THC(ppm) | 17 | 100 | - | - | 2.9 | - | 2.5 | - |
| 216466-01-00 | THC(ppm) | 18 | 100 | - | - | 2.5 | - | 2.3 | - |
| 137467-01-00 | THC(ppm) | 19 | 100 | - | - | 3.2 | - | 2.4 | - |
| 236394-00-00 | THC(ppm) | 20 | 96 | - | - | 3.5 | - | 2.5 | - |
| 254465-00-00 | THC(ppm) | 21 | 100 | - | - | 5.2 | - | 2.8 | - |
| 094-03-00 | THC(ppm) | 22 | 100 | - | - | 2.9 | - | 2.2 | - |
| 80105-01-00 | THC(ppm) | 23 | 100 | - | - | 5.1 | - | 2.9 | - |
| 305529-00-00 | THC(ppm) | 29 | 100 | - | - | 2.6 | - | 2.4 | - |
| 318401-00-00 | THC(ppm) | 30 | 99 | - | - | 3.7 | - | 2.4 | - |
| 026-03-00 | THC(ppm) | 31 | 100 | - | - | 13.1 | - | 4.2 | - |
| 364232-00-00 | THC(ppm) | 32 | 98 | - | - | 5.5 | - | 2.7 | - |
| 228044-00-00 | THC(ppm) | 508 | 100 | - | - | 2.9 | - | 2.4 | - |
| 247548-00-00 | O3(ppb) | 1 | 99 | - | - | 46.4 | 0 | 26.1 | - |
| 231302-00-00 | O3(ppb) | 4 | 98 | - | - | 49.6 | 0 | 26.4 | - |
| 246984-01-00 | O3(ppb) | 6 | 100 | - | - | 62.7 | 0 | 27.1 | - |
| 153125-01-00 | O3(ppb) | 7 | 100 | - | - | 60.0 | 0 | 25.0 | - |
| | O3(ppb) | 8 | 100 | - | - | 47.7 | 0 | 32.5 | - |
| | O3(ppb) | 13 | 99 | - | - | 46.3 | 0 | 22.4 | - |
| | O3(ppb) | 14 | 100 | - | - | 43.7 | 0 | 28.1 | - |
| | O3(ppb) | 17 | 100 | - | - | 42.8 | 0 | 33.5 | - |
| | O3(ppb) | 18 | 100 | - | - | 46.4 | 0 | 35.2 | - |
| | O3(ppb) | 21 | 100 | - | - | 46.2 | 0 | 27.5 | - |
| | O3(ppb) | 22 | 100 | - | - | 45.1 | 0 | 28.0 | - |
| | NO2(ppb) | 1 | 99 | - | - | 18.0 | 0 | 7.0 | - |
| | NO2(ppb) | 4 | 98 | - | - | 19.6 | 0 | 9.5 | - |
| | NO2(ppb) | 6 | 100 | - | - | 15.7 | 0 | 7.3 | - |
| | NO2(ppb) | 7 | 99 | - | - | 13.3 | 0 | 7.5 | - |
| | NO2(ppb) | 8 | 99 | - | - | 11.4 | 0 | 4.9 | - |
| | NO2(ppb) | 9 | 99 | - | - | 22.4 | 0 | 8.4 | - |
| | NO2(ppb) | 13 | 99 | - | - | 20.7 | 0 | 5.7 | - |
| | NO2(ppb) | 14 | 100 | - | - | 8.4 | 0 | 2.5 | - |
| | NO2(ppb) | 17 | 100 | - | - | 17.9 | 0 | 5.0 | - |
| | NO2(ppb) | 18 | 96 | - | - | 2.9 | 0 | 1.1 | - |
| | NO2(ppb) | 19 | 100 | - | - | 15.0 | 0 | 4.8 | - |
| | NO2(ppb) | 20 | 100 | - | - | 10.6 | 0 | 2.2 | - |
| | NO2(ppb) | 21 | 100 | - | - | 13.7 | 0 | 3.2 | - |
| | NO2(ppb) | 22 | 100 | - | - | 3.6 | 0 | 1.5 | - |
| | NO2(ppb) | 23 | 100 | - | - | 32.9 | 0 | 14.3 | - |
| | NO2(ppb) | 27 | 100 | - | - | 5.4 | 0 | 1.9 | - |
| | NO2(ppb) | 29 | 97 | - | - | 6.1 | 0 | 2.6 | - |
| | NO2(ppb) | 30 | 99 | - | - | 23.4 | 0 | 6.8 | - |
| | NO2(ppb) | 31 | 100 | - | - | 11.5 | 0 | 3.0 | - |
| | NO2(ppb) | 33 | 100 | - | - | 11.0 | 0 | 2.2 | - |
| | NO2(ppb) | 34 | 100 | - | - | 19.2 | 0 | 5.4 | - |
| | NO2(ppb) | 505 | 100 | - | - | 15.0 | 0 | 5.8 | - |
| | NO2(ppb) | 506 | 100 | - | - | 15.1 | 0 | 5.4 | - |
| | NO2(ppb) | 508 | 100 | - | - | 4.7 | 0 | 1.4 | - |
| | NO2(ppb) | 513 | 100 | - | - | 14.0 | 0 | 4.2 | - |
| | CO(ppm) | 7 | 99 | - | - | 1.0 | 0 | 0.3 | - |
| | NH3(ppb) | 1 | 90 | - | - | 11.7 | 0 | 0.0 | - |
| | NH3(ppb) | 6 | 90 | - | - | 0.0 | 0 | 0.0 | - |
| | PM2.5(ug/m3) | 1 | 99 | - | - | 74.6 | 0 | 26.8 | 0 |
| | PM2.5(ug/m3) | 4 | 98 | - | - | 67.5 | 0 | 36.2 | 1 |
| | PM2.5(ug/m3) | 6 | 100 | - | - | 97.2 | 1 | 27.9 | 0 |
| | PM2.5(ug/m3) | 7 | 98 | - | - | 96.5 | 2 | 24.8 | 0 |

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| APPROVAL NUMBERS | REPORT DATE MONTH | YEAR |
|---|---|---|
| 289664-00-00<br>241311-00-00<br>20809-02-00<br>149968-01-00<br>237382-00-00<br>48522-01-00 | 8 | 2026 |

CONTINUOUS AMBIENT MONITORING

| APPROVAL NUMBERS | PARAMETER | STN. NO. | % TIME OPERATIONAL | 30-MIN AVERAGE MAXIMUM CONCENTRATION | 30-MIN AVERAGE NO. READINGS > REGULATION | ONE-HOUR AVERAGE MAXIMUM CONCENTRATION | ONE-HOUR AVERAGE NO. READINGS > REGULATION | 24-HOUR AVERAGE MAXIMUM CONCENTRATION | 24-HOUR AVERAGE NO. READINGS > REGULATION |
|---|---|---|---|---|---|---|---|---|---|
| 240008-00-00 | PM2.5(ug/m3) | 8 | 100 | - | - | 128.0 | 7 | 51.1 | 2 |
| 48263-01-00 | PM2.5(ug/m3) | 9 | 99 | - | - | 98.9 | 3 | 26.3 | 0 |
| 224816-00-00 | PM2.5(ug/m3) | 13 | 99 | - | - | 53.2 | 0 | 26 | 0 |
| 151469-01-00 | PM2.5(ug/m3) | 14 | 100 | - | - | 77.2 | 0 | 26.8 | 0 |
| 189942-00-00 | PM2.5(ug/m3) | 17 | 100 | - | - | 80.5 | 1 | 29.2 | 1 |
| 206355-00-00 | PM2.5(ug/m3) | 18 | 91 | - | - | 30.5 | 0 | 12.9 | 0 |
| 46586-00-00 | PM2.5(ug/m3) | 21 | 100 | - | - | 43.8 | 0 | 20.3 | 0 |
| 73203-02-00 | PM2.5(ug/m3) | 22 | 93 | - | - | 178.4 | 13 | 72.2 | 3 |
| 216466-01-00 | PM2.5(ug/m3) | 23 | 97 | - | - | 100.8 | 4 | 39.6 | 3 |
| 137467-01-00 | PM2.5(ug/m3) | 29 | 100 | - | - | 78.1 | 0 | 27.9 | 0 |
| 236394-00-00 | PM2.5(ug/m3) | 30 | 88 | - | - | 64.6 | 0 | 29.2 | 1 |
| 254465-00-00 | WS(km/h) | 1 | 99 | - | - | - | - | - | - |
| 094-03-00 | WS(km/h) | 4 | 100 | - | - | - | - | - | - |
| 80105-01-00 | WS(km/h) | 5 | 100 | - | - | - | - | - | - |
| 305529-00-00 | WS(km/h) | 6 | 100 | - | - | - | - | - | - |
| 318401-00-00 | WS(km/h) | 7 | 100 | - | - | - | - | - | - |
| 026-03-00 | WS(km/h) | 8 | 100 | - | - | - | - | - | - |
| 364232-00-00 | WS(km/h) | 9 | 100 | - | - | - | - | - | - |
| 228044-00-00 | WS(km/h) | 11 | 98 | - | - | - | - | - | - |
| 247548-00-00 | WS(km/h) | 13 | 100 | - | - | - | - | - | - |
| 231302-00-00 | WS(km/h) | 14 | 100 | - | - | - | - | - | - |
| 246984-01-00 | WS(km/h) | 17 | 100 | - | - | - | - | - | - |
| 153125-01-00 | WS(km/h) | 18 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 19 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 20 | 91 | - | - | - | - | - | - |
| | WS(km/h) | 21 | 99 | - | - | - | - | - | - |
| | WS(km/h) | 22 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 23 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 25 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 27 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 29 | 92 | - | - | - | - | - | - |
| | WS(km/h) | 30 | 99 | - | - | - | - | - | - |
| | WS(km/h) | 31 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 32 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 33 | 99 | - | - | - | - | - | - |
| | WS(km/h) | 34 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 505 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 506 | 99 | - | - | - | - | - | - |
| | WS(km/h) | 508 | 100 | - | - | - | - | - | - |
| | WS(km/h) | 513 | 100 | - | - | - | - | - | - |



SIGNATURE OF ASSOCIATION REPRESENTATIVE

FOR ALBERTA ENVIRONMENT USE ONLY

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS01
## BERTHA GANTER - FORT MCKAY
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY - BERTHA GANTER (AMS01)
AIUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 702 | 35 | 42 | 99.06 | - | - | 39.1 | 0 | 4.9 | 0 |
| H2S(ppb) Average | 701 | 36 | 43 | 99.06 | - | - | 12.1 | 1 | 1.8 | 0 |
| TRS(ppb) Average | 638 | 33 | 106 | 90.19 | 9.9 | 3 | 7.3 | - | 1.1 | - |
| THC(ppm) Average | 702 | 35 | 42 | 99.06 | - | - | 3 | - | 2.6 | - |
| NMHC(ppm) Average | 702 | 35 | 42 | 99.06 | - | - | 0.368 | - | 0.214 | - |
| CH4(ppm) Average | 702 | 35 | 42 | 99.06 | - | - | 2.8 | - | 2.4 | - |
| O3 (ppb) Average | 701 | 36 | 43 | 99.06 | - | - | 46.4 | 0 | 26.1 | - |
| NO2 (ppb) Average | 702 | 36 | 42 | 99.19 | - | - | 18 | 0 | 7 | - |
| NO (ppb) Average | 702 | 36 | 42 | 99.19 | - | - | 29.1 | - | 6 | - |
| NOX (ppb) Average | 702 | 36 | 42 | 99.19 | - | - | 46.2 | - | 13 | - |
| NH3 (ppb) Average | 632 | 41 | 112 | 90.46 | - | - | 11.7 | 0 | 0 | - |
| PM2.5 (ug/m3) Average | 735 | 2 | 9 | 99.06 | - | - | 74.6 | 0 | 26.8 | 0 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 29.6 | - | 21.5 | - |
| Temperature 10 m (C) Average | 744 | 0 | 0 | 100 | - | - | 29.2 | - | 21.9 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 100 | - | 89.5 | - |
| Wind Speed 10 m (km/h) Average | 740 | 0 | 4 | 99.46 | - | - | 29 | - | 19 | - |
| Wind Direction 10 m (deg) Average | 740 | 0 | 4 | 99.46 | - | - | - | - | - | - |
| Precipitation (mm) Total | 738 | 0 | 6 | 99.19 | - | - | 7.7 | - | 12.3 | - |
| Leaf Wetness (% of range) Average | 743 | 0 | 1 | 99.87 | - | - | 75.5 | - | 24.2 | - |
| Global Solar Radiation (W/m2) Average | 744 | 0 | 0 | 100 | - | - | 804 | - | 259.3 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BERTHA GANTER FORT McKAY (AMS01)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 702 | 0.61 | 2.7 | - | 0 | 0 | 0 | 0.1 | 0.2 | 0.8 | 39.1 |
| H2S (ppb) Average | 701 | 0.42 | 0.8 | - | 0 | 0.1 | 0.1 | 0.2 | 0.4 | 1 | 12.1 |
| TRS (ppb) Average | 638 | 0.41 | 0.5 | - | 0 | 0.2 | 0.2 | 0.3 | 0.4 | 0.8 | 7.3 |
| THC (ppm) Average | 702 | 2.23 | 0.2 | - | 2 | 2 | 2.1 | 2.2 | 2.3 | 2.5 | 3 |
| NMHC(ppm) Average | 702 | 0.049 | 0.064 | - | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0.368 |
| CH4(ppm) Average | 702 | 2.18 | 0.2 | - | 2 | 2 | 2.1 | 2.1 | 2.3 | 2.4 | 2.8 |
| O3 (ppb) Average | 701 | 17.46 | 10.6 | - | 1.3 | 4 | 8.6 | 16.4 | 25.3 | 32 | 46.4 |
| NO2 (ppb) Average | 702 | 4.09 | 3.7 | - | 0 | 0.3 | 0.9 | 3.3 | 6 | 9.1 | 18 |
| NO (ppb) Average | 702 | 1.79 | 3.9 | - | 0 | 0 | 0 | 0.1 | 1.5 | 5.4 | 29.1 |
| NOX (ppb) Average | 702 | 5.88 | 6.8 | - | 0 | 0.3 | 1 | 4 | 7.6 | 14.4 | 46.2 |
| NH3 (ppb) Average | 632 | 0.02 | 0.5 | - | 0 | 0 | 0 | 0 | 0 | 0 | 11.7 |
| PM2.5 (ug/m3) Average | 735 | 10.77 | 9.3 | - | 0.4 | 2.7 | 4.3 | 7.4 | 14.9 | 21.7 | 74.6 |
| Temperature 2 m (C) Average | 744 | 16.82 | 5 | - | 5.6 | 10.5 | 12.9 | 16.4 | 20.5 | 24.1 | 29.6 |
| Temperature 10 m (C) Average | 744 | 17.08 | 4.6 | - | 6.3 | 11.3 | 13.5 | 16.6 | 20.3 | 23.7 | 29.2 |
| Relative Humidity (%) Average | 744 | 73.42 | 19.2 | - | 31.2 | 46.6 | 55.7 | 75.4 | 91.9 | 96.6 | 100 |
| Wind Speed 10 m (km/h) Average | 740 | 6.9 | 5 | - | 1 | 2 | 3 | 6 | 9 | 13 | 29 |
| Wind Direction 10 m (deg) Average | 740 | - | - | - | - | - | - | - | - | - | - |
| Precipitation (mm) Total | 738 | - | - | 37.89 | - | - | - | - | - | - | - |
| Leaf Wetness (% of range) Average | 743 | 8.4 | 13.8 | - | 0.1 | 0.6 | 1 | 1.8 | 8.8 | 28.2 | 75.5 |
| Global Solar Radiation (W/m2) Average | 744 | 198.24 | 240 | - | 0 | 0 | 0 | 56.5 | 380.9 | 590.7 | 804 |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BERTHA GANTER FORT McKAY (AMS01)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| H2S, SO2, TRS, THC, O3, NH3 | 11 Aug 2026 15:00 | 11 Aug 2026 15:00 | 1 | Maintenance - sample manifold cleaned |
| H2S, SO2, TRS, THC, O3, NO2, PM2.5, Precipitation Collector | 25 Aug 2026 16:00 | 25 Aug 2026 21:00 | 6 | Station power failure |
| NH3 | 25 Aug 2026 17:00 | 25 Aug 2026 21:00 | 5 | Station power failure |
| TRS | 18 Aug 2026 09:00 | 18 Aug 2026 09:00 | 1 | Maintenance - verify daily QA response |
| TRS | 25 Aug 2026 22:00 | 27 Aug 2026 08:00 | 35 | Analyzer Failure - TRS converter failed/dead |
| TRS | 27 Aug 2026 09:00 | 27 Aug 2026 14:00 | 6 | Maintenance -converter replacement |
| TRS | 27 Aug 2026 15:00 | 28 Aug 2026 08:00 | 18 | Analyzer Failure - TRS converter failed/dead |
| TRS | 28 Aug 2026 09:00 | 28 Aug 2026 14:00 | 6 | Maintenance -converter/pump replacement |
| NH3 | 01 Aug 2026 07:00 | 31 Aug 2026 08:00 | 52 | Stabilization after daily QA check |
| NH3 | 25 Aug 2026 22:00 | 26 Aug 2026 10:00 | 13 | Maintenance - calibration in progress |
| PM2.5 | 05 Aug 2026 08:00 | 05 Aug 2026 08:00 | 1 | DAS Failure - data not recorded |
| Surface Leaf Wetness | 04 Aug 2026 17:00 | 04 Aug 2026 17:00 | 1 | Sensor operated out of range |
| Wind Speed, Wind Direction | 10 Aug 2026 02:00 | 30 Aug 2026 01:00 | 4 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 39.1 ppb on Aug 30 14:00 Maximum Daily Average: 4.9 ppb on Aug 30

Minimum Value: 0.0 ppb on Aug 1 23:00 Minimum Daily Average: 0.0 ppb on Aug 12
Maximum Diurnal Average: 2.9 ppb at hour 14 Minimum Diurnal Average: 0.1 ppb at hour 6
Monthly Average: 0.61 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.8 $P_{99}$ = 13.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.8 | 1.4 | 1.2 | 0.6 | 0.4 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.3 | 1.4 |
| 2-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.6 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.6 |
| 3-Aug | 0.1 | 0.1 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 1.0 | 0.4 | 0.6 | 0.2 | 0.1 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 5-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 6-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.7 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.7 |
| 7-Aug | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.2 |
| 8-Aug | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 9-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 11-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | M | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 12-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | C | C | C | C | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 13-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 14-Aug | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 1.1 | 0.9 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.4 |
| 17-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 5.0 | 3.1 | 3.3 | 1.4 | 0.5 | 0.4 | 0.1 | 0.1 | 0.0 | 0.7 | 5.0 |
| 18-Aug | 0.0 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 2.6 | 2.7 | 1.1 | 0.9 | 0.5 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.4 | 2.7 |
| 19-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| 20-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.7 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.7 |
| 21-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.4 | 0.5 | 1.0 | 1.1 | 0.3 | 0.3 | 0.3 | 2.6 | 1.7 | 0.4 | 0.2 | 0.3 | 0.6 | 0.6 | 0.7 | 1.0 | 0.6 | 2.6 |
| 22-Aug | 0.9 | 0.6 | 0.3 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.5 | 0.9 | 5.2 | 10.3 | 17.2 | 21.1 | 15.8 | 9.8 | 3.3 | 1.3 | 1.1 | 0.8 | 0.5 | 0.7 | 1.1 | 1.1 | 4.1 | 21.1 |
| 23-Aug | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 1.0 | 1.1 | 2.3 | 1.1 | 0.7 | 13.8 | 3.1 | 2.4 | 2.0 | 0.9 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 1.4 | 13.8 |
| 24-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.4 | 0.4 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 25-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | PF | PF | PF | PF | PF | PF | 0.2 | 0.1 | 0.1 | -- | 0.3 |
| 26-Aug | 0.1 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.3 | 1.1 | 3.3 | 10.5 | 15.9 | 14.1 | 6.8 | 1.8 | 3.1 | 0.8 | 0.4 | 0.5 | 0.8 | 0.6 | 0.9 | 0.6 | 0.4 | 2.7 | 15.9 |
| 27-Aug | 0.6 | 0.4 | 0.2 | 0.2 | Z | 0.2 | 0.4 | 0.4 | 0.6 | 3.3 | 4.2 | 0.6 | 7.2 | 1.9 | 2.1 | 7.0 | 0.7 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.3 | 0.2 | 1.3 | 7.2 |
| 28-Aug | 0.1 | 0.1 | 0.0 | 0.3 | 0.8 | Z | 0.2 | 1.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 |
| 29-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 30-Aug | 0.1 | Z | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 4.2 | 32.8 | 39.1 | 13.4 | 4.6 | 3.2 | 3.4 | 2.6 | 1.9 | 2.0 | 0.7 | 0.6 | 0.4 | 4.9 | 39.1 |
| 31-Aug | 0.3 | 0.2 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 1.4 | 1.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.5 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 1.0 | 1.3 | 2.5 | 2.9 | 1.4 | 1.3 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | Diurnal Average | |
| | 0.9 | 0.6 | 0.6 | 0.5 | 0.8 | 0.4 | 0.4 | 2.6 | 2.7 | 3.3 | 10.5 | 15.9 | 32.8 | 39.1 | 15.8 | 9.8 | 3.3 | 3.4 | 2.6 | 1.9 | 2.0 | 0.9 | 1.1 | 1.1 | Diurnal Maximum | |

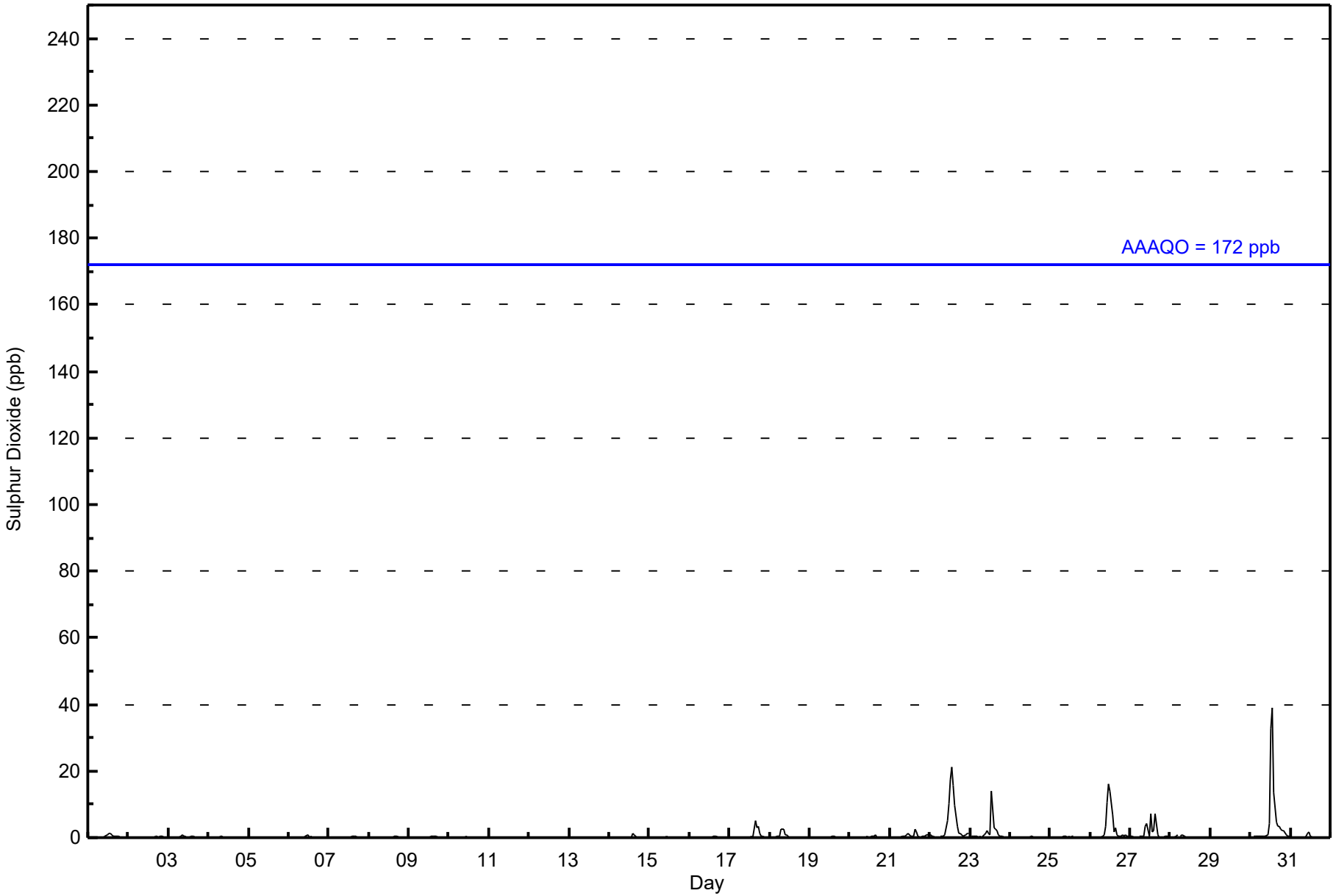
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb

## Fort McKay - Bertha Ganter - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 692 | 98.58 | 98.58 |
| 11 - 20 | 7 | 1.00 | 99.57 |
| 21 - 60 | 3 | 0.43 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 90 | 47 | 14 | 8 | 4 | 5 | 20 | 75 | 70 | 45 | 51 | 29 | 38 | 76 | 56 | 61 | 689 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 90 | 47 | 14 | 8 | 4 | 5 | 23 | 82 | 70 | 45 | 51 | 29 | 38 | 76 | 56 | 61 | 699 |

Total Number of Valid Hours: 699

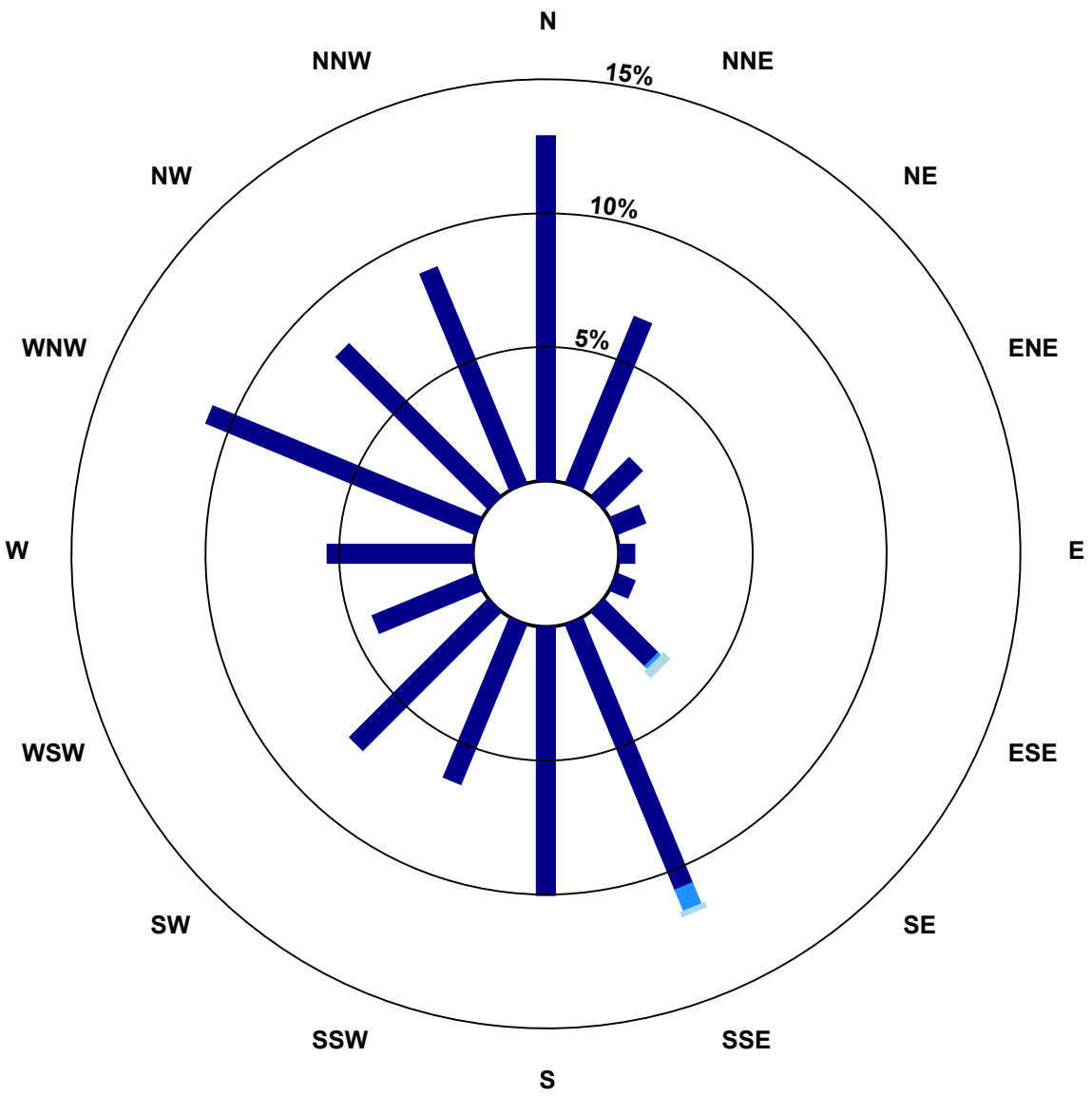
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

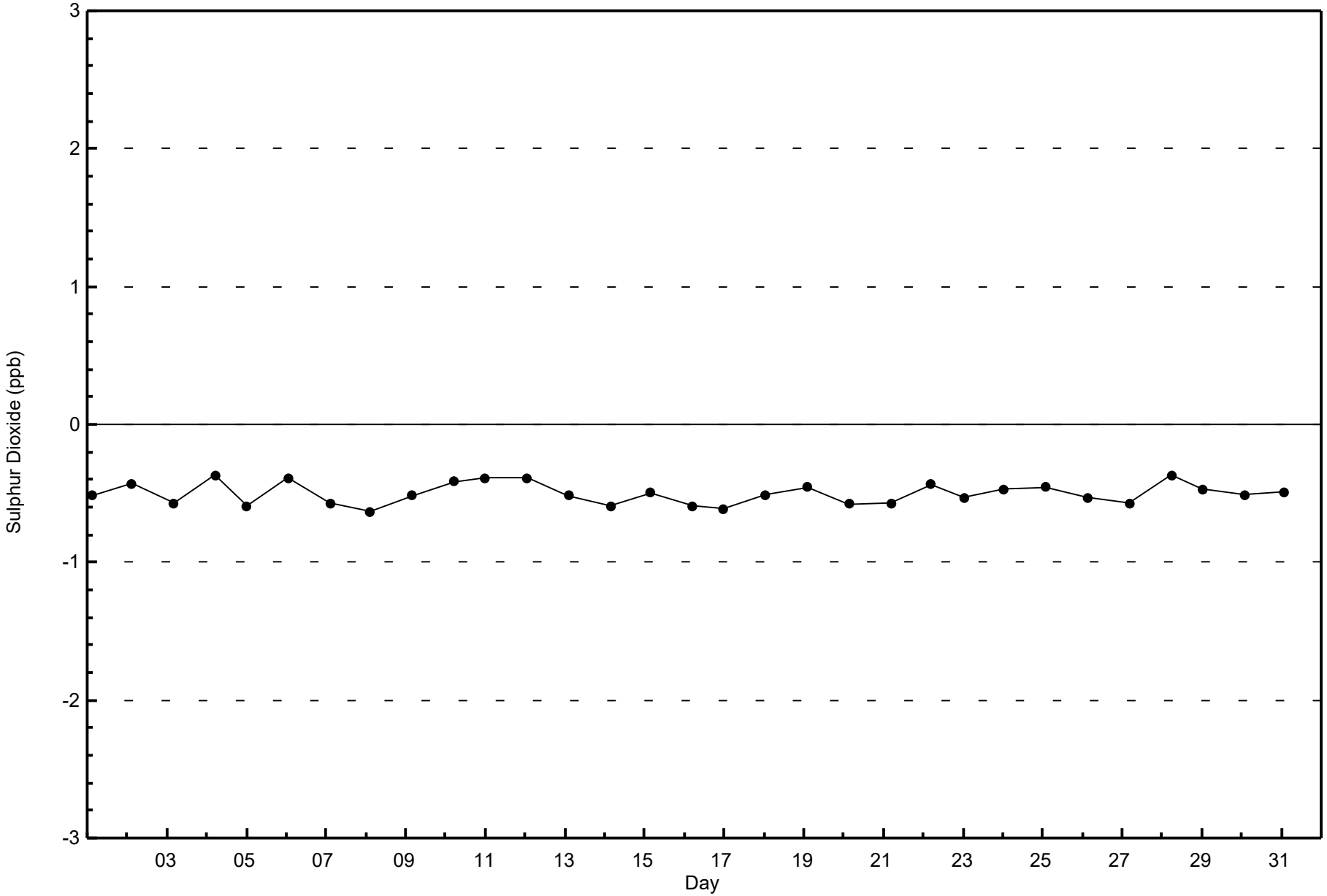
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

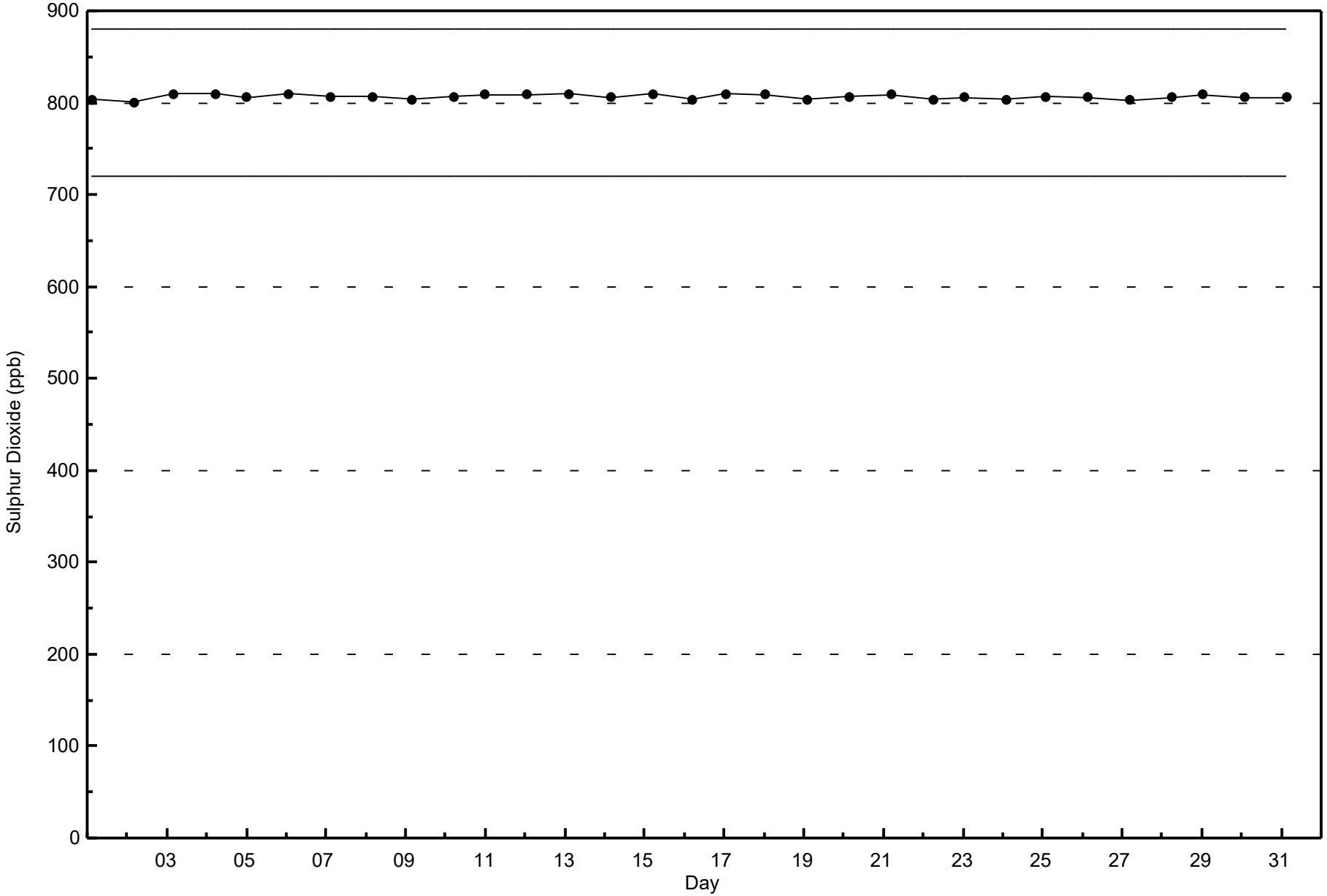


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 0
Maximum Value: 12.1 ppb on Aug 27 07:00 Maximum Daily Average: 1.8 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 24 11:00 Minimum Daily Average: 0.1 ppb on Aug 12
Maximum Diurnal Average: 0.9 ppb at hour 7 Minimum Diurnal Average: 0.2 ppb at hour 18
Monthly Average: 0.42 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.4 $P_{90}$ = 1.0 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.3 | 1.0 | 0.8 | Z | 0.5 | 0.5 | 1.2 | 1.2 | 1.0 | 2.2 | 2.4 | 1.2 | 1.1 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.3 | 0.3 | 0.2 | 0.9 | 2.4 |
| 2-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 3-Aug | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 |
| 4-Aug | Z | 0.7 | 0.7 | 0.8 | 0.9 | 1.0 | 1.8 | 2.0 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 2.0 |
| 5-Aug | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 |
| 6-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 7-Aug | 0.1 | 0.2 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 8-Aug | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 |
| 9-Aug | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 10-Aug | Z | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 1.2 | 0.9 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 1.2 |
| 11-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | M | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 |
| 12-Aug | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 13-Aug | 0.1 | 0.1 | 0.2 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 14-Aug | 0.3 | 0.2 | 0.3 | 0.3 | Z | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| 15-Aug | 0.4 | 0.5 | 0.3 | 0.2 | 0.3 | Z | 0.6 | 0.4 | 0.3 | 0.5 | 0.6 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 16-Aug | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 17-Aug | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.8 | 1.0 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.5 | 0.6 | 0.3 | 0.1 | 0.2 | 7.2 | 2.7 | 1.3 | 0.6 | 0.8 | 7.2 |
| 18-Aug | 0.5 | 0.4 | Z | 0.8 | 1.3 | 1.3 | 0.8 | 6.4 | 1.0 | 1.7 | 0.9 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.8 | 6.4 |
| 19-Aug | 0.1 | 0.1 | 0.1 | Z | 0.7 | 1.0 | 1.9 | 1.7 | 0.3 | C | C | C | C | C | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.5 | 1.9 |
| 20-Aug | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.6 |
| 21-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.6 | 1.0 | 2.0 | 2.0 | 1.5 | 0.9 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 1.0 | 1.2 | 0.6 | 2.0 |
| 22-Aug | Z | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 | 0.9 | 1.3 | 1.6 | 1.0 | 0.7 | 0.5 | 0.3 | 0.5 | 0.3 | 0.2 | 0.1 | 0.2 | 0.6 | 1.0 | 1.3 | 2.1 | 2.9 | 0.9 | 0.9 | 2.9 |
| 23-Aug | 0.4 | Z | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.8 | 3.2 | 1.1 | 2.6 | 2.2 | 0.9 | 1.5 | 1.1 | 1.0 | 0.9 | 0.4 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.0 | 3.2 |
| 24-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 |
| 25-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | PF | PF | PF | PF | PF | PF | 0.4 | 0.5 | 0.4 | -- | 0.7 |
| 26-Aug | 0.4 | 0.4 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.9 | 0.5 | 0.4 | 0.6 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.8 | 2.6 | 2.1 | 0.5 | 0.4 | 0.6 | 2.6 |
| 27-Aug | 5.2 | 2.4 | 2.3 | 2.0 | 2.8 | Z | 12.1 | 2.5 | 1.9 | 2.3 | 1.4 | 0.3 | 1.4 | 0.2 | 0.4 | 1.5 | 1.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1.8 | 12.1 |
| 28-Aug | Z | 1.0 | 0.7 | 1.1 | 0.7 | 0.2 | 0.6 | 0.9 | 2.7 | 0.8 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 2.7 |
| 29-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.8 | 3.6 | 1.7 | 0.3 | 3.6 |
| 30-Aug | 2.0 | 2.0 | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.6 | 1.2 | 2.1 | 1.1 | 1.1 | 0.4 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 2.1 |
| 31-Aug | 0.2 | 0.2 | 0.3 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.1 | 0.3 |
| | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 0.4 | 0.5 | 0.3 | Diurnal Average | |
| | 5.2 | 2.4 | 2.3 | 2.0 | 2.8 | 1.3 | 12.1 | 6.4 | 3.2 | 2.3 | 2.6 | 2.2 | 1.4 | 1.5 | 1.1 | 1.5 | 1.2 | 0.5 | 0.6 | 1.8 | 7.2 | 2.7 | 3.6 | 1.7 | Diurnal Maximum | |

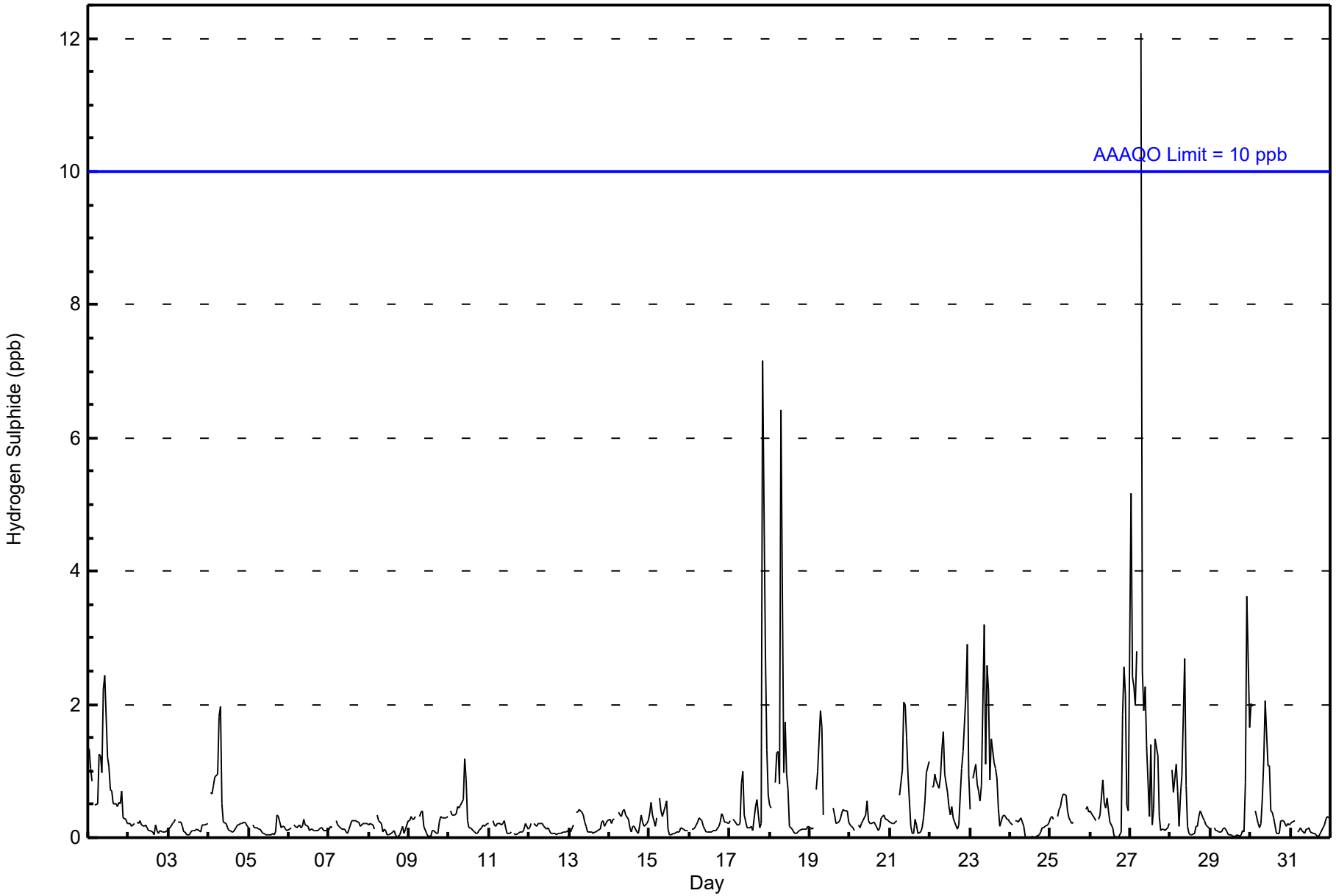
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



# Hydrogen Sulphide ($H_2S$) - ppb

## Fort McKay - Bertha Ganter - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 689 | 98.29 | 98.29 |
| 3 - 4 | 8 | 1.14 | 99.43 |
| 5 - 7 | 3 | 0.43 | 99.86 |
| 8 - 11 | 0 | 0.00 | 99.86 |
| > 11 | 1 | 0.14 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 92 | 47 | 14 | 8 | 4 | 5 | 23 | 77 | 67 | 41 | 49 | 31 | 37 | 77 | 54 | 60 | 686 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 92 | 47 | 14 | 8 | 4 | 5 | 23 | 82 | 72 | 41 | 51 | 31 | 37 | 77 | 54 | 60 | 698 |

Total Number of Valid Hours: 698

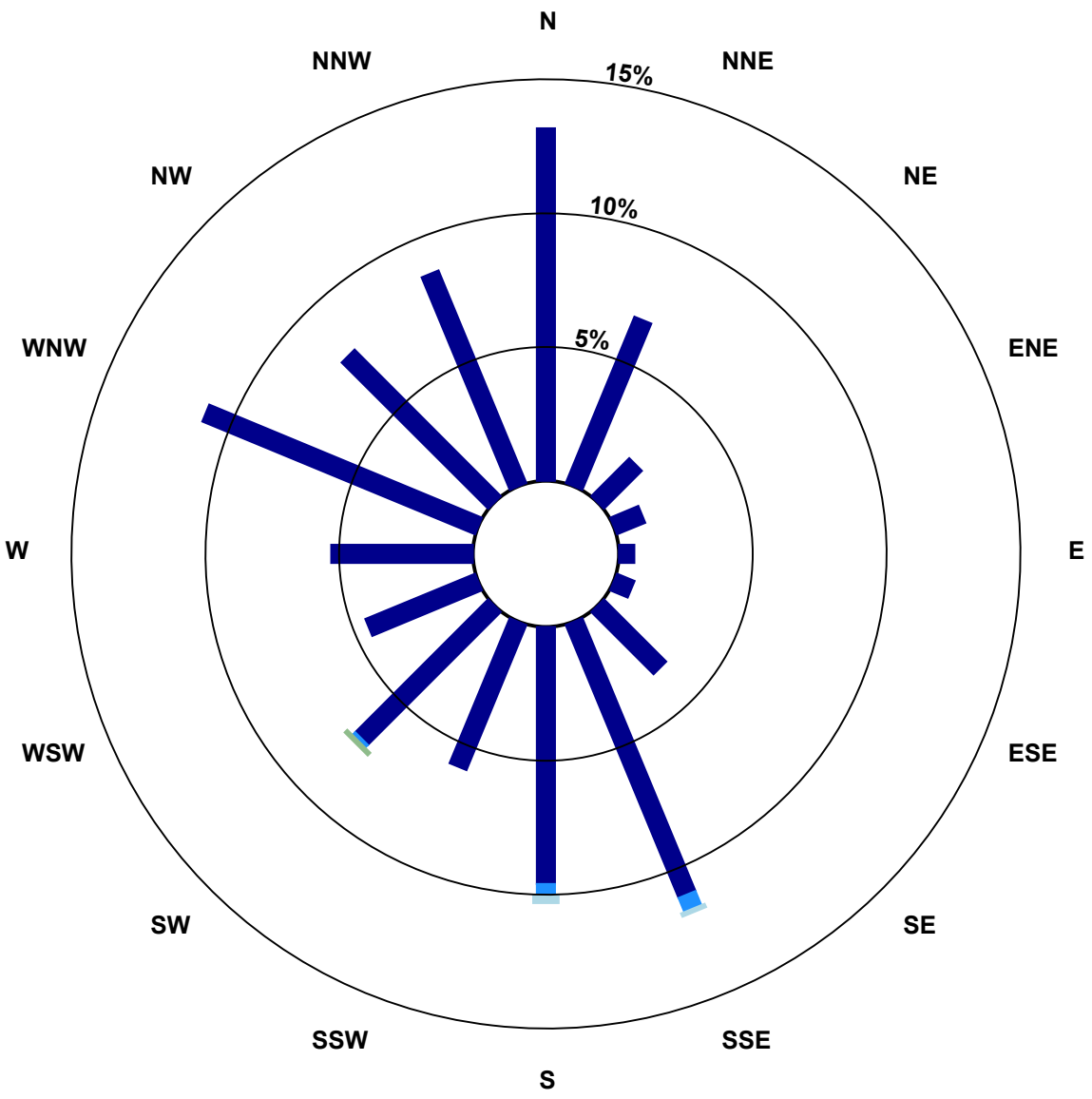
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

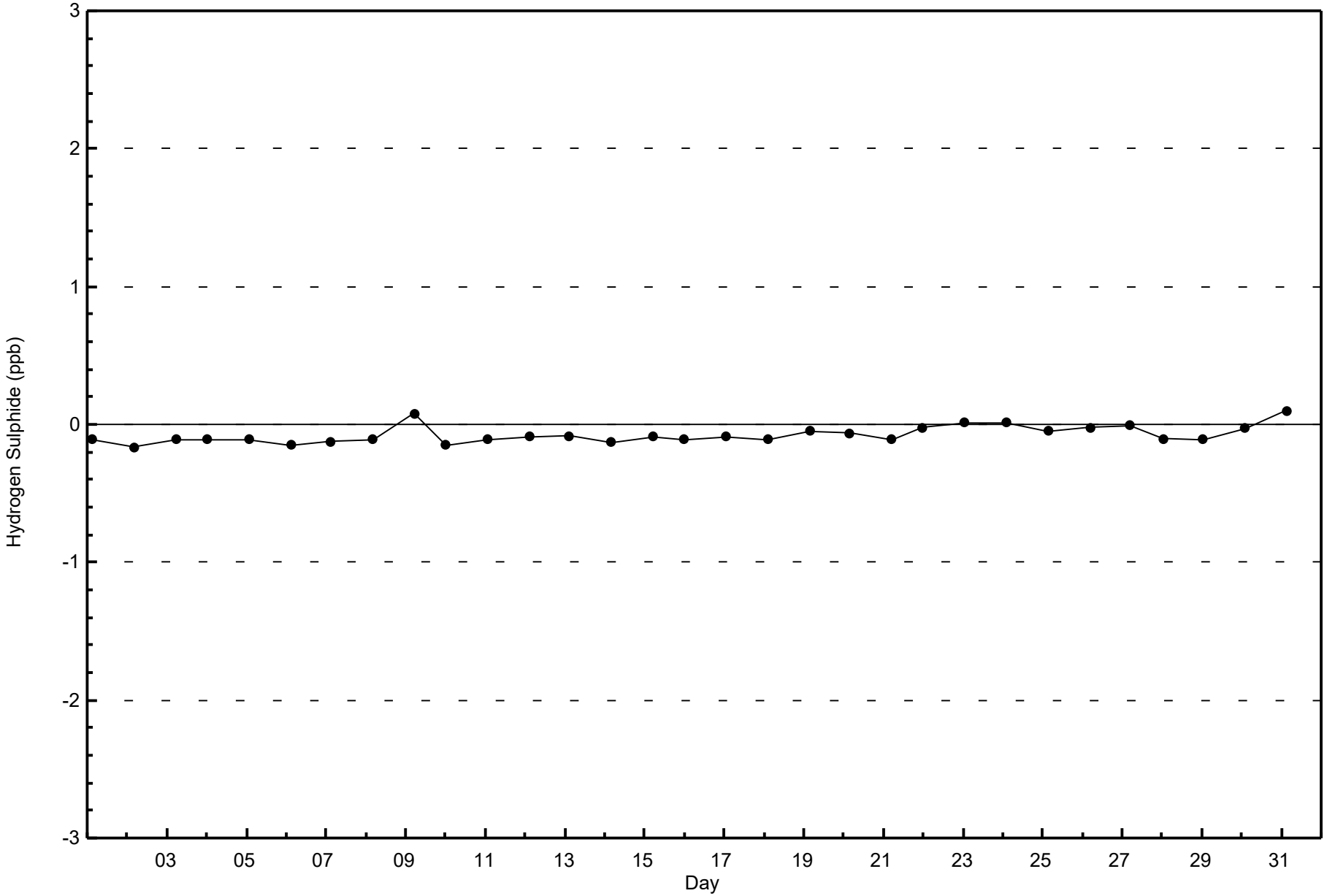
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

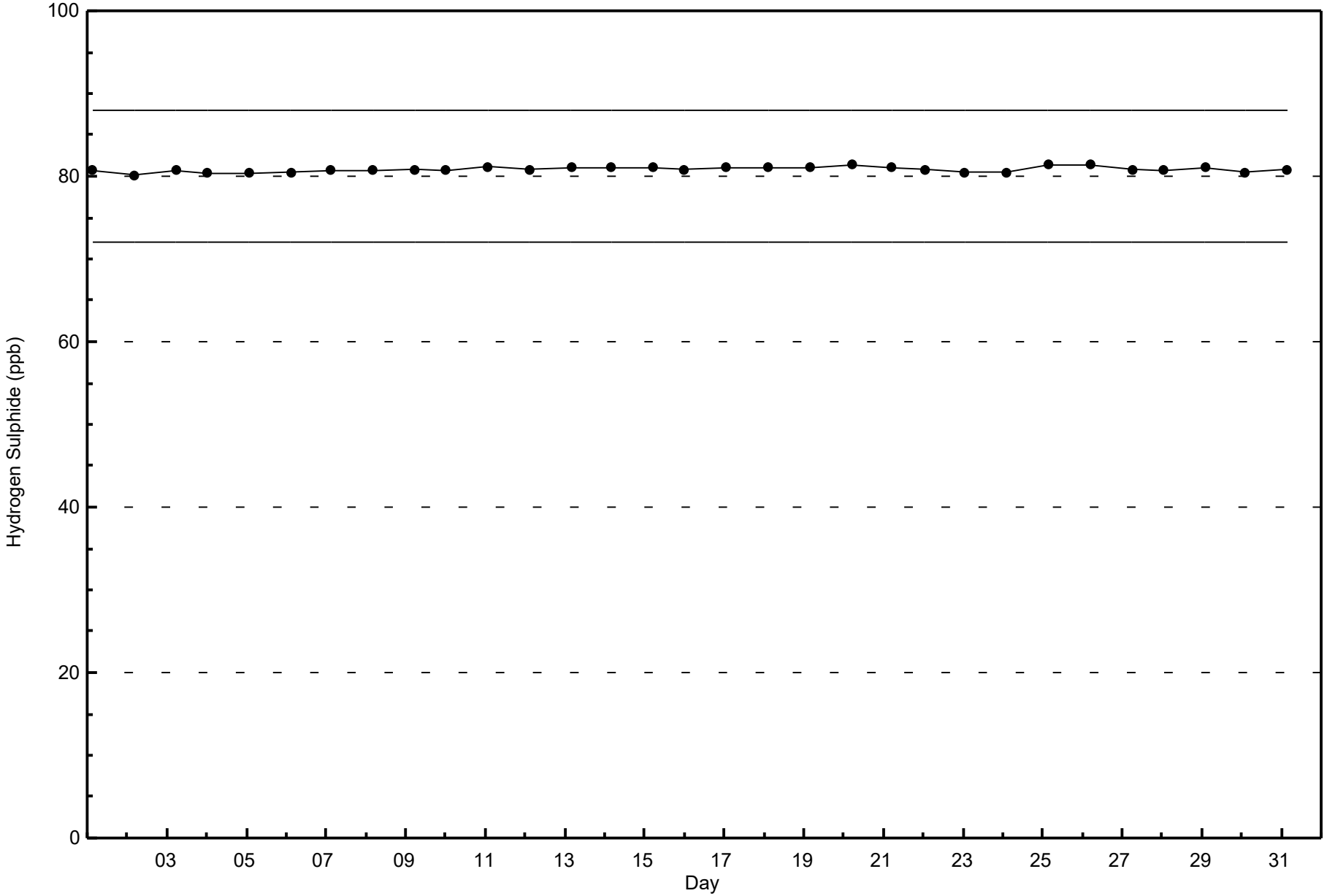


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedences (AAAQG): 30-Min: 3

Maximum Value: 9.9 ppb on Aug 17 21:00 Maximum Daily Average: 1.1 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 29 13:30 Minimum Daily Average: 0.1 ppb on Aug 29

Maximum Diurnal Average: 0.8 ppb at hour 8 Minimum Diurnal Average: 0.2 ppb at hour 18

Monthly Average: 0.41 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.3 $Q_3$ = 0.4 $P_{90}$ = 0.8 $P_{99}$ = 2.5

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1274 |
| Periods of Invalid Data: | 214 |
| Periods of Calibration: | 66 |
| Percent Operational Time: | 90.1 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 1.4 | 1.2 | 0.9 | Z | 0.5 | 0.6 | 1.1 | 1.3 | 0.9 | 1.8 | 2.4 | 1.3 | 1.0 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.8 | 2.4 |
| | 1.5 | 1.0 | 0.8 | SP | 0.5 | 0.4 | 1.4 | 1.1 | 0.9 | 2.4 | 2.3 | 0.9 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.0 | 0.3 | 0.3 | 0.2 | | |
| 2-Aug | 0.2 | 0.3 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 |
| | 0.3 | 0.2 | 0.2 | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 3-Aug | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 4-Aug | Z | 0.6 | 0.7 | 0.8 | 0.8 | 0.9 | 1.8 | 2.4 | 0.8 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 2.4 |
| | SP | 0.8 | 0.7 | 0.8 | 1.1 | 0.9 | 1.8 | 1.6 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 5-Aug | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 |
| | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | | |
| 6-Aug | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | | |
| 7-Aug | 0.2 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| | 0.2 | 0.2 | 0.2 | SP | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 8-Aug | 0.3 | 0.3 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 0.4 | 0.2 | 0.4 |
| | 0.3 | 0.3 | 0.2 | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | | |
| 9-Aug | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 |
| | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | SP | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 10-Aug | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.9 | 1.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 1.3 |
| | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 1.3 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | | |
| 11-Aug | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | M | M | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| | 0.2 | SP | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | M | M | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 12-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.3 | SP | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 13-Aug | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| | 0.2 | 0.2 | 0.2 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | | |
| 14-Aug | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 |
| | 0.4 | 0.3 | 0.3 | 0.3 | SP | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | | |
| 15-Aug | 0.4 | 0.6 | 0.4 | 0.2 | 0.4 | Z | 0.6 | 0.4 | 0.3 | 0.6 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 |
| | 0.5 | 0.6 | 0.3 | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort McKay - Bertha Ganter - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 |
| | SP | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 17-Aug | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 1.0 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 | 0.6 | 0.2 | 0.2 | 4.6 | 3.4 | 1.7 | 0.7 | 0.8 | 9.9 |
| | 0.3 | SP | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 1.0 | 0.9 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.7 | 0.3 | 0.2 | 0.3 | 9.9 | 2.2 | 1.0 | 0.7 | | |
| 18-Aug | 0.6 | 0.4 | Z | 0.8 | 1.1 | 1.4 | 0.9 | 7.0 | M | 1.7 | 1.1 | 1.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.8 | 7.0 |
| | 0.4 | 0.5 | SP | 0.8 | 1.5 | 1.1 | 0.7 | 5.9 | M | 2.0 | 0.9 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 19-Aug | 0.2 | 0.2 | 0.2 | Z | 0.6 | 0.9 | 1.8 | 2.1 | 0.6 | C | C | C | C | C | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.3 | 0.6 | 2.2 |
| | 0.2 | 0.2 | 0.3 | SP | 0.9 | 1.3 | 2.2 | 1.3 | 0.3 | C | C | C | C | C | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | | |
| 20-Aug | 0.3 | 0.2 | 0.3 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.7 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.7 |
| | 0.3 | 0.3 | 0.3 | 0.2 | SP | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | | |
| 21-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.7 | 1.8 | 2.2 | 1.4 | 1.5 | 0.4 | 0.2 | 0.1 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 1.1 | 1.3 | 0.7 | 2.2 |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | SP | 0.9 | 1.3 | 2.2 | 1.9 | 1.8 | 0.6 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 | 1.1 | 1.4 | | |
| 22-Aug | Z | 0.9 | 0.9 | 1.0 | 1.0 | 0.8 | 0.8 | 1.2 | 1.6 | 1.1 | 0.9 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 1.4 | 1.1 | 2.5 | 3.1 | 1.6 | 1.1 | 3.7 |
| | SP | 0.8 | 0.9 | 1.1 | 0.9 | 0.9 | 1.3 | 1.5 | 1.7 | 1.0 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 1.2 | 1.2 | 2.1 | 2.6 | 3.7 | 0.7 | | |
| 23-Aug | 0.5 | Z | 0.7 | 1.5 | 1.0 | 0.9 | 0.7 | 0.8 | 4.5 | 0.7 | 2.8 | 3.1 | 1.2 | 2.4 | 1.2 | 1.0 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 | 4.5 |
| | 0.6 | SP | 1.3 | 1.2 | 0.9 | 0.7 | 0.7 | 1.0 | 2.4 | 1.9 | 3.0 | 2.0 | 1.1 | 1.3 | 1.5 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | | |
| 24-Aug | 0.1 | 0.1 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.5 |
| | 0.1 | 0.1 | SP | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | | |
| 25-Aug | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | PF | PF | PF | PF | PF | PF | AF | AF | AF | -- | 0.7 |
| | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | PF | PF | PF | PF | PF | PF | AF | AF | AF | | |
| 26-Aug | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | -- | -- |
| | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | | |
| 27-Aug | AF | AF | AF | AF | AF | AF | AF | AF | M | M | M | M | M | M | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | -- | -- |
| | AF | AF | AF | AF | AF | AF | AF | M | M | M | M | M | M | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | | |
| 28-Aug | AF | AF | AF | AF | AF | AF | AF | AF | M | M | M | M | M | M | 0.4 | 0.3 | 0.2 | 0.3 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | -- | 0.5 |
| | AF | AF | AF | AF | AF | AF | AF | AF | M | M | M | M | M | M | 0.5 | 0.2 | 0.2 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | | |
| 29-Aug | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.9 | 0.5 | 0.1 | 0.9 |
| | 0.2 | SP | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.9 | 0.4 | | |
| 30-Aug | 0.5 | 0.7 | Z | 0.5 | 0.3 | 0.2 | 0.2 | 0.4 | 0.7 | 0.8 | 0.6 | 0.3 | 0.3 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.4 | 0.9 |
| | 0.6 | 0.7 | SP | 0.4 | 0.3 | 0.2 | 0.3 | 0.6 | 0.9 | 0.9 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | | |
| 31-Aug | 0.5 | 0.5 | 0.5 | Z | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 |
| | 0.5 | 0.5 | 0.5 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | | |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 0.5 | 0.4 | Diurnal Average | |
| | 1.5 | 1.2 | 1.3 | 1.5 | 1.5 | 1.4 | 2.2 | 7.0 | 4.5 | 2.4 | 3.0 | 3.1 | 1.2 | 2.4 | 1.5 | 1.0 | 0.7 | 0.6 | 1.2 | 1.4 | 9.9 | 3.4 | 3.7 | 1.6 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance AF - Analyzer Failure PF - Power Failure SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Reduced Sulphur (TRS) - ppb

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 7.3 ppb on Aug 17 21:00

Maximum Daily Average: 1.1 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 29 14:00

Minimum Daily Average: 0.1 ppb on Aug 29

Maximum Diurnal Average: 0.8 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 18

Monthly Average: 0.41 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.2 Median = 0.3 $Q_3$ = 0.4 $P_{90}$ = 0.8 $P_{99}$ = 2.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 638 |
| Hours of Missing Data: | 106 |
| Hours of Calibration: | 33 |
| Percent Operational Time: | 90.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.4 | 1.1 | 0.9 | Z | 0.5 | 0.5 | 1.3 | 1.2 | 0.9 | 2.1 | 2.3 | 1.1 | 0.9 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.3 | 0.3 | 0.2 | 0.8 | 2.3 |
| 2-Aug | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 3-Aug | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 4-Aug | Z | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 | 1.8 | 2.0 | 0.6 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 2.0 |
| 5-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 |
| 6-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 7-Aug | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 8-Aug | 0.3 | 0.3 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | 0.2 | 0.4 |
| 9-Aug | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 |
| 10-Aug | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 1.1 | 0.8 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 1.1 |
| 11-Aug | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | M | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 12-Aug | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 13-Aug | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 |
| 14-Aug | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 |
| 15-Aug | 0.4 | 0.6 | 0.4 | 0.2 | 0.4 | Z | 0.5 | 0.3 | 0.3 | 0.5 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 |
| 16-Aug | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 17-Aug | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.7 | 1.0 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.6 | 0.4 | 0.2 | 0.3 | 7.3 | 2.8 | 1.4 | 0.7 | 0.8 | 7.3 |
| 18-Aug | 0.5 | 0.5 | Z | 0.8 | 1.3 | 1.3 | 0.8 | 6.4 | M | 1.8 | 1.0 | 0.8 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.8 | 6.4 |
| 19-Aug | 0.2 | 0.2 | 0.3 | Z | 0.8 | 1.1 | 2.0 | 1.7 | 0.4 | C | C | C | C | C | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.6 | 2.0 |
| 20-Aug | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 |
| 21-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.6 | 1.0 | 2.0 | 2.0 | 1.6 | 1.0 | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.7 | 1.1 | 1.4 | 0.7 | 2.0 |
| 22-Aug | Z | 0.8 | 0.9 | 1.1 | 0.9 | 0.8 | 1.0 | 1.4 | 1.7 | 1.1 | 0.8 | 0.6 | 0.4 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.9 | 1.3 | 1.6 | 2.5 | 3.4 | 1.1 | 1.1 | 3.4 |
| 23-Aug | 0.6 | Z | 1.0 | 1.3 | 1.0 | 0.8 | 0.7 | 0.9 | 3.5 | 1.3 | 2.9 | 2.6 | 1.1 | 1.9 | 1.4 | 0.7 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.0 | 3.5 |
| 24-Aug | 0.1 | 0.1 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 |
| 25-Aug | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | PF | PF | PF | PF | PF | PF | AF | AF | AF | -- | 0.7 |
| 26-Aug | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | -- | -- |
| 27-Aug | AF | AF | AF | AF | AF | AF | AF | AF | M | M | M | M | M | M | AF | AF | AF | AF | AF | AF | AF | AF | AF | AF | -- | -- |
| 28-Aug | AF | AF | AF | AF | AF | AF | AF | AF | M | M | M | M | M | M | 0.4 | 0.2 | 0.2 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | -- | 0.5 |
| 29-Aug | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.9 | 0.5 | 0.1 | 0.9 |
| 30-Aug | 0.5 | 0.7 | Z | 0.4 | 0.3 | 0.2 | 0.3 | 0.5 | 0.8 | 0.8 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.8 |
| 31-Aug | 0.5 | 0.5 | 0.5 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 0.5 | 0.4 | Diurnal Average | |
| | 1.4 | 1.1 | 1.0 | 1.3 | 1.3 | 1.3 | 2.0 | 6.4 | 3.5 | 2.1 | 2.9 | 2.6 | 1.1 | 1.9 | 1.4 | 0.7 | 0.6 | 0.5 | 0.9 | 1.3 | 7.3 | 2.8 | 3.4 | 1.4 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance AF - Analyzer Failure PF - Power Failure

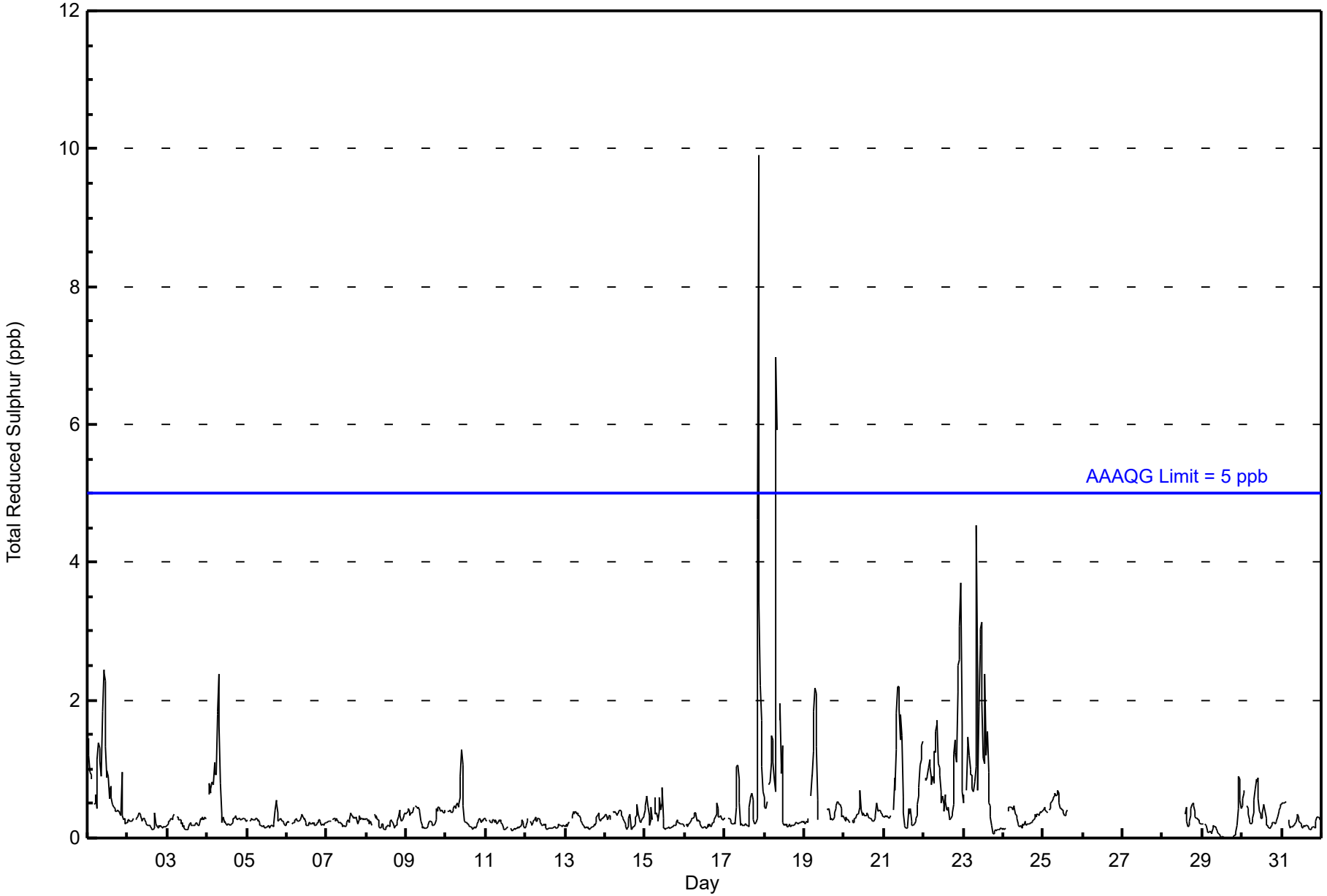
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 630 | 98.75 | 98.75 |
| 3 - 4 | 6 | 0.94 | 99.69 |
| 5 - 7 | 2 | 0.31 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 638

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 92 | 47 | 13 | 8 | 3 | 4 | 18 | 49 | 59 | 37 | 48 | 30 | 35 | 77 | 50 | 57 | 627 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 92 | 47 | 13 | 8 | 3 | 4 | 18 | 55 | 61 | 37 | 48 | 30 | 35 | 77 | 50 | 57 | 635 |

Total Number of Valid Hours: 635

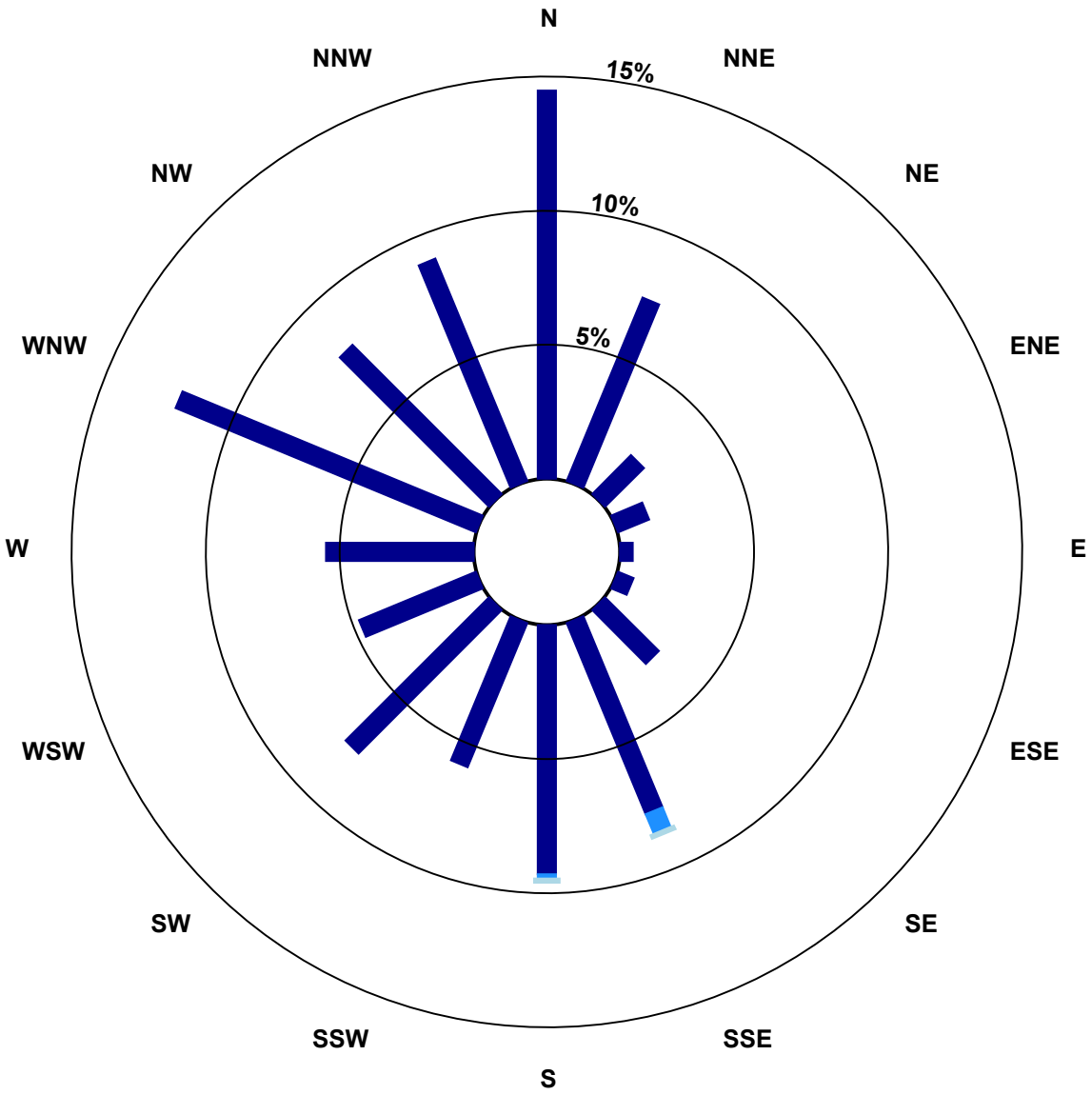
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

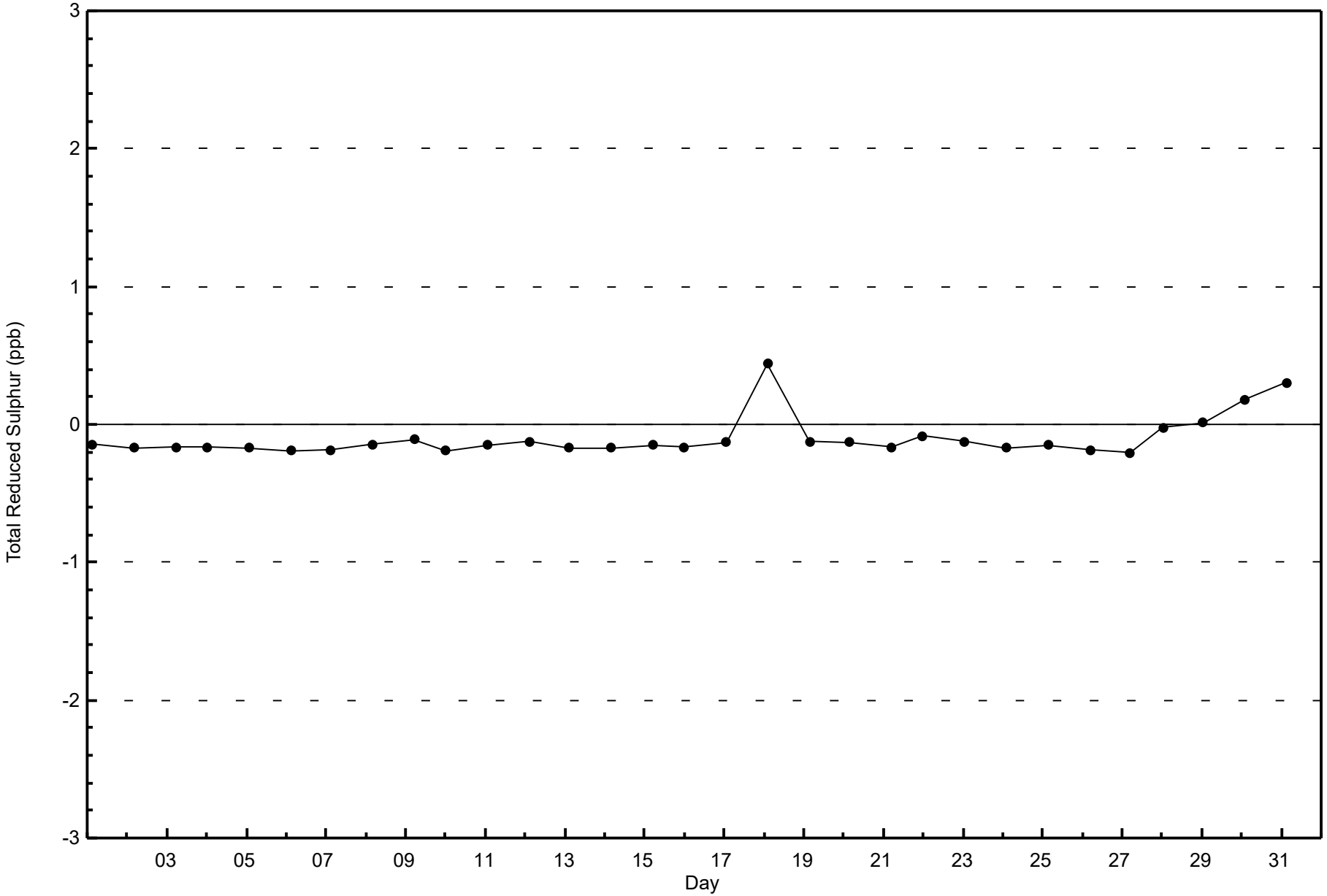
Total Number of Valid Hours: 635

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

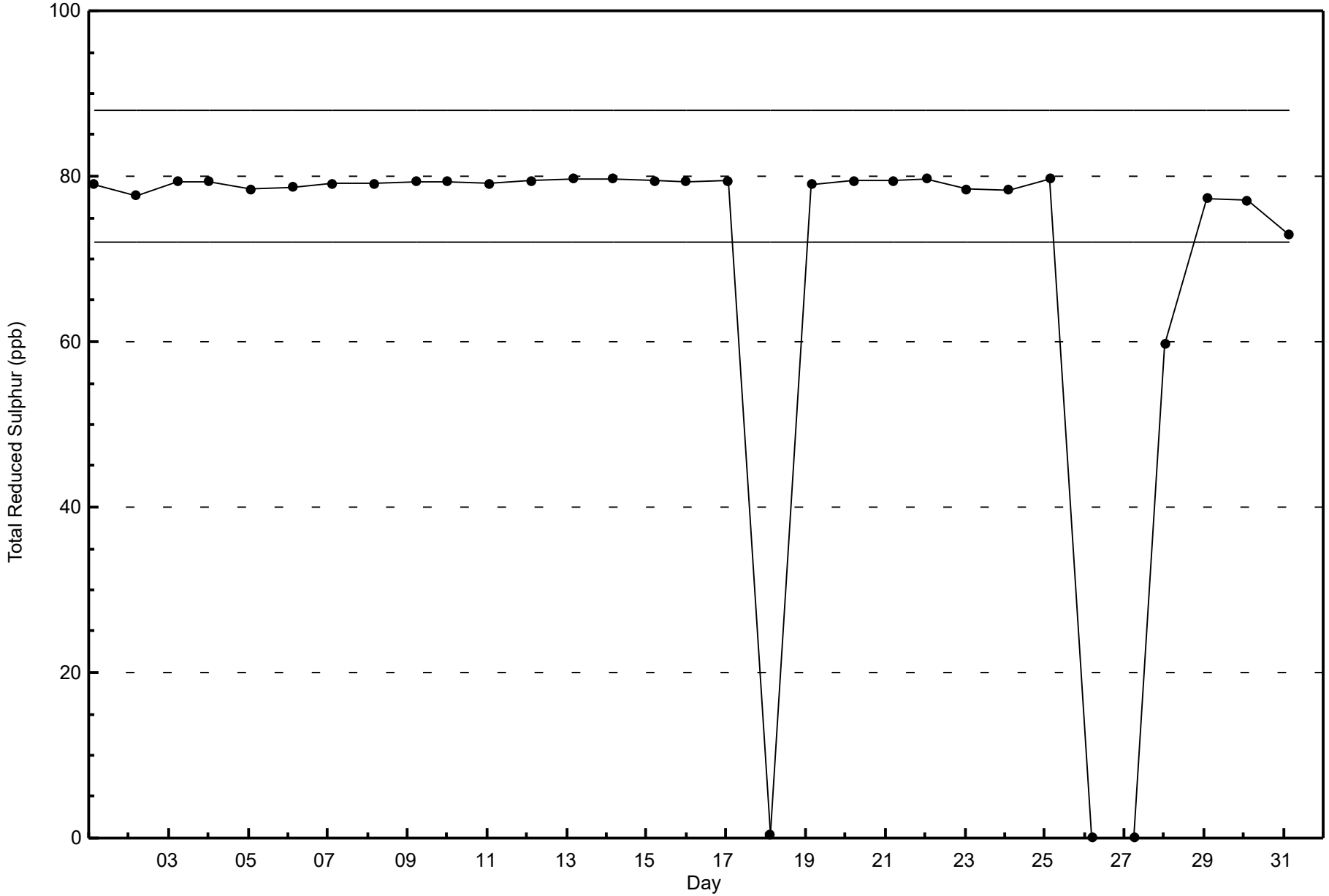


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 3.0 ppm on Aug 1 09:00

Maximum Daily Average: 2.6 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 6 03:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.4 ppm at hour 8

Minimum Diurnal Average: 2.1 ppm at hour 17

Monthly Average: 2.23 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 2.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.5 | 2.6 | Z | 2.7 | 2.7 | 2.8 | 2.8 | 2.9 | 3.0 | 2.9 | 2.8 | 2.6 | 2.9 | 2.8 | 2.7 | 2.5 | 2.5 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.6 | 3.0 |
| 2-Aug | 2.3 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 3-Aug | 2.2 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.3 |
| 4-Aug | 2.3 | 2.5 | 2.5 | 2.4 | 2.4 | Z | 2.5 | 2.6 | 2.3 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.4 | 2.2 | 2.1 | 2.2 | 2.6 |
| 5-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 |
| 6-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 |
| 7-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.2 | 2.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.4 |
| 8-Aug | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.4 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.4 | 2.5 | 2.2 | 2.5 |
| 9-Aug | 2.4 | 2.4 | 2.4 | 2.6 | Z | 2.5 | 2.6 | 2.6 | 2.6 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.6 |
| 10-Aug | 2.3 | 2.4 | 2.4 | 2.5 | 2.5 | Z | 2.5 | 2.5 | 2.6 | 2.9 | 2.7 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.9 |
| 11-Aug | Z | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.4 | 2.1 | 2.0 | 2.1 | 2.1 | M | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.4 |
| 12-Aug | 2.1 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 13-Aug | 2.1 | 2.1 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.4 |
| 14-Aug | 2.3 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.3 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 15-Aug | 2.3 | 2.3 | 2.3 | 2.2 | Z | 2.4 | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 16-Aug | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.4 |
| 17-Aug | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 | 2.4 | 2.4 | 2.3 | 2.2 | 2.6 |
| 18-Aug | 2.2 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 3.0 | 2.4 | 2.4 | 2.4 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 3.0 |
| 19-Aug | 2.1 | 2.1 | Z | 2.3 | 2.4 | 2.6 | 2.8 | 2.7 | 2.4 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.4 | 2.3 | 2.1 | 2.2 | 2.8 |
| 20-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.3 | 2.4 | 2.5 | 2.6 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.6 |
| 21-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.3 | 2.4 | 2.6 | 2.6 | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.6 |
| 22-Aug | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | Z | 2.5 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.6 | 2.8 | 2.5 | 2.4 | 2.8 |
| 23-Aug | Z | 2.4 | 2.6 | 2.6 | 2.7 | 2.6 | 2.5 | 2.7 | 3.0 | 2.6 | 2.8 | 2.8 | 2.7 | 2.9 | 2.7 | 2.8 | 2.8 | 2.6 | 2.2 | 2.6 | 2.5 | 2.3 | 2.3 | 2.3 | 2.6 | 3.0 |
| 24-Aug | 2.2 | Z | 2.4 | 2.6 | 2.6 | 2.4 | 2.2 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.6 |
| 25-Aug | 2.4 | 2.4 | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 | 2.7 | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | PF | PF | PF | PF | PF | PF | 2.5 | 2.6 | 2.5 | -- | 2.7 |
| 26-Aug | 2.4 | 2.4 | 2.4 | Z | 2.5 | 2.5 | 2.6 | 2.5 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.6 |
| 27-Aug | 2.5 | 2.3 | 2.5 | 2.5 | Z | 2.8 | 3.0 | 2.6 | 2.4 | 2.4 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 3.0 |
| 28-Aug | 2.2 | 2.3 | 2.2 | 2.3 | 2.4 | Z | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 29-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.5 | 2.9 | 2.5 | 2.1 | 2.9 |
| 30-Aug | 2.5 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.6 | 2.7 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.7 |
| 31-Aug | 2.3 | 2.3 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | Diurnal Average | |
| | 2.5 | 2.6 | 2.6 | 2.7 | 2.7 | 2.8 | 3.0 | 3.0 | 3.0 | 2.9 | 2.8 | 2.8 | 2.9 | 2.9 | 2.7 | 2.8 | 2.8 | 2.6 | 2.4 | 2.6 | 2.6 | 2.6 | 2.9 | 2.5 | Diurnal Maximum | |

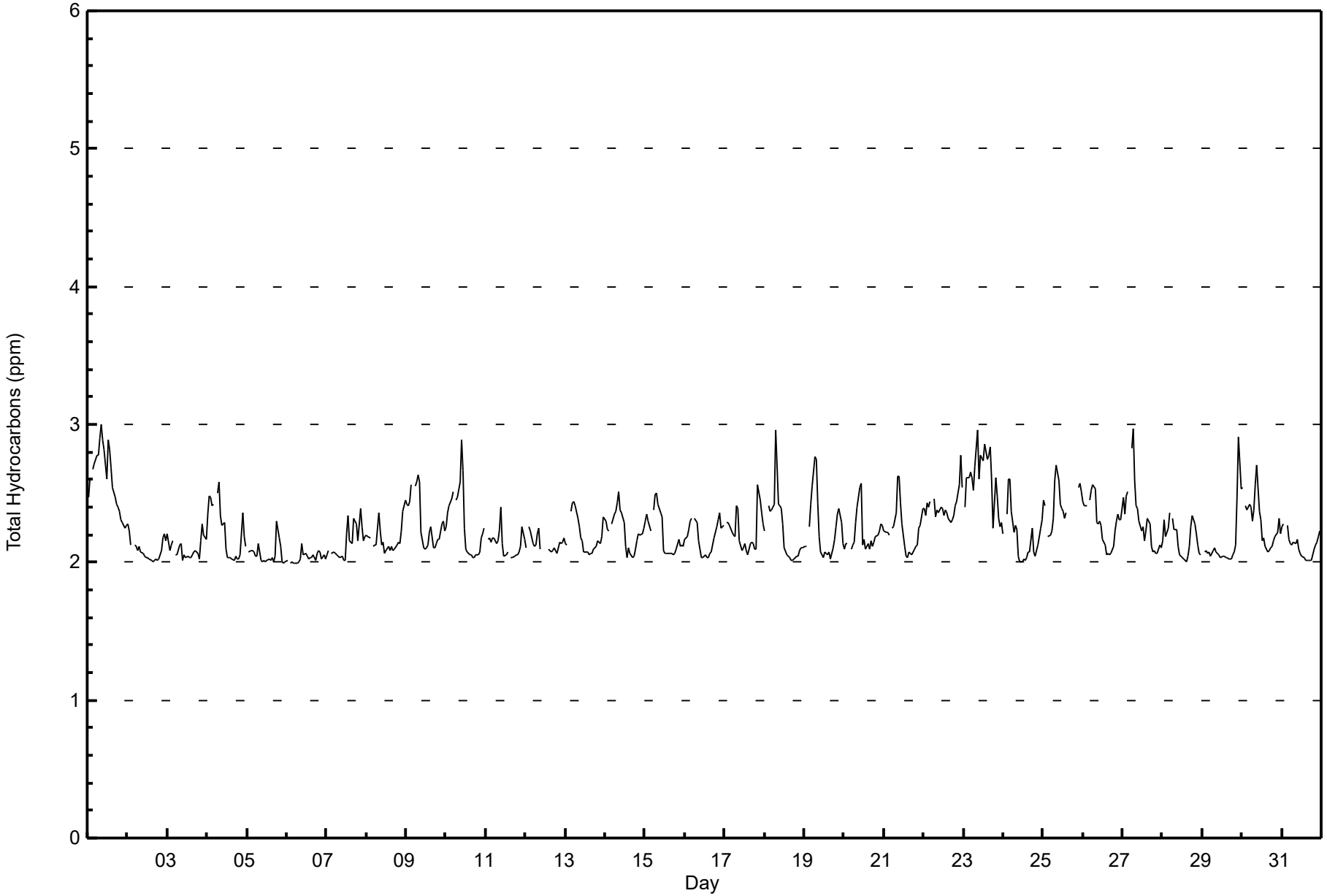
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**



# Total Hydrocarbons (THC) - ppm
## Fort McKay - Bertha Ganter - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 111 | 15.81 | 15.81 |
| 2.1 - 3.0 | 591 | 84.19 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 25 | 3 | 2 | 1 | 1 | 1 | 0 | 1 | 3 | 8 | 16 | 4 | 2 | 21 | 14 | 9 | 111 |
| 2.1 - 3.0 | 65 | 44 | 12 | 7 | 3 | 4 | 23 | 81 | 67 | 37 | 35 | 25 | 36 | 55 | 42 | 52 | 588 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 90 | 47 | 14 | 8 | 4 | 5 | 23 | 82 | 70 | 45 | 51 | 29 | 38 | 76 | 56 | 61 | 699 |

Total Number of Valid Hours: 699

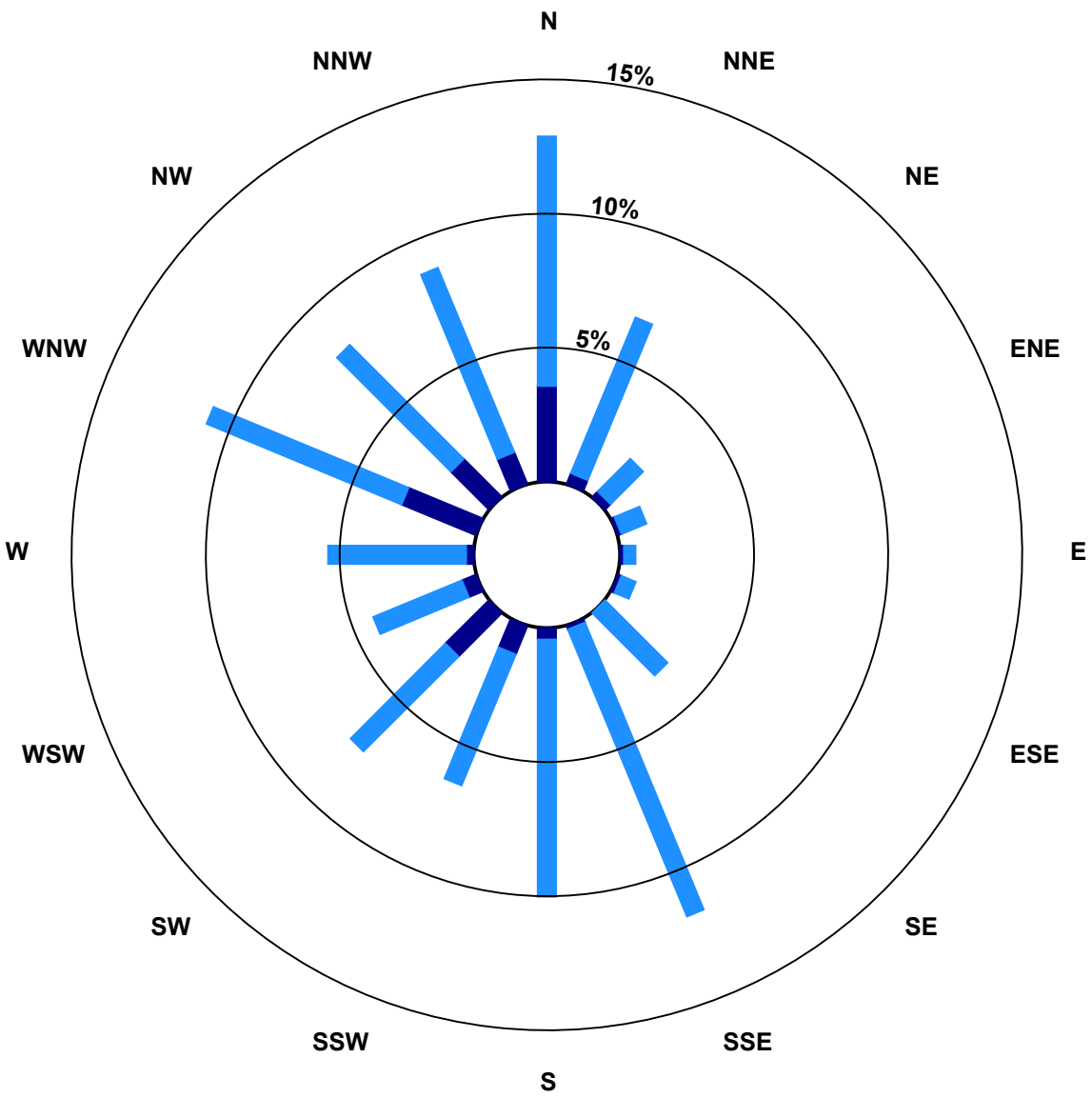
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

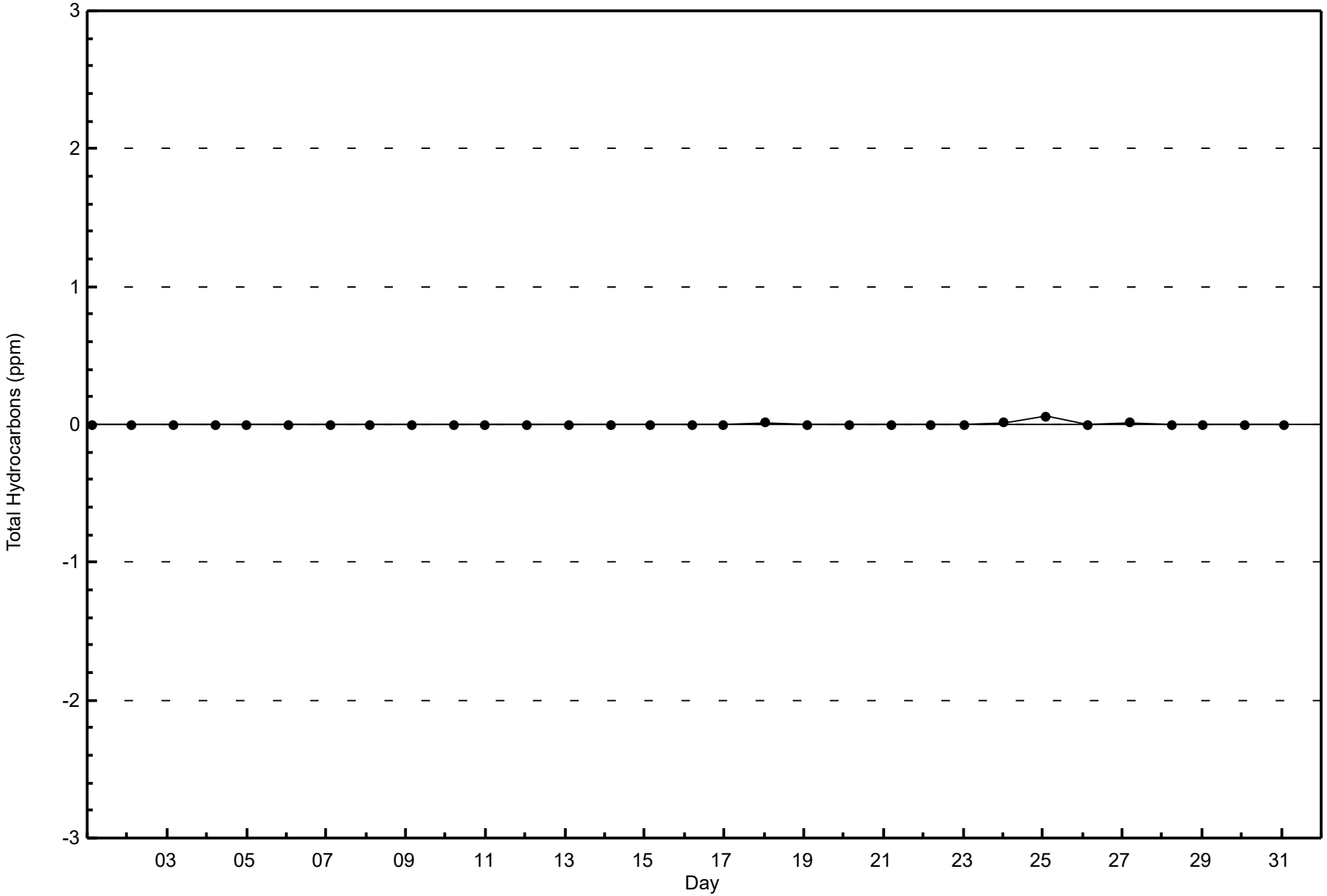
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**

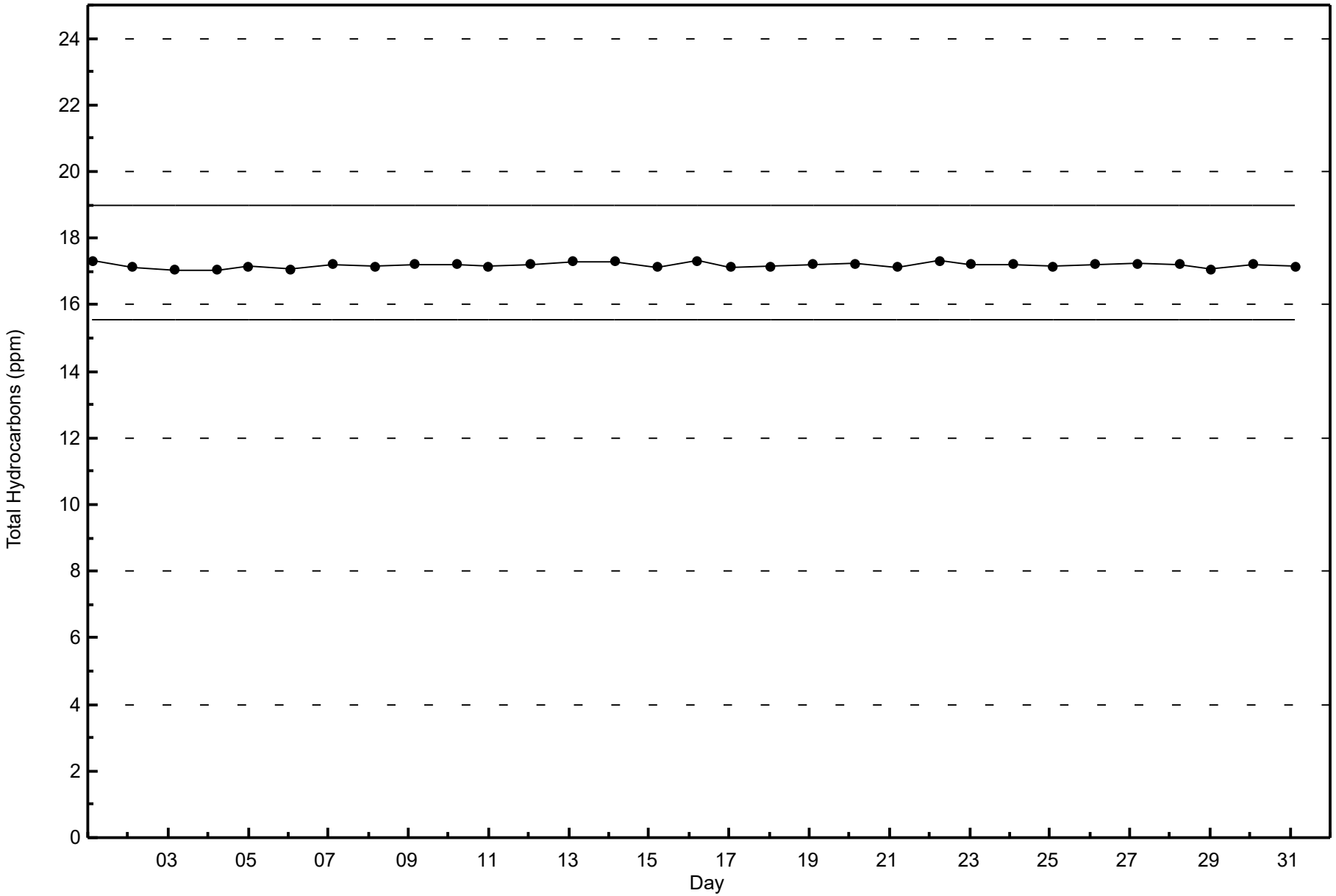


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Non Methane Hydrocarbons (NMHC) - ppm

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 0.368 ppm on Aug 18 08:00

Maximum Daily Average: 0.214 ppm on Aug 23

Minimum Value: 0.000 ppm on Aug 2 12:00

Minimum Daily Average: 0.008 ppm on Aug 12

Maximum Diurnal Average: 0.073 ppm at hour 22

Minimum Diurnal Average: 0.029 ppm at hour 6

Monthly Average: 0.049 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.1 $P_{99}$ = 0.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.117 | 0.139 | Z | 0.112 | 0.106 | 0.122 | 0.143 | 0.156 | 0.152 | 0.160 | 0.161 | 0.178 | 0.231 | 0.303 | 0.286 | 0.210 | 0.175 | 0.158 | 0.124 | 0.175 | 0.178 | 0.183 | 0.099 | 0.142 | 0.166 | 0.303 |
| 2-Aug | 0.118 | 0.079 | 0.013 | Z | 0.038 | 0.051 | 0.016 | 0.024 | 0.014 | 0.015 | 0.002 | 0.000 | 0.002 | 0.004 | 0.000 | 0.000 | 0.003 | 0.002 | 0.000 | 0.000 | 0.002 | 0.004 | 0.004 | 0.005 | 0.017 | 0.118 |
| 3-Aug | 0.002 | 0.001 | 0.001 | 0.001 | Z | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.007 | 0.032 | 0.029 | 0.003 | 0.000 | 0.093 | 0.154 | 0.106 | 0.032 | 0.020 | 0.154 |
| 4-Aug | 0.008 | 0.015 | 0.004 | 0.006 | 0.008 | Z | 0.094 | 0.117 | 0.021 | 0.013 | 0.032 | 0.013 | 0.011 | 0.017 | 0.017 | 0.009 | 0.008 | 0.016 | 0.017 | 0.014 | 0.010 | 0.046 | 0.026 | 0.012 | 0.023 | 0.117 |
| 5-Aug | Z | 0.037 | 0.031 | 0.033 | 0.033 | 0.007 | 0.004 | 0.005 | 0.002 | 0.000 | 0.015 | 0.008 | 0.006 | 0.024 | 0.016 | 0.003 | 0.001 | 0.008 | 0.011 | 0.009 | 0.005 | 0.002 | 0.003 | 0.001 | 0.011 | 0.037 |
| 6-Aug | 0.002 | Z | 0.003 | 0.007 | 0.007 | 0.009 | 0.003 | 0.006 | 0.002 | 0.008 | 0.006 | 0.005 | 0.003 | 0.016 | 0.014 | 0.020 | 0.011 | 0.008 | 0.024 | 0.014 | 0.012 | 0.010 | 0.034 | 0.003 | 0.010 | 0.034 |
| 7-Aug | 0.022 | 0.013 | Z | 0.040 | 0.030 | 0.022 | 0.004 | 0.010 | 0.008 | 0.013 | 0.004 | 0.008 | 0.137 | 0.247 | 0.078 | 0.016 | 0.055 | 0.067 | 0.138 | 0.072 | 0.216 | 0.133 | 0.038 | 0.039 | 0.061 | 0.247 |
| 8-Aug | 0.011 | 0.010 | 0.004 | Z | 0.018 | 0.017 | 0.002 | 0.024 | 0.020 | 0.004 | 0.056 | 0.025 | 0.024 | 0.044 | 0.024 | 0.016 | 0.010 | 0.023 | 0.019 | 0.011 | 0.012 | 0.002 | 0.012 | 0.003 | 0.017 | 0.056 |
| 9-Aug | 0.010 | 0.007 | 0.016 | 0.003 | Z | 0.012 | 0.023 | 0.030 | 0.030 | 0.026 | 0.008 | 0.011 | 0.014 | 0.029 | 0.098 | 0.121 | 0.004 | 0.016 | 0.050 | 0.047 | 0.070 | 0.126 | 0.126 | 0.028 | 0.039 | 0.126 |
| 10-Aug | 0.018 | 0.026 | 0.016 | 0.019 | 0.036 | Z | 0.013 | 0.025 | 0.061 | 0.220 | 0.132 | 0.124 | 0.009 | 0.005 | 0.011 | 0.003 | 0.009 | 0.013 | 0.004 | 0.010 | 0.012 | 0.009 | 0.022 | 0.024 | 0.036 | 0.220 |
| 11-Aug | Z | 0.011 | 0.022 | 0.009 | 0.011 | 0.007 | 0.002 | 0.004 | 0.013 | 0.016 | 0.010 | 0.010 | 0.015 | 0.020 | M | 0.001 | 0.002 | 0.003 | 0.003 | 0.005 | 0.006 | 0.004 | 0.008 | 0.007 | 0.009 | 0.022 |
| 12-Aug | 0.009 | Z | 0.008 | 0.002 | 0.001 | 0.005 | 0.002 | 0.003 | 0.015 | 0.004 | C | C | C | C | 0.007 | 0.014 | 0.012 | 0.015 | 0.006 | 0.003 | 0.014 | 0.003 | 0.023 | 0.009 | 0.008 | 0.023 |
| 13-Aug | 0.011 | 0.005 | Z | 0.003 | 0.003 | 0.005 | 0.006 | 0.002 | 0.038 | 0.047 | 0.025 | 0.004 | 0.003 | 0.007 | 0.004 | 0.008 | 0.002 | 0.007 | 0.009 | 0.012 | 0.013 | 0.009 | 0.032 | 0.080 | 0.015 | 0.080 |
| 14-Aug | 0.018 | 0.018 | 0.005 | Z | 0.020 | 0.018 | 0.010 | 0.009 | 0.007 | 0.007 | 0.007 | 0.014 | 0.027 | 0.001 | 0.014 | 0.010 | 0.004 | 0.009 | 0.005 | 0.038 | 0.059 | 0.057 | 0.031 | 0.019 | 0.018 | 0.059 |
| 15-Aug | 0.026 | 0.009 | 0.005 | 0.009 | Z | 0.005 | 0.016 | 0.007 | 0.037 | 0.034 | 0.046 | 0.016 | 0.015 | 0.002 | 0.005 | 0.011 | 0.006 | 0.011 | 0.012 | 0.012 | 0.034 | 0.019 | 0.037 | 0.016 | 0.017 | 0.046 |
| 16-Aug | 0.036 | 0.036 | 0.030 | 0.030 | 0.013 | Z | 0.013 | 0.014 | 0.016 | 0.009 | 0.007 | 0.003 | 0.002 | 0.003 | 0.003 | 0.010 | 0.004 | 0.083 | 0.063 | 0.085 | 0.113 | 0.119 | 0.042 | 0.067 | 0.035 | 0.119 |
| 17-Aug | Z | 0.013 | 0.009 | 0.004 | 0.010 | 0.001 | 0.000 | 0.008 | 0.003 | 0.009 | 0.010 | 0.015 | 0.016 | 0.020 | 0.017 | 0.023 | 0.027 | 0.037 | 0.014 | 0.015 | 0.222 | 0.165 | 0.080 | 0.037 | 0.033 | 0.222 |
| 18-Aug | 0.017 | Z | 0.034 | 0.045 | 0.056 | 0.049 | 0.052 | 0.368 | 0.167 | 0.106 | 0.118 | 0.061 | 0.018 | 0.011 | 0.013 | 0.020 | 0.014 | 0.013 | 0.017 | 0.017 | 0.020 | 0.031 | 0.052 | 0.014 | 0.057 | 0.368 |
| 19-Aug | 0.037 | 0.021 | Z | 0.045 | 0.052 | 0.049 | 0.065 | 0.073 | 0.051 | 0.038 | 0.044 | 0.037 | 0.072 | 0.042 | 0.017 | 0.033 | 0.016 | 0.072 | 0.120 | 0.122 | 0.100 | 0.101 | 0.073 | 0.055 | 0.058 | 0.122 |
| 20-Aug | 0.037 | 0.031 | 0.013 | Z | 0.027 | 0.019 | 0.016 | 0.019 | 0.055 | 0.149 | 0.141 | 0.018 | 0.101 | 0.043 | 0.064 | 0.052 | 0.082 | 0.041 | 0.054 | 0.094 | 0.093 | 0.101 | 0.091 | 0.074 | 0.061 | 0.149 |
| 21-Aug | 0.051 | 0.029 | 0.020 | 0.011 | Z | 0.008 | 0.007 | 0.015 | 0.078 | 0.149 | 0.101 | 0.086 | 0.041 | 0.005 | 0.004 | 0.014 | 0.010 | 0.017 | 0.018 | 0.015 | 0.031 | 0.104 | 0.062 | 0.103 | 0.043 | 0.149 |
| 22-Aug | 0.079 | 0.080 | 0.089 | 0.104 | 0.112 | Z | 0.100 | 0.056 | 0.069 | 0.079 | 0.157 | 0.145 | 0.132 | 0.160 | 0.171 | 0.161 | 0.161 | 0.179 | 0.192 | 0.214 | 0.219 | 0.206 | 0.281 | 0.236 | 0.147 | 0.281 |
| 23-Aug | Z | 0.138 | 0.155 | 0.209 | 0.160 | 0.145 | 0.146 | 0.180 | 0.307 | 0.221 | 0.251 | 0.238 | 0.259 | 0.341 | 0.304 | 0.321 | 0.348 | 0.298 | 0.196 | 0.165 | 0.109 | 0.142 | 0.144 | 0.158 | 0.214 | 0.348 |
| 24-Aug | 0.103 | Z | 0.025 | 0.017 | 0.009 | 0.009 | 0.006 | 0.007 | 0.005 | 0.007 | 0.011 | 0.008 | 0.004 | 0.008 | 0.009 | 0.048 | 0.058 | 0.231 | 0.037 | 0.008 | 0.021 | 0.023 | 0.010 | 0.025 | 0.030 | 0.231 |
| 25-Aug | 0.054 | 0.062 | Z | 0.016 | 0.013 | 0.008 | 0.003 | 0.029 | 0.040 | 0.195 | 0.179 | 0.185 | 0.179 | 0.149 | 0.161 | PF | PF | PF | PF | PF | PF | 0.193 | 0.210 | 0.156 | -- | 0.210 |
| 26-Aug | 0.073 | 0.061 | 0.079 | Z | 0.013 | 0.020 | 0.050 | 0.133 | 0.063 | 0.061 | 0.105 | 0.122 | 0.084 | 0.062 | 0.020 | 0.030 | 0.014 | 0.018 | 0.061 | 0.114 | 0.126 | 0.128 | 0.066 | 0.114 | 0.070 | 0.133 |
| 27-Aug | 0.148 | 0.080 | 0.097 | 0.115 | Z | 0.152 | 0.212 | 0.096 | 0.067 | 0.086 | 0.103 | 0.096 | 0.101 | 0.051 | 0.101 | 0.146 | 0.131 | 0.058 | 0.026 | 0.028 | 0.013 | 0.021 | 0.059 | 0.026 | 0.087 | 0.212 |
| 28-Aug | 0.055 | 0.064 | 0.058 | 0.051 | 0.079 | Z | 0.041 | 0.068 | 0.049 | 0.024 | 0.030 | 0.063 | 0.054 | 0.037 | 0.013 | 0.033 | 0.079 | 0.167 | 0.197 | 0.155 | 0.112 | 0.047 | 0.018 | 0.009 | 0.065 | 0.197 |
| 29-Aug | Z | 0.029 | 0.037 | 0.022 | 0.035 | 0.002 | 0.008 | 0.008 | 0.003 | 0.008 | 0.008 | 0.005 | 0.008 | 0.015 | 0.008 | 0.013 | 0.013 | 0.008 | 0.011 | 0.016 | 0.033 | 0.083 | 0.059 | 0.066 | 0.022 | 0.083 |
| 30-Aug | 0.002 | Z | 0.007 | 0.003 | 0.004 | 0.002 | 0.000 | 0.000 | 0.002 | 0.007 | 0.012 | 0.020 | 0.015 | 0.031 | 0.013 | 0.012 | 0.012 | 0.029 | 0.025 | 0.037 | 0.021 | 0.004 | 0.029 | 0.000 | 0.013 | 0.037 |
| 31-Aug | 0.009 | 0.001 | Z | 0.016 | 0.024 | 0.022 | 0.006 | 0.009 | 0.010 | 0.034 | 0.007 | 0.010 | 0.011 | 0.012 | 0.007 | 0.009 | 0.012 | 0.008 | 0.005 | 0.016 | 0.017 | 0.025 | 0.032 | 0.012 | 0.014 | 0.034 |
| | 0.041 | 0.039 | 0.031 | 0.036 | 0.035 | 0.029 | 0.034 | 0.049 | 0.045 | 0.056 | 0.060 | 0.051 | 0.053 | 0.057 | 0.050 | 0.046 | 0.044 | 0.055 | 0.049 | 0.051 | 0.066 | 0.073 | 0.062 | 0.051 | Diurnal Average | |
| | 0.148 | 0.139 | 0.155 | 0.209 | 0.160 | 0.152 | 0.212 | 0.368 | 0.307 | 0.221 | 0.251 | 0.238 | 0.259 | 0.341 | 0.304 | 0.321 | 0.348 | 0.298 | 0.197 | 0.214 | 0.222 | 0.206 | 0.281 | 0.236 | Diurnal Maximum | |

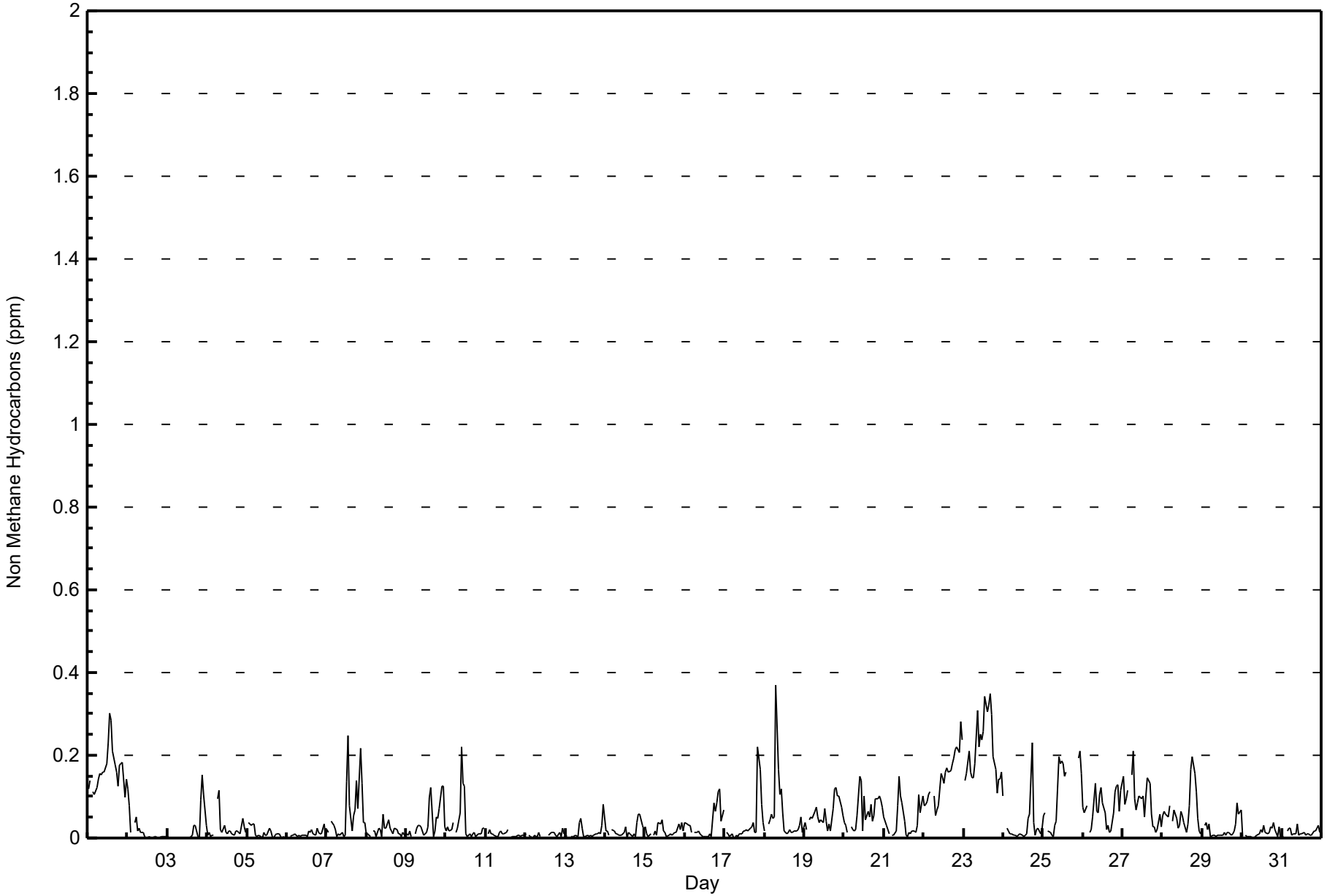
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 121 | 17.24 | 17.24 |
| 0.006 - 0.05 | 383 | 54.56 | 71.79 |
| 0.06 - 0.1 | 133 | 18.95 | 90.74 |
| > 0.1 | 65 | 9.26 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 28 | 7 | 4 | 2 | 0 | 1 | 1 | 3 | 5 | 7 | 2 | 2 | 4 | 17 | 18 | 19 | 120 |
| 0.006 - 0.05 | 47 | 22 | 7 | 2 | 2 | 2 | 14 | 29 | 31 | 29 | 38 | 18 | 28 | 48 | 32 | 32 | 381 |
| 0.06 - 0.1 | 10 | 12 | 2 | 1 | 1 | 2 | 6 | 32 | 24 | 8 | 7 | 7 | 4 | 10 | 3 | 4 | 133 |
| > 0.1 | 5 | 6 | 1 | 3 | 1 | 0 | 2 | 18 | 10 | 1 | 4 | 2 | 2 | 1 | 3 | 6 | 65 |
| **Totals** | 90 | 47 | 14 | 8 | 4 | 5 | 23 | 82 | 70 | 45 | 51 | 29 | 38 | 76 | 56 | 61 | 699 |

Total Number of Valid Hours: 699

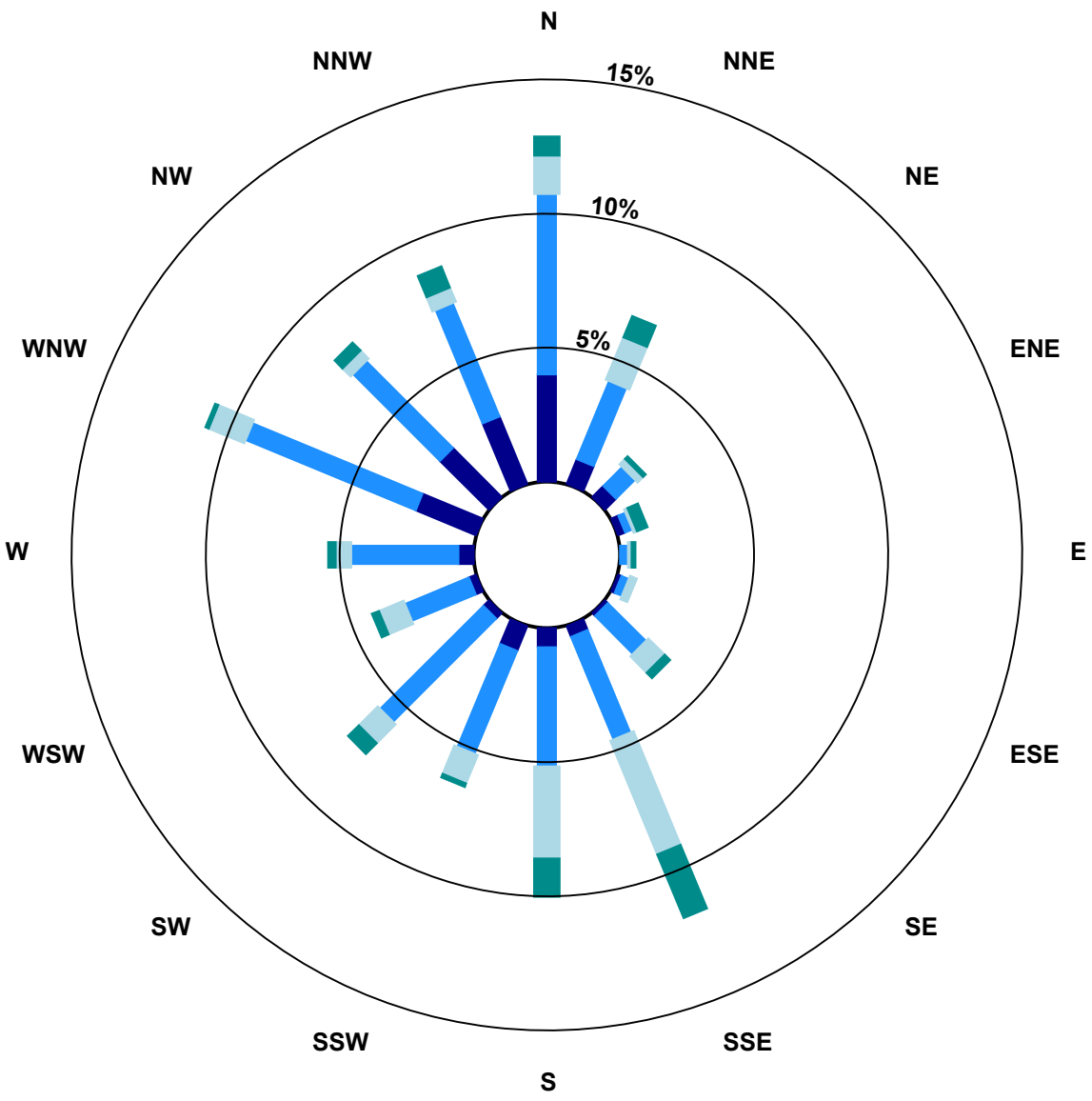
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

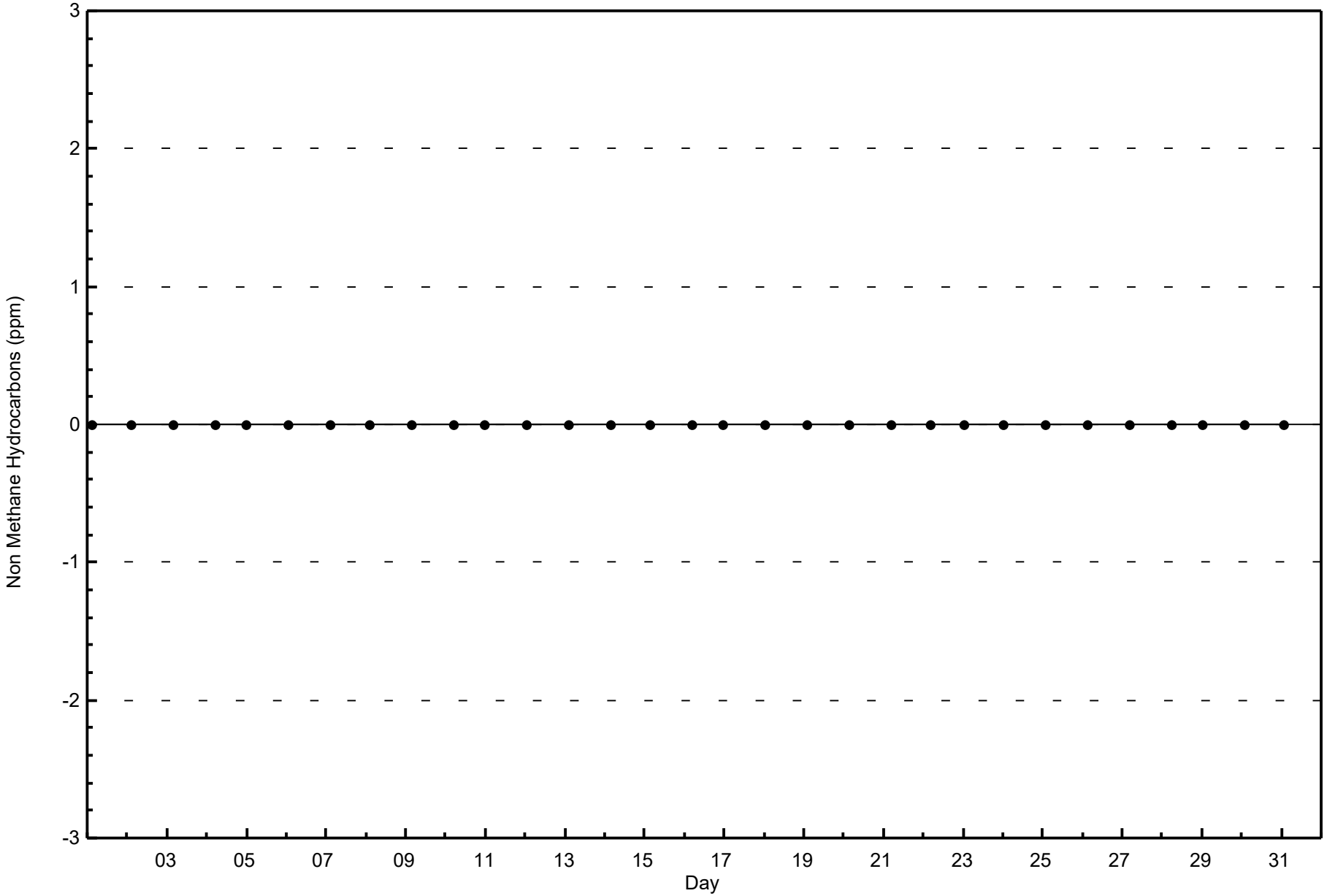
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**

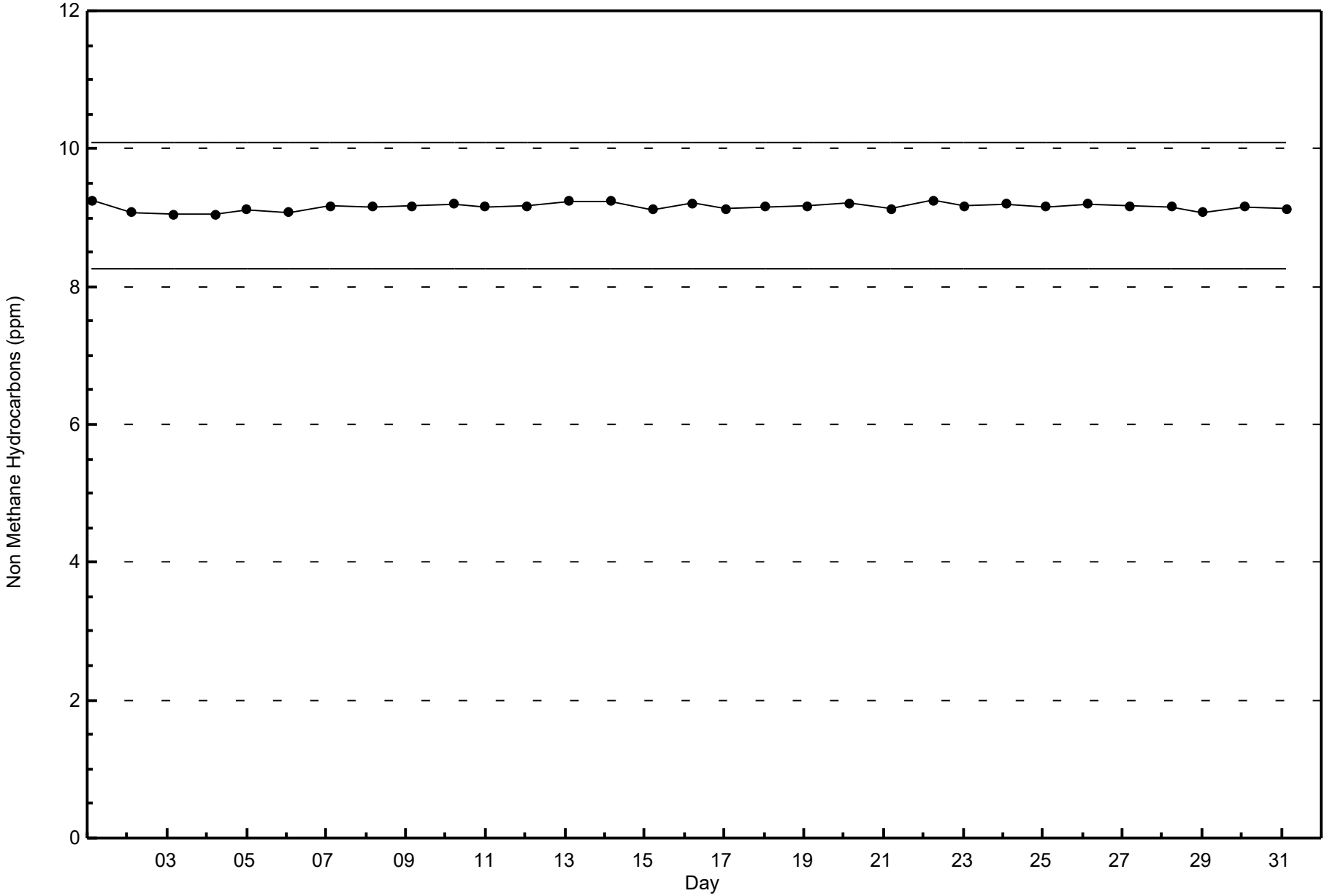


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.8 ppm on Aug 29 23:00
Maximum Daily Average: 2.4 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 28 12:00
Minimum Daily Average: 2.0 ppm on Aug 6
Maximum Diurnal Average: 2.3 ppm at hour 8
Minimum Diurnal Average: 2.1 ppm at hour 18
Monthly Average: 2.18 ppm
Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.1 $Q_3$ = 2.3 $P_{90}$ = 2.4 $P_{99}$ = 2.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.4 | 2.5 | Z | 2.6 | 2.6 | 2.7 | 2.6 | 2.7 | 2.8 | 2.7 | 2.7 | 2.4 | 2.7 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 2.8 |
| 2-Aug | 2.2 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 3-Aug | 2.2 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 4-Aug | 2.3 | 2.5 | 2.5 | 2.4 | 2.4 | Z | 2.4 | 2.5 | 2.3 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.2 | 2.1 | 2.2 | 2.5 |
| 5-Aug | Z | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 |
| 6-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 7-Aug | 2.0 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 8-Aug | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.4 | 2.2 | 2.4 |
| 9-Aug | 2.4 | 2.4 | 2.4 | 2.6 | Z | 2.5 | 2.6 | 2.6 | 2.6 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 |
| 10-Aug | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | Z | 2.4 | 2.5 | 2.5 | 2.7 | 2.5 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 |
| 11-Aug | Z | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.4 | 2.1 | 2.0 | 2.0 | 2.1 | M | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.4 |
| 12-Aug | 2.1 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 13-Aug | 2.1 | 2.1 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.4 |
| 14-Aug | 2.3 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.3 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.5 |
| 15-Aug | 2.3 | 2.3 | 2.3 | 2.2 | Z | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 16-Aug | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 17-Aug | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 2.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.4 |
| 18-Aug | 2.2 | Z | 2.4 | 2.3 | 2.3 | 2.4 | 2.4 | 2.6 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.6 |
| 19-Aug | 2.1 | 2.1 | Z | 2.2 | 2.4 | 2.5 | 2.7 | 2.7 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.7 |
| 20-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.4 | 2.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.4 |
| 21-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.5 | 2.5 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.5 |
| 22-Aug | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.4 | 2.5 | 2.3 | 2.3 | 2.5 |
| 23-Aug | Z | 2.3 | 2.5 | 2.4 | 2.5 | 2.5 | 2.4 | 2.5 | 2.7 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.5 | 2.5 | 2.3 | 2.0 | 2.4 | 2.4 | 2.2 | 2.1 | 2.1 | 2.4 | 2.7 |
| 24-Aug | 2.1 | Z | 2.3 | 2.6 | 2.6 | 2.4 | 2.2 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.6 |
| 25-Aug | 2.4 | 2.4 | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 | 2.7 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | PF | PF | PF | PF | PF | PF | 2.3 | 2.4 | 2.4 | -- | 2.7 |
| 26-Aug | 2.4 | 2.4 | 2.3 | Z | 2.4 | 2.5 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 27-Aug | 2.3 | 2.3 | 2.4 | 2.4 | Z | 2.7 | 2.8 | 2.5 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.8 |
| 28-Aug | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | Z | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.3 |
| 29-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 | 2.8 | 2.5 | 2.1 | 2.8 |
| 30-Aug | 2.5 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.6 | 2.7 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.7 |
| 31-Aug | 2.2 | 2.3 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | Diurnal Average | |
| | 2.5 | 2.5 | 2.5 | 2.6 | 2.6 | 2.7 | 2.8 | 2.7 | 2.8 | 2.7 | 2.7 | 2.5 | 2.7 | 2.5 | 2.4 | 2.5 | 2.5 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.8 | 2.5 | Diurnal Maximum | |

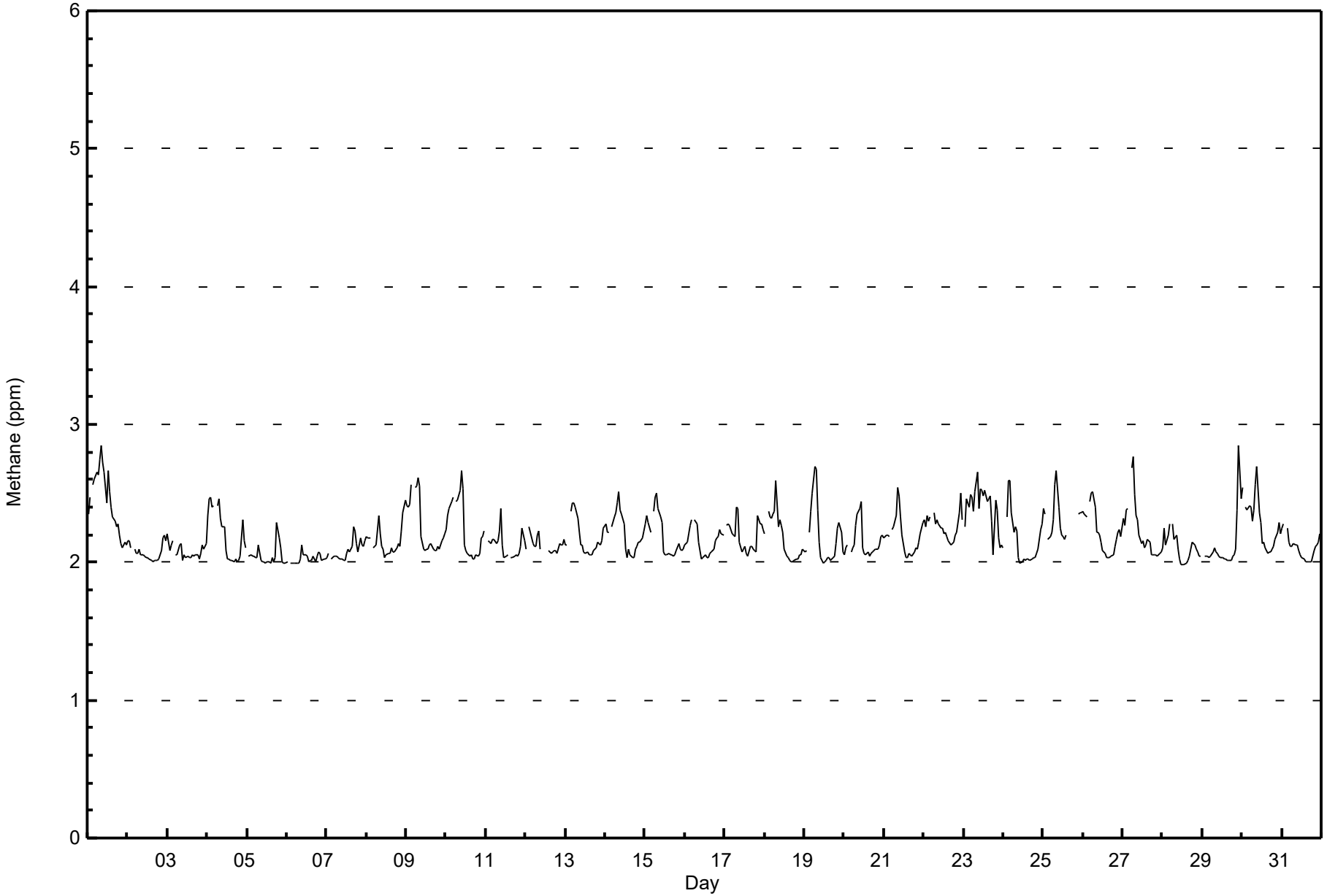
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 163 | 23.22 | 23.22 |
| 2.1 - 3.0 | 539 | 76.78 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 36 | 10 | 4 | 1 | 1 | 1 | 0 | 10 | 3 | 11 | 24 | 4 | 4 | 24 | 19 | 11 | 163 |
| 2.1 - 3.0 | 54 | 37 | 10 | 7 | 3 | 4 | 23 | 72 | 67 | 34 | 27 | 25 | 34 | 52 | 37 | 50 | 536 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 90 | 47 | 14 | 8 | 4 | 5 | 23 | 82 | 70 | 45 | 51 | 29 | 38 | 76 | 56 | 61 | 699 |

Total Number of Valid Hours: 699

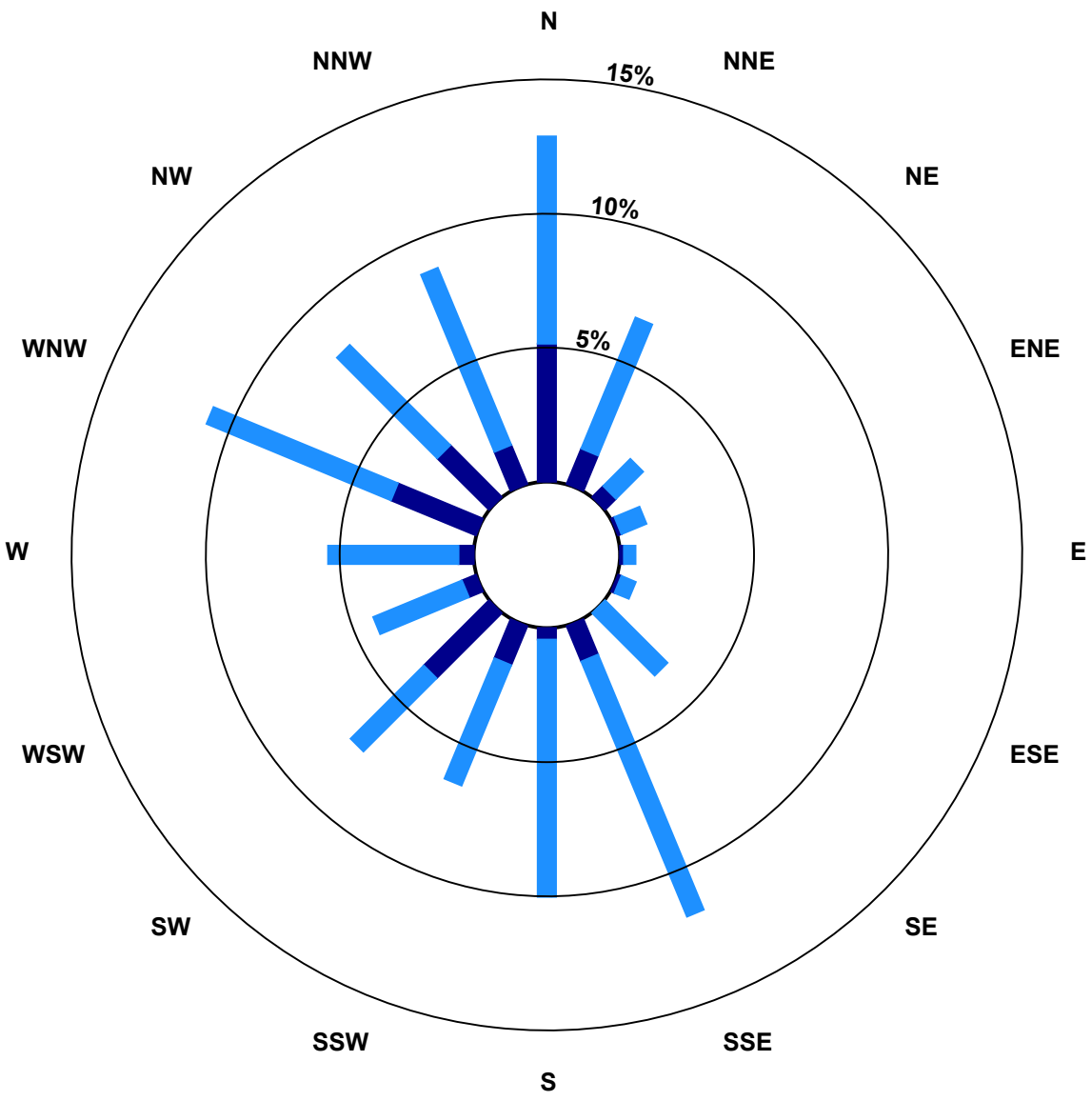
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Fort McKay - Bertha Ganter




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

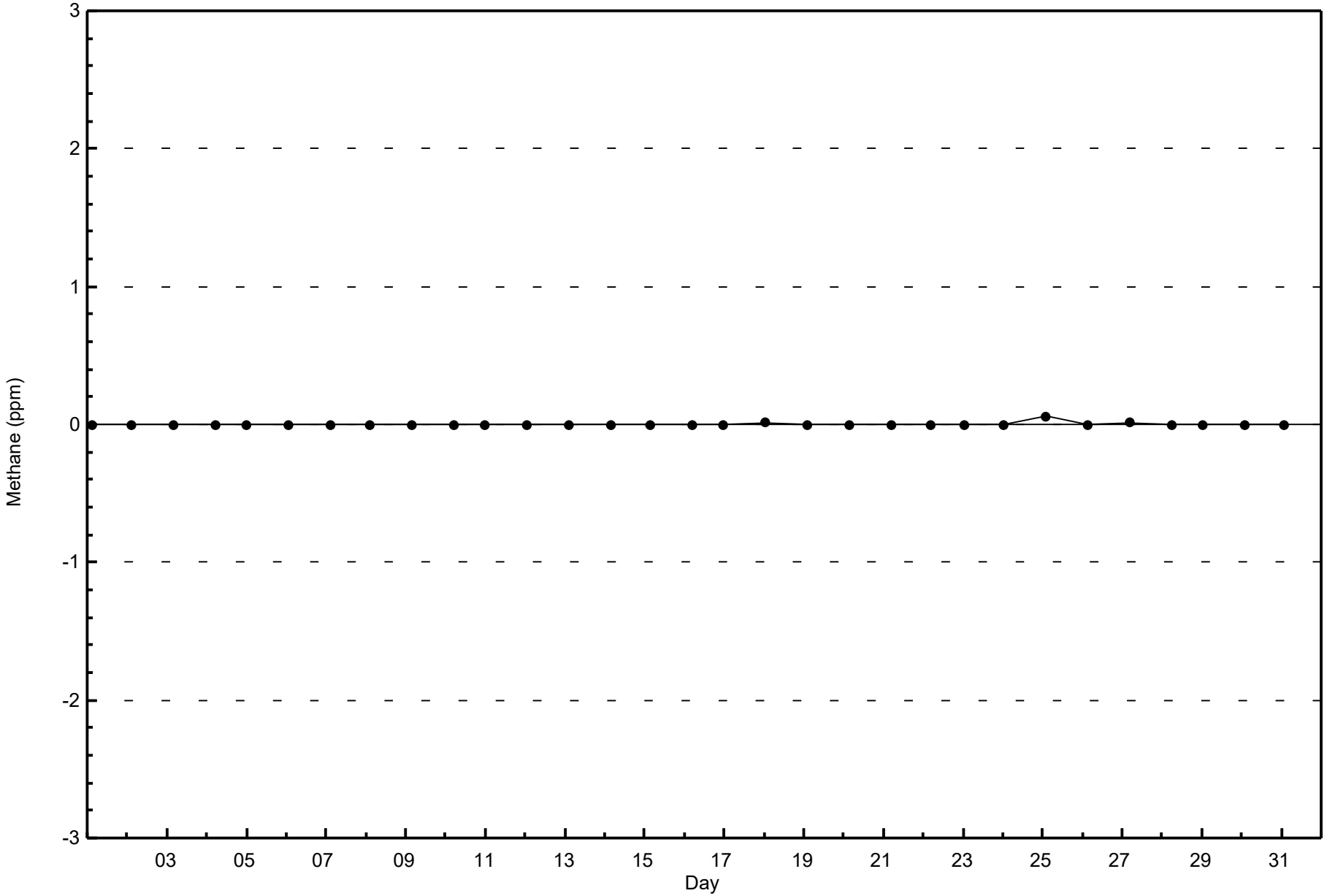
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Fort McKay - Bertha Ganter - August 2026**

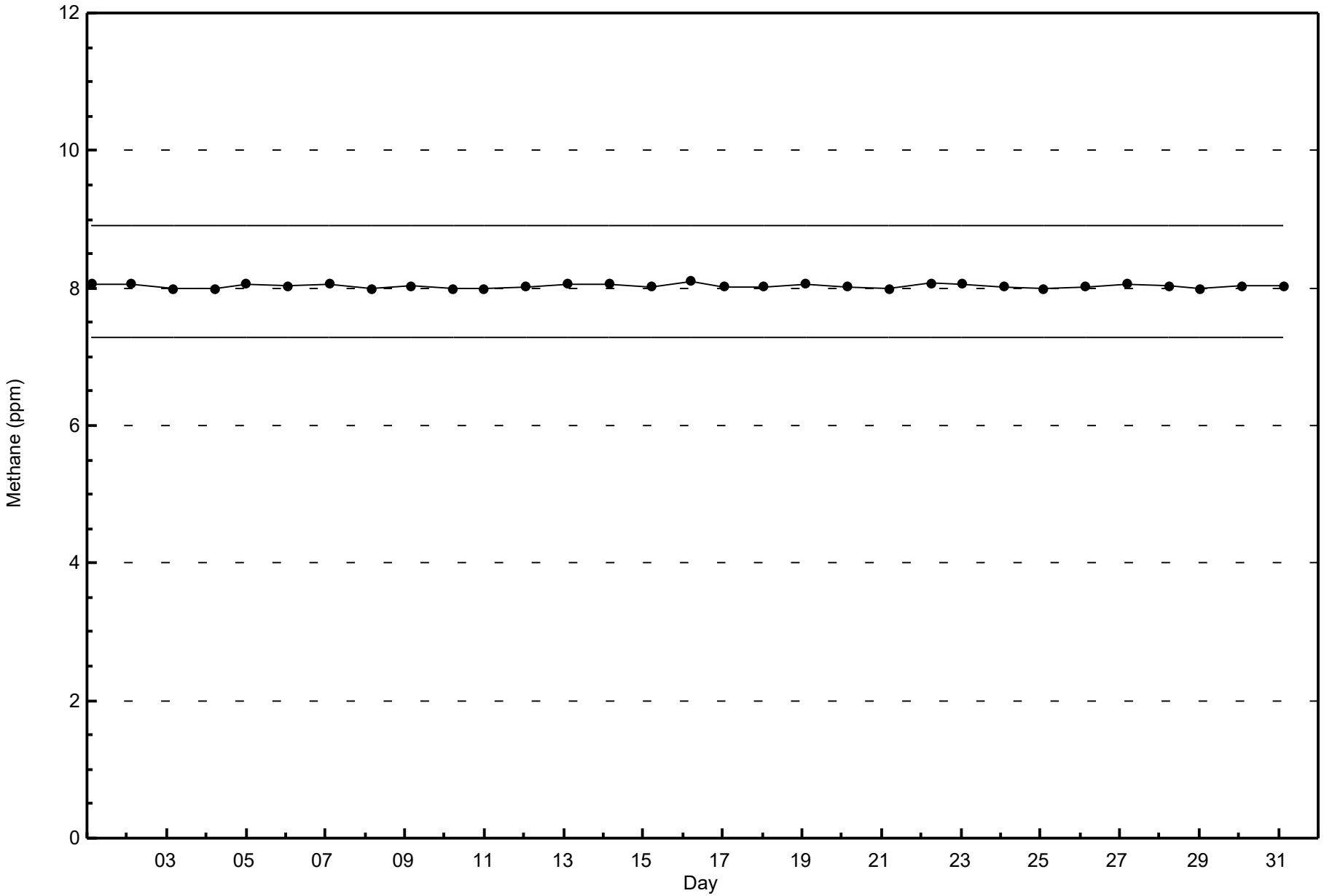


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 29.1 ppb on Aug 25 09:00

Maximum Daily Average: 6.0 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 1 21:00

Minimum Daily Average: 0.0 ppb on Aug 28

Maximum Diurnal Average: 6.6 ppb at hour 9

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 1.79 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 1.5 $P_{90}$ = 5.4 $P_{99}$ = 19.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.4 | 0.5 | 1.4 | 4.5 | 9.0 | 13.9 | 12.8 | 14.4 | 18.2 | 14.6 | 5.4 | 16.4 | 9.9 | 5.4 | 3.7 | 3.1 | 1.3 | 1.5 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 18.2 |
| 2-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.2 |
| 3-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 3.7 | 0.1 | 0.8 | 0.3 | 0.7 | 0.6 | 1.4 | 3.1 | 2.6 | 1.8 | 1.3 | 0.3 | 0.1 | 0.5 | 0.1 | 0.0 | 0.9 | 3.7 |
| 4-Aug | 0.6 | 5.2 | 9.4 | Z | 7.7 | 10.9 | 7.1 | 5.0 | 3.6 | 2.6 | 3.9 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 2.4 | 10.9 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 1.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.6 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 2.6 | 1.1 | 1.0 | 0.4 | 0.2 | 0.5 | 0.3 | 0.4 | 0.0 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 2.6 |
| 7-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 3.4 | 1.6 | 1.1 | 5.2 | 4.1 | 3.6 | 0.8 | 1.4 | 0.1 | 0.1 | 0.1 | 1.1 | 5.2 |
| 8-Aug | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 6.7 | 2.8 | 5.9 | 5.5 | 1.4 | 2.5 | 2.9 | 1.6 | 1.0 | 0.6 | 1.0 | 0.8 | 0.2 | 0.0 | 0.2 | 5.4 | 12.9 | 2.2 | 12.9 |
| 9-Aug | 10.7 | 8.7 | Z | 8.2 | 5.9 | 3.2 | 3.7 | 9.8 | 18.3 | 4.9 | 1.7 | 0.8 | 0.6 | 0.7 | 2.0 | 2.4 | 1.6 | 0.7 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 3.7 | 18.3 |
| 10-Aug | 0.3 | 1.7 | 1.5 | Z | 1.0 | 1.0 | 1.9 | 5.2 | 7.6 | 28.5 | 28.9 | 3.6 | 1.0 | 0.8 | 0.6 | 0.5 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.5 | 0.1 | 0.0 | 3.7 | 28.9 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.7 | 3.1 | 8.4 | C | C | C | C | C | 0.4 | 0.4 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 8.4 |
| 12-Aug | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 1.8 | 1.1 | 0.6 | 1.3 | 0.9 | 0.5 | 1.0 | 0.4 | 0.8 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.5 | 1.8 |
| 13-Aug | Z | 0.3 | 7.9 | 14.1 | 19.7 | 16.4 | 15.3 | 7.6 | 7.1 | 6.9 | 3.9 | 1.1 | 1.5 | 2.6 | 1.5 | 0.7 | 0.7 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.7 | 19.7 |
| 14-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.5 | 3.3 | 11.3 | 15.1 | 13.5 | 10.9 | 9.1 | 4.3 | 1.3 | 2.0 | 0.8 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1 | 15.1 |
| 15-Aug | 0.0 | 0.8 | Z | 0.0 | 1.1 | 13.6 | 20.9 | 19.9 | 11.4 | 6.6 | 4.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 20.9 |
| 16-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 1.1 | 1.9 | 0.3 | 0.6 | 0.0 | 0.2 | 0.8 | 0.1 | 0.0 | 0.2 | 0.0 | 2.2 | 2.1 | 0.4 | 0.5 | 0.2 | 0.0 | 0.7 | 0.5 | 2.2 |
| 17-Aug | 3.3 | 1.0 | 0.2 | 0.3 | Z | 0.6 | 2.8 | 14.3 | 11.8 | 2.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.2 | 0.6 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 14.3 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | Z | 4.8 | 2.5 | 3.9 | 3.3 | 2.9 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 4.8 |
| 19-Aug | Z | 0.0 | 0.0 | 0.3 | 2.8 | 6.4 | 6.4 | 10.2 | 4.6 | 0.0 | 0.0 | 0.0 | 0.1 | 1.4 | 0.4 | 0.2 | 0.0 | 0.3 | 0.5 | 0.2 | 0.5 | 0.1 | 0.0 | 0.0 | 1.5 | 10.2 |
| 20-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 4.1 | 6.6 | 11.5 | 25.4 | 2.6 | 2.3 | 1.7 | 2.9 | 1.4 | 2.5 | 1.0 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 2.7 | 25.4 |
| 21-Aug | 0.0 | 0.0 | Z | 0.0 | 0.3 | 0.6 | 3.5 | 14.1 | 19.9 | 11.6 | 3.1 | 0.8 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 19.9 |
| 22-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 1.7 | 4.3 | 6.2 | 3.1 | 1.8 | 2.9 | 3.4 | 4.0 | 1.8 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 6.2 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 1.2 | 1.8 | 3.3 | 1.3 | 2.5 | 1.4 | 0.8 | 1.0 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 3.3 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 3.8 | 6.1 | Z | 2.1 | 2.2 | 2.9 | 0.1 | 0.0 | 0.0 | 0.6 | 0.2 | 1.1 | 1.1 | 0.9 | 1.5 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.0 | 6.1 |
| 25-Aug | Z | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 11.8 | 29.1 | 12.7 | 5.2 | 2.8 | 1.9 | 1.0 | 0.9 | PF | PF | PF | PF | PF | PF | 0.6 | 2.9 | 4.0 | -- | 29.1 |
| 26-Aug | 6.3 | Z | 0.4 | 0.2 | 1.4 | 3.9 | 6.1 | 5.2 | 3.1 | 2.3 | 2.4 | 2.5 | 1.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 6.3 |
| 27-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.3 | 0.9 | 6.5 | 5.8 | 4.5 | 2.0 | 0.2 | 0.8 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 6.5 |
| 28-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 1.0 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 1.0 | 0.0 | 0.2 | 1.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | Z | 1.0 | 12.2 | 16.4 | 11.0 | 2.0 | 1.9 | 4.8 | 4.9 | 1.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 0.4 | 2.5 | 16.4 |
| 31-Aug | Z | 5.0 | 6.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.3 | 1.0 | 2.1 | 1.3 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 6.1 |
| | 0.9 | 0.9 | 1.0 | 1.1 | 2.0 | 2.6 | 3.3 | 5.7 | 6.6 | 5.3 | 4.2 | 1.4 | 1.6 | 1.3 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 | Diurnal Average | |
| | 10.7 | 8.7 | 9.4 | 14.1 | 19.7 | 16.4 | 20.9 | 19.9 | 29.1 | 28.5 | 28.9 | 9.1 | 16.4 | 9.9 | 5.4 | 3.7 | 5.2 | 4.1 | 3.6 | 0.8 | 1.4 | 0.7 | 5.4 | 12.9 | Diurnal Maximum | |

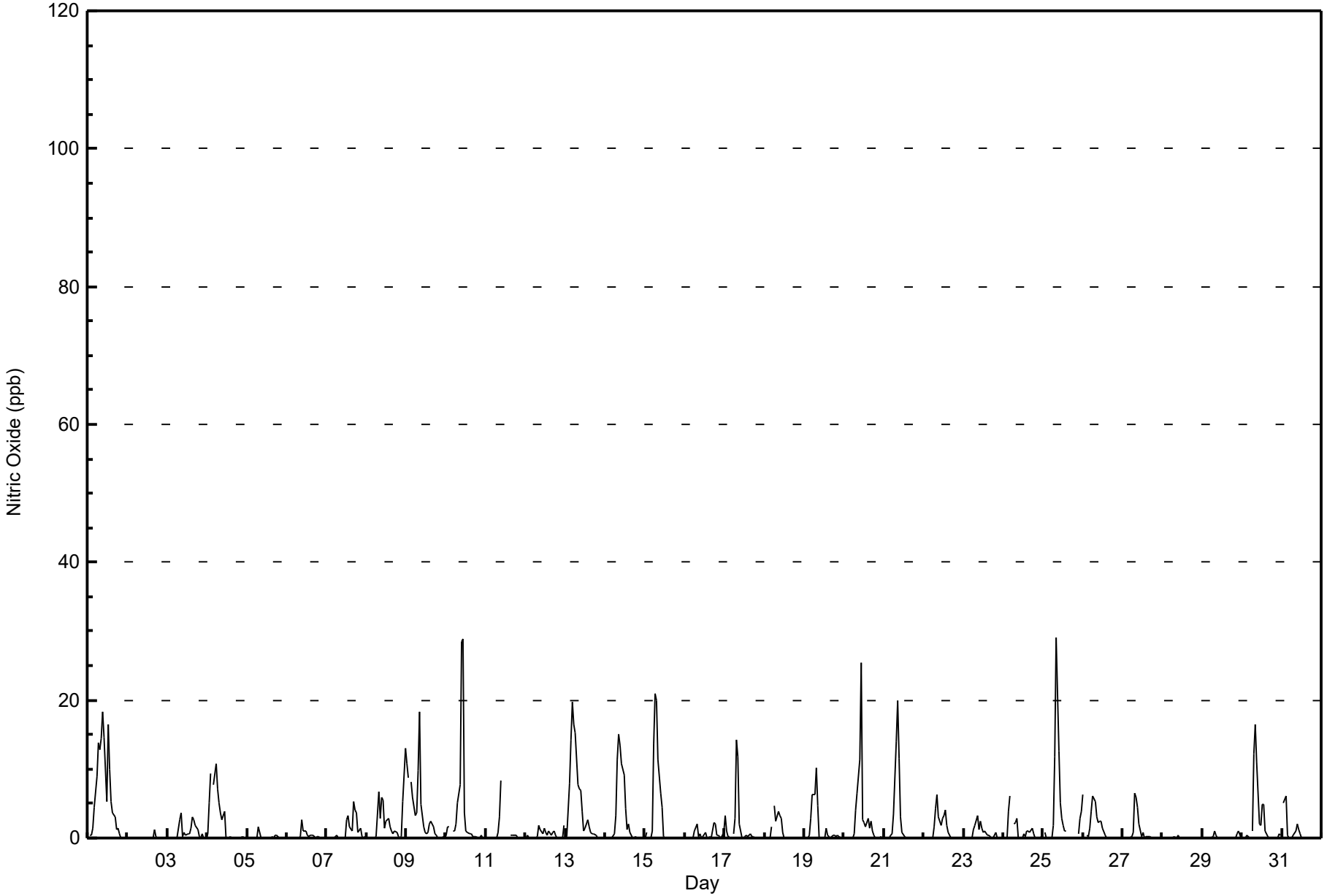
Z - zerospan C - Calibration PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 697 | 99.29 | 99.29 |
| 21 - 40 | 5 | 0.71 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 87 | 45 | 14 | 8 | 3 | 5 | 23 | 81 | 69 | 46 | 51 | 28 | 37 | 80 | 57 | 59 | 693 |
| 21 - 40 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 89 | 47 | 14 | 8 | 3 | 5 | 23 | 81 | 70 | 46 | 51 | 28 | 37 | 80 | 57 | 59 | 698 |

Total Number of Valid Hours: 698

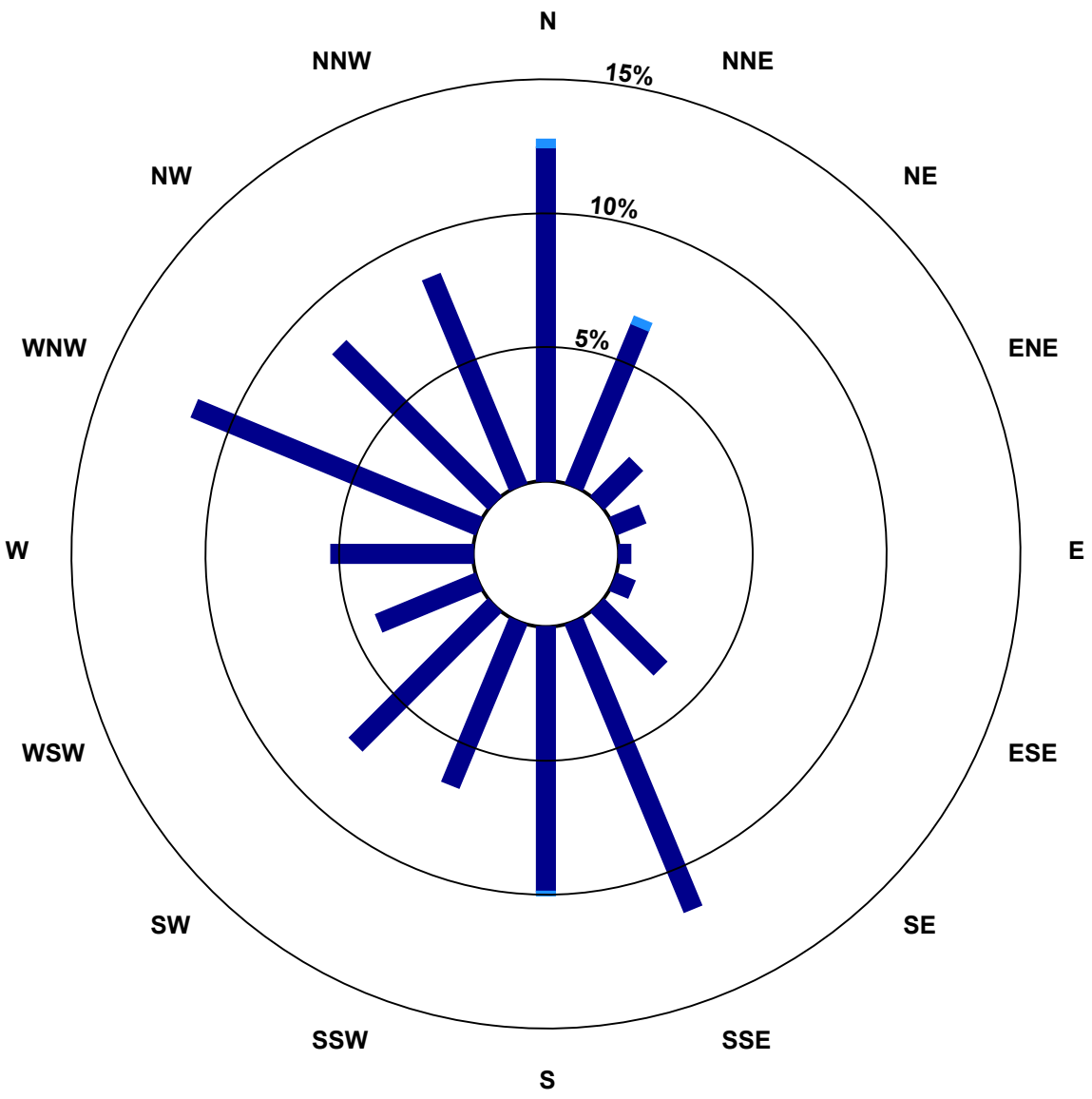
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

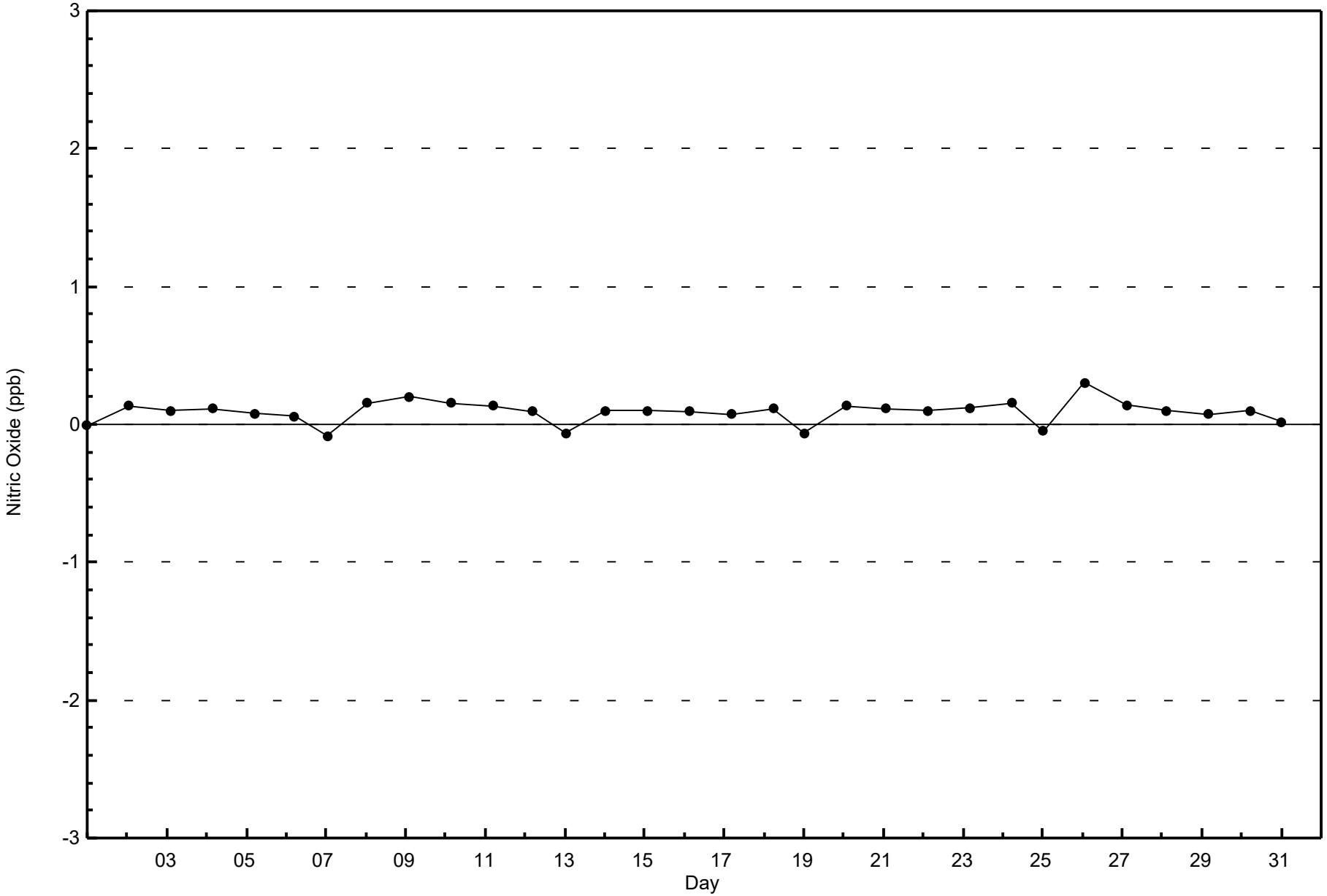
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

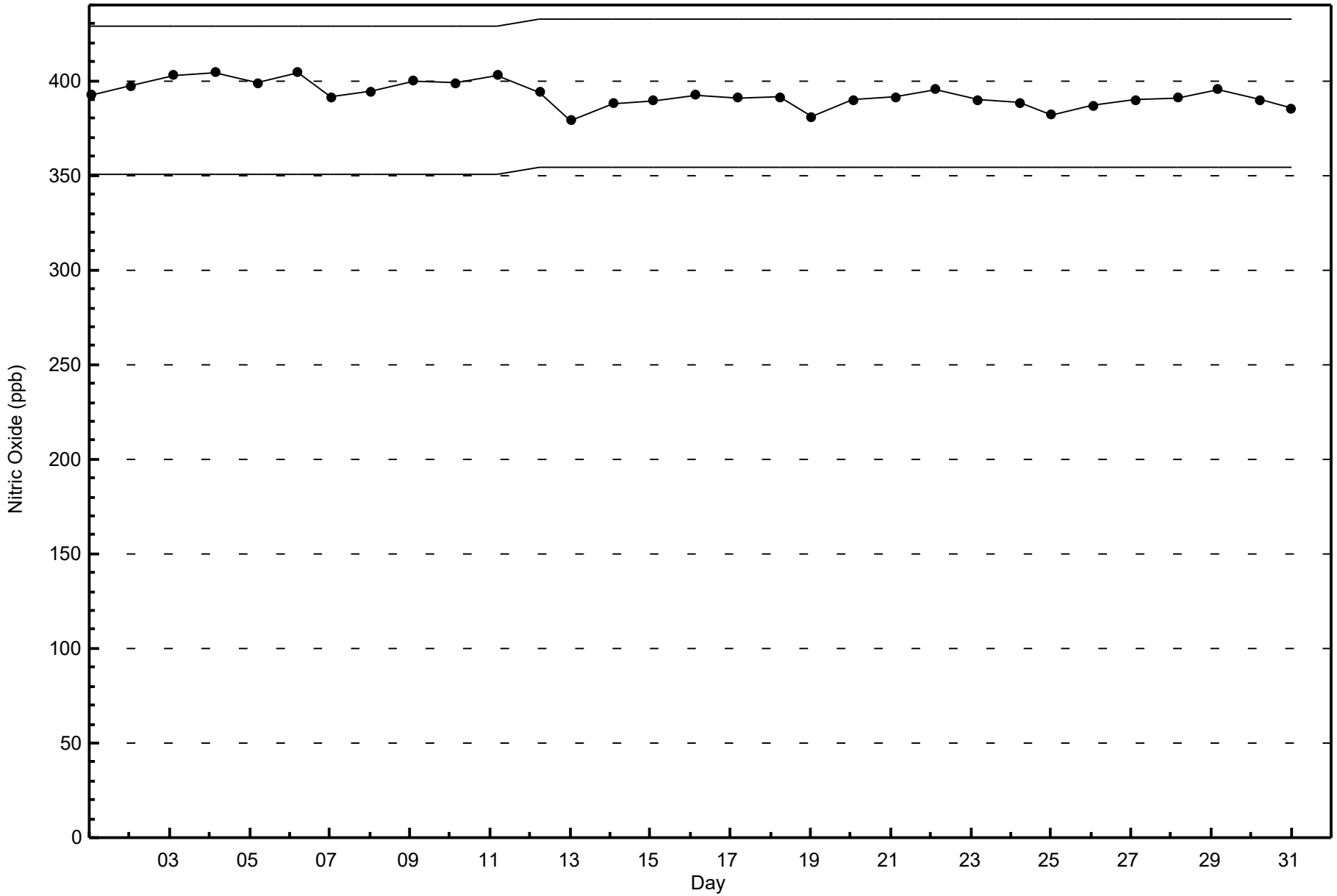


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Dioxide ($NO_2$) - ppb

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.0 ppb on Aug 8 23:00 Maximum Daily Average: 7.0 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 2 11:00
Maximum Diurnal Average: 6.2 ppb at hour 22
Monthly Average: 4.09 ppb

Minimum Daily Average: 0.9 ppb on Aug 6
Minimum Diurnal Average: 2.5 ppb at hour 17
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.3 $Q_1$ = 0.9 Median = 3.3 $Q_3$ = 6.0 $P_{90}$ = 9.1 $P_{99}$ = 16.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 1.6 | 1.4 | 3.7 | 3.6 | 3.2 | 5.2 | 4.9 | 4.9 | 7.7 | 8.9 | 6.3 | 15.7 | 16.7 | 11.7 | 9.6 | 8.9 | 7.5 | 12.5 | 7.9 | 4.5 | 5.0 | 5.0 | 4.8 | 7.0 | 16.7 |
| 2-Aug | 3.2 | Z | 0.6 | 5.6 | 2.0 | 0.2 | 0.4 | 2.9 | 1.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 1.1 | 0.8 | 0.0 | 0.8 | 2.7 | 6.2 | 8.3 | 7.9 | 2.0 | 8.3 |
| 3-Aug | 9.8 | 6.9 | Z | 9.8 | 3.6 | 0.2 | 0.8 | 5.2 | 4.1 | 0.6 | 2.0 | 1.3 | 1.5 | 1.4 | 2.9 | 5.7 | 5.6 | 5.1 | 5.2 | 2.7 | 5.6 | 6.9 | 3.6 | 2.1 | 4.0 | 9.8 |
| 4-Aug | 3.8 | 5.9 | 6.0 | Z | 7.6 | 8.5 | 7.0 | 5.8 | 4.3 | 4.0 | 4.8 | 0.2 | 0.3 | 0.3 | 0.9 | 0.8 | 0.5 | 1.7 | 0.4 | 0.3 | 1.2 | 10.3 | 4.2 | 2.6 | 3.5 | 10.3 |
| 5-Aug | 0.3 | 0.2 | 0.3 | 0.2 | Z | 0.2 | 0.3 | 3.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 1.9 | 0.4 | 2.8 | 7.2 | 5.3 | 3.2 | 0.1 | 0.0 | 0.1 | 1.2 | 7.2 |
| 6-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.4 | 3.2 | 1.6 | 2.1 | 1.5 | 0.7 | 1.7 | 0.8 | 1.2 | 0.2 | 2.2 | 2.4 | 1.3 | 0.1 | 0.1 | 0.1 | 0.9 | 3.2 |
| 7-Aug | Z | 0.5 | 0.2 | 0.2 | 0.1 | 0.5 | 1.0 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 4.8 | 7.4 | 5.2 | 3.8 | 9.8 | 10.7 | 10.9 | 7.8 | 10.6 | 6.2 | 3.6 | 3.5 | 3.8 | 10.9 |
| 8-Aug | 3.5 | Z | 1.5 | 0.7 | 0.4 | 0.2 | 0.3 | 3.9 | 2.5 | 4.9 | 4.9 | 2.1 | 3.5 | 4.6 | 4.2 | 2.6 | 1.8 | 3.9 | 4.8 | 3.1 | 3.7 | 13.1 | 18.0 | 16.0 | 4.5 | 18.0 |
| 9-Aug | 12.1 | 8.7 | Z | 9.0 | 8.0 | 5.0 | 3.6 | 5.2 | 10.6 | 5.3 | 3.3 | 2.6 | 2.5 | 3.5 | 7.6 | 9.8 | 7.1 | 5.6 | 4.0 | 2.6 | 2.7 | 4.0 | 4.1 | 3.7 | 5.7 | 12.1 |
| 10-Aug | 5.4 | 5.3 | 4.8 | Z | 3.3 | 1.8 | 1.8 | 3.1 | 4.4 | 11.4 | 17.3 | 6.8 | 3.4 | 3.6 | 2.0 | 2.6 | 1.6 | 1.5 | 2.0 | 2.1 | 1.0 | 13.2 | 9.2 | 6.0 | 4.9 | 17.3 |
| 11-Aug | 2.3 | 1.2 | 0.6 | 0.5 | Z | 0.6 | 0.7 | 1.3 | 3.9 | 11.9 | C | C | C | C | C | 1.6 | 2.0 | 2.6 | 3.7 | 2.3 | 3.6 | 7.9 | 11.4 | 0.5 | 3.3 | 11.9 |
| 12-Aug | 0.4 | 9.5 | 2.7 | 0.6 | 0.2 | Z | 0.1 | 1.0 | 3.0 | 2.5 | 1.4 | 3.0 | 1.8 | 1.2 | 2.1 | 1.9 | 1.7 | 3.2 | 2.2 | 1.2 | 3.4 | 7.3 | 4.7 | 13.0 | 3.0 | 13.0 |
| 13-Aug | Z | 7.0 | 16.5 | 17.0 | 17.1 | 14.5 | 10.1 | 7.1 | 7.2 | 7.4 | 5.0 | 1.9 | 2.5 | 3.7 | 2.6 | 1.5 | 1.9 | 2.7 | 3.8 | 2.8 | 1.3 | 0.9 | 0.8 | 4.3 | 6.1 | 17.1 |
| 14-Aug | 2.6 | Z | 0.6 | 0.5 | 1.1 | 3.1 | 4.6 | 7.6 | 12.7 | 13.7 | 12.7 | 10.8 | 6.6 | 3.0 | 5.6 | 2.5 | 0.5 | 0.7 | 4.2 | 4.9 | 4.1 | 5.6 | 7.6 | 7.4 | 5.3 | 13.7 |
| 15-Aug | 5.7 | 7.3 | Z | 3.9 | 7.0 | 9.3 | 9.4 | 9.1 | 7.5 | 6.3 | 6.0 | 0.8 | 0.1 | 0.3 | 0.4 | 0.0 | 0.0 | 0.3 | 0.9 | 2.3 | 2.2 | 2.3 | 0.3 | 0.1 | 3.5 | 9.4 |
| 16-Aug | 0.7 | 0.6 | 0.2 | Z | 0.2 | 1.1 | 4.6 | 7.2 | 4.6 | 4.2 | 0.4 | 1.2 | 2.3 | 1.1 | 0.8 | 1.8 | 1.4 | 10.3 | 12.0 | 9.9 | 9.9 | 6.9 | 4.9 | 6.1 | 4.0 | 12.0 |
| 17-Aug | 7.7 | 5.0 | 2.9 | 2.1 | Z | 2.0 | 3.5 | 5.5 | 5.8 | 2.1 | 0.1 | 0.7 | 0.9 | 2.3 | 1.6 | 3.6 | 2.6 | 2.9 | 2.0 | 2.3 | 4.7 | 7.6 | 4.6 | 2.9 | 3.3 | 7.7 |
| 18-Aug | 3.0 | 4.6 | 4.4 | 7.1 | 13.6 | Z | 8.7 | 5.7 | 7.1 | 4.3 | 4.3 | 1.9 | 0.9 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 2.9 | 5.1 | 0.6 | 0.6 | 3.4 | 13.6 |
| 19-Aug | Z | 0.5 | 0.9 | 6.2 | 7.9 | 7.9 | 6.2 | 7.8 | 3.8 | 0.3 | 0.3 | 0.1 | 0.5 | 2.9 | 2.3 | 1.8 | 0.6 | 2.7 | 5.3 | 7.1 | 10.5 | 7.1 | 5.8 | 0.8 | 3.9 | 10.5 |
| 20-Aug | 0.4 | Z | 0.1 | 0.3 | 0.5 | 0.5 | 0.9 | 3.0 | 4.3 | 8.5 | 14.9 | 4.9 | 5.1 | 4.2 | 5.6 | 3.4 | 6.0 | 4.9 | 5.5 | 5.8 | 4.7 | 6.3 | 6.9 | 7.2 | 4.5 | 14.9 |
| 21-Aug | 4.9 | 4.0 | Z | 2.8 | 2.5 | 1.6 | 2.5 | 5.6 | 9.0 | 9.7 | 6.4 | 3.7 | 1.6 | 1.2 | 0.6 | 1.5 | 1.4 | 1.0 | 1.0 | 1.4 | 3.4 | 7.3 | 8.1 | 7.4 | 3.9 | 9.7 |
| 22-Aug | 5.9 | 5.3 | 5.0 | Z | 5.2 | 4.7 | 4.8 | 8.8 | 9.5 | 7.9 | 6.1 | 7.4 | 8.4 | 10.0 | 7.6 | 5.4 | 2.4 | 2.3 | 3.8 | 4.0 | 4.4 | 5.1 | 3.9 | 3.2 | 5.7 | 10.0 |
| 23-Aug | 2.1 | 8.1 | 7.7 | 6.5 | Z | 5.1 | 5.3 | 5.3 | 6.7 | 4.3 | 6.3 | 3.8 | 3.9 | 6.6 | 4.5 | 4.3 | 4.1 | 2.1 | 0.4 | 11.9 | 9.3 | 2.9 | 0.9 | 0.2 | 4.9 | 11.9 |
| 24-Aug | 0.8 | 5.4 | 6.1 | 12.9 | 16.2 | Z | 5.5 | 3.6 | 6.6 | 1.0 | 0.0 | 0.1 | 1.8 | 1.2 | 3.7 | 3.8 | 3.2 | 4.6 | 5.1 | 5.4 | 5.6 | 4.4 | 10.4 | 8.6 | 5.0 | 16.2 |
| 25-Aug | Z | 8.2 | 4.3 | 1.5 | 0.7 | 0.8 | 3.3 | 6.8 | 14.3 | 12.2 | 7.9 | 6.7 | 6.9 | 6.4 | 7.6 | PF | PF | PF | PF | PF | PF | 15.4 | 13.1 | 10.8 | -- | 15.4 |
| 26-Aug | 11.8 | Z | 5.3 | 4.2 | 4.5 | 3.0 | 3.5 | 4.9 | 5.0 | 5.3 | 7.2 | 8.4 | 5.9 | 3.2 | 1.3 | 1.8 | 0.9 | 1.3 | 2.2 | 5.7 | 7.4 | 7.4 | 6.2 | 5.2 | 4.9 | 11.8 |
| 27-Aug | 7.0 | 5.3 | Z | 8.0 | 5.6 | 7.5 | 4.3 | 11.4 | 11.3 | 10.3 | 6.8 | 2.5 | 6.0 | 2.0 | 3.8 | 6.7 | 5.3 | 1.6 | 0.2 | 0.7 | 1.0 | 0.2 | 0.6 | 1.2 | 4.8 | 11.4 |
| 28-Aug | 2.3 | 2.6 | 2.4 | Z | 2.9 | 0.3 | 3.3 | 4.8 | 2.3 | 1.9 | 0.9 | 0.3 | 0.5 | 0.8 | 0.2 | 0.4 | 0.9 | 1.2 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.4 | 1.4 | 4.8 |
| 29-Aug | 0.4 | 0.2 | 0.3 | 0.6 | Z | 0.9 | 2.7 | 2.9 | 1.4 | 0.5 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.5 | 3.0 | 3.6 | 5.1 | 10.9 | 12.2 | 6.2 | 2.3 | 12.2 |
| 30-Aug | 6.0 | 6.5 | 4.6 | 4.8 | 3.3 | Z | 2.9 | 6.0 | 8.7 | 9.0 | 4.1 | 5.5 | 11.6 | 14.2 | 5.7 | 2.3 | 2.2 | 2.7 | 4.5 | 6.1 | 4.4 | 10.7 | 15.6 | 16.5 | 6.9 | 16.5 |
| 31-Aug | Z | 15.8 | 14.7 | 5.0 | 0.9 | 0.4 | 0.5 | 0.7 | 1.5 | 3.3 | 2.8 | 2.3 | 1.1 | 0.7 | 0.4 | 0.4 | 0.1 | 0.0 | 0.0 | 0.2 | 4.1 | 4.4 | 1.9 | 1.6 | 2.7 | 15.8 |
| | 4.1 | 4.9 | 3.6 | 4.4 | 4.5 | 3.2 | 3.5 | 4.9 | 5.5 | 5.3 | 4.6 | 2.9 | 3.4 | 3.5 | 3.1 | 2.8 | 2.5 | 2.9 | 3.7 | 3.8 | 4.3 | 6.2 | 5.7 | 4.9 | Diurnal Average | |
| | 12.1 | 15.8 | 16.5 | 17.0 | 17.1 | 14.5 | 10.1 | 11.4 | 14.3 | 13.7 | 17.3 | 10.8 | 15.7 | 16.7 | 11.7 | 9.8 | 9.8 | 10.7 | 12.5 | 11.9 | 10.6 | 15.4 | 18.0 | 16.5 | Diurnal Maximum | |

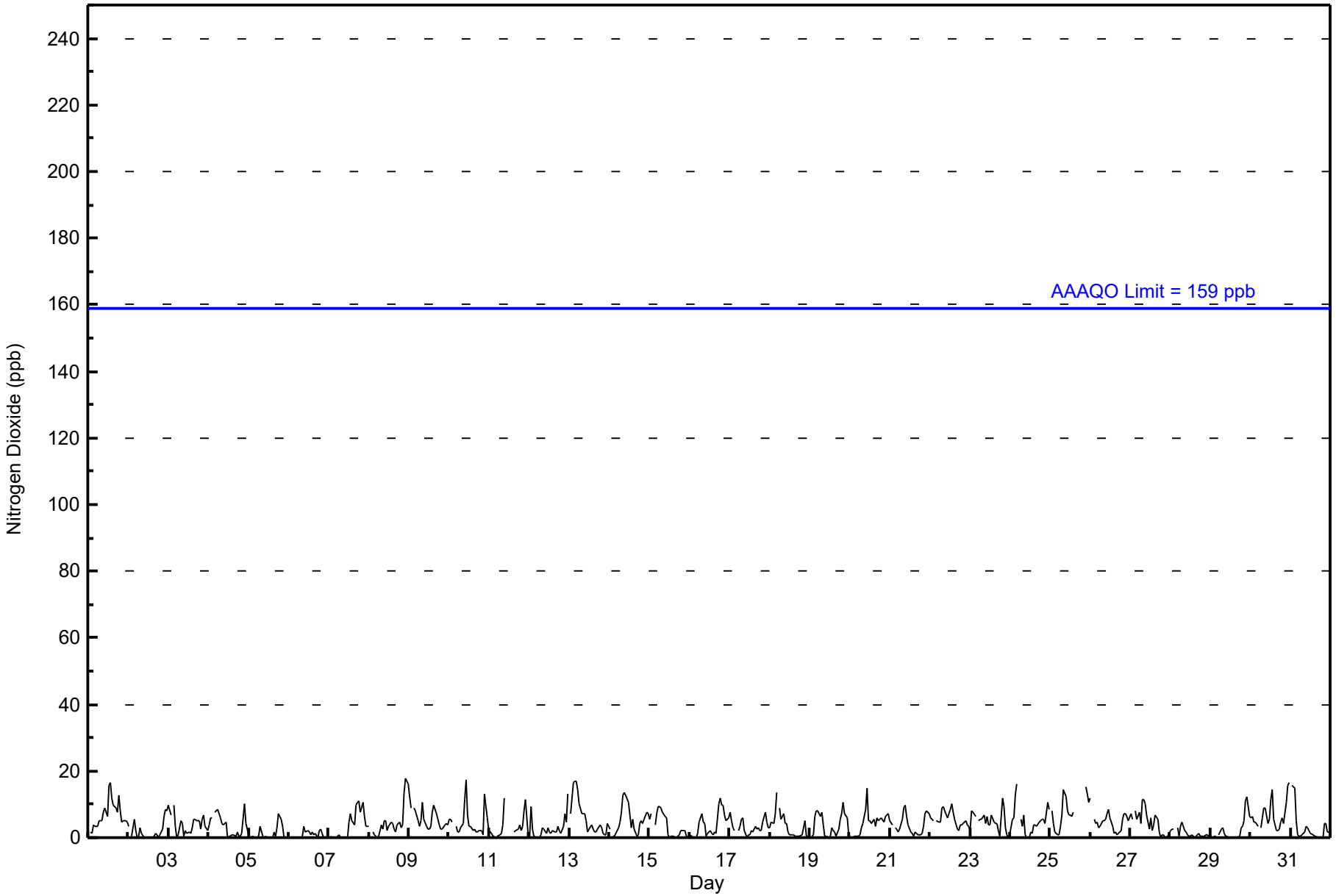
Z - zerospan C - Calibration PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb

## Fort McKay - Bertha Ganter - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 702 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 89 | 47 | 14 | 8 | 3 | 5 | 23 | 81 | 70 | 46 | 51 | 28 | 37 | 80 | 57 | 59 | 698 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 89 | 47 | 14 | 8 | 3 | 5 | 23 | 81 | 70 | 46 | 51 | 28 | 37 | 80 | 57 | 59 | 698 |

Total Number of Valid Hours: 698

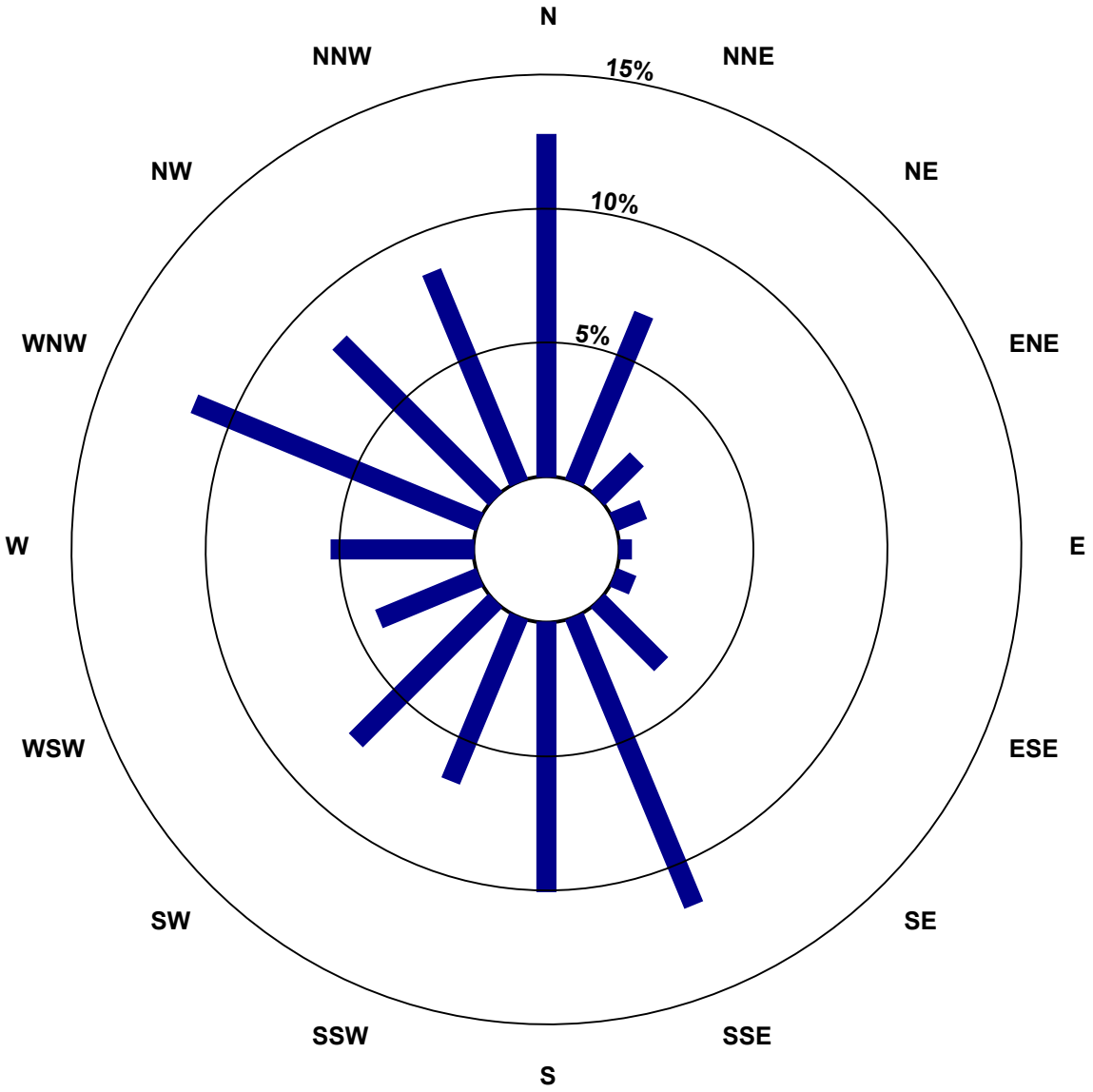
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

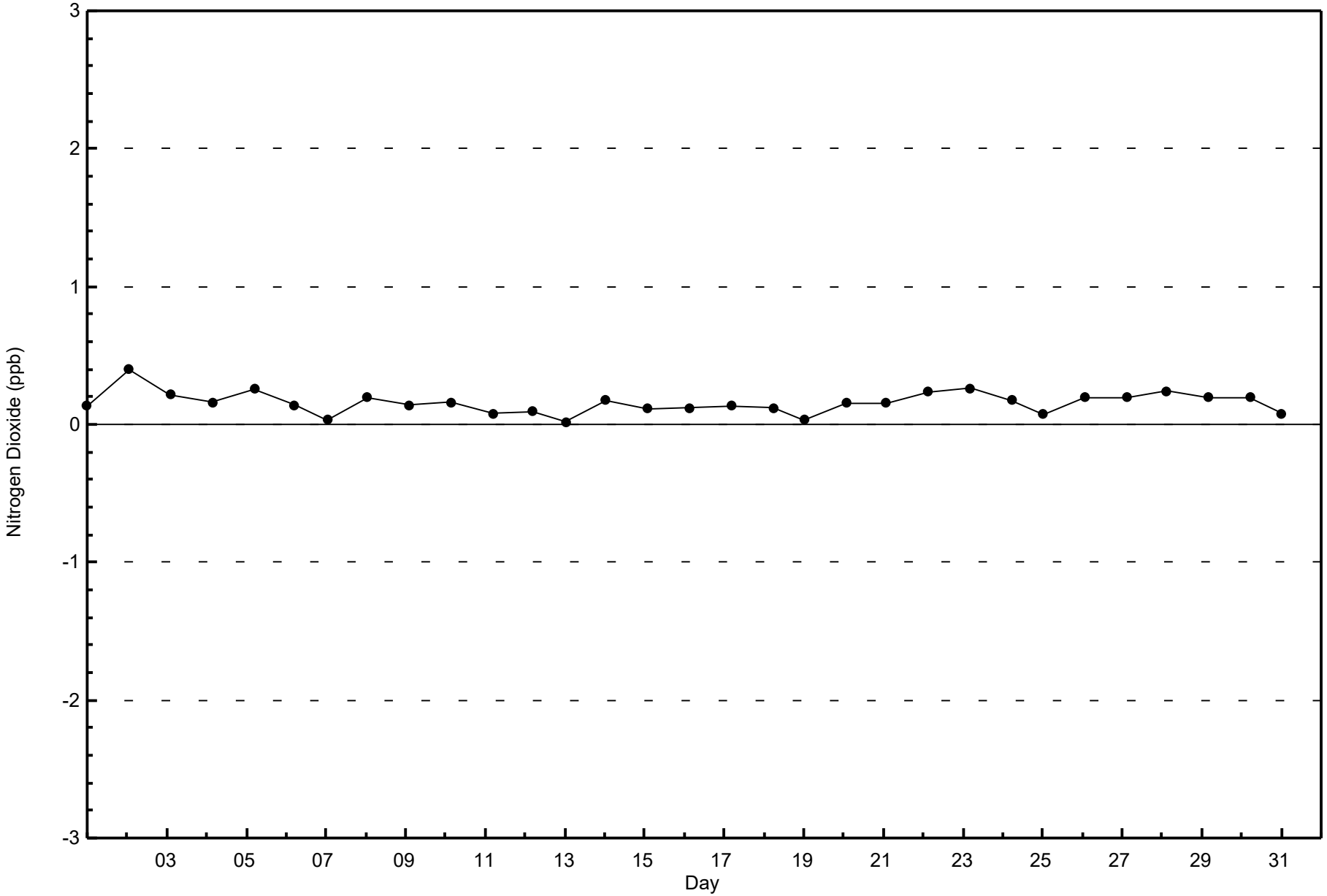
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

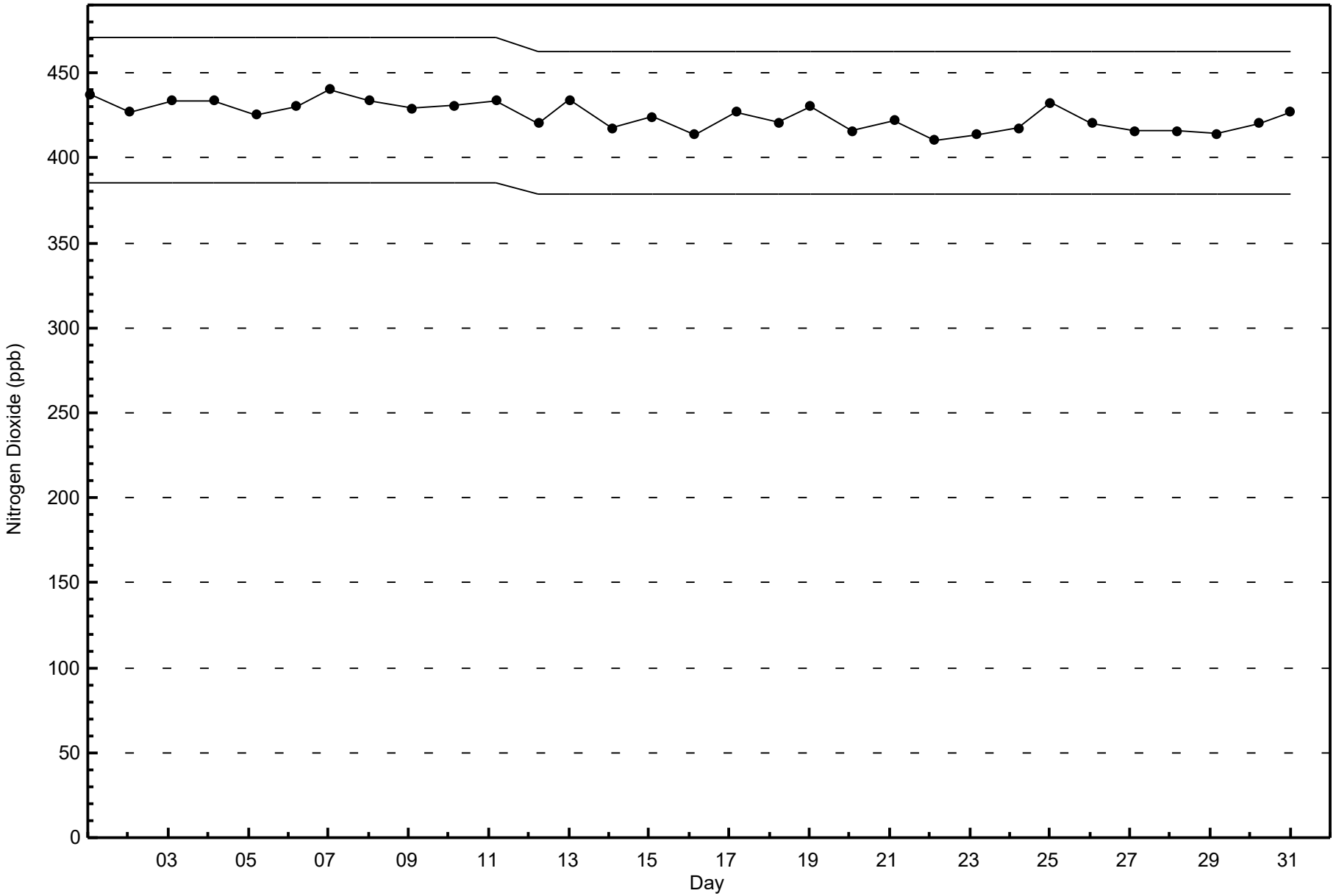


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 46.2 ppb on Aug 10 11:00

Maximum Daily Average: 13.0 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 2 12:00

Minimum Daily Average: 1.2 ppb on Aug 6

Maximum Diurnal Average: 12.1 ppb at hour 9

Minimum Diurnal Average: 3.2 ppb at hour 17

Monthly Average: 5.88 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.3 $Q_1$ = 1.0 Median = 4.0 $Q_3$ = 7.6 $P_{90}$ = 14.4 $P_{99}$ = 30.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 2.0 | 1.9 | 5.1 | 8.1 | 12.2 | 19.1 | 17.7 | 19.3 | 25.9 | 23.5 | 11.7 | 32.1 | 26.6 | 17.1 | 13.3 | 12.0 | 8.8 | 14.0 | 8.5 | 4.5 | 5.0 | 5.0 | 4.8 | 13.0 | 32.1 |
| 2-Aug | 3.2 | Z | 0.6 | 5.6 | 2.0 | 0.2 | 0.4 | 3.0 | 1.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 2.3 | 1.0 | 0.0 | 0.8 | 2.7 | 6.2 | 8.3 | 7.9 | 2.0 | 8.3 |
| 3-Aug | 9.8 | 6.9 | Z | 9.8 | 3.6 | 0.2 | 0.8 | 7.9 | 7.8 | 0.7 | 2.8 | 1.6 | 2.2 | 2.0 | 4.3 | 8.8 | 8.2 | 6.9 | 6.5 | 3.0 | 5.7 | 7.4 | 3.7 | 2.1 | 4.9 | 9.8 |
| 4-Aug | 4.4 | 11.1 | 15.4 | Z | 15.3 | 19.4 | 14.1 | 10.8 | 7.9 | 6.6 | 8.7 | 0.2 | 0.3 | 0.3 | 1.0 | 0.8 | 0.5 | 1.8 | 0.4 | 0.3 | 1.2 | 10.4 | 4.2 | 2.6 | 6.0 | 19.4 |
| 5-Aug | 0.3 | 0.2 | 0.3 | 0.2 | Z | 0.2 | 0.3 | 4.8 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 2.1 | 0.4 | 3.2 | 7.5 | 5.4 | 3.2 | 0.1 | 0.0 | 0.1 | 1.3 | 7.5 |
| 6-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.6 | 5.8 | 2.7 | 3.1 | 1.9 | 0.9 | 2.2 | 1.1 | 1.6 | 0.2 | 2.5 | 2.5 | 1.4 | 0.1 | 0.1 | 0.1 | 1.2 | 5.8 |
| 7-Aug | Z | 0.5 | 0.2 | 0.2 | 0.1 | 0.6 | 1.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 7.5 | 10.8 | 6.8 | 4.9 | 15.0 | 14.8 | 14.5 | 8.6 | 12.0 | 6.3 | 3.7 | 3.6 | 4.9 | 15.0 |
| 8-Aug | 3.6 | Z | 1.6 | 0.7 | 0.4 | 0.2 | 0.4 | 10.6 | 5.3 | 10.8 | 10.4 | 3.5 | 6.0 | 7.5 | 5.8 | 3.6 | 2.4 | 4.9 | 5.6 | 3.3 | 3.7 | 13.3 | 23.4 | 28.9 | 6.8 | 28.9 |
| 9-Aug | 22.8 | 17.4 | Z | 17.2 | 13.9 | 8.2 | 7.3 | 15.0 | 28.9 | 10.2 | 5.0 | 3.4 | 3.1 | 4.2 | 9.6 | 12.2 | 8.7 | 6.3 | 4.3 | 2.7 | 2.7 | 4.0 | 4.2 | 3.7 | 9.3 | 28.9 |
| 10-Aug | 5.7 | 7.0 | 6.3 | Z | 4.3 | 2.8 | 3.7 | 8.3 | 12.0 | 39.9 | 46.2 | 10.4 | 4.4 | 4.4 | 2.6 | 3.1 | 1.8 | 1.7 | 2.1 | 2.1 | 1.0 | 13.7 | 9.3 | 6.0 | 8.7 | 46.2 |
| 11-Aug | 2.3 | 1.2 | 0.6 | 0.5 | Z | 0.6 | 0.8 | 2.0 | 7.0 | 20.3 | C | C | C | C | C | 2.0 | 2.4 | 3.0 | 4.0 | 2.3 | 3.6 | 7.9 | 11.4 | 0.5 | 4.0 | 20.3 |
| 12-Aug | 0.4 | 10.0 | 2.7 | 0.6 | 0.2 | Z | 0.1 | 1.1 | 4.8 | 3.6 | 2.0 | 4.3 | 2.7 | 1.7 | 3.1 | 2.3 | 2.5 | 4.2 | 2.7 | 1.2 | 3.4 | 7.3 | 4.7 | 14.7 | 3.5 | 14.7 |
| 13-Aug | Z | 7.3 | 24.4 | 31.1 | 36.8 | 30.9 | 25.4 | 14.7 | 14.3 | 14.3 | 8.9 | 3.0 | 4.0 | 6.3 | 4.1 | 2.2 | 2.6 | 3.3 | 4.2 | 2.8 | 1.3 | 0.9 | 0.8 | 4.3 | 10.8 | 36.8 |
| 14-Aug | 2.6 | Z | 0.6 | 0.5 | 1.1 | 3.6 | 7.9 | 18.9 | 27.8 | 27.2 | 23.6 | 19.9 | 10.9 | 4.3 | 7.6 | 3.3 | 0.5 | 0.7 | 4.4 | 4.9 | 4.1 | 5.6 | 7.6 | 7.4 | 8.5 | 27.8 |
| 15-Aug | 5.7 | 8.1 | Z | 3.9 | 8.1 | 22.9 | 30.3 | 29.0 | 18.9 | 12.9 | 10.5 | 0.9 | 0.1 | 0.3 | 0.4 | 0.0 | 0.0 | 0.3 | 0.9 | 2.3 | 2.2 | 2.3 | 0.3 | 0.1 | 7.0 | 30.3 |
| 16-Aug | 0.7 | 0.6 | 0.2 | Z | 0.2 | 1.1 | 5.7 | 9.1 | 4.9 | 4.8 | 0.4 | 1.4 | 3.1 | 1.2 | 0.8 | 2.0 | 1.4 | 12.5 | 14.1 | 10.3 | 10.4 | 7.1 | 4.9 | 6.8 | 4.5 | 14.1 |
| 17-Aug | 11.0 | 6.0 | 3.1 | 2.4 | Z | 2.6 | 6.3 | 19.8 | 17.6 | 4.1 | 0.1 | 0.8 | 1.1 | 2.7 | 1.8 | 4.2 | 2.8 | 3.1 | 2.0 | 2.3 | 4.7 | 7.6 | 4.6 | 2.9 | 4.9 | 19.8 |
| 18-Aug | 3.0 | 4.6 | 4.4 | 7.1 | 15.1 | Z | 13.5 | 8.2 | 11.0 | 7.6 | 7.2 | 2.7 | 1.0 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 2.9 | 5.1 | 0.6 | 0.6 | 4.3 | 15.1 |
| 19-Aug | Z | 0.5 | 0.9 | 6.5 | 10.7 | 14.3 | 12.6 | 18.0 | 8.4 | 0.3 | 0.3 | 0.1 | 0.6 | 4.3 | 2.7 | 2.0 | 0.6 | 3.0 | 5.8 | 7.3 | 11.0 | 7.2 | 5.8 | 0.8 | 5.4 | 18.0 |
| 20-Aug | 0.4 | Z | 0.1 | 0.3 | 0.5 | 0.5 | 1.4 | 7.1 | 10.9 | 20.0 | 40.3 | 7.5 | 7.4 | 5.9 | 8.5 | 4.8 | 8.5 | 5.9 | 5.9 | 5.8 | 4.7 | 6.4 | 7.0 | 7.3 | 7.3 | 40.3 |
| 21-Aug | 4.9 | 4.0 | Z | 2.8 | 2.8 | 2.2 | 6.0 | 19.7 | 28.9 | 21.3 | 9.5 | 4.5 | 1.7 | 1.2 | 0.6 | 1.6 | 1.4 | 1.0 | 1.0 | 1.4 | 3.4 | 7.3 | 8.1 | 7.4 | 6.2 | 28.9 |
| 22-Aug | 5.9 | 5.3 | 5.0 | Z | 5.2 | 4.8 | 6.5 | 13.1 | 15.7 | 11.0 | 7.9 | 10.3 | 11.8 | 14.0 | 9.4 | 6.2 | 2.5 | 2.3 | 3.8 | 4.0 | 4.4 | 5.1 | 3.9 | 3.2 | 7.0 | 15.7 |
| 23-Aug | 2.1 | 8.1 | 7.7 | 6.5 | Z | 5.2 | 6.5 | 7.1 | 10.0 | 5.6 | 8.8 | 5.2 | 4.7 | 7.6 | 4.8 | 4.6 | 4.2 | 2.1 | 0.4 | 12.6 | 9.3 | 2.9 | 0.9 | 0.2 | 5.5 | 12.6 |
| 24-Aug | 0.8 | 5.4 | 6.1 | 16.7 | 22.3 | Z | 7.6 | 5.8 | 9.5 | 1.1 | 0.0 | 0.1 | 2.4 | 1.4 | 4.8 | 4.9 | 4.1 | 6.1 | 5.7 | 5.4 | 5.6 | 4.4 | 10.4 | 9.2 | 6.1 | 22.3 |
| 25-Aug | Z | 9.0 | 4.3 | 1.5 | 0.7 | 0.8 | 5.2 | 18.6 | 43.4 | 24.9 | 13.1 | 9.5 | 8.8 | 7.4 | 8.5 | PF | PF | PF | PF | PF | PF | 16.0 | 16.0 | 14.8 | -- | 43.4 |
| 26-Aug | 18.1 | Z | 5.7 | 4.4 | 5.9 | 6.9 | 9.6 | 10.1 | 8.1 | 7.6 | 9.6 | 10.9 | 7.3 | 3.5 | 1.3 | 1.8 | 0.9 | 1.3 | 2.2 | 5.7 | 7.4 | 7.4 | 6.2 | 5.2 | 6.4 | 18.1 |
| 27-Aug | 7.0 | 5.3 | Z | 8.0 | 5.6 | 7.8 | 5.2 | 17.9 | 17.1 | 14.8 | 8.8 | 2.7 | 6.8 | 2.1 | 4.0 | 6.9 | 5.5 | 1.6 | 0.2 | 0.7 | 1.0 | 0.2 | 0.6 | 1.2 | 5.7 | 17.9 |
| 28-Aug | 2.3 | 2.6 | 2.4 | Z | 2.9 | 0.3 | 3.3 | 5.0 | 2.4 | 2.3 | 1.0 | 0.3 | 0.5 | 0.8 | 0.2 | 0.4 | 0.9 | 1.2 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.4 | 1.4 | 5.0 |
| 29-Aug | 0.4 | 0.2 | 0.3 | 0.6 | Z | 0.9 | 2.9 | 3.9 | 1.8 | 0.5 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.5 | 3.0 | 3.6 | 5.1 | 11.6 | 13.2 | 6.2 | 2.4 | 13.2 |
| 30-Aug | 6.0 | 6.5 | 4.6 | 5.3 | 3.3 | Z | 3.9 | 18.2 | 25.1 | 20.0 | 6.1 | 7.4 | 16.4 | 19.1 | 6.7 | 2.4 | 2.3 | 2.7 | 4.5 | 6.1 | 4.4 | 10.8 | 16.2 | 16.9 | 9.3 | 25.1 |
| 31-Aug | Z | 20.8 | 20.8 | 5.4 | 0.9 | 0.4 | 0.5 | 1.0 | 2.5 | 5.4 | 4.1 | 3.0 | 1.2 | 0.7 | 0.4 | 0.4 | 0.1 | 0.0 | 0.0 | 0.2 | 4.1 | 4.4 | 1.9 | 1.6 | 3.5 | 20.8 |
| | 4.9 | 5.8 | 4.6 | 5.5 | 6.5 | 5.8 | 6.7 | 10.5 | 12.1 | 10.6 | 8.8 | 4.3 | 5.0 | 4.7 | 4.0 | 3.4 | 3.2 | 3.5 | 4.1 | 3.9 | 4.4 | 6.3 | 6.1 | 5.5 | Diurnal Average | |
| | 22.8 | 20.8 | 24.4 | 31.1 | 36.8 | 30.9 | 30.3 | 29.0 | 43.4 | 39.9 | 46.2 | 19.9 | 32.1 | 26.6 | 17.1 | 13.3 | 15.0 | 14.8 | 14.5 | 12.6 | 12.0 | 16.0 | 23.4 | 28.9 | Diurnal Maximum | |

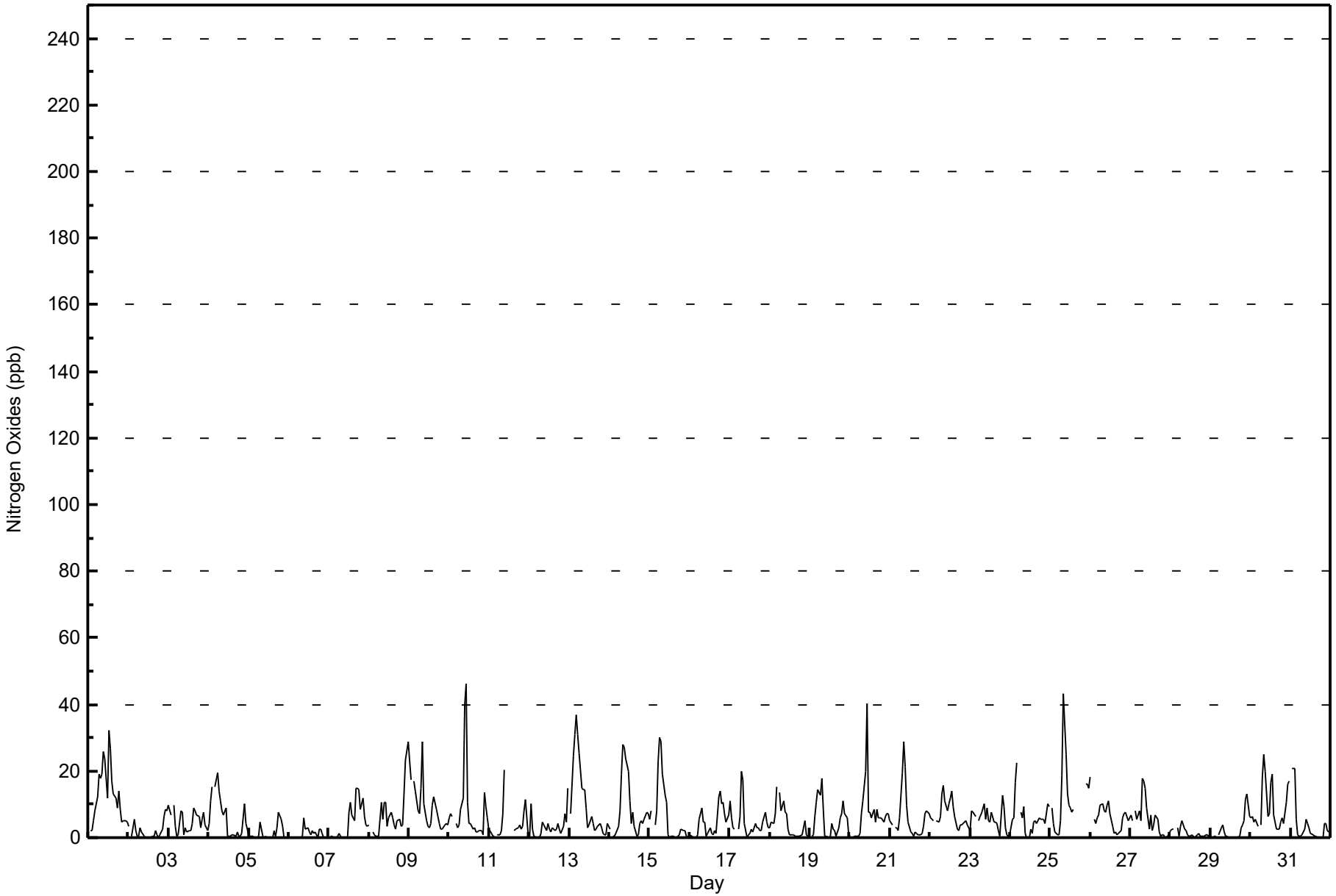
Z - zerospan C - Calibration PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb

## Fort McKay - Bertha Ganter - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 672 | 95.73 | 95.73 |
| 21 - 40 | 28 | 3.99 | 99.72 |
| 11 - 80 | 2 | 0.28 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 81 | 42 | 14 | 8 | 3 | 5 | 19 | 80 | 68 | 45 | 51 | 27 | 34 | 80 | 56 | 55 | 668 |
| 21 - 40 | 7 | 4 | 0 | 0 | 0 | 0 | 4 | 1 | 2 | 1 | 0 | 1 | 3 | 0 | 1 | 4 | 28 |
| 11 - 80 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 89 | 47 | 14 | 8 | 3 | 5 | 23 | 81 | 70 | 46 | 51 | 28 | 37 | 80 | 57 | 59 | 698 |

Total Number of Valid Hours: 698

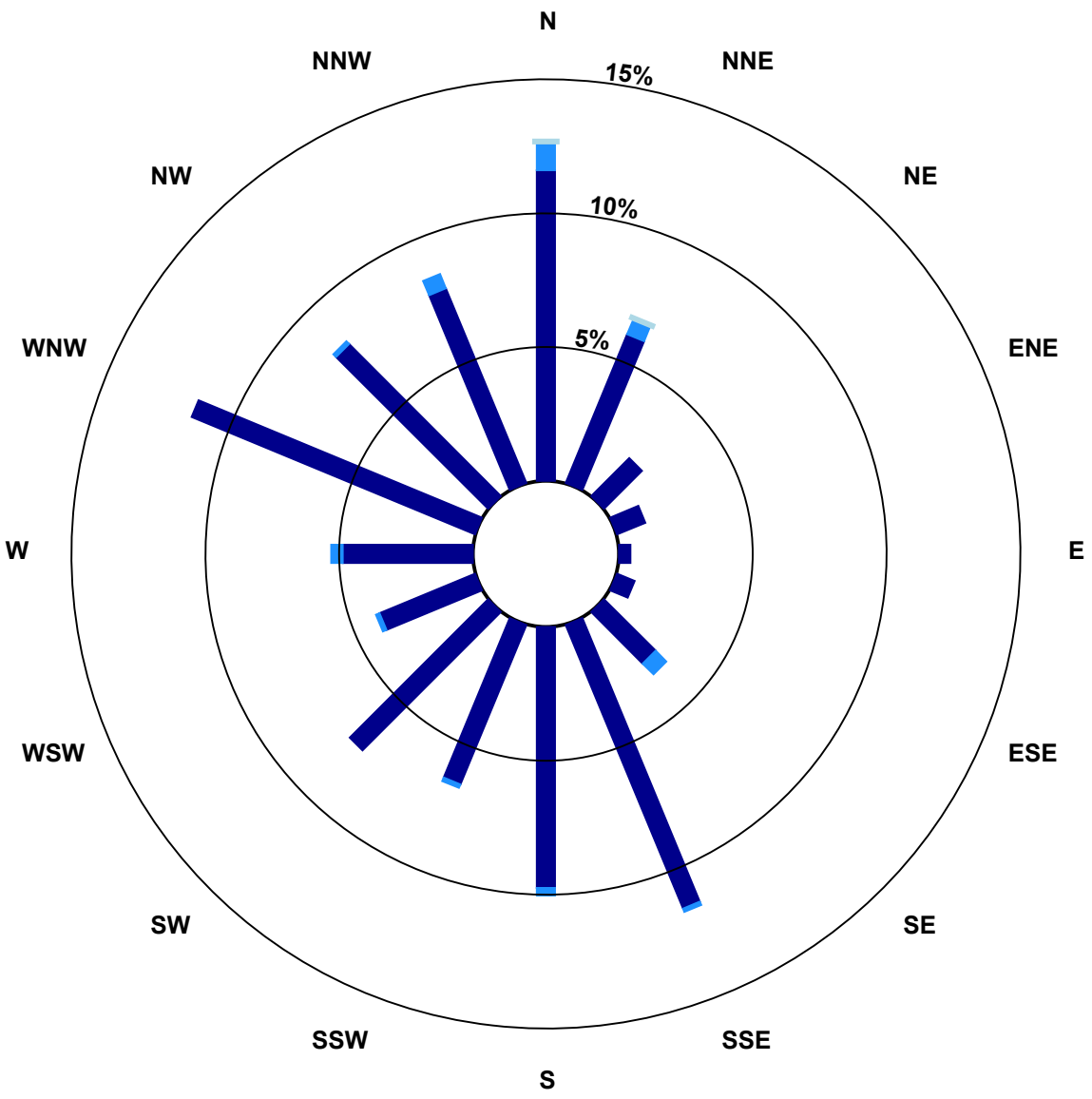
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

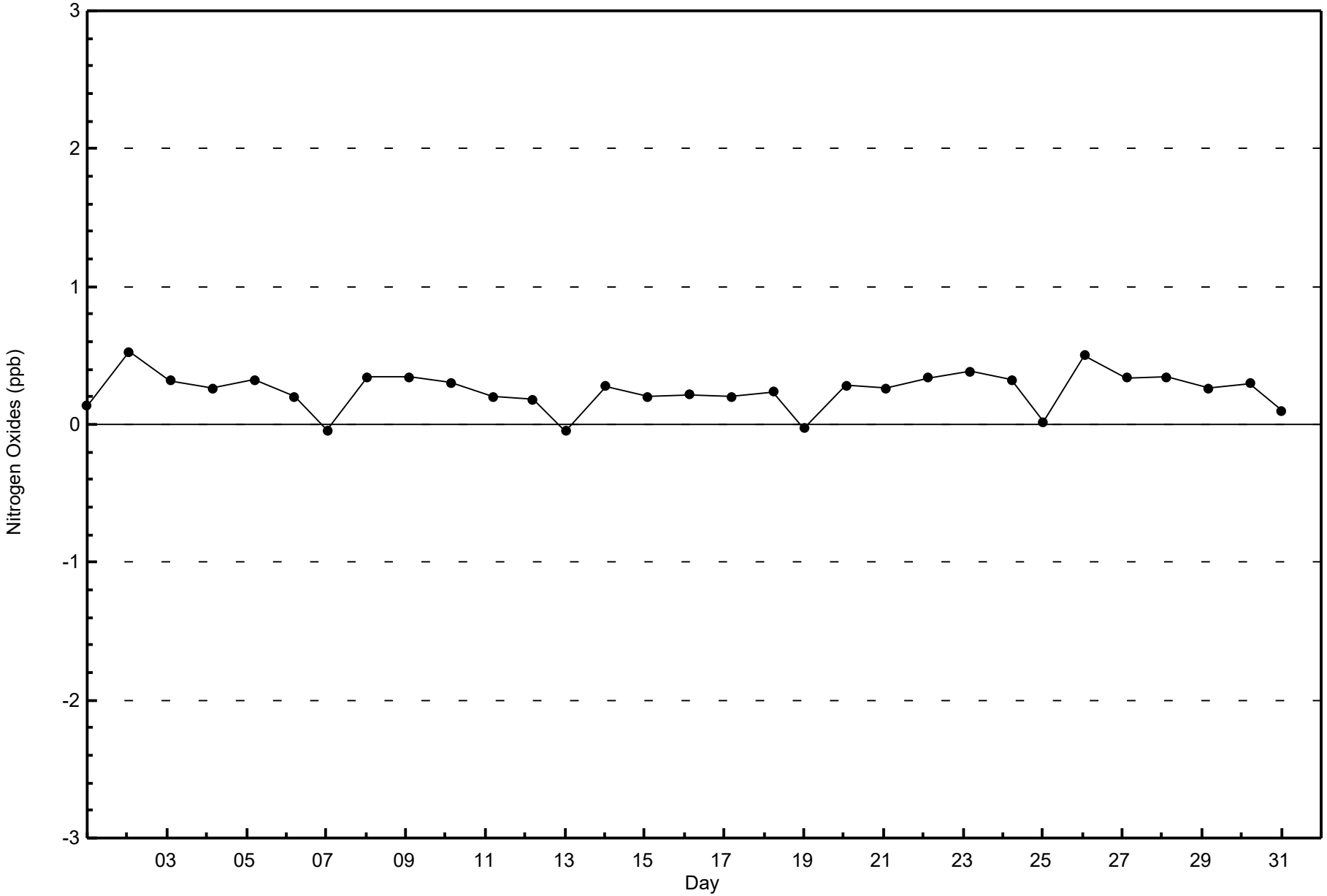
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

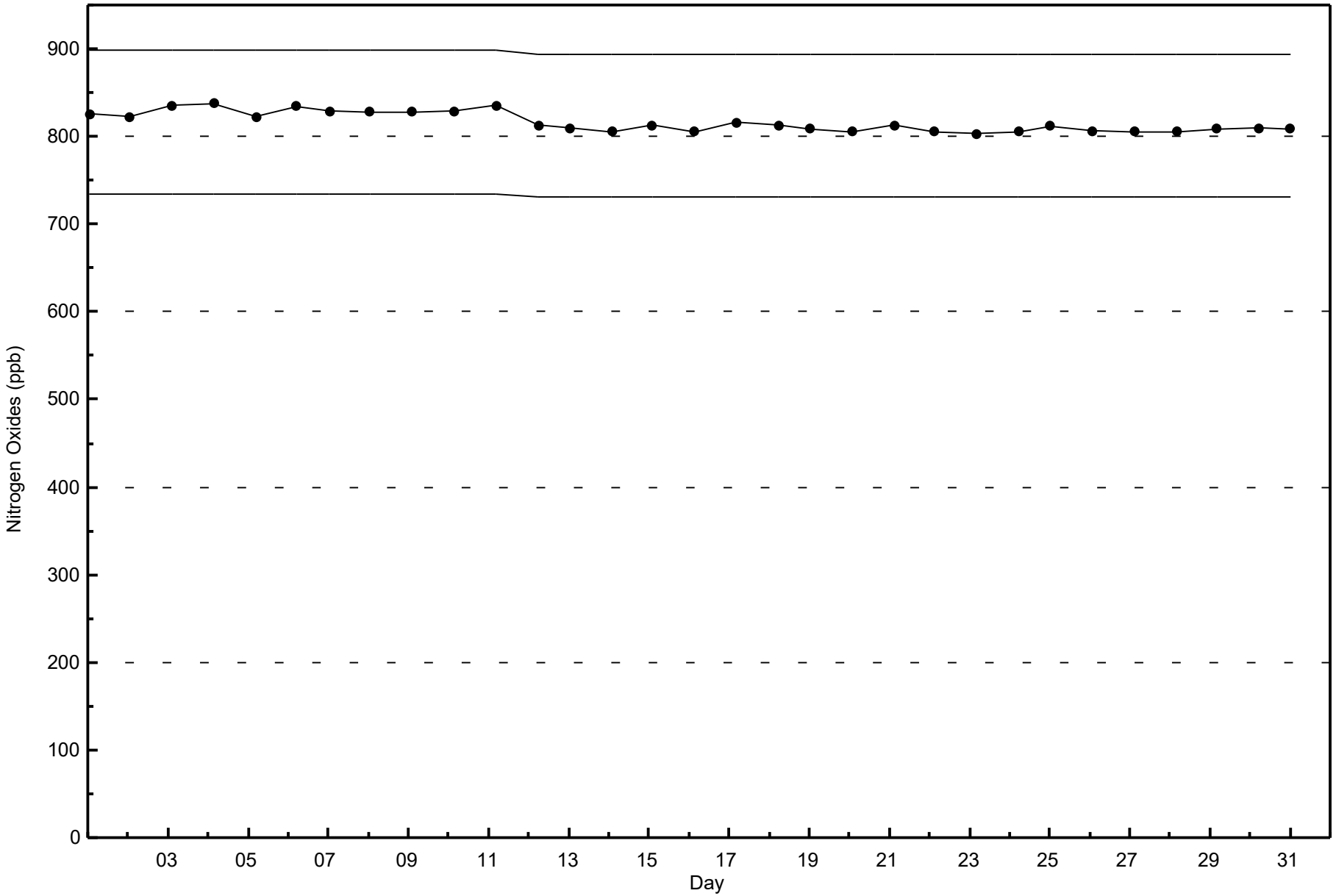


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.4 ppb on Aug 25 15:00
Maximum Daily Average: 26.1 ppb on Aug 27

Minimum Value: 1.3 ppb on Aug 17 02:00
Minimum Daily Average: 11.3 ppb on Aug 7
Maximum Diurnal Average: 30.0 ppb at hour 15
Minimum Diurnal Average: 7.7 ppb at hour 6
Monthly Average: 17.46 ppb
Percentiles: $P_1$ = 1.9 $P_{10}$ = 4.0 $Q_1$ = 8.6 Median = 16.4 $Q_3$ = 25.3 $P_{90}$ = 32.0 $P_{99}$ = 43.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 3.3 | 2.2 | 2.0 | 1.9 | Z | 3.1 | 2.2 | 1.9 | 1.9 | 3.1 | 4.6 | 10.6 | 10.7 | 14.0 | 19.0 | 19.6 | 19.0 | 17.9 | 10.4 | 11.4 | 21.1 | 29.5 | 31.8 | 32.1 | 11.9 | 32.1 |
| 2-Aug | 20.6 | 21.6 | 24.3 | 17.9 | 20.3 | Z | 19.8 | 15.4 | 16.0 | 17.8 | 17.4 | 20.1 | 20.9 | 22.3 | 24.7 | 27.6 | 27.3 | 27.8 | 26.5 | 23.4 | 20.6 | 17.8 | 15.4 | 15.6 | 20.9 | 27.8 |
| 3-Aug | Z | 15.0 | 12.6 | 10.1 | 14.5 | 17.1 | 17.8 | 14.1 | 17.2 | 21.7 | 23.5 | 25.4 | 26.4 | 27.5 | 27.3 | 25.4 | 24.2 | 23.7 | 22.0 | 22.0 | 12.7 | 5.8 | 5.6 | 5.4 | 18.1 | 27.5 |
| 4-Aug | 4.0 | Z | 2.8 | 2.2 | 2.0 | 2.8 | 6.9 | 10.8 | 15.8 | 17.9 | 18.0 | 24.7 | 28.2 | 29.7 | 30.0 | 29.8 | 25.9 | 18.4 | 21.8 | 17.3 | 15.3 | 11.8 | 14.9 | 16.2 | 16.0 | 30.0 |
| 5-Aug | 16.9 | 15.5 | Z | 14.0 | 13.5 | 13.6 | 16.8 | 17.0 | 22.8 | 26.2 | C | C | C | C | C | 28.8 | 26.0 | 21.8 | 14.6 | 15.7 | 14.7 | 16.5 | 16.8 | 18.5 | 18.3 | 28.8 |
| 6-Aug | 16.8 | 16.2 | 15.1 | Z | 13.1 | 12.6 | 10.2 | 10.2 | 11.2 | 10.5 | 15.7 | 22.8 | 25.3 | 24.0 | 22.3 | 22.2 | 23.7 | 20.9 | 17.3 | 17.4 | 12.7 | 20.0 | 16.8 | 14.7 | 17.0 | 25.3 |
| 7-Aug | 11.0 | 9.6 | 11.8 | 11.3 | Z | 8.0 | 7.0 | 9.6 | 11.9 | 13.9 | 19.2 | 22.5 | 18.9 | 14.7 | 15.8 | 17.7 | 12.3 | 8.5 | 7.2 | 9.3 | 4.1 | 6.0 | 5.3 | 4.2 | 11.3 | 22.5 |
| 8-Aug | 4.2 | 5.7 | 5.5 | 7.4 | 8.6 | Z | 9.2 | 8.2 | 13.7 | 13.1 | 15.7 | 18.7 | 17.9 | 19.1 | 16.7 | 19.4 | 21.1 | 20.0 | 17.8 | 14.5 | 10.3 | 5.1 | 2.7 | 2.3 | 12.0 | 21.1 |
| 9-Aug | Z | 3.1 | 2.4 | 2.1 | 2.3 | 2.4 | 2.9 | 4.2 | 7.3 | 19.0 | 24.7 | 27.8 | 29.4 | 33.3 | 31.3 | 32.9 | 35.1 | 28.2 | 21.8 | 17.8 | 15.4 | 9.8 | 5.1 | 5.4 | 15.8 | 35.1 |
| 10-Aug | 3.0 | Z | 2.2 | 1.7 | 1.7 | 2.1 | 2.5 | 3.0 | 4.0 | 5.7 | 12.4 | 26.4 | 30.0 | 31.1 | 33.1 | 35.2 | 36.0 | 34.0 | 31.2 | 27.1 | 20.1 | 9.6 | 9.4 | 9.3 | 16.1 | 36.0 |
| 11-Aug | 10.6 | 10.0 | Z | 9.7 | 7.2 | 7.2 | 9.3 | 10.8 | 14.0 | 15.8 | 26.4 | 31.1 | 31.3 | 30.9 | M | 32.8 | 33.4 | 31.5 | 27.0 | 24.9 | 21.4 | 14.9 | 9.1 | 19.7 | 19.5 | 33.4 |
| 12-Aug | 18.4 | 6.2 | 9.2 | Z | 12.4 | 10.8 | 10.2 | 7.4 | 9.0 | 13.0 | 17.0 | 17.5 | 23.0 | 26.0 | 25.7 | 22.8 | 21.7 | 21.7 | 20.7 | 18.0 | 12.7 | 8.4 | 11.6 | 4.0 | 15.1 | 26.0 |
| 13-Aug | 11.4 | 8.9 | 1.8 | 1.7 | Z | 3.5 | 3.6 | 8.0 | 11.2 | 13.5 | 16.5 | 21.9 | 24.8 | 22.2 | 24.3 | 24.4 | 24.7 | 21.8 | 17.0 | 14.5 | 10.8 | 13.3 | 10.8 | 5.5 | 13.7 | 24.8 |
| 14-Aug | 7.0 | 8.6 | 7.7 | 7.2 | 6.0 | Z | 3.8 | 3.5 | 5.9 | 9.9 | 13.8 | 19.1 | 26.5 | 33.0 | 33.2 | 34.9 | 35.6 | 33.6 | 31.7 | 26.6 | 19.7 | 15.8 | 10.9 | 7.0 | 17.4 | 35.6 |
| 15-Aug | Z | 3.4 | 4.9 | 5.6 | 3.1 | 2.6 | 3.7 | 5.5 | 9.6 | 14.0 | 18.9 | 27.7 | 29.0 | 30.6 | 31.3 | 29.9 | 27.8 | 26.8 | 25.1 | 21.9 | 15.9 | 15.6 | 19.3 | 21.2 | 17.1 | 31.3 |
| 16-Aug | 20.0 | Z | 17.9 | 12.2 | 9.2 | 7.3 | 4.3 | 15.3 | 25.5 | 30.8 | 37.4 | 37.4 | 31.2 | 32.2 | 32.2 | 33.1 | 29.9 | 17.9 | 15.2 | 11.0 | 6.0 | 4.1 | 4.7 | 3.6 | 19.1 | 37.4 |
| 17-Aug | 1.3 | 1.3 | Z | 2.9 | 5.4 | 4.5 | 5.8 | 4.6 | 6.8 | 15.0 | 16.8 | 13.5 | 15.5 | 25.3 | 32.6 | 38.5 | 39.2 | 37.7 | 34.7 | 29.3 | 22.8 | 15.0 | 14.2 | 15.9 | 17.3 | 39.2 |
| 18-Aug | 16.4 | 13.2 | 6.4 | Z | 3.4 | 3.3 | 9.3 | 16.8 | 16.2 | 19.3 | 20.9 | 24.9 | 29.0 | 31.8 | 33.1 | 33.4 | 32.7 | 31.6 | 29.9 | 25.6 | 21.8 | 16.3 | 20.6 | 19.6 | 20.7 | 33.4 |
| 19-Aug | 17.0 | 16.1 | 11.0 | 6.2 | Z | 3.8 | 3.7 | 3.8 | 7.8 | 13.6 | 19.0 | 21.2 | 23.5 | 26.7 | 28.0 | 24.7 | 22.9 | 25.7 | 19.8 | 14.1 | 9.2 | 6.2 | 7.8 | 18.8 | 15.2 | 28.0 |
| 20-Aug | 14.4 | 13.2 | 8.2 | 5.2 | 5.3 | Z | 5.0 | 5.6 | 6.2 | 9.0 | 13.6 | 23.6 | 26.1 | 28.2 | 26.7 | 30.0 | 25.9 | 26.2 | 24.0 | 17.7 | 13.4 | 7.6 | 4.3 | 3.3 | 14.9 | 30.0 |
| 21-Aug | Z | 5.0 | 4.1 | 3.9 | 2.7 | 2.6 | 3.8 | 4.8 | 7.0 | 11.9 | 24.5 | 33.5 | 32.7 | 33.0 | 31.7 | 32.5 | 32.9 | 31.3 | 30.8 | 28.6 | 24.9 | 18.7 | 15.7 | 15.2 | 18.8 | 33.5 |
| 22-Aug | 15.9 | Z | 13.1 | 12.0 | 12.0 | 10.9 | 8.1 | 11.2 | 13.9 | 19.8 | 24.3 | 25.7 | 28.3 | 30.3 | 37.4 | 40.7 | 43.1 | 43.4 | 39.7 | 30.3 | 26.1 | 21.8 | 21.8 | 20.7 | 23.9 | 43.4 |
| 23-Aug | 21.8 | 13.8 | Z | 13.7 | 11.9 | 9.8 | 8.7 | 10.5 | 11.8 | 14.9 | 14.8 | 18.4 | 23.5 | 30.1 | 23.3 | 23.3 | 25.0 | 17.9 | 18.4 | 8.8 | 8.3 | 10.3 | 7.7 | 6.2 | 15.3 | 30.1 |
| 24-Aug | 6.1 | 4.3 | 3.9 | Z | 3.4 | 4.5 | 6.1 | 9.0 | 18.1 | 25.9 | 29.5 | 30.3 | 31.2 | 32.7 | 31.9 | 31.7 | 28.5 | 27.3 | 23.0 | 18.2 | 13.5 | 11.7 | 6.9 | 4.4 | 17.5 | 32.7 |
| 25-Aug | 2.5 | 3.0 | 5.2 | 9.8 | Z | 9.1 | 6.0 | 5.7 | 6.6 | 13.2 | 19.6 | 26.3 | 33.5 | 41.6 | 46.4 | PF | PF | PF | PF | PF | PF | 3.1 | 2.3 | 2.2 | -- | 46.4 |
| 26-Aug | 2.4 | 2.3 | 3.3 | 3.5 | 2.6 | Z | 4.4 | 8.1 | 15.5 | 22.9 | 29.8 | 34.2 | 37.3 | 41.2 | 42.8 | 42.3 | 43.4 | 43.1 | 39.5 | 33.0 | 26.6 | 21.7 | 21.7 | 21.2 | 23.6 | 43.4 |
| 27-Aug | Z | 20.9 | 14.1 | 8.7 | 6.7 | 4.7 | 7.4 | 9.4 | 16.3 | 23.7 | 32.0 | 36.9 | 38.4 | 39.7 | 41.9 | 32.8 | 29.8 | 31.3 | 31.8 | 32.6 | 33.7 | 36.9 | 36.2 | 35.0 | 26.1 | 41.9 |
| 28-Aug | 30.5 | Z | 24.5 | 22.7 | 20.7 | 22.3 | 21.9 | 23.6 | 27.5 | 27.1 | 31.6 | 40.2 | 38.3 | 39.4 | 35.7 | 29.8 | 25.9 | 19.1 | 10.4 | 8.7 | 8.1 | 8.8 | 10.9 | 11.9 | 23.5 | 40.2 |
| 29-Aug | 11.7 | 12.4 | Z | 15.3 | 15.7 | 16.3 | 14.3 | 11.9 | 13.6 | 14.7 | 18.1 | 19.3 | 19.1 | 20.2 | 21.7 | 23.3 | 24.3 | 25.0 | 23.3 | 19.1 | 14.1 | 4.9 | 3.8 | 7.3 | 16.0 | 25.0 |
| 30-Aug | 6.5 | 5.6 | 5.5 | Z | 5.2 | 4.2 | 5.6 | 4.2 | 7.0 | 11.9 | 24.0 | 31.0 | 30.9 | 34.2 | 45.3 | 44.3 | 44.6 | 43.1 | 31.3 | 21.7 | 19.7 | 10.5 | 3.3 | 4.1 | 19.3 | 45.3 |
| 31-Aug | 2.8 | 2.3 | 2.5 | 6.4 | Z | 10.4 | 8.6 | 8.4 | 13.7 | 17.2 | 23.1 | 28.6 | 28.8 | 27.2 | 25.3 | 24.5 | 26.0 | 25.9 | 23.9 | 17.5 | 10.5 | 6.0 | 4.5 | 3.2 | 15.1 | 28.8 |
| | 11.4 | 9.2 | 8.5 | 8.3 | 8.4 | 7.7 | 8.0 | 9.1 | 12.4 | 16.3 | 20.8 | 25.4 | 27.0 | 29.1 | 30.0 | 29.6 | 28.9 | 26.8 | 23.6 | 19.9 | 16.2 | 13.0 | 12.0 | 12.1 | Diurnal Average | |
| | 30.5 | 21.6 | 24.5 | 22.7 | 20.7 | 22.3 | 21.9 | 23.6 | 27.5 | 30.8 | 37.4 | 40.2 | 38.4 | 41.6 | 46.4 | 44.3 | 44.6 | 43.4 | 39.7 | 33.0 | 33.7 | 36.9 | 36.2 | 35.0 | Diurnal Maximum | |

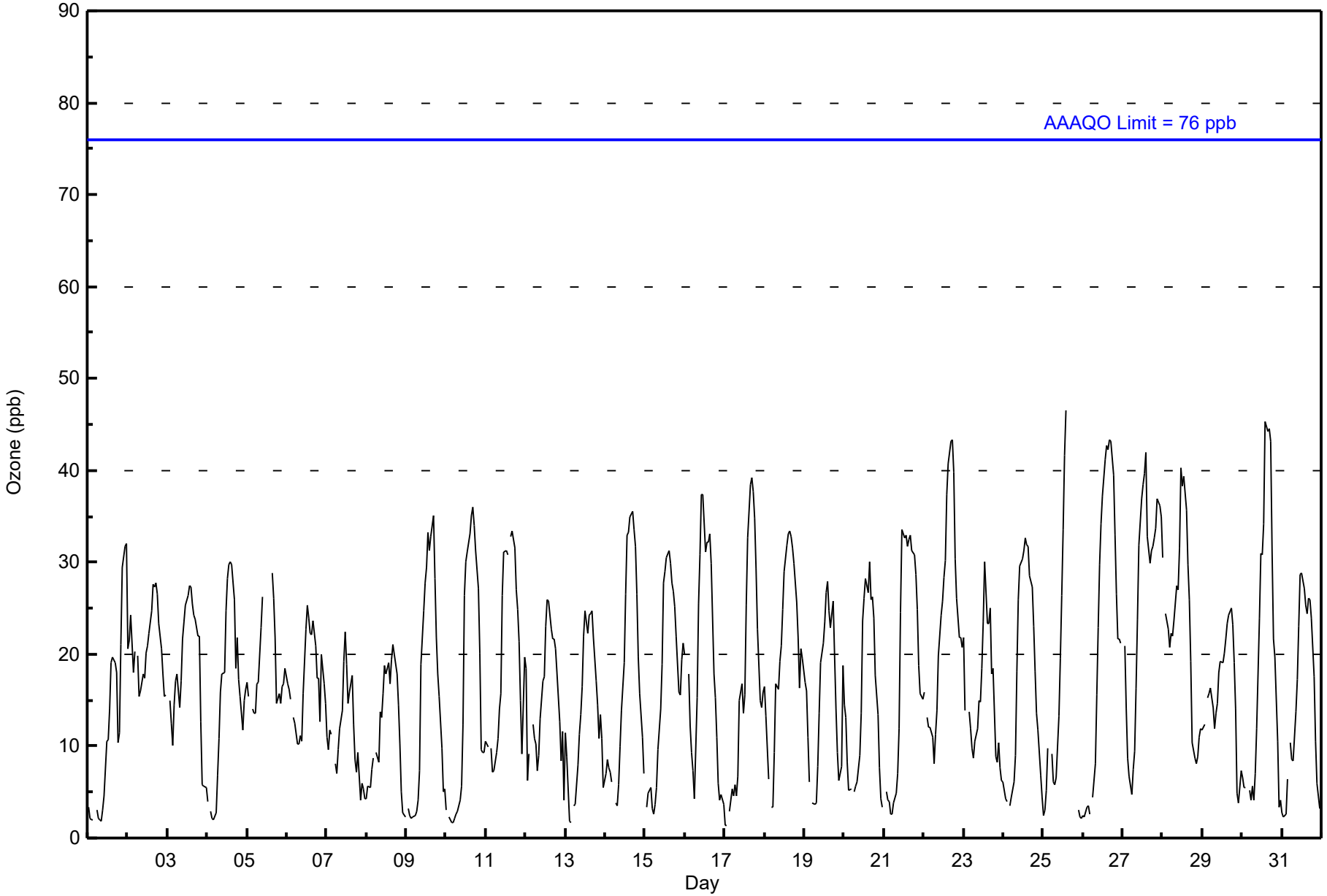
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 433 | 61.77 | 61.77 |
| 21 - 50 | 268 | 38.23 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 45 | 23 | 5 | 1 | 1 | 1 | 9 | 30 | 45 | 31 | 30 | 23 | 35 | 74 | 40 | 37 | 430 |
| 21 - 50 | 50 | 24 | 8 | 7 | 3 | 4 | 14 | 51 | 24 | 16 | 20 | 5 | 4 | 7 | 9 | 22 | 268 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 95 | 47 | 13 | 8 | 4 | 5 | 23 | 81 | 69 | 47 | 50 | 28 | 39 | 81 | 49 | 59 | 698 |

Total Number of Valid Hours: 698

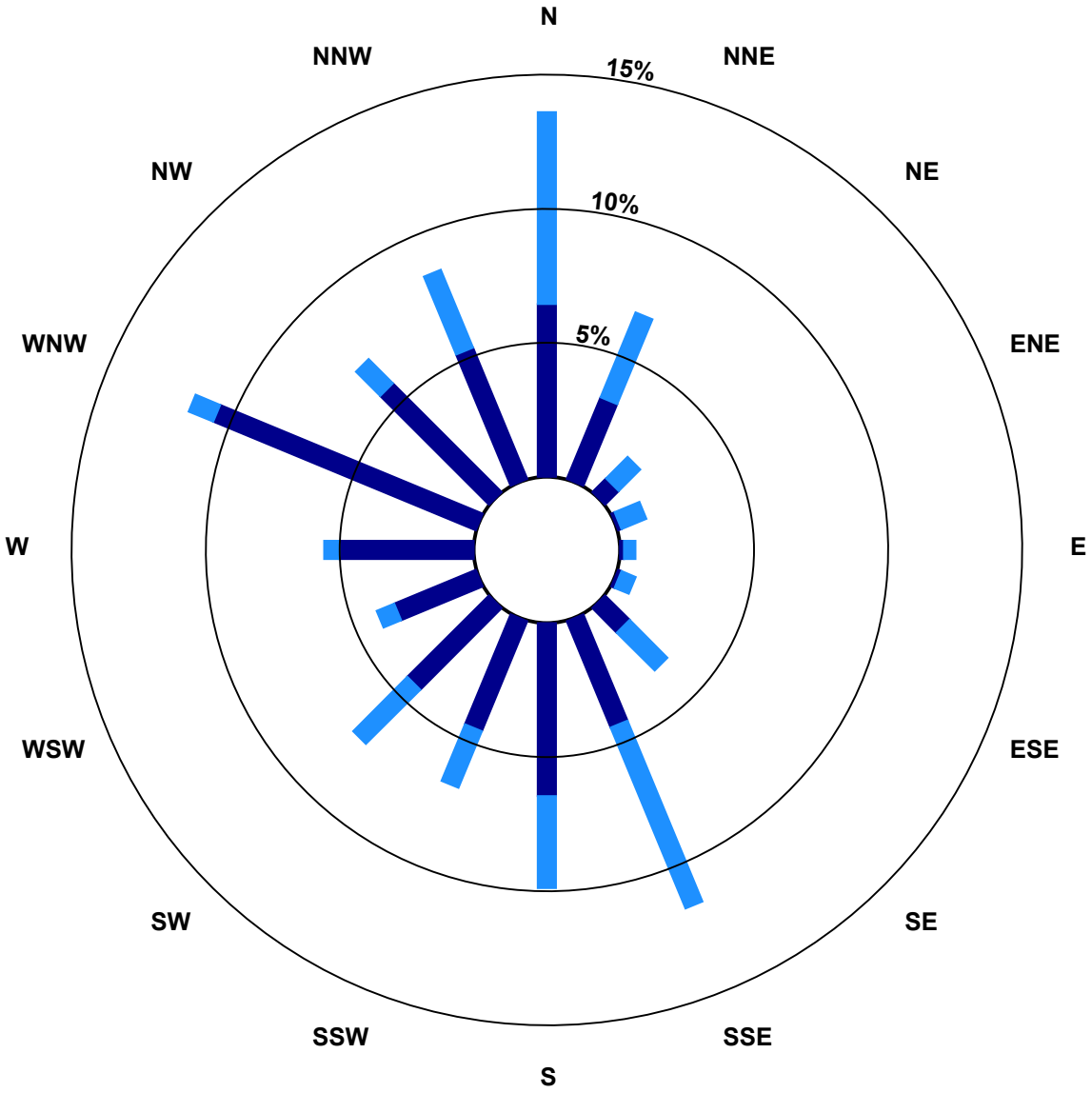
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ozone ($O_3$) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

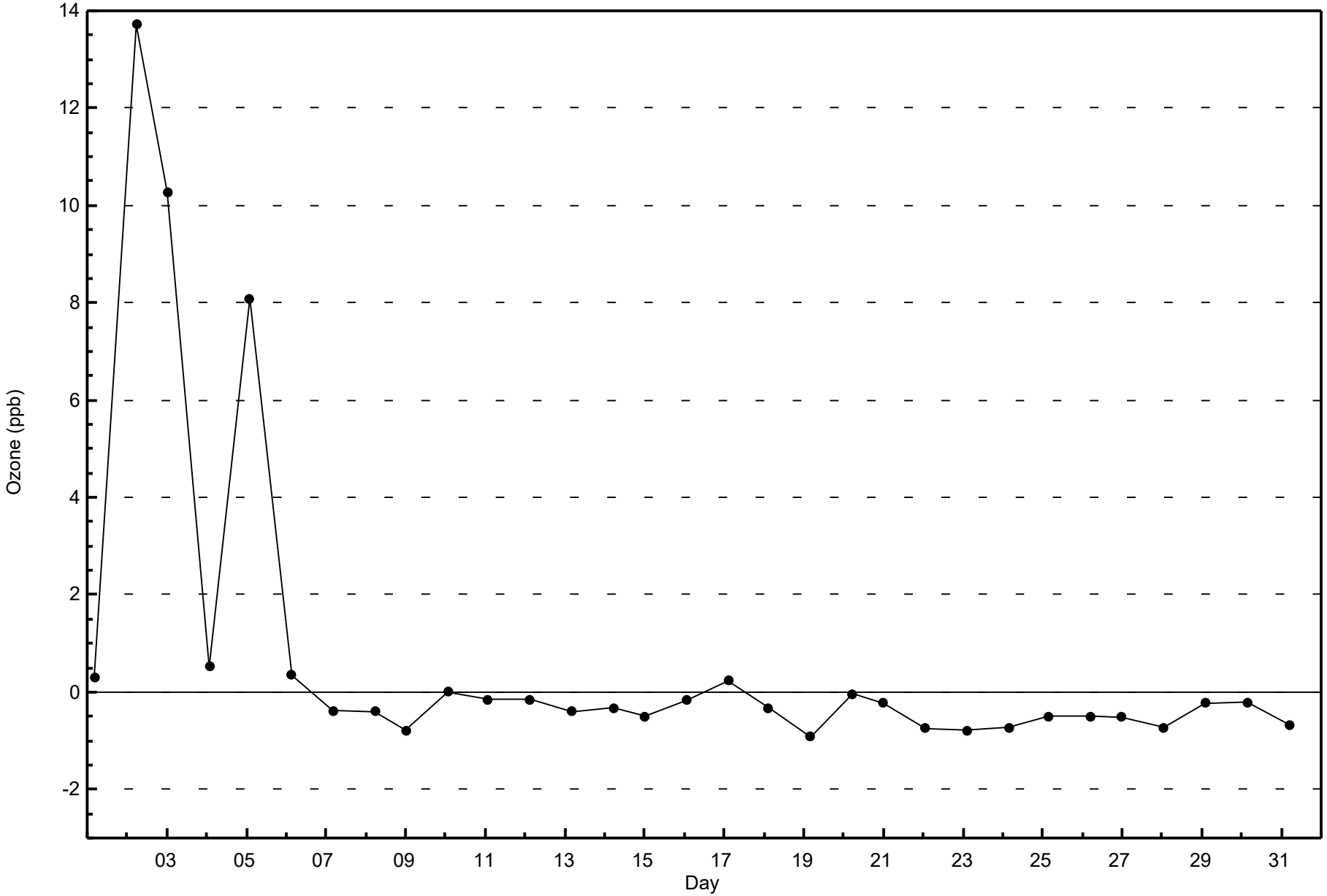
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

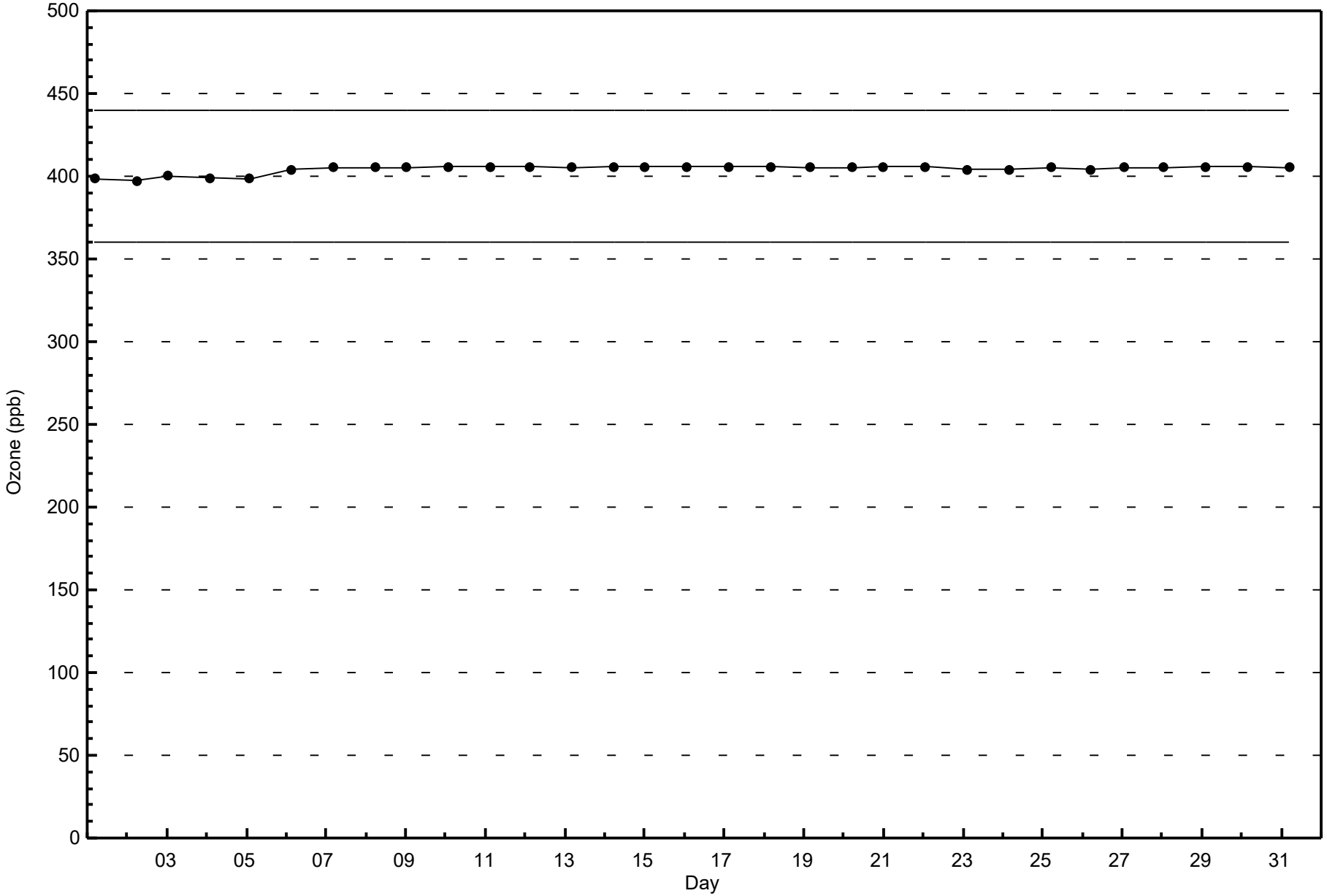


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 74.6 $\mu g/m^3$ on Aug 19 21:00

Maximum Daily Average: 26.8 $\mu g/m^3$ on Aug 25

Minimum Value: 0.4 $\mu g/m^3$ on Aug 6 09:00

Minimum Daily Average: 1.3 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 14.1 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 8.7 $\mu g/m^3$ at hour 7

Monthly Average: 10.77 $\mu g/m^3$

Percentiles: $P_1$ = 0.6 $P_{10}$ = 2.7 $Q_1$ = 4.3 Median = 7.4 $Q_3$ = 14.9 $P_{90}$ = 21.7 $P_{99}$ = 41.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 735 |
| Hours of Missing Data: | 9 |
| Hours of Calibration: | 2 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 6.6 | 6.8 | 6.3 | 6.0 | 8.8 | 8.2 | 5.9 | 6.0 | 6.4 | 8.8 | 11.8 | 15.8 | 20.3 | 21.7 | 20.0 | 19.9 | 19.7 | 20.2 | 20.7 | 18.7 | 16.4 | 16.0 | 14.5 | 7.7 | 13.0 | 21.7 |
| 2-Aug | 8.2 | 11.6 | 13.6 | 13.9 | 11.7 | 9.6 | 9.0 | 7.9 | 5.8 | 5.7 | 5.2 | 3.8 | 3.1 | 3.3 | 3.3 | 3.2 | 3.2 | 2.9 | 2.7 | 2.6 | 2.5 | 3.2 | 2.6 | 3.0 | 5.9 | 13.9 |
| 3-Aug | 2.8 | 2.7 | 2.6 | 2.8 | 2.5 | 1.7 | 1.7 | 2.2 | 2.2 | 2.0 | 4.6 | 4.0 | 4.1 | 3.8 | 5.6 | 8.0 | 8.7 | 8.2 | 7.5 | 4.9 | 12.9 | 35.9 | 19.2 | 8.6 | 6.6 | 35.9 |
| 4-Aug | 6.5 | 9.3 | 9.0 | 7.2 | 6.6 | 6.7 | 6.4 | 7.0 | 11.6 | 15.0 | 16.1 | 8.2 | 5.8 | 5.4 | 4.7 | 5.3 | 7.4 | 6.7 | 5.2 | 5.4 | 6.2 | 7.6 | 8.9 | 10.2 | 7.9 | 16.1 |
| 5-Aug | 12.7 | 14.1 | 14.4 | 12.9 | 12.1 | 10.8 | 8.7 | DF | 4.8 | 4.8 | 4.6 | 3.7 | 3.5 | 3.2 | 3.0 | 3.0 | 2.2 | 2.8 | 2.5 | 2.1 | 2.5 | 2.4 | 1.8 | 1.2 | 5.8 | 14.4 |
| 6-Aug | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.1 | 1.5 | 1.4 | 1.9 | 1.7 | 2.2 | 1.7 | 2.2 | 2.5 | 3.0 | 1.8 | 2.1 | 2.2 | 1.3 | 3.0 |
| 7-Aug | 2.4 | 2.6 | 2.3 | 2.4 | 2.5 | 2.5 | 2.6 | 2.7 | 2.8 | 3.3 | 4.3 | 5.5 | 6.5 | 6.1 | 6.3 | 7.0 | 7.6 | 6.3 | 5.9 | 2.9 | 3.6 | 3.4 | 3.5 | 4.7 | 4.2 | 7.6 |
| 8-Aug | 4.0 | 3.8 | 4.1 | 3.6 | 3.6 | 3.3 | 3.1 | 2.8 | 1.9 | 2.4 | 3.2 | 2.7 | 3.4 | 4.4 | 3.3 | 2.3 | 2.3 | 3.0 | 4.5 | 4.8 | 4.5 | 6.6 | 8.4 | 9.3 | 4.0 | 9.3 |
| 9-Aug | 7.6 | 6.6 | 6.0 | 5.3 | 4.7 | 4.4 | 4.1 | 4.6 | 5.3 | 3.4 | 3.0 | 3.6 | 3.8 | 4.1 | 6.4 | 8.8 | 7.3 | 7.4 | 6.8 | 6.0 | 6.4 | 11.7 | 6.5 | 5.9 | 5.8 | 11.7 |
| 10-Aug | 6.3 | 6.7 | 6.0 | 5.5 | 5.5 | 5.0 | 4.7 | 5.2 | 5.5 | 8.0 | 11.1 | 7.7 | 7.3 | 8.9 | 6.8 | 7.4 | 7.2 | 6.0 | 9.2 | 5.1 | 4.1 | 6.5 | 7.7 | 6.5 | 6.7 | 11.1 |
| 11-Aug | 8.5 | 5.4 | 6.2 | 5.3 | 4.8 | 6.7 | 4.5 | 4.4 | 5.5 | 7.7 | 8.6 | 9.0 | C | C | 12.5 | 11.9 | 12.0 | 10.0 | 9.7 | 5.7 | 6.3 | 5.6 | 7.5 | 3.2 | 7.3 | 12.5 |
| 12-Aug | 2.9 | 4.8 | 3.7 | 3.0 | 2.8 | 2.6 | 2.9 | 2.9 | 2.4 | 1.3 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 | 1.7 | 2.2 | 2.5 | 2.5 | 2.4 | 2.7 | 2.7 | 2.7 | 2.8 | 2.4 | 4.8 |
| 13-Aug | 2.8 | 2.9 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.3 | 3.4 | 3.5 | 3.6 | 3.2 | 3.5 | 4.2 | 4.0 | 3.5 | 3.8 | 3.6 | 5.2 | 4.6 | 4.1 | 3.7 | 4.1 | 6.5 | 3.7 | 6.5 |
| 14-Aug | 4.5 | 4.2 | 4.3 | 4.3 | 4.4 | 4.5 | 4.5 | 5.0 | 6.2 | 7.3 | 8.0 | 8.0 | 8.5 | 7.0 | 11.2 | 7.0 | 3.8 | 3.9 | 7.0 | 9.8 | 10.8 | 12.3 | 13.4 | 11.8 | 7.2 | 13.4 |
| 15-Aug | 13.4 | 11.1 | 7.6 | 6.5 | 7.3 | 7.7 | 7.1 | 6.3 | 6.2 | 7.6 | 10.2 | 5.0 | 4.0 | 4.6 | 5.0 | 4.0 | 3.6 | 3.5 | 5.1 | 5.8 | 7.1 | 6.4 | 4.0 | 3.9 | 6.4 | 13.4 |
| 16-Aug | 6.4 | 5.1 | 4.7 | 4.1 | 4.4 | 4.8 | 4.5 | 10.6 | 18.4 | 20.7 | 20.1 | 20.6 | 15.2 | 21.6 | 28.5 | 45.1 | 51.2 | 43.2 | 35.0 | 34.7 | 35.7 | 35.8 | 33.8 | 34.2 | 22.4 | 51.2 |
| 17-Aug | 38.5 | 35.6 | 35.3 | 34.0 | 28.9 | 23.8 | 21.6 | 21.2 | 21.5 | 19.9 | 19.7 | 21.4 | 21.1 | 21.3 | 22.2 | 29.1 | 25.1 | 22.7 | 20.6 | 19.7 | 21.5 | 22.2 | 18.8 | 16.3 | 24.3 | 38.5 |
| 18-Aug | 15.7 | 15.4 | 16.0 | 16.0 | 16.1 | 15.9 | 15.1 | 15.4 | 14.8 | 14.3 | 15.1 | 12.3 | 7.3 | 6.5 | 5.9 | 4.7 | 3.9 | 4.0 | 4.5 | 3.9 | 7.0 | 11.8 | 5.0 | 4.9 | 10.5 | 16.1 |
| 19-Aug | 6.1 | 5.9 | 7.8 | 7.3 | 7.9 | 8.7 | 10.1 | 10.2 | 6.8 | 5.2 | 4.1 | 3.3 | 4.4 | 8.6 | 9.8 | 5.9 | 12.3 | 37.8 | 38.7 | 45.5 | 74.6 | 68.0 | 64.0 | 28.7 | 20.1 | 74.6 |
| 20-Aug | 20.6 | 18.1 | 17.1 | 16.7 | 15.8 | 15.1 | 14.7 | 14.4 | 14.6 | 15.4 | 22.3 | 16.7 | 18.4 | 20.1 | 22.8 | 20.2 | 18.1 | 15.1 | 12.3 | 9.6 | 9.5 | 9.9 | 18.3 | 13.3 | 16.2 | 22.8 |
| 21-Aug | 14.3 | 12.4 | 11.5 | 10.9 | 11.0 | 9.1 | 9.1 | 11.4 | 15.8 | 20.6 | 20.2 | 17.3 | 11.0 | 9.0 | 9.1 | 10.6 | 10.8 | 10.7 | 11.4 | 11.7 | 12.8 | 15.5 | 14.1 | 13.7 | 12.7 | 20.6 |
| 22-Aug | 14.0 | 13.2 | 13.2 | 13.8 | 13.6 | 14.0 | 14.7 | 12.7 | 12.6 | 12.9 | 17.6 | 19.4 | 20.5 | 22.8 | 18.4 | 16.8 | 12.5 | 12.8 | 14.9 | 19.0 | 19.7 | 21.3 | 20.1 | 17.5 | 16.2 | 22.8 |
| 23-Aug | 14.1 | 13.7 | 14.7 | 14.1 | 14.6 | 15.0 | 14.9 | 17.1 | 21.1 | 19.1 | 23.0 | 22.4 | 23.8 | 30.4 | 22.6 | 24.7 | 25.7 | 22.4 | 11.3 | 9.1 | 9.8 | 8.2 | 8.2 | 7.4 | 17.0 | 30.4 |
| 24-Aug | 6.5 | 5.7 | 5.2 | 4.4 | 4.6 | 4.3 | 4.3 | 4.0 | 3.9 | 2.4 | 1.7 | 1.7 | 3.1 | 3.6 | 5.7 | 8.4 | 5.9 | 10.8 | 12.0 | 10.9 | 12.2 | 10.6 | 13.4 | 12.9 | 6.6 | 13.4 |
| 25-Aug | 11.1 | 12.3 | 13.0 | 16.2 | 18.6 | 17.8 | 20.3 | 25.7 | 35.5 | 33.4 | 28.6 | 32.4 | 36.5 | 37.4 | 42.6 | PF | PF | PF | PF | PF | PF | 32.5 | 36.3 | 31.6 | 26.8 | 42.6 |
| 26-Aug | 33.0 | 30.7 | 29.0 | 28.3 | 28.2 | 27.8 | 27.4 | 27.6 | 22.6 | 22.8 | 25.5 | 20.5 | 12.5 | 8.5 | 6.7 | 6.7 | 5.8 | 5.8 | 6.6 | 9.2 | 12.5 | 12.5 | 9.4 | 7.2 | 17.8 | 33.0 |
| 27-Aug | 8.0 | 7.3 | 7.7 | 10.0 | 10.4 | 12.0 | 12.4 | 16.5 | 19.2 | 19.3 | 19.5 | 17.4 | 25.6 | 20.3 | 20.5 | 32.3 | 22.4 | 23.4 | 16.4 | 16.4 | 17.3 | 17.6 | 18.8 | 21.0 | 17.2 | 32.3 |
| 28-Aug | 21.9 | 21.6 | 21.4 | 23.2 | 18.9 | 12.2 | 13.2 | 17.5 | 14.1 | 16.6 | 14.6 | 8.5 | 5.7 | 6.0 | 4.8 | 6.5 | 14.6 | 29.0 | 27.7 | 15.5 | 9.3 | 6.5 | 3.3 | 2.4 | 14.0 | 29.0 |
| 29-Aug | 2.3 | 1.9 | 2.2 | 2.7 | 3.0 | 3.8 | 4.8 | 7.0 | 6.9 | 7.2 | 8.0 | 7.0 | 6.4 | 6.2 | 6.2 | 5.8 | 5.8 | 7.1 | 10.4 | 13.5 | 15.4 | 19.3 | 17.4 | 12.1 | 7.6 | 19.3 |
| 30-Aug | 11.6 | 12.2 | 11.5 | 11.4 | 9.9 | 8.9 | 9.7 | 11.5 | 15.0 | 23.3 | 19.9 | 20.7 | 23.9 | 29.5 | 19.9 | 12.2 | 12.2 | 13.8 | 17.5 | 17.0 | 16.7 | 13.0 | 9.2 | 6.3 | 14.9 | 29.5 |
| 31-Aug | 7.6 | 5.4 | 5.3 | 5.2 | 4.5 | 4.3 | 4.5 | 4.4 | 4.5 | 5.7 | 8.4 | 6.1 | 7.4 | 7.5 | 4.4 | 3.2 | 2.3 | 2.5 | 2.5 | 4.7 | 5.5 | 5.6 | 6.3 | 5.5 | 5.1 | 8.4 |
| | 10.4 | 10.0 | 9.8 | 9.7 | 9.4 | 8.9 | 8.7 | 9.6 | 10.2 | 11.0 | 11.8 | 10.7 | 10.7 | 11.3 | 11.2 | 10.9 | 10.7 | 11.7 | 11.3 | 10.8 | 12.4 | 14.1 | 13.0 | 10.4 | Diurnal Average | |
| | 38.5 | 35.6 | 35.3 | 34.0 | 28.9 | 27.8 | 27.4 | 27.6 | 35.5 | 33.4 | 28.6 | 32.4 | 36.5 | 37.4 | 42.6 | 45.1 | 51.2 | 43.2 | 38.7 | 45.5 | 74.6 | 68.0 | 64.0 | 34.2 | Diurnal Maximum | |

C - Calibration DF - DAS Failure PF - Power Failure

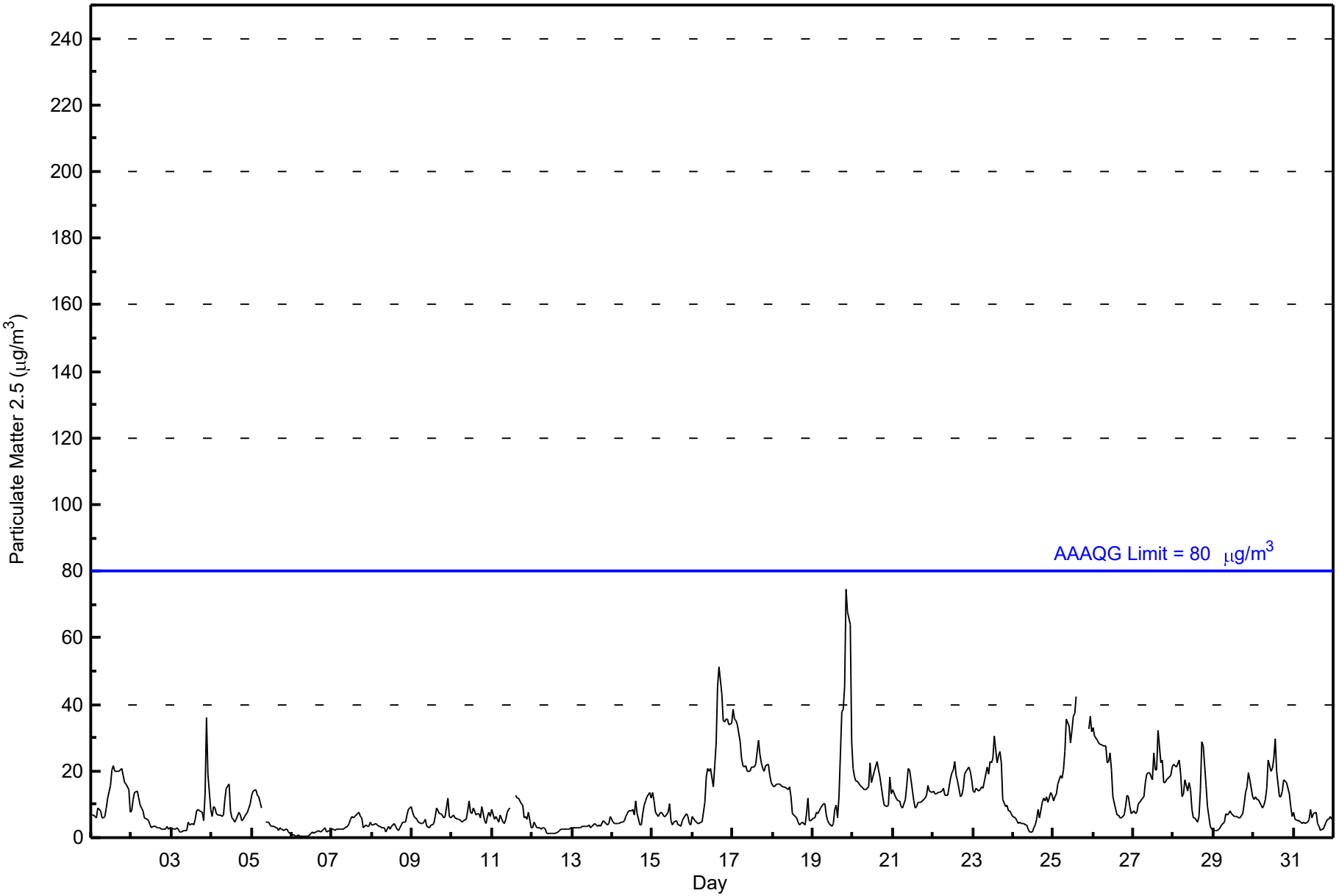
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort McKay - Bertha Ganter - August 2026**



# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Fort McKay - Bertha Ganter - August 2026

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 256 | 34.83 | 34.83 |
| 6 - 15 | 310 | 42.18 | 77.01 |
| 16 - 25 | 118 | 16.05 | 93.06 |
| 26 - 80 | 51 | 6.94 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 735

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 36 | 12 | 7 | 2 | 1 | 2 | 1 | 4 | 4 | 12 | 18 | 5 | 15 | 56 | 38 | 43 | 256 |
| 6 - 15 | 40 | 26 | 6 | 3 | 2 | 1 | 4 | 40 | 45 | 31 | 30 | 15 | 17 | 22 | 16 | 9 | 307 |
| 16 - 25 | 12 | 8 | 1 | 0 | 0 | 1 | 16 | 33 | 23 | 5 | 1 | 4 | 2 | 5 | 2 | 4 | 117 |
| 26 - 80 | 5 | 2 | 0 | 3 | 1 | 1 | 2 | 5 | 3 | 0 | 4 | 7 | 8 | 2 | 3 | 5 | 51 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 93 | 48 | 14 | 8 | 4 | 5 | 23 | 82 | 75 | 48 | 53 | 31 | 42 | 85 | 59 | 61 | 731 |

Total Number of Valid Hours: 731

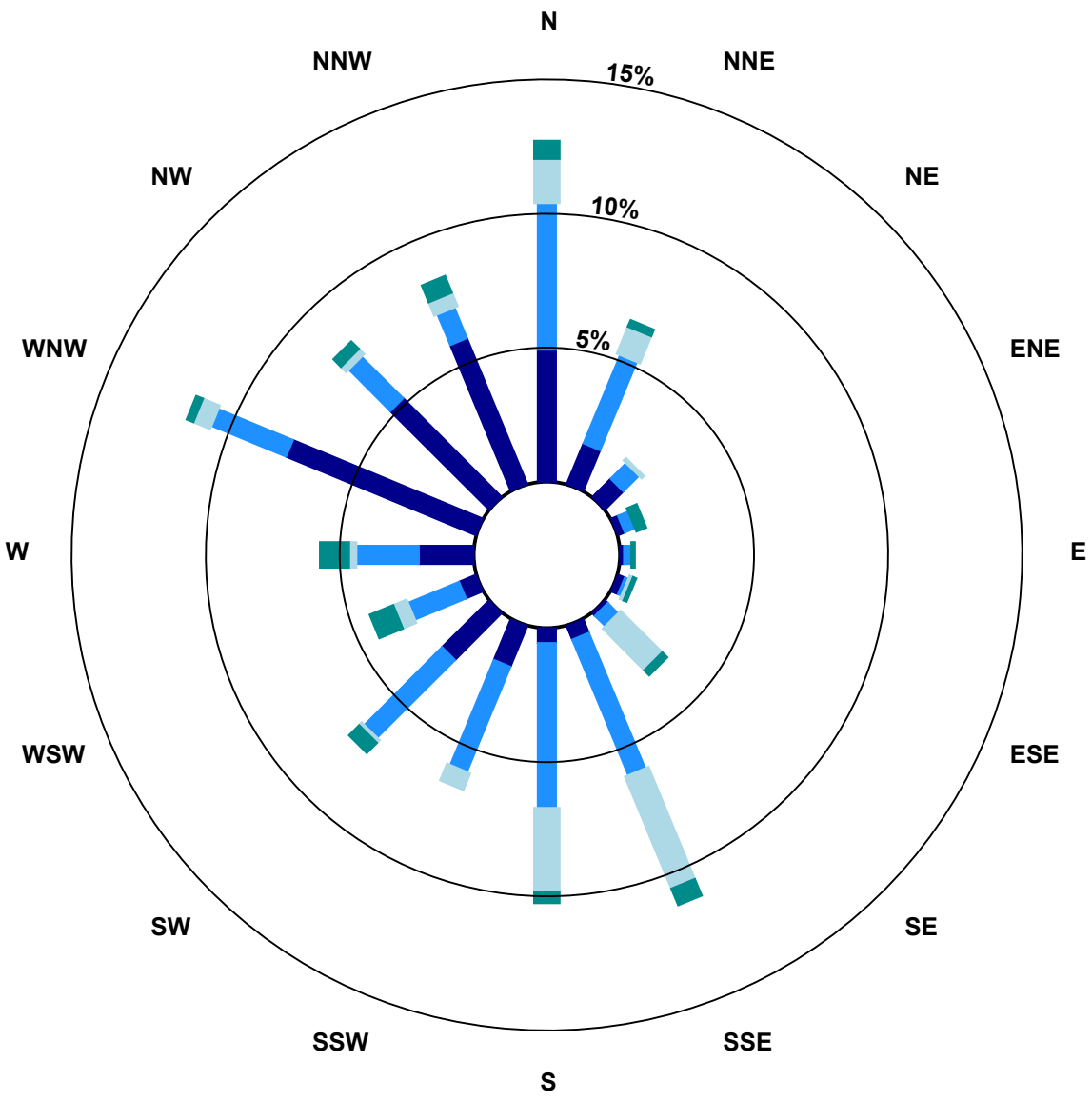
Total Number of Hours: 744

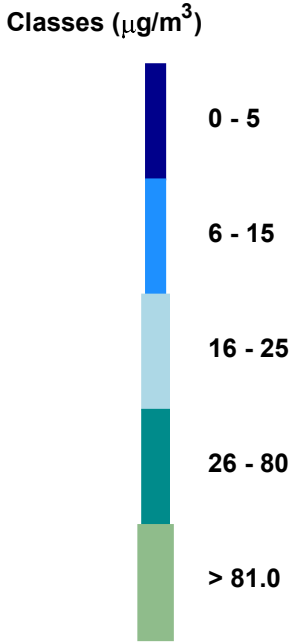
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Fort McKay - Bertha Ganter




Total Number of Valid Hours: 731

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Ammonia ($NH_3$) - ppb

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedences (AAAQO): 1-hr: 0

Maximum Value: 11.7 ppb on Aug 26 17:00

Maximum Daily Average: 0.0 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 1 01:00

Minimum Daily Average: 0.0 ppb on Aug 1

Maximum Diurnal Average: 0.4 ppb at hour 17

Minimum Diurnal Average: 0.0 ppb at hour 1

Monthly Average: 0.02 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 632 |
| Hours of Missing Data: | 112 |
| Hours of Calibration: | 41 |
| Percent Operational Time: | 90.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2-Aug | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8-Aug | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9-Aug | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-Aug | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11-Aug | 0.0 | 0.0 | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | 0.0 | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17-Aug | 0.0 | 0.0 | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20-Aug | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22-Aug | 0.0 | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | C | C | C | C | C | C | PF | PF | PF | PF | PF | M | M | M | -- | 0.0 |
| 26-Aug | M | M | M | M | M | M | M | M | M | M | C | C | C | C | C | RE | 11.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 11.7 |
| 27-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance PF - Power Failure RE - Recovery

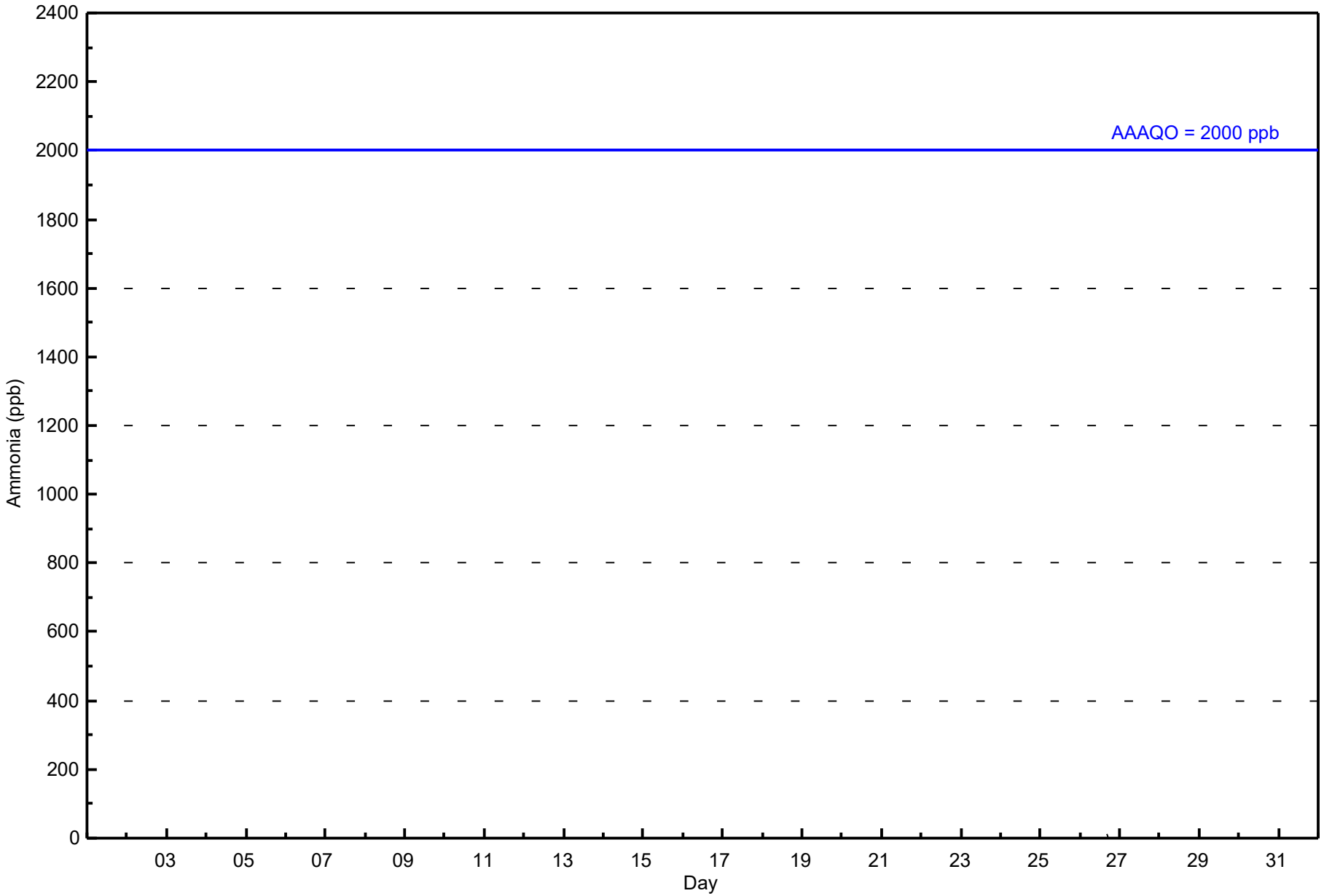
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 2000 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ammonia ($NH_3$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 631 | 99.84 | 99.84 |
| 6 - 10 | 0 | 0.00 | 99.84 |
| 11 - 15 | 1 | 0.16 | 100.00 |
| 16 - 20 | 0 | 0.00 | 100.00 |
| 21 - 25 | 0 | 0.00 | 100.00 |
| > 26 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 632

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ammonia ($NH_3$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 91 | 47 | 14 | 5 | 2 | 5 | 21 | 68 | 55 | 38 | 49 | 24 | 33 | 68 | 53 | 54 | 627 |
| 6 - 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 16 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 91 | 47 | 14 | 5 | 2 | 5 | 21 | 69 | 55 | 38 | 49 | 24 | 33 | 68 | 53 | 54 | 628 |

Total Number of Valid Hours: 628

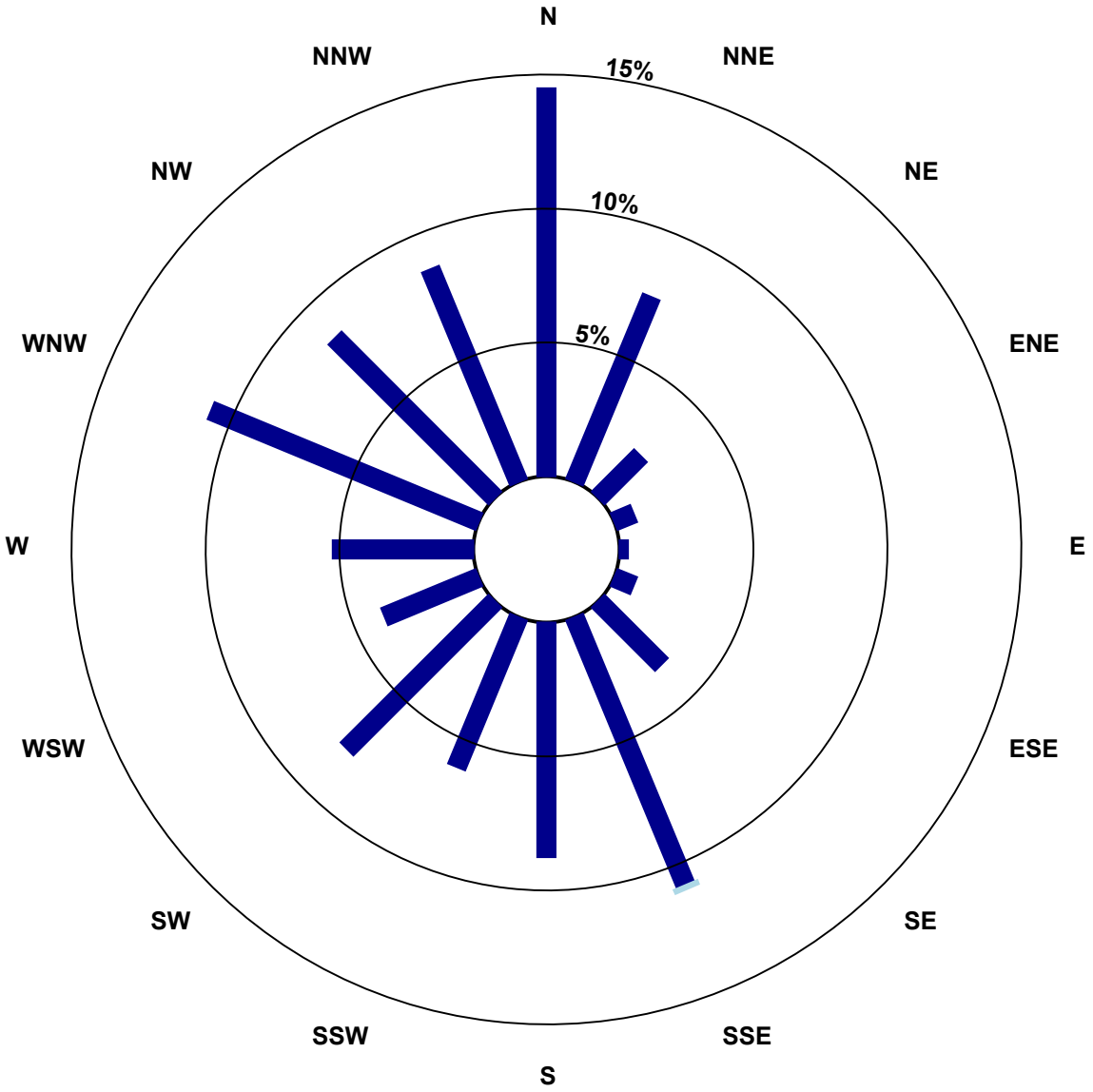
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ammonia ($NH_3$) - ppb

Fort McKay - Bertha Ganter




Classes (ppb)

0 - 5

6 - 10

11 - 15

16 - 20

21 - 25

> 26

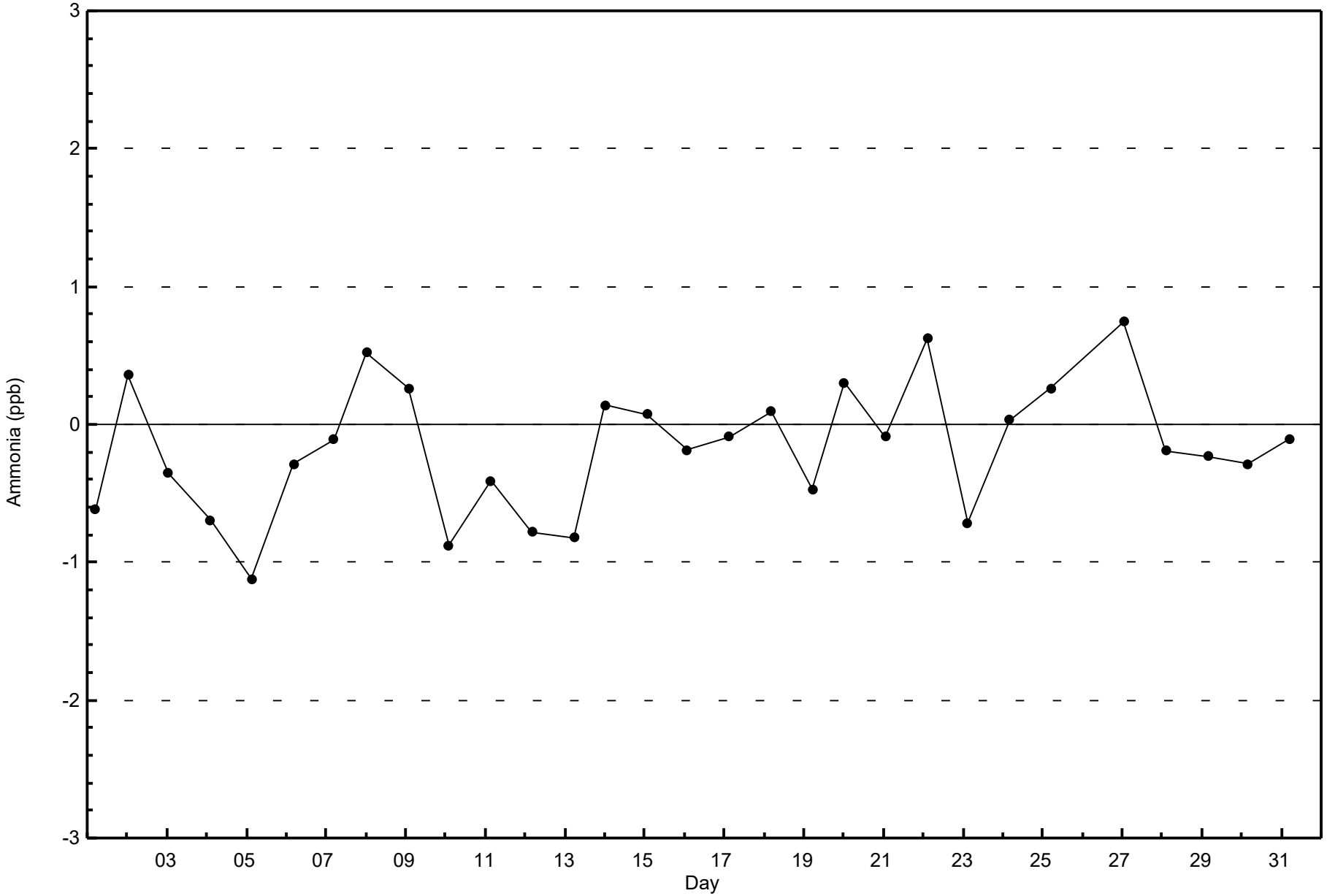
Total Number of Valid Hours: 628

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ammonia ($NH_3$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**

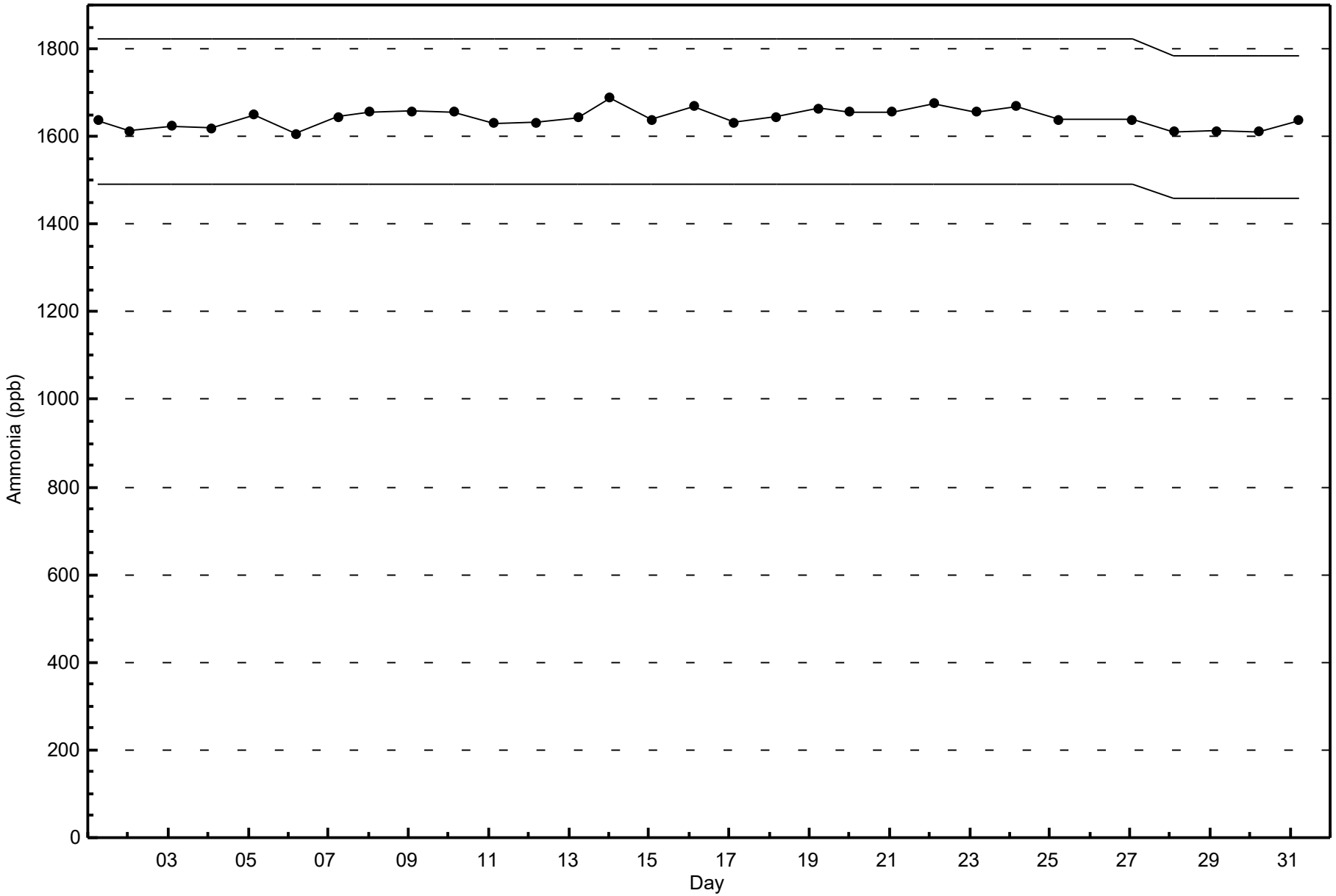


**Wood Buffalo Environmental Association**

**Span Responses**

**Ammonia ($NH_3$) - ppb**

**Fort McKay - Bertha Ganter - August 2026**



Maximum Value: 29.2 C on Aug 26 17:00
Maximum Daily Average: 21.9 C on Aug 27

Minimum Value: 6.3 C on Aug 17 06:00
Minimum Daily Average: 13.6 C on Aug 12
Maximum Diurnal Average: 22.0 C at hour 16
Minimum Diurnal Average: 12.1 C at hour 6
Monthly Average: 17.08 C
Percentiles: $P_1$ = 9.0 $P_{10}$ = 11.3 $Q_1$ = 13.5 Median = 16.6 $Q_3$ = 20.3 $P_{90}$ = 23.7 $P_{99}$ = 27.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

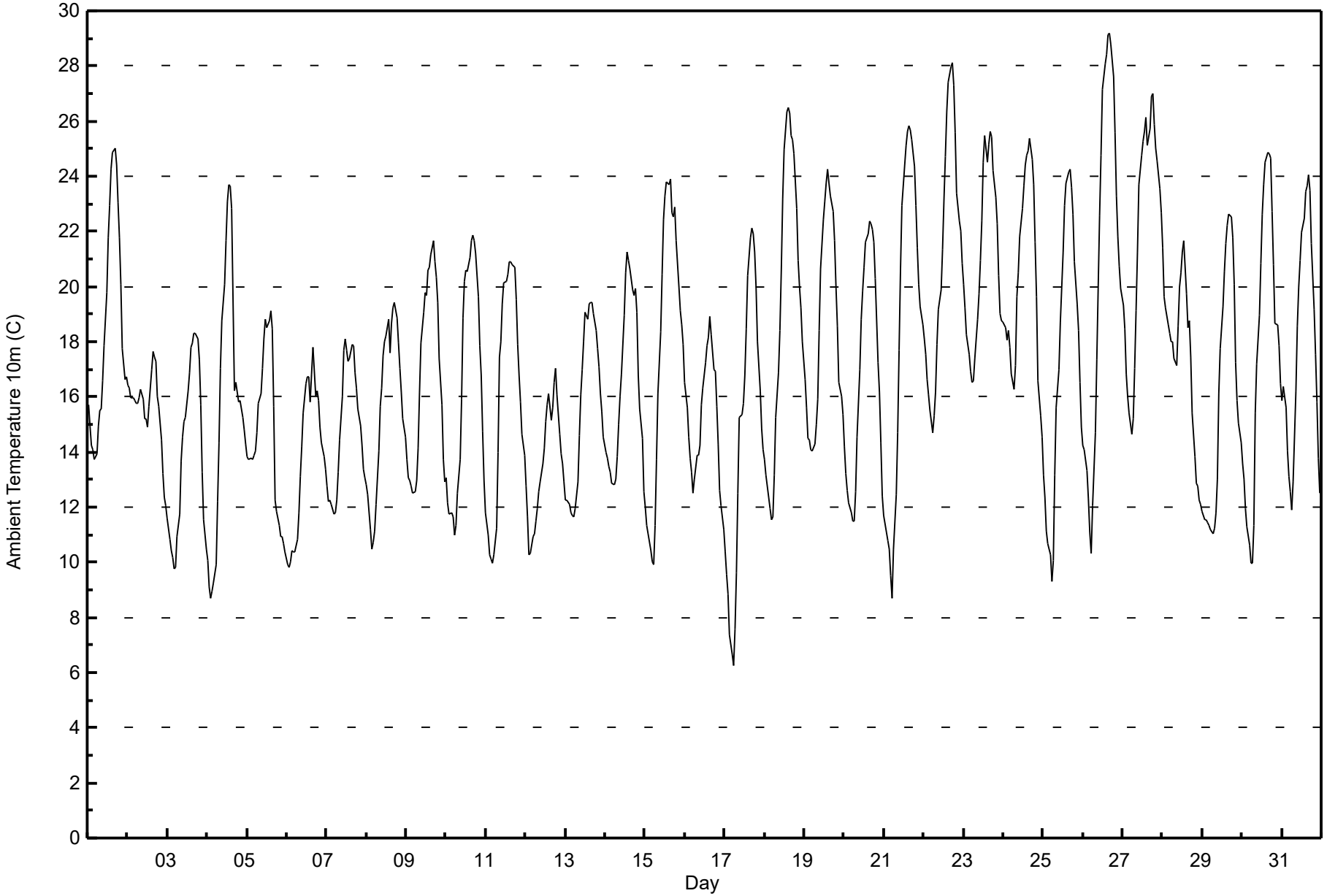
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.7 | 15.0 | 14.2 | 14.1 | 13.7 | 13.9 | 14.9 | 15.5 | 15.6 | 16.6 | 17.9 | 19.8 | 21.8 | 22.9 | 24.3 | 24.9 | 25.0 | 24.4 | 23.0 | 21.8 | 20.1 | 17.7 | 16.6 | 16.7 | 18.6 | 25.0 |
| 2-Aug | 16.4 | 16.3 | 16.0 | 16.0 | 15.9 | 15.8 | 15.8 | 16.0 | 16.3 | 15.9 | 15.2 | 15.2 | 14.9 | 15.6 | 17.0 | 17.7 | 17.5 | 17.3 | 16.0 | 15.7 | 14.4 | 13.2 | 12.4 | 12.0 | 15.6 | 17.7 |
| 3-Aug | 11.6 | 10.8 | 10.4 | 10.2 | 9.8 | 9.8 | 10.9 | 11.8 | 13.7 | 14.6 | 15.1 | 15.3 | 16.2 | 16.9 | 17.8 | 18.0 | 18.3 | 18.3 | 18.1 | 17.4 | 15.7 | 13.3 | 11.6 | 10.5 | 14.0 | 18.3 |
| 4-Aug | 10.1 | 9.1 | 8.7 | 8.9 | 9.2 | 9.9 | 12.2 | 14.3 | 17.0 | 18.8 | 20.1 | 21.7 | 23.1 | 23.7 | 23.7 | 22.8 | 16.2 | 16.5 | 16.2 | 15.8 | 15.9 | 15.3 | 14.8 | 14.3 | 15.8 | 23.7 |
| 5-Aug | 13.8 | 13.7 | 13.8 | 13.7 | 13.9 | 14.0 | 14.7 | 15.7 | 16.1 | 17.1 | 18.1 | 18.8 | 18.5 | 18.8 | 19.1 | 18.4 | 15.6 | 12.3 | 11.8 | 11.3 | 10.9 | 11.0 | 10.7 | 10.4 | 14.7 | 19.1 |
| 6-Aug | 9.9 | 9.8 | 10.0 | 10.4 | 10.4 | 10.4 | 10.8 | 11.8 | 13.1 | 14.2 | 15.4 | 16.5 | 16.7 | 16.7 | 15.8 | 16.8 | 17.8 | 16.0 | 16.2 | 15.9 | 14.9 | 14.3 | 13.8 | 13.4 | 13.8 | 17.8 |
| 7-Aug | 12.7 | 12.2 | 12.3 | 12.1 | 11.7 | 11.8 | 12.2 | 13.3 | 14.4 | 16.0 | 17.7 | 18.1 | 17.7 | 17.3 | 17.4 | 17.9 | 17.9 | 16.9 | 16.3 | 15.6 | 14.9 | 14.2 | 13.4 | 13.1 | 14.9 | 18.1 |
| 8-Aug | 12.8 | 12.4 | 11.2 | 10.5 | 10.7 | 11.1 | 12.1 | 14.0 | 15.7 | 16.3 | 17.5 | 18.0 | 18.2 | 18.8 | 17.6 | 18.7 | 19.2 | 19.4 | 18.8 | 17.9 | 17.0 | 16.2 | 15.2 | 14.5 | 15.6 | 19.4 |
| 9-Aug | 13.7 | 13.1 | 13.0 | 12.7 | 12.5 | 12.6 | 13.0 | 14.1 | 16.2 | 17.9 | 19.1 | 19.8 | 19.7 | 20.6 | 20.7 | 21.1 | 21.7 | 20.9 | 20.3 | 19.4 | 17.4 | 15.7 | 13.7 | 12.9 | 16.7 | 21.7 |
| 10-Aug | 13.1 | 12.2 | 11.8 | 11.8 | 11.6 | 11.0 | 11.3 | 12.5 | 13.7 | 15.9 | 18.9 | 20.2 | 20.6 | 20.5 | 21.0 | 21.7 | 21.9 | 21.7 | 21.2 | 19.7 | 17.8 | 16.8 | 14.8 | 13.0 | 16.4 | 21.9 |
| 11-Aug | 11.8 | 11.0 | 10.3 | 10.1 | 10.0 | 10.3 | 11.3 | 14.0 | 17.5 | 18.0 | 19.4 | 20.1 | 20.2 | 20.4 | 20.9 | 20.9 | 20.8 | 20.7 | 19.5 | 17.9 | 16.8 | 15.8 | 14.6 | 13.9 | 16.1 | 20.9 |
| 12-Aug | 12.8 | 11.7 | 10.3 | 10.3 | 10.9 | 11.0 | 11.5 | 11.9 | 12.6 | 12.9 | 13.6 | 14.2 | 15.1 | 15.7 | 16.1 | 15.2 | 15.6 | 16.5 | 17.0 | 16.1 | 14.7 | 14.0 | 13.6 | 12.9 | 13.6 | 17.0 |
| 13-Aug | 12.2 | 12.2 | 12.1 | 11.8 | 11.7 | 11.6 | 12.0 | 12.9 | 14.6 | 16.1 | 17.0 | 18.0 | 19.0 | 18.8 | 19.4 | 19.4 | 19.4 | 19.0 | 18.4 | 17.7 | 17.1 | 16.1 | 15.5 | 14.6 | 15.7 | 19.4 |
| 14-Aug | 14.0 | 13.8 | 13.5 | 13.3 | 12.9 | 12.8 | 13.0 | 13.8 | 15.0 | 16.0 | 16.8 | 19.0 | 20.5 | 21.3 | 20.9 | 20.7 | 19.9 | 19.7 | 19.9 | 19.1 | 16.8 | 15.6 | 14.5 | 12.6 | 16.5 | 21.3 |
| 15-Aug | 12.0 | 11.3 | 11.0 | 10.4 | 10.0 | 9.9 | 11.3 | 13.7 | 16.1 | 18.4 | 20.5 | 22.4 | 23.3 | 23.8 | 23.7 | 23.9 | 22.7 | 22.5 | 22.9 | 21.6 | 20.0 | 19.1 | 18.6 | 17.9 | 17.8 | 23.9 |
| 16-Aug | 16.5 | 15.6 | 14.6 | 13.8 | 13.2 | 12.5 | 13.0 | 13.9 | 13.9 | 14.2 | 15.7 | 16.3 | 17.2 | 17.8 | 18.1 | 18.9 | 18.2 | 17.0 | 16.9 | 15.7 | 14.3 | 12.6 | 12.1 | 11.2 | 15.1 | 18.9 |
| 17-Aug | 10.4 | 9.5 | 8.9 | 7.4 | 6.7 | 6.3 | 7.6 | 9.6 | 12.5 | 15.3 | 15.4 | 15.8 | 16.8 | 18.5 | 20.4 | 21.8 | 22.1 | 21.9 | 21.3 | 20.0 | 18.0 | 16.2 | 14.8 | 14.1 | 14.6 | 22.1 |
| 18-Aug | 13.7 | 13.2 | 12.4 | 12.0 | 11.6 | 11.6 | 13.2 | 15.3 | 16.9 | 18.4 | 20.6 | 23.2 | 25.0 | 26.4 | 26.5 | 26.3 | 25.5 | 25.3 | 24.8 | 22.8 | 20.9 | 20.0 | 19.2 | 18.0 | 19.3 | 26.5 |
| 19-Aug | 16.6 | 15.6 | 14.5 | 14.4 | 14.1 | 14.0 | 14.3 | 15.0 | 15.9 | 18.4 | 20.7 | 22.4 | 23.1 | 23.7 | 24.3 | 23.7 | 23.3 | 22.7 | 21.6 | 20.0 | 18.6 | 16.5 | 16.0 | 15.4 | 18.5 | 24.3 |
| 20-Aug | 14.2 | 13.2 | 12.6 | 12.1 | 11.8 | 11.5 | 11.5 | 12.5 | 14.6 | 17.0 | 18.8 | 19.8 | 20.7 | 21.6 | 21.9 | 22.4 | 22.2 | 22.1 | 21.6 | 20.3 | 17.3 | 16.2 | 14.4 | 12.4 | 16.8 | 22.4 |
| 21-Aug | 11.7 | 11.1 | 10.8 | 10.5 | 9.5 | 8.7 | 10.5 | 12.4 | 14.7 | 17.7 | 20.6 | 22.9 | 24.4 | 25.1 | 25.6 | 25.8 | 25.7 | 25.3 | 24.3 | 22.9 | 21.4 | 20.1 | 19.3 | 18.6 | 18.3 | 25.8 |
| 22-Aug | 18.1 | 17.5 | 16.6 | 16.1 | 15.5 | 14.7 | 15.3 | 16.2 | 17.9 | 19.2 | 19.9 | 21.3 | 23.1 | 24.7 | 26.3 | 27.4 | 28.0 | 28.1 | 27.3 | 25.6 | 23.4 | 22.4 | 22.0 | 20.8 | 21.1 | 28.1 |
| 23-Aug | 20.1 | 19.2 | 18.2 | 17.6 | 16.9 | 16.5 | 16.6 | 17.4 | 18.8 | 19.7 | 20.9 | 22.4 | 24.5 | 25.5 | 24.5 | 25.2 | 25.6 | 25.4 | 24.2 | 23.2 | 22.3 | 20.4 | 19.0 | 18.8 | 21.0 | 25.6 |
| 24-Aug | 18.7 | 18.5 | 18.0 | 18.4 | 17.8 | 16.8 | 16.3 | 17.2 | 19.6 | 20.5 | 21.8 | 22.8 | 23.6 | 24.4 | 24.7 | 24.9 | 25.4 | 24.6 | 23.7 | 21.6 | 19.6 | 16.6 | 15.3 | 14.5 | 20.2 | 25.4 |
| 25-Aug | 13.2 | 12.4 | 11.1 | 10.7 | 10.3 | 9.3 | 10.1 | 13.2 | 15.6 | 17.0 | 18.7 | 20.0 | 21.3 | 22.9 | 23.7 | 24.2 | 24.3 | 23.6 | 22.6 | 20.9 | 19.3 | 18.4 | 16.5 | 14.9 | 17.3 | 24.3 |
| 26-Aug | 14.2 | 14.1 | 13.3 | 12.3 | 11.1 | 10.3 | 12.1 | 14.7 | 17.3 | 20.0 | 22.6 | 24.8 | 27.1 | 28.1 | 28.4 | 29.1 | 29.2 | 28.8 | 27.6 | 25.6 | 23.3 | 21.8 | 20.7 | 19.9 | 20.7 | 29.2 |
| 27-Aug | 19.3 | 18.5 | 16.8 | 16.0 | 15.4 | 14.6 | 15.2 | 17.0 | 19.1 | 21.2 | 23.7 | 24.8 | 25.3 | 25.6 | 26.1 | 25.1 | 25.8 | 26.9 | 27.0 | 25.9 | 25.0 | 24.6 | 23.5 | 22.7 | 21.9 | 27.0 |
| 28-Aug | 21.4 | 19.6 | 19.2 | 18.6 | 18.3 | 18.0 | 18.0 | 17.4 | 17.1 | 18.5 | 20.0 | 20.5 | 21.3 | 21.7 | 19.7 | 18.5 | 18.8 | 17.5 | 15.4 | 13.8 | 12.9 | 12.7 | 12.3 | 12.1 | 17.6 | 21.7 |
| 29-Aug | 11.8 | 11.5 | 11.5 | 11.5 | 11.3 | 11.2 | 11.0 | 11.2 | 11.8 | 13.0 | 16.1 | 17.8 | 19.3 | 20.5 | 21.6 | 22.2 | 22.6 | 22.5 | 21.7 | 20.1 | 17.2 | 15.9 | 15.0 | 14.3 | 15.9 | 22.6 |
| 30-Aug | 13.6 | 13.0 | 11.9 | 11.3 | 10.6 | 9.9 | 10.0 | 11.4 | 15.4 | 17.2 | 19.0 | 20.9 | 22.6 | 23.7 | 24.5 | 24.9 | 24.8 | 24.7 | 22.8 | 20.8 | 18.7 | 18.6 | 17.8 | 16.5 | 17.7 | 24.9 |
| 31-Aug | 15.8 | 16.4 | 15.6 | 14.0 | 13.1 | 12.6 | 11.9 | 12.9 | 16.2 | 18.5 | 20.0 | 21.0 | 21.9 | 22.5 | 23.4 | 23.7 | 24.1 | 23.5 | 21.6 | 19.1 | 17.5 | 15.8 | 13.8 | 12.5 | 17.8 | 24.1 |
| | 14.3 | 13.7 | 13.1 | 12.7 | 12.3 | 12.1 | 12.7 | 14.0 | 15.6 | 17.1 | 18.6 | 19.8 | 20.7 | 21.4 | 21.8 | 22.0 | 21.8 | 21.4 | 20.7 | 19.4 | 17.9 | 16.7 | 15.7 | 14.8 | Diurnal Average | |
| | 21.4 | 19.6 | 19.2 | 18.6 | 18.3 | 18.0 | 18.0 | 17.4 | 19.6 | 21.2 | 23.7 | 24.8 | 27.1 | 28.1 | 28.4 | 29.1 | 29.2 | 28.8 | 27.6 | 25.9 | 25.0 | 24.6 | 23.5 | 22.7 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 10m (AT10) - C**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 24 | 3.23 | 3.23 |
| 10 - 20 | 524 | 70.43 | 73.66 |
| > 20 | 196 | 26.34 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 29.6 C on Aug 26 16:00
Maximum Daily Average: 21.5 C on Aug 27

Minimum Value: 5.6 C on Aug 17 06:00
Minimum Daily Average: 13.5 C on Aug 12
Maximum Diurnal Average: 22.4 C at hour 16
Minimum Diurnal Average: 11.4 C at hour 6
Monthly Average: 16.82 C
Percentiles: $P_1$ = 7.4 $P_{10}$ = 10.5 $Q_1$ = 12.9 Median = 16.4 $Q_3$ = 20.5 $P_{90}$ = 24.1 $P_{99}$ = 28.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

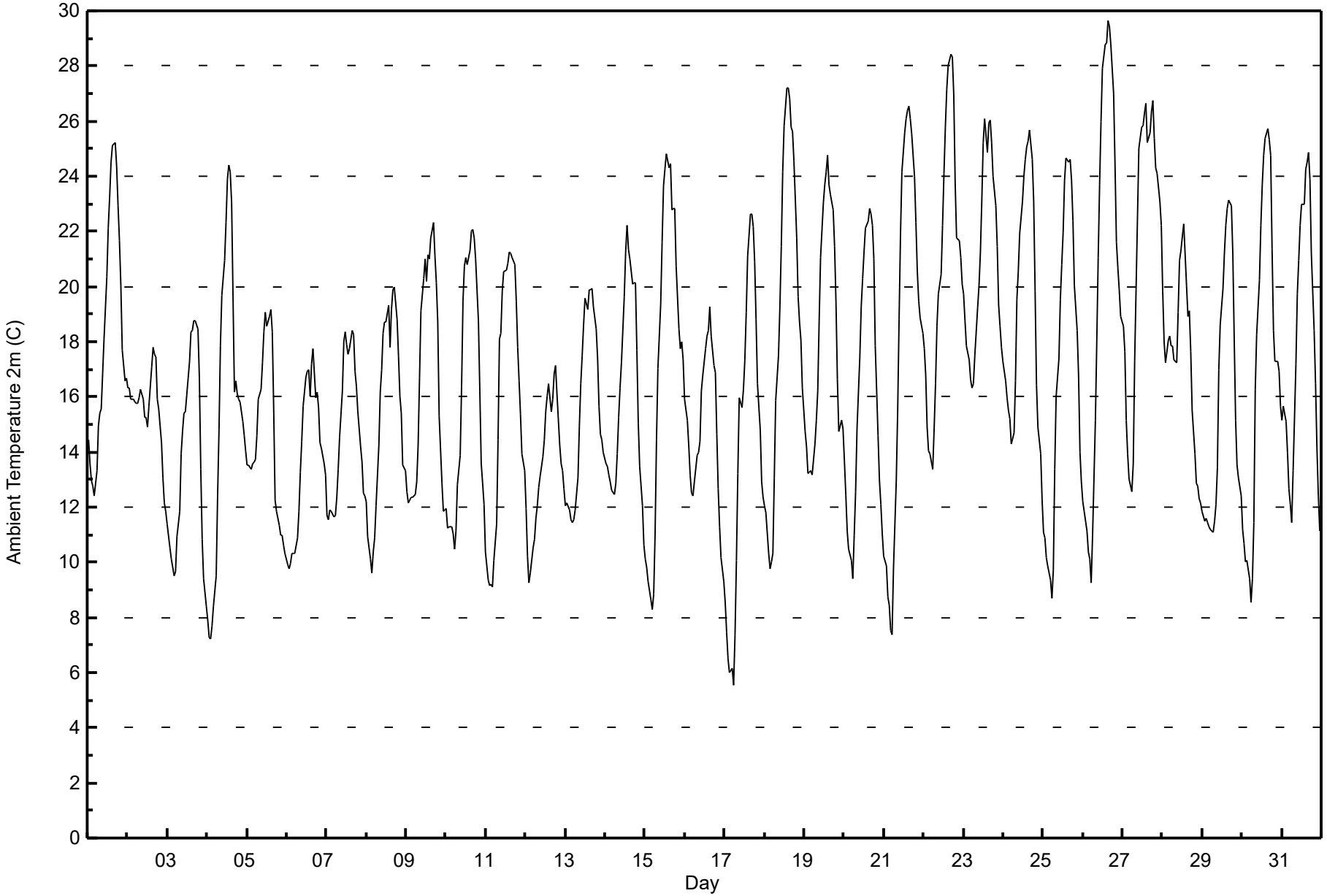
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 14.4 | 13.6 | 12.9 | 12.8 | 12.4 | 13.3 | 14.9 | 15.4 | 15.6 | 16.8 | 18.1 | 20.3 | 22.1 | 23.2 | 24.5 | 25.1 | 25.2 | 24.4 | 22.9 | 21.7 | 20.0 | 17.7 | 16.6 | 16.7 | 18.4 | 25.2 |
| 2-Aug | 16.3 | 16.3 | 15.9 | 15.9 | 15.8 | 15.7 | 15.8 | 15.9 | 16.3 | 15.9 | 15.3 | 15.3 | 14.9 | 15.6 | 17.1 | 17.8 | 17.5 | 17.4 | 15.9 | 15.6 | 14.3 | 13.1 | 12.2 | 11.9 | 15.6 | 17.8 |
| 3-Aug | 11.4 | 10.6 | 10.1 | 9.8 | 9.5 | 9.6 | 10.9 | 11.8 | 13.9 | 14.7 | 15.4 | 15.5 | 16.7 | 17.3 | 18.4 | 18.4 | 18.8 | 18.8 | 18.5 | 16.7 | 13.3 | 10.8 | 9.4 | 8.4 | 13.7 | 18.8 |
| 4-Aug | 7.9 | 7.3 | 7.2 | 7.7 | 8.4 | 9.5 | 12.4 | 14.8 | 17.8 | 19.7 | 20.9 | 22.3 | 23.9 | 24.4 | 24.2 | 23.0 | 16.2 | 16.6 | 16.1 | 15.9 | 15.8 | 15.1 | 14.6 | 14.0 | 15.7 | 24.4 |
| 5-Aug | 13.5 | 13.5 | 13.4 | 13.6 | 13.6 | 13.7 | 14.6 | 15.9 | 16.3 | 17.2 | 18.4 | 19.1 | 18.6 | 18.9 | 19.2 | 18.3 | 15.6 | 12.3 | 11.9 | 11.3 | 11.0 | 11.0 | 10.6 | 10.3 | 14.7 | 19.2 |
| 6-Aug | 9.9 | 9.8 | 9.9 | 10.3 | 10.3 | 10.3 | 10.9 | 11.9 | 13.3 | 14.4 | 15.7 | 16.8 | 16.9 | 17.0 | 16.0 | 17.2 | 17.7 | 16.0 | 16.2 | 15.6 | 14.4 | 14.2 | 13.6 | 13.1 | 13.8 | 17.7 |
| 7-Aug | 11.7 | 11.5 | 11.9 | 11.9 | 11.7 | 11.7 | 12.3 | 13.4 | 14.6 | 16.2 | 18.0 | 18.4 | 17.9 | 17.5 | 17.8 | 18.4 | 18.2 | 17.0 | 16.4 | 15.5 | 14.2 | 13.6 | 12.5 | 12.4 | 14.8 | 18.4 |
| 8-Aug | 12.2 | 10.9 | 10.1 | 9.6 | 10.4 | 10.9 | 12.1 | 14.2 | 16.2 | 17.0 | 18.3 | 18.7 | 18.7 | 19.3 | 17.8 | 19.2 | 19.9 | 20.0 | 18.8 | 17.5 | 16.0 | 15.4 | 13.5 | 13.3 | 15.4 | 20.0 |
| 9-Aug | 12.6 | 12.2 | 12.3 | 12.4 | 12.4 | 12.5 | 12.9 | 14.2 | 16.7 | 19.1 | 20.3 | 21.0 | 20.2 | 21.2 | 21.0 | 21.7 | 22.3 | 21.1 | 20.1 | 18.7 | 15.3 | 12.9 | 11.9 | 11.9 | 16.5 | 22.3 |
| 10-Aug | 12.0 | 11.2 | 11.3 | 11.3 | 11.1 | 10.5 | 11.2 | 12.8 | 13.9 | 16.4 | 19.4 | 20.8 | 21.1 | 20.8 | 21.3 | 22.0 | 22.1 | 21.7 | 21.0 | 18.8 | 16.2 | 13.6 | 12.9 | 12.1 | 16.1 | 22.1 |
| 11-Aug | 10.4 | 9.4 | 9.2 | 9.2 | 9.1 | 10.1 | 11.4 | 14.4 | 18.1 | 18.3 | 19.8 | 20.5 | 20.6 | 20.8 | 21.3 | 21.2 | 21.1 | 20.8 | 19.5 | 17.8 | 16.6 | 15.3 | 13.9 | 13.3 | 15.9 | 21.3 |
| 12-Aug | 11.9 | 10.2 | 9.3 | 9.6 | 10.5 | 10.8 | 11.6 | 12.1 | 12.7 | 13.1 | 13.8 | 14.4 | 15.5 | 16.0 | 16.5 | 15.5 | 15.9 | 16.8 | 17.2 | 16.1 | 14.2 | 13.6 | 13.3 | 12.7 | 13.5 | 17.2 |
| 13-Aug | 12.1 | 12.2 | 11.9 | 11.5 | 11.4 | 11.5 | 11.9 | 13.1 | 15.0 | 16.5 | 17.5 | 18.6 | 19.6 | 19.2 | 19.9 | 19.9 | 19.9 | 19.3 | 18.5 | 17.4 | 15.7 | 14.6 | 14.5 | 14.0 | 15.6 | 19.9 |
| 14-Aug | 13.6 | 13.5 | 13.2 | 12.9 | 12.6 | 12.5 | 12.9 | 14.0 | 15.3 | 16.3 | 17.3 | 19.6 | 21.3 | 22.2 | 21.4 | 21.0 | 20.1 | 20.1 | 20.2 | 17.7 | 15.1 | 13.5 | 12.0 | 10.6 | 16.2 | 22.2 |
| 15-Aug | 10.1 | 9.8 | 9.3 | 8.6 | 8.3 | 8.9 | 11.1 | 14.5 | 17.0 | 19.4 | 21.6 | 23.6 | 24.2 | 24.8 | 24.3 | 24.4 | 22.8 | 22.8 | 22.8 | 20.8 | 18.4 | 17.7 | 18.0 | 17.3 | 17.5 | 24.8 |
| 16-Aug | 15.9 | 15.1 | 14.2 | 13.2 | 12.5 | 12.4 | 12.9 | 13.9 | 14.0 | 14.4 | 16.2 | 16.8 | 17.7 | 18.2 | 18.4 | 19.3 | 18.2 | 17.1 | 16.9 | 14.6 | 12.7 | 11.3 | 10.2 | 9.3 | 14.8 | 19.3 |
| 17-Aug | 8.5 | 7.5 | 6.5 | 6.0 | 6.1 | 5.6 | 7.4 | 10.1 | 13.2 | 15.9 | 15.6 | 16.3 | 17.3 | 19.1 | 21.1 | 22.6 | 22.6 | 22.2 | 20.9 | 18.8 | 16.5 | 14.8 | 12.9 | 12.4 | 14.2 | 22.6 |
| 18-Aug | 12.0 | 11.8 | 10.3 | 9.8 | 10.0 | 10.3 | 13.1 | 15.9 | 17.5 | 19.3 | 21.4 | 24.1 | 25.8 | 27.2 | 27.2 | 26.8 | 25.8 | 25.6 | 24.5 | 21.8 | 19.6 | 18.7 | 18.1 | 16.3 | 18.9 | 27.2 |
| 19-Aug | 14.7 | 14.2 | 13.2 | 13.3 | 13.3 | 13.2 | 14.3 | 15.1 | 16.2 | 18.8 | 21.1 | 23.0 | 23.7 | 24.1 | 24.8 | 23.7 | 23.3 | 22.8 | 21.4 | 19.4 | 16.6 | 14.7 | 15.2 | 14.8 | 18.1 | 24.8 |
| 20-Aug | 13.7 | 12.5 | 11.1 | 10.5 | 10.0 | 9.4 | 11.0 | 12.5 | 14.9 | 17.4 | 19.3 | 20.3 | 21.3 | 22.1 | 22.4 | 22.8 | 22.6 | 22.2 | 21.0 | 17.9 | 14.6 | 13.0 | 12.1 | 11.1 | 16.1 | 22.8 |
| 21-Aug | 10.2 | 9.8 | 8.8 | 8.5 | 7.5 | 7.4 | 9.8 | 13.0 | 15.5 | 18.8 | 21.9 | 24.2 | 25.6 | 26.1 | 26.4 | 26.5 | 26.1 | 25.5 | 24.0 | 22.3 | 20.6 | 19.5 | 18.9 | 18.3 | 18.1 | 26.5 |
| 22-Aug | 17.7 | 16.8 | 14.9 | 14.0 | 13.9 | 13.4 | 14.9 | 16.5 | 18.6 | 19.7 | 20.5 | 22.2 | 24.1 | 25.8 | 27.2 | 28.0 | 28.4 | 28.3 | 27.0 | 23.8 | 21.8 | 21.7 | 21.1 | 20.1 | 20.8 | 28.4 |
| 23-Aug | 19.7 | 18.8 | 17.8 | 17.3 | 16.6 | 16.3 | 16.5 | 17.5 | 19.2 | 20.1 | 21.3 | 23.1 | 25.2 | 26.1 | 24.9 | 25.9 | 26.0 | 25.2 | 24.0 | 23.0 | 21.4 | 19.3 | 18.5 | 17.8 | 20.9 | 26.1 |
| 24-Aug | 17.3 | 16.6 | 16.0 | 15.5 | 15.2 | 14.3 | 14.7 | 16.6 | 19.5 | 20.5 | 21.9 | 23.1 | 24.0 | 24.6 | 25.1 | 25.3 | 25.7 | 24.6 | 23.1 | 19.8 | 16.4 | 14.9 | 13.9 | 12.2 | 19.2 | 25.7 |
| 25-Aug | 11.1 | 10.9 | 10.2 | 9.8 | 9.3 | 8.7 | 9.7 | 13.4 | 16.0 | 17.4 | 19.6 | 20.8 | 22.0 | 23.9 | 24.7 | 24.5 | 24.6 | 23.8 | 22.4 | 20.0 | 18.4 | 16.8 | 14.0 | 12.9 | 16.9 | 24.7 |
| 26-Aug | 12.2 | 11.8 | 11.1 | 10.4 | 10.1 | 9.3 | 11.0 | 15.1 | 18.1 | 21.1 | 23.7 | 26.0 | 27.9 | 28.8 | 28.9 | 29.6 | 29.5 | 28.8 | 27.0 | 24.4 | 21.6 | 20.7 | 19.9 | 18.9 | 20.2 | 29.6 |
| 27-Aug | 18.6 | 17.6 | 15.2 | 13.9 | 13.0 | 12.6 | 13.6 | 17.3 | 19.9 | 22.5 | 25.0 | 25.8 | 25.9 | 26.3 | 26.7 | 25.2 | 25.6 | 26.4 | 26.7 | 25.4 | 24.3 | 24.1 | 23.1 | 22.2 | 21.5 | 26.7 |
| 28-Aug | 19.8 | 18.0 | 17.3 | 18.0 | 18.2 | 17.8 | 17.9 | 17.3 | 17.2 | 19.1 | 21.0 | 21.3 | 21.8 | 22.3 | 20.0 | 18.9 | 19.1 | 17.7 | 15.5 | 13.9 | 12.9 | 12.8 | 12.3 | 12.1 | 17.6 | 22.3 |
| 29-Aug | 11.9 | 11.5 | 11.6 | 11.5 | 11.3 | 11.2 | 11.1 | 11.5 | 12.1 | 13.4 | 17.0 | 18.6 | 19.9 | 21.2 | 22.2 | 22.8 | 23.2 | 22.9 | 21.2 | 18.1 | 15.1 | 13.5 | 13.1 | 12.4 | 15.8 | 23.2 |
| 30-Aug | 11.2 | 10.7 | 10.0 | 10.1 | 9.4 | 8.5 | 9.4 | 11.5 | 16.3 | 18.3 | 20.2 | 22.2 | 23.7 | 24.8 | 25.4 | 25.7 | 25.3 | 24.8 | 21.3 | 18.4 | 17.3 | 17.3 | 16.9 | 15.7 | 17.3 | 25.7 |
| 31-Aug | 15.1 | 15.7 | 15.1 | 14.0 | 12.7 | 12.1 | 11.5 | 13.3 | 17.2 | 19.7 | 21.0 | 22.2 | 23.0 | 23.0 | 24.2 | 24.5 | 24.9 | 23.9 | 21.2 | 18.4 | 16.5 | 14.1 | 12.4 | 11.1 | 17.8 | 24.9 |
| | 13.2 | 12.6 | 12.0 | 11.7 | 11.5 | 11.4 | 12.4 | 14.2 | 16.1 | 17.7 | 19.2 | 20.5 | 21.3 | 22.0 | 22.3 | 22.4 | 22.1 | 21.5 | 20.5 | 18.6 | 16.7 | 15.5 | 14.6 | 13.9 | Diurnal Average | |
| | 19.8 | 18.8 | 17.8 | 18.0 | 18.2 | 17.8 | 17.9 | 17.5 | 19.9 | 22.5 | 25.0 | 26.0 | 27.9 | 28.8 | 28.9 | 29.6 | 29.5 | 28.8 | 27.0 | 25.4 | 24.3 | 24.1 | 23.1 | 22.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 51 | 6.85 | 6.85 |
| 10 - 20 | 491 | 65.99 | 72.85 |
| > 20 | 202 | 27.15 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 100.0 % on Aug 1 04:00

Maximum Daily Average: 89.5 % on Aug 1

Minimum Value: 31.2 % on Aug 24 14:00

Minimum Daily Average: 62.5 % on Aug 24

Maximum Diurnal Average: 93.4 % at hour 6

Minimum Diurnal Average: 50.6 % at hour 16

Monthly Average: 73.42 %

Percentiles: $P_1$ = 34.7 $P_{10}$ = 46.6 $Q_1$ = 55.7 Median = 75.4 $Q_3$ = 91.9 $P_{90}$ = 96.6 $P_{99}$ = 99.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

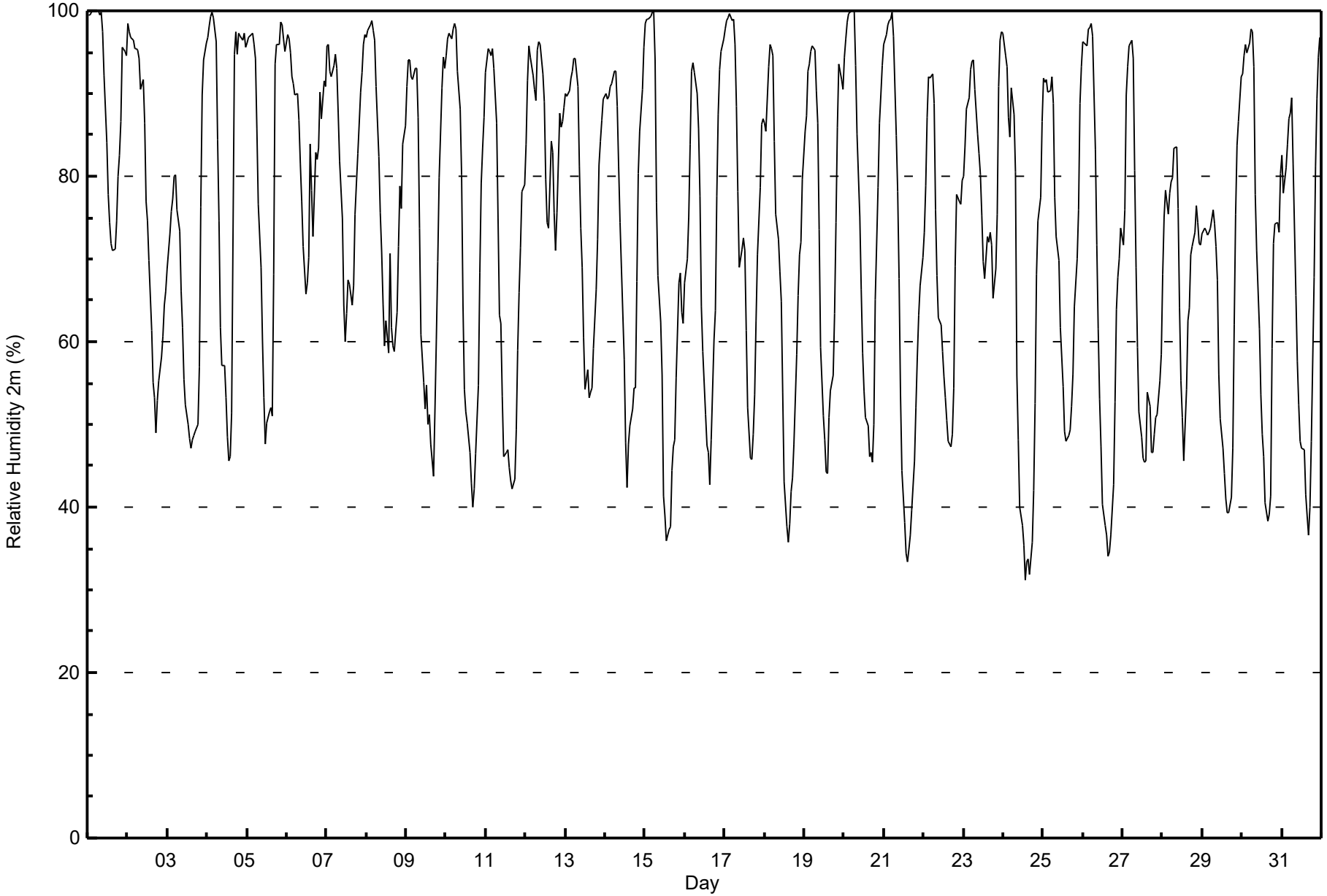
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 99.4 | 99.5 | 99.9 | 100.0 | 100.0 | 100.0 | 100.0 | 99.6 | 99.9 | 97.5 | 92.1 | 84.1 | 77.8 | 74.5 | 71.8 | 71.1 | 71.2 | 74.5 | 80.0 | 82.5 | 86.5 | 95.6 | 95.1 | 94.6 | 89.5 | 100.0 |
| 2-Aug | 98.4 | 97.4 | 96.7 | 96.5 | 95.4 | 95.5 | 95.3 | 94.3 | 90.5 | 91.7 | 86.4 | 77.0 | 74.6 | 69.9 | 61.3 | 55.1 | 53.2 | 49.0 | 52.9 | 55.3 | 58.2 | 60.6 | 64.4 | 66.1 | 76.5 | 98.4 |
| 3-Aug | 68.7 | 73.1 | 75.8 | 77.3 | 80.0 | 80.2 | 75.9 | 73.4 | 66.1 | 61.7 | 55.4 | 52.4 | 50.0 | 48.4 | 47.1 | 48.1 | 48.6 | 49.1 | 50.0 | 57.0 | 76.3 | 89.9 | 94.1 | 96.0 | 66.4 | 96.0 |
| 4-Aug | 96.7 | 98.2 | 99.3 | 99.9 | 99.2 | 96.3 | 84.4 | 74.7 | 61.7 | 57.2 | 57.2 | 53.3 | 48.5 | 45.6 | 46.1 | 51.3 | 94.8 | 97.5 | 94.7 | 97.3 | 97.0 | 96.4 | 97.2 | 95.6 | 80.8 | 99.9 |
| 5-Aug | 96.1 | 96.8 | 97.1 | 97.3 | 95.9 | 94.2 | 85.8 | 76.6 | 69.0 | 60.2 | 53.2 | 47.6 | 50.2 | 51.5 | 52.1 | 51.0 | 68.2 | 93.5 | 96.0 | 96.0 | 98.7 | 98.3 | 96.6 | 95.2 | 79.9 | 98.7 |
| 6-Aug | 97.1 | 96.6 | 94.9 | 92.1 | 91.2 | 89.9 | 90.0 | 86.8 | 81.5 | 77.0 | 71.6 | 65.7 | 67.1 | 70.1 | 83.8 | 78.3 | 72.7 | 82.8 | 82.1 | 83.3 | 90.1 | 87.0 | 91.5 | 90.8 | 83.9 | 97.1 |
| 7-Aug | 95.7 | 96.0 | 92.8 | 92.0 | 93.4 | 94.7 | 93.1 | 87.6 | 81.8 | 74.8 | 64.5 | 60.0 | 63.5 | 67.4 | 66.9 | 64.4 | 66.7 | 75.4 | 79.1 | 82.7 | 90.2 | 92.6 | 95.9 | 97.0 | 82.0 | 97.0 |
| 8-Aug | 96.8 | 97.7 | 98.3 | 98.8 | 97.7 | 96.5 | 90.8 | 82.4 | 75.7 | 70.8 | 64.6 | 59.6 | 62.6 | 58.6 | 70.7 | 61.7 | 59.5 | 58.9 | 63.6 | 71.5 | 78.9 | 76.2 | 83.9 | 86.1 | 77.6 | 98.8 |
| 9-Aug | 90.9 | 94.0 | 94.1 | 92.0 | 91.7 | 93.1 | 93.0 | 87.1 | 73.8 | 60.9 | 55.0 | 51.9 | 54.7 | 50.0 | 51.1 | 47.6 | 43.7 | 51.7 | 60.4 | 69.6 | 79.8 | 90.7 | 94.4 | 93.1 | 73.5 | 94.4 |
| 10-Aug | 94.5 | 96.6 | 97.2 | 96.5 | 97.8 | 98.5 | 97.8 | 92.8 | 88.2 | 80.1 | 64.4 | 54.2 | 51.5 | 50.1 | 46.6 | 42.9 | 39.9 | 42.2 | 46.5 | 54.8 | 68.2 | 79.1 | 83.4 | 87.1 | 73.0 | 98.5 |
| 11-Aug | 92.5 | 95.4 | 95.1 | 94.5 | 95.4 | 93.1 | 86.5 | 74.9 | 63.2 | 62.2 | 53.4 | 46.1 | 46.7 | 46.9 | 44.7 | 43.3 | 42.3 | 43.3 | 49.4 | 59.0 | 65.9 | 71.3 | 78.2 | 79.0 | 67.6 | 95.4 |
| 12-Aug | 83.8 | 91.5 | 95.7 | 94.3 | 92.2 | 90.6 | 89.1 | 95.3 | 96.2 | 96.0 | 92.3 | 89.1 | 79.6 | 74.4 | 73.7 | 84.2 | 82.8 | 75.6 | 71.1 | 75.6 | 87.6 | 85.9 | 86.6 | 88.3 | 86.3 | 96.2 |
| 13-Aug | 90.1 | 89.6 | 90.4 | 91.9 | 92.7 | 94.2 | 94.2 | 90.8 | 81.1 | 73.7 | 69.0 | 60.5 | 54.2 | 56.6 | 53.3 | 54.0 | 54.5 | 59.1 | 66.2 | 72.5 | 81.4 | 84.2 | 86.8 | 89.3 | 76.3 | 94.2 |
| 14-Aug | 90.0 | 89.4 | 89.6 | 90.9 | 91.2 | 92.8 | 92.7 | 88.5 | 81.3 | 74.3 | 68.8 | 57.7 | 47.7 | 42.3 | 47.6 | 49.8 | 51.9 | 54.4 | 54.4 | 67.3 | 80.4 | 85.4 | 90.4 | 95.6 | 73.9 | 95.6 |
| 15-Aug | 98.5 | 99.0 | 98.9 | 99.3 | 99.8 | 100.0 | 94.1 | 76.8 | 68.0 | 62.4 | 55.9 | 41.4 | 38.9 | 36.0 | 37.2 | 37.6 | 44.4 | 47.4 | 48.1 | 55.6 | 67.1 | 68.4 | 63.5 | 62.1 | 66.7 | 100.0 |
| 16-Aug | 67.1 | 70.0 | 75.1 | 83.9 | 92.7 | 93.7 | 92.6 | 90.0 | 85.7 | 77.6 | 64.2 | 58.8 | 51.3 | 47.4 | 46.6 | 42.7 | 48.1 | 60.2 | 63.7 | 77.6 | 87.5 | 92.9 | 95.1 | 96.6 | 73.4 | 96.6 |
| 17-Aug | 97.9 | 98.8 | 99.2 | 99.6 | 98.9 | 99.0 | 96.0 | 88.5 | 78.2 | 69.0 | 71.2 | 72.5 | 70.9 | 61.3 | 52.0 | 45.9 | 45.7 | 48.8 | 53.6 | 62.5 | 70.6 | 78.6 | 86.2 | 87.0 | 76.3 | 99.6 |
| 18-Aug | 86.5 | 85.3 | 93.3 | 95.9 | 95.4 | 94.7 | 84.2 | 75.5 | 72.4 | 68.6 | 65.0 | 54.0 | 43.0 | 37.6 | 35.7 | 38.0 | 41.8 | 43.6 | 47.7 | 58.5 | 65.6 | 70.5 | 72.1 | 79.7 | 66.9 | 95.9 |
| 19-Aug | 85.5 | 87.3 | 92.8 | 93.6 | 95.1 | 95.8 | 95.2 | 90.4 | 86.5 | 73.5 | 59.3 | 51.0 | 48.1 | 44.2 | 44.0 | 50.9 | 54.1 | 55.9 | 63.4 | 74.4 | 85.9 | 93.5 | 91.8 | 90.5 | 75.1 | 95.8 |
| 20-Aug | 94.4 | 96.7 | 98.6 | 99.7 | 99.9 | 100.0 | 100.0 | 93.4 | 85.1 | 75.1 | 66.3 | 58.6 | 54.1 | 50.8 | 49.9 | 46.1 | 46.6 | 45.4 | 50.0 | 65.1 | 78.6 | 86.5 | 89.8 | 93.4 | 76.0 | 100.0 |
| 21-Aug | 96.0 | 97.1 | 98.3 | 98.9 | 99.0 | 99.9 | 96.9 | 84.9 | 78.1 | 67.6 | 53.7 | 44.4 | 38.1 | 34.5 | 33.4 | 34.9 | 36.5 | 39.6 | 45.6 | 52.0 | 58.2 | 63.2 | 66.8 | 70.1 | 66.1 | 99.9 |
| 22-Aug | 73.3 | 78.8 | 87.1 | 92.0 | 91.9 | 92.4 | 88.8 | 76.0 | 67.9 | 62.8 | 62.0 | 58.8 | 55.7 | 53.3 | 50.5 | 48.0 | 47.2 | 48.8 | 54.5 | 69.1 | 77.7 | 77.0 | 76.6 | 79.6 | 69.6 | 92.4 |
| 23-Aug | 80.1 | 83.6 | 88.1 | 89.6 | 92.9 | 93.9 | 94.0 | 90.5 | 85.1 | 82.8 | 80.2 | 75.3 | 69.7 | 67.6 | 72.7 | 72.0 | 73.3 | 71.8 | 65.3 | 68.9 | 75.5 | 90.8 | 96.5 | 97.4 | 81.6 | 97.4 |
| 24-Aug | 97.3 | 94.5 | 93.2 | 87.2 | 84.7 | 90.7 | 87.5 | 80.6 | 55.9 | 48.1 | 40.0 | 37.8 | 35.5 | 31.2 | 33.4 | 33.7 | 31.9 | 35.8 | 42.0 | 52.6 | 68.2 | 74.7 | 77.5 | 86.6 | 62.5 | 97.3 |
| 25-Aug | 91.9 | 91.3 | 91.8 | 90.3 | 90.3 | 92.0 | 88.9 | 77.4 | 72.8 | 69.8 | 61.7 | 58.2 | 54.5 | 49.1 | 48.0 | 48.6 | 49.4 | 52.1 | 56.2 | 64.2 | 69.9 | 75.9 | 88.8 | 93.2 | 71.9 | 93.2 |
| 26-Aug | 96.2 | 96.2 | 95.7 | 97.9 | 98.0 | 98.5 | 97.0 | 83.2 | 71.6 | 61.5 | 53.1 | 47.3 | 40.3 | 37.8 | 36.5 | 34.0 | 34.6 | 36.7 | 42.8 | 52.7 | 63.9 | 67.9 | 70.1 | 73.7 | 66.1 | 98.5 |
| 27-Aug | 71.8 | 76.0 | 89.8 | 93.2 | 95.8 | 96.4 | 94.2 | 80.7 | 68.9 | 59.3 | 51.5 | 48.5 | 46.0 | 45.4 | 45.6 | 53.8 | 52.3 | 46.5 | 46.7 | 48.8 | 50.9 | 51.2 | 55.2 | 58.4 | 63.6 | 96.4 |
| 28-Aug | 68.1 | 75.1 | 78.3 | 75.3 | 77.9 | 79.4 | 79.9 | 83.3 | 83.6 | 76.1 | 64.0 | 55.2 | 50.8 | 45.6 | 54.3 | 62.5 | 64.0 | 70.6 | 71.6 | 73.2 | 76.4 | 74.4 | 71.9 | 71.7 | 70.1 | 83.6 |
| 29-Aug | 73.0 | 73.7 | 73.4 | 72.9 | 73.3 | 73.7 | 75.9 | 74.2 | 71.5 | 67.4 | 56.1 | 50.7 | 47.1 | 44.1 | 41.0 | 39.2 | 39.3 | 41.1 | 47.2 | 62.1 | 75.5 | 83.8 | 86.6 | 92.0 | 63.9 | 92.0 |
| 30-Aug | 92.4 | 94.7 | 96.0 | 95.0 | 96.2 | 97.8 | 97.4 | 93.2 | 77.8 | 71.0 | 61.5 | 53.6 | 48.9 | 46.1 | 40.5 | 38.3 | 39.2 | 41.3 | 59.1 | 71.9 | 74.3 | 74.5 | 73.2 | 80.3 | 71.4 | 97.8 |
| 31-Aug | 82.5 | 77.9 | 81.0 | 83.9 | 87.0 | 87.6 | 89.5 | 81.6 | 65.5 | 57.7 | 52.4 | 48.0 | 47.2 | 47.0 | 41.6 | 39.0 | 36.5 | 40.1 | 48.0 | 67.8 | 81.2 | 89.3 | 94.5 | 96.8 | 67.6 | 96.8 |
| | 88.5 | 89.9 | 91.8 | 92.3 | 93.0 | 93.4 | 91.0 | 84.7 | 76.9 | 70.6 | 63.4 | 57.2 | 53.8 | 51.1 | 51.0 | 50.6 | 52.7 | 55.9 | 59.7 | 67.8 | 76.3 | 80.8 | 83.7 | 85.9 | Diurnal Average | |
| | 99.4 | 99.5 | 99.9 | 100.0 | 100.0 | 100.0 | 100.0 | 99.6 | 99.9 | 97.5 | 92.3 | 89.1 | 79.6 | 74.5 | 83.8 | 84.2 | 94.8 | 97.5 | 96.0 | 97.3 | 98.7 | 98.3 | 97.2 | 97.4 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Precipitation (PC) - mm

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 7.7 mm on Aug 4 17:00

Maximum Daily Total: 12.3 mm on Aug 4

Minimum Value: 0.0 mm on Aug 1 01:00

Minimum Daily Total: 0.0 mm on Aug 3

Maximum Diurnal Total: 9.5 mm at hour 17

Minimum Diurnal Total: 0.0 mm at hour 3

Monthly Total: 37.89 mm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 1.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 738 |
| Hours of Missing Data: | 6 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Total | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.3 | 0.0 | 0.6 | 3.7 | 2.0 |
| 2-Aug | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 1.0 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7 | 0.6 | 1.2 | 0.6 | 1.9 | 0.3 | 0.0 | 0.0 | 12.3 | 7.7 |
| 5-Aug | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 3.3 | 2.0 | 1.9 | 1.9 | 0.4 | 0.0 | 0.0 | 10.4 | 3.3 |
| 6-Aug | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 3.7 | 1.9 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.5 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 3.8 | 1.5 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.7 | 0.4 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.6 | 0.0 | 1.5 | 1.0 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | PF | PF | PF | PF | PF | PF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.5 | 0.3 | 0.0 | 0.2 | 0.3 | 0.1 | 0.0 | 1.5 | 1.9 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.2 | 9.5 | 3.9 | 3.2 | 2.6 | 6.0 | 2.0 | 0.9 | 1.0 | Diurnal Average | |
| | 1.0 | 0.2 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.9 | 1.5 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.2 | 7.7 | 3.3 | 2.0 | 1.9 | 2.0 | 1.0 | 0.6 | 0.6 | Diurnal Maximum | |

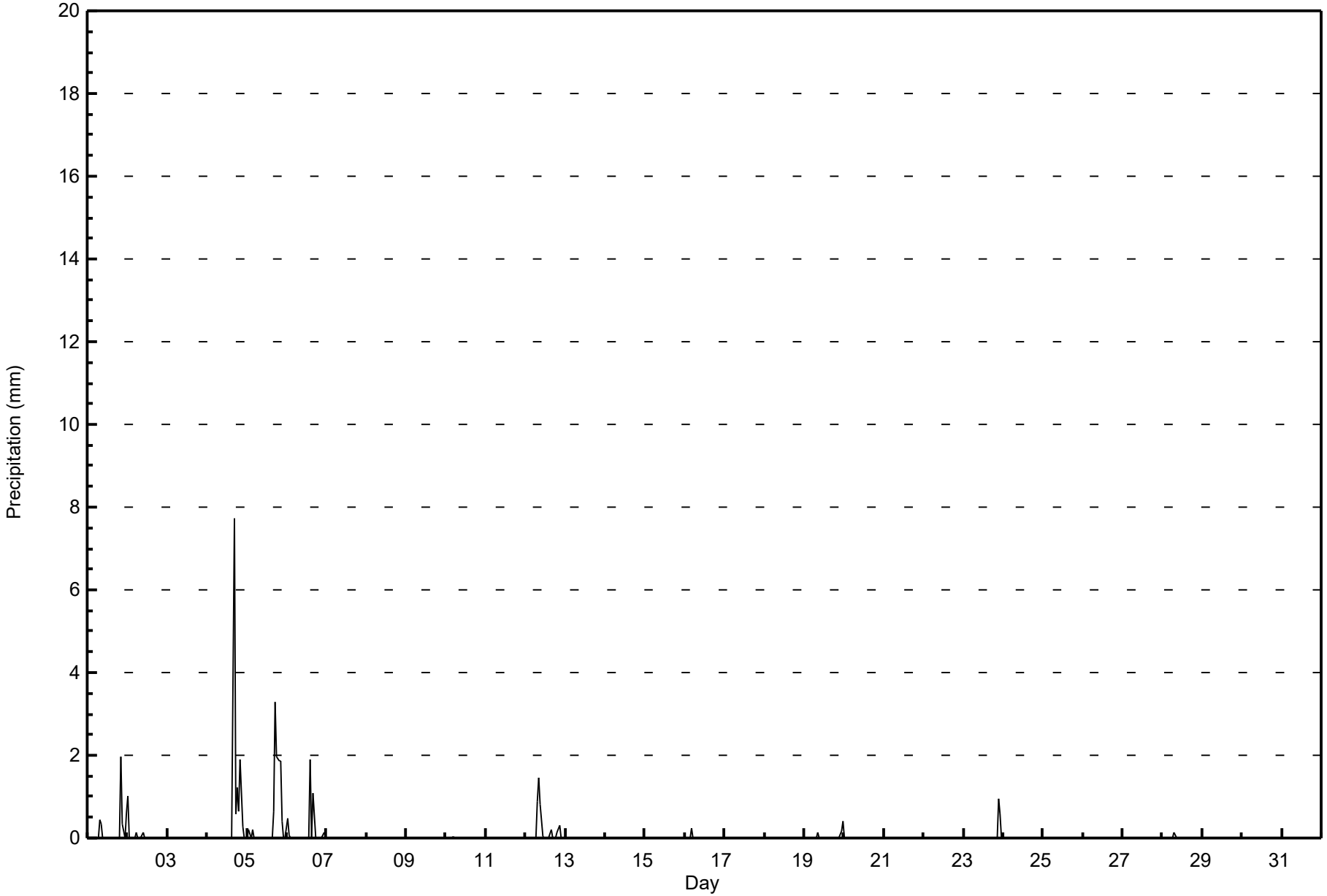
PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Precipitation (PC) - mm**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (mm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 714 | 96.75 | 96.75 |
| 0.4 - 0.5 | 4 | 0.54 | 97.29 |
| 0.6 - 0.7 | 5 | 0.68 | 97.97 |
| 0.8 - 1.4 | 6 | 0.81 | 98.78 |
| 1.5 - 10 | 8 | 1.08 | 99.86 |
| > 10 | 0 | 0.00 | 99.86 |

Total Number of Valid Hours: 738

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Leaf Wetness (LW) - %

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 75.5 % on Aug 8 05:00

Maximum Daily Average: 24.2 % on Aug 1

Minimum Value: 0.1 % on Aug 26 16:00

Minimum Daily Average: 1.6 % on Aug 29

Maximum Diurnal Average: 21.5 % at hour 5

Minimum Diurnal Average: 0.8 % at hour 14

Monthly Average: 8.40 %

Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.6 $Q_1$ = 1.0 Median = 1.8 $Q_3$ = 8.8 $P_{90}$ = 28.2 $P_{99}$ = 55.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 49.2 | 61.0 | 69.8 | 55.3 | 55.9 | 49.5 | 41.3 | 44.9 | 32.8 | 11.0 | 4.7 | 1.5 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 1.4 | 1.7 | 1.9 | 28.4 | 28.6 | 4.8 | 31.6 | 24.2 | 69.8 |
| 2-Aug | 38.9 | 9.6 | 5.0 | 4.3 | 3.5 | 14.3 | 13.2 | 6.6 | 3.6 | 19.3 | 4.8 | 1.9 | 4.4 | 1.8 | 1.5 | 1.3 | 1.3 | 1.2 | 1.3 | 1.4 | 1.4 | 1.5 | 1.6 | 1.6 | 6.1 | 38.9 |
| 3-Aug | 1.7 | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 1.8 | 1.7 | 1.4 | 1.3 | 1.1 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 1.0 | 1.3 | 2.6 | 7.9 | 14.9 | 22.3 | 3.1 | 22.3 |
| 4-Aug | 30.8 | 41.1 | 50.4 | 55.3 | 55.0 | 51.6 | 25.1 | 3.8 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 6.2 | OR | 30.0 | 36.7 | 47.3 | 49.8 | 20.3 | 14.4 | 14.0 | 23.4 | 55.3 |
| 5-Aug | 15.5 | 20.7 | 18.0 | 29.4 | 14.4 | 9.4 | 4.0 | 1.7 | 1.5 | 1.2 | 1.0 | 0.8 | 1.0 | 1.0 | 1.0 | 1.1 | 28.2 | 60.8 | 55.3 | 54.7 | 56.3 | 28.2 | 17.1 | 7.7 | 17.9 | 60.8 |
| 6-Aug | 44.5 | 29.0 | 11.3 | 5.9 | 4.5 | 3.0 | 2.3 | 2.1 | 1.9 | 1.7 | 1.5 | 1.3 | 4.0 | 2.7 | 20.1 | 6.9 | 15.5 | 5.1 | 2.8 | 2.1 | 8.7 | 15.1 | 9.4 | 5.3 | 8.6 | 44.5 |
| 7-Aug | 10.9 | 13.3 | 11.6 | 5.2 | 3.6 | 3.6 | 2.5 | 2.1 | 1.9 | 1.6 | 1.2 | 1.2 | 1.2 | 1.3 | 1.4 | 1.3 | 1.3 | 1.6 | 1.7 | 1.9 | 5.8 | 10.3 | 13.6 | 18.3 | 4.9 | 18.3 |
| 8-Aug | 22.7 | 34.2 | 50.3 | 71.3 | 75.5 | 64.8 | 46.6 | 14.0 | 1.3 | 1.1 | 0.8 | 0.8 | 1.0 | 0.9 | 11.4 | 1.2 | 1.0 | 1.0 | 1.3 | 1.6 | 2.0 | 2.0 | 2.7 | 2.3 | 17.2 | 75.5 |
| 9-Aug | 3.2 | 3.3 | 2.9 | 2.6 | 2.5 | 2.5 | 2.4 | 2.0 | 1.5 | 0.8 | 0.6 | 0.5 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.8 | 1.2 | 1.6 | 2.7 | 9.3 | 17.8 | 21.0 | 3.4 | 21.0 |
| 10-Aug | 20.3 | 23.9 | 26.0 | 26.7 | 29.2 | 20.5 | 14.1 | 8.3 | 6.3 | 2.6 | 0.8 | 0.7 | 0.7 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 1.3 | 1.9 | 2.4 | 2.8 | 5.3 | 8.3 | 29.2 |
| 11-Aug | 10.8 | 18.1 | 25.5 | 27.8 | 29.2 | 30.0 | 20.7 | 7.0 | 1.0 | 1.1 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 1.0 | 1.2 | 1.4 | 1.7 | 2.0 | 2.1 | 7.8 | 30.0 |
| 12-Aug | 2.6 | 5.0 | 13.5 | 19.9 | 18.4 | 11.8 | 12.1 | 50.0 | 55.9 | 49.2 | 14.8 | 4.6 | 1.7 | 1.7 | 1.5 | 11.2 | 8.0 | 1.9 | 1.6 | 9.6 | 22.4 | 4.8 | 2.9 | 2.4 | 13.7 | 55.9 |
| 13-Aug | 2.5 | 2.4 | 2.7 | 2.8 | 2.9 | 2.9 | 3.5 | 2.2 | 1.7 | 1.5 | 1.3 | 1.0 | 0.8 | 1.0 | 0.9 | 0.9 | 0.9 | 1.1 | 1.3 | 1.6 | 2.1 | 2.1 | 2.2 | 2.4 | 1.9 | 3.5 |
| 14-Aug | 2.5 | 2.4 | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | 2.1 | 1.8 | 1.6 | 1.3 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 1.1 | 1.6 | 2.1 | 3.7 | 7.5 | 14.6 | 2.5 | 14.6 |
| 15-Aug | 24.0 | 35.1 | 45.7 | 50.0 | 55.1 | 42.1 | 37.2 | 15.2 | 1.2 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.7 | 0.8 | 0.9 | 1.2 | 1.5 | 1.6 | 1.5 | 1.5 | 13.3 | 55.1 |
| 16-Aug | 1.6 | 1.7 | 1.7 | 2.5 | 27.4 | 9.6 | 6.8 | 5.7 | 2.4 | 1.7 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 0.7 | 1.0 | 1.2 | 1.4 | 1.8 | 3.2 | 6.4 | 13.0 | 21.3 | 4.8 | 27.4 |
| 17-Aug | 31.4 | 41.8 | 50.7 | 53.6 | 50.4 | 41.7 | 35.1 | 21.4 | 5.0 | 1.3 | 1.5 | 1.5 | 1.3 | 1.1 | 0.7 | 0.5 | 0.6 | 0.8 | 1.1 | 1.5 | 2.0 | 2.6 | 6.8 | 11.4 | 15.2 | 53.6 |
| 18-Aug | 13.5 | 9.8 | 8.9 | 13.4 | 18.4 | 23.9 | 16.7 | 2.1 | 1.4 | 1.1 | 1.0 | 0.7 | 0.5 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 1.2 | 1.5 | 1.6 | 1.7 | 2.1 | 5.1 | 23.9 |
| 19-Aug | 3.2 | 4.6 | 7.9 | 8.8 | 8.7 | 11.5 | 7.5 | 8.2 | 24.8 | 4.2 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 1.0 | 0.8 | 0.8 | 1.1 | 1.6 | 2.9 | 8.2 | 17.9 | 29.1 | 6.5 | 29.1 |
| 20-Aug | 18.0 | 21.6 | 22.5 | 23.3 | 24.1 | 25.0 | 20.3 | 8.7 | 2.8 | 1.3 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 1.5 | 2.2 | 3.7 | 8.6 | 14.2 | 8.5 | 25.0 |
| 21-Aug | 20.4 | 28.3 | 36.9 | 44.5 | 51.6 | 53.8 | 52.3 | 42.3 | 19.6 | 3.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.7 | 0.9 | 1.1 | 1.2 | 1.3 | 1.4 | 15.1 | 53.8 |
| 22-Aug | 1.5 | 1.8 | 2.5 | 6.2 | 11.6 | 15.7 | 12.6 | 1.8 | 1.3 | 1.1 | 1.0 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 0.9 | 1.4 | 1.9 | 1.8 | 2.0 | 1.9 | 2.9 | 15.7 |
| 23-Aug | 1.9 | 2.1 | 2.5 | 2.5 | 2.7 | 2.9 | 2.7 | 2.2 | 1.7 | 1.7 | 1.6 | 1.2 | 1.0 | 1.0 | 1.3 | 1.3 | 1.3 | 1.5 | 1.5 | 1.5 | 4.0 | 34.1 | 36.0 | 16.8 | 5.3 | 36.0 |
| 24-Aug | 13.5 | 11.6 | 7.4 | 7.8 | 5.7 | 8.7 | 7.5 | 4.5 | 1.4 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 | 0.8 | 1.2 | 1.7 | 1.9 | 2.0 | 3.3 | 3.4 | 13.5 |
| 25-Aug | 7.7 | 11.9 | 14.7 | 18.8 | 21.7 | 24.9 | 23.5 | 6.6 | 1.2 | 1.0 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 1.0 | 1.3 | 1.7 | 1.9 | 4.0 | 8.7 | 6.4 | 24.9 |
| 26-Aug | 14.3 | 21.5 | 28.4 | 35.7 | 42.5 | 48.7 | 49.8 | 39.2 | 7.9 | 0.9 | 0.6 | 0.4 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.6 | 1.0 | 1.4 | 1.4 | 1.5 | 1.7 | 12.4 | 49.8 |
| 27-Aug | 1.7 | 2.0 | 3.6 | 10.3 | 15.5 | 20.8 | 23.7 | 9.1 | 1.2 | 0.7 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 1.3 | 0.9 | 2.1 | 1.1 | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 | 4.2 | 23.7 |
| 28-Aug | 1.5 | 1.7 | 1.9 | 1.8 | 1.7 | 1.8 | 1.8 | 10.7 | 2.0 | 1.4 | 0.9 | 0.9 | 0.8 | 0.7 | 0.9 | 1.0 | 1.1 | 1.3 | 1.4 | 1.5 | 1.6 | 1.6 | 1.6 | 1.5 | 1.8 | 10.7 |
| 29-Aug | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 3.3 | 1.6 | 1.5 | 1.4 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 1.3 | 1.9 | 2.6 | 3.2 | 7.4 | 1.6 | 7.4 |
| 30-Aug | 12.3 | 16.3 | 22.3 | 23.8 | 26.6 | 32.5 | 35.2 | 28.6 | 4.0 | 1.0 | 0.7 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 | 1.1 | 1.6 | 1.7 | 1.7 | 1.7 | 1.9 | 9.0 | 35.2 |
| 31-Aug | 2.2 | 1.9 | 1.9 | 2.0 | 2.4 | 2.5 | 2.9 | 1.9 | 1.1 | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.1 | 0.4 | 0.8 | 1.3 | 2.1 | 4.0 | 11.8 | 18.7 | 2.5 | 18.7 |
| | 13.8 | 15.5 | 17.8 | 19.9 | 21.5 | 20.5 | 17.1 | 11.6 | 6.3 | 3.9 | 1.6 | 0.9 | 1.0 | 0.8 | 1.7 | 1.4 | 2.3 | 3.9 | 4.1 | 4.9 | 7.1 | 7.0 | 7.4 | 9.5 | Diurnal Average | |
| | 49.2 | 61.0 | 69.8 | 71.3 | 75.5 | 64.8 | 52.3 | 50.0 | 55.9 | 49.2 | 14.8 | 4.6 | 4.4 | 2.7 | 20.1 | 11.2 | 28.2 | 60.8 | 55.3 | 54.7 | 56.3 | 34.1 | 36.0 | 31.6 | Diurnal Maximum | |

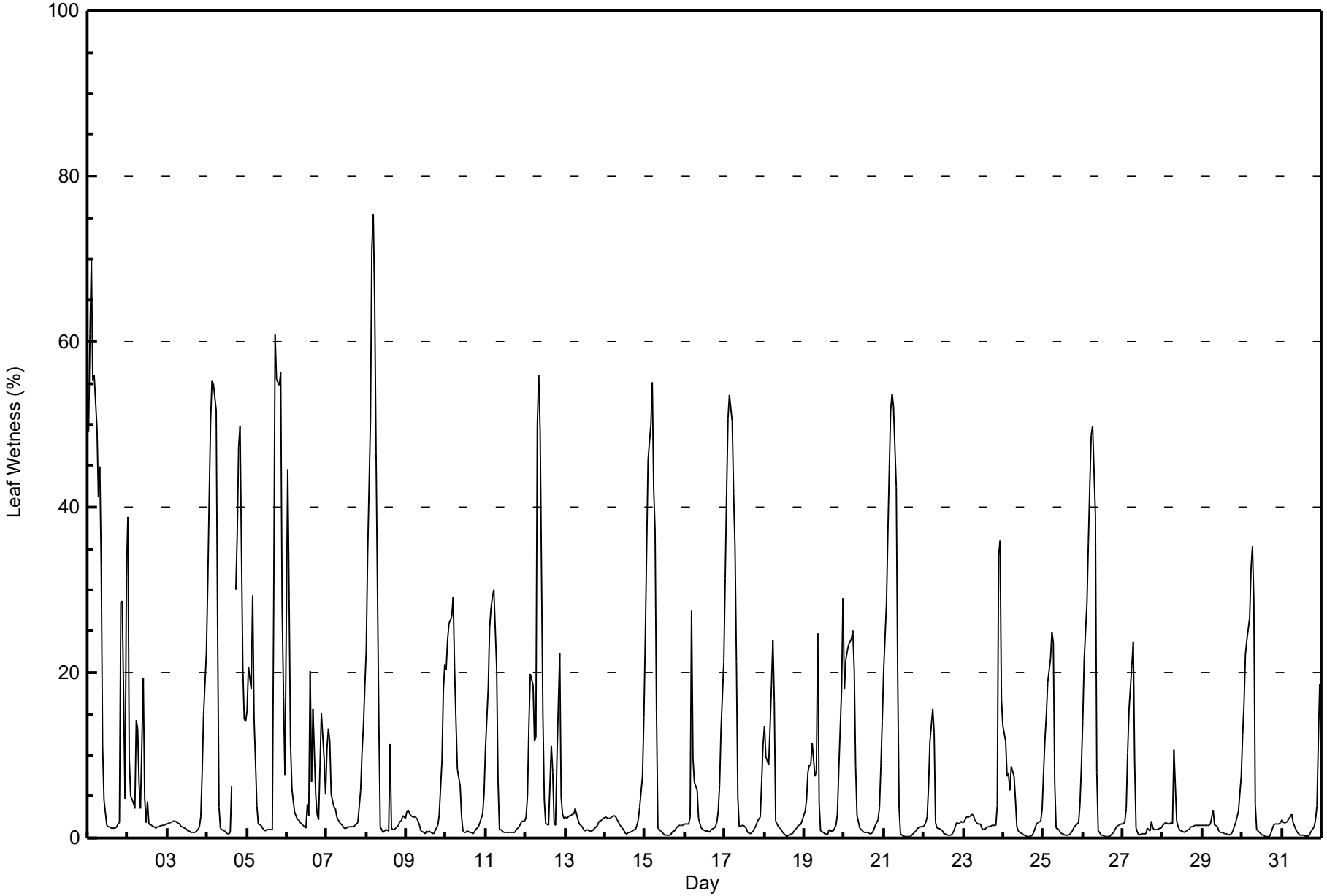
OR - Out of Range

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Leaf Wetness (LW) - %**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 34 | 4.58 | 4.58 |
| 0.4 - 0.5 | 37 | 4.98 | 9.56 |
| 0.6 - 0.7 | 57 | 7.67 | 17.23 |
| 0.8 - 1.4 | 166 | 22.34 | 39.57 |
| 1.5 - 10 | 260 | 34.99 | 74.56 |
| > 10 | 177 | 23.82 | 98.38 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Global Radiation (GR) - W/m2

## Fort McKay - Bertha Ganter - August 2026

Maximum Value: 804.0 W/m2 on Aug 15 13:00

Maximum Daily Average: 259.3 W/m2 on Aug 11

Minimum Value: 0.0 W/m2 on Aug 1 01:00

Minimum Daily Average: 105.8 W/m2 on Aug 23

Maximum Diurnal Average: 582.1 W/m2 at hour 13

Minimum Diurnal Average: 0.0 W/m2 at hour 1

Monthly Average: 198.24 W/m2

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 56.5 $Q_3$ = 380.9 $P_{90}$ = 590.7 $P_{99}$ = 749.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

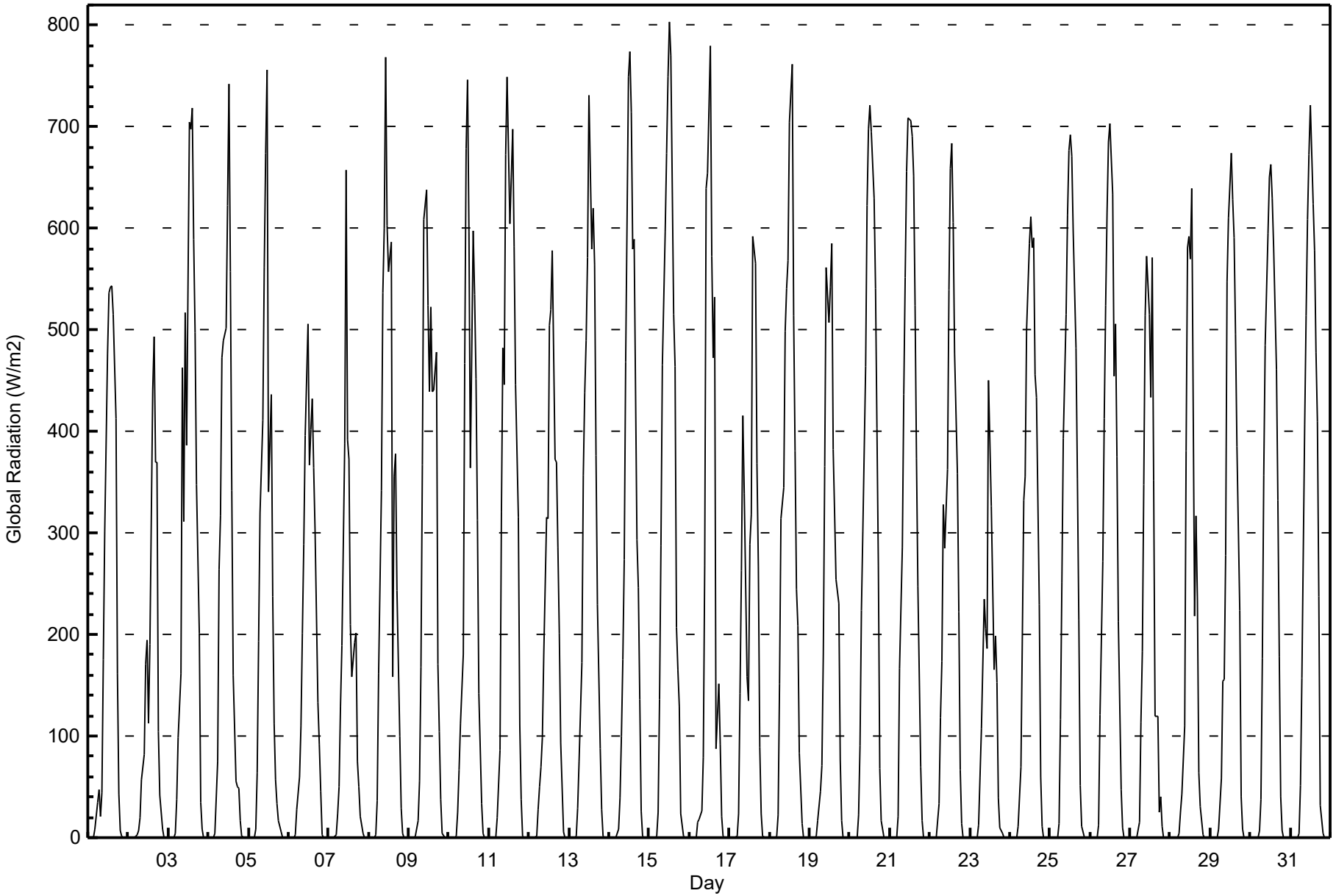
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 7.9 | 35.2 | 47.8 | 21.3 | 45.0 | 175.2 | 301.7 | 477.4 | 536.3 | 542.7 | 543.8 | 515.3 | 412.3 | 160.5 | 43.1 | 6.4 | 0.7 | 0.0 | 0.0 | 0.0 | 161.4 | 543.8 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 2.9 | 7.6 | 19.7 | 56.4 | 81.9 | 170.7 | 193.9 | 112.9 | 190.6 | 439.9 | 493.5 | 370.1 | 370.1 | 104.1 | 42.0 | 8.3 | 0.1 | 0.0 | 0.0 | 111.1 | 493.5 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | 37.8 | 98.9 | 160.7 | 462.4 | 310.9 | 517.2 | 386.8 | 705.3 | 698.2 | 718.4 | 589.6 | 497.1 | 347.8 | 201.3 | 34.3 | 7.8 | 0.0 | 0.0 | 0.0 | 240.8 | 718.4 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 75.3 | 264.2 | 316.5 | 473.0 | 488.6 | 501.8 | 623.3 | 742.4 | 558.0 | 341.7 | 160.4 | 55.5 | 49.6 | 48.2 | 17.1 | 1.2 | 0.0 | 0.0 | 0.0 | 196.7 | 742.4 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 8.5 | 63.6 | 193.5 | 320.2 | 411.4 | 561.9 | 673.4 | 756.3 | 340.2 | 435.9 | 237.7 | 113.2 | 56.7 | 34.0 | 17.2 | 6.1 | 0.4 | 0.0 | 0.0 | 0.0 | 176.3 | 756.3 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 28.0 | 60.3 | 109.7 | 201.2 | 289.1 | 395.9 | 505.6 | 366.7 | 401.8 | 432.9 | 364.1 | 300.9 | 133.8 | 91.7 | 45.5 | 2.9 | 0.0 | 0.0 | 0.0 | 155.5 | 505.6 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 24.1 | 50.4 | 129.1 | 189.5 | 387.3 | 657.1 | 392.2 | 372.8 | 210.3 | 158.1 | 192.4 | 201.6 | 75.5 | 49.7 | 20.8 | 3.8 | 0.0 | 0.0 | 0.0 | 129.9 | 657.1 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 36.0 | 160.9 | 342.1 | 536.9 | 600.9 | 768.3 | 602.9 | 557.0 | 586.6 | 158.8 | 356.3 | 378.1 | 243.7 | 99.5 | 28.8 | 4.0 | 0.0 | 0.0 | 0.0 | 227.6 | 768.3 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 16.8 | 55.1 | 168.0 | 367.0 | 608.4 | 637.4 | 524.6 | 438.9 | 522.4 | 438.7 | 441.1 | 478.1 | 171.1 | 104.9 | 37.9 | 4.3 | 0.0 | 0.0 | 0.0 | 209.0 | 637.4 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 25.6 | 66.9 | 112.4 | 181.2 | 467.4 | 677.7 | 746.1 | 595.6 | 364.4 | 597.7 | 535.2 | 451.1 | 313.1 | 142.4 | 34.0 | 4.5 | 0.0 | 0.0 | 0.0 | 221.5 | 746.1 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 19.4 | 86.3 | 321.3 | 481.8 | 446.6 | 672.9 | 748.9 | 604.4 | 650.3 | 697.4 | 582.6 | 446.0 | 314.8 | 110.6 | 37.8 | 1.4 | 0.0 | 0.0 | 0.0 | 259.3 | 748.9 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 27.8 | 49.8 | 69.7 | 98.9 | 181.3 | 315.2 | 313.9 | 504.2 | 520.1 | 578.3 | 372.8 | 370.3 | 286.1 | 201.8 | 93.3 | 4.9 | 0.0 | 0.0 | 0.0 | 166.2 | 578.3 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 29.7 | 74.6 | 172.0 | 356.9 | 437.4 | 489.8 | 571.2 | 731.7 | 579.9 | 620.1 | 564.6 | 376.8 | 229.0 | 87.3 | 28.3 | 1.7 | 0.0 | 0.0 | 0.0 | 223.0 | 731.7 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 8.2 | 39.5 | 99.7 | 175.7 | 274.1 | 468.4 | 749.6 | 773.5 | 714.0 | 579.5 | 589.2 | 293.5 | 245.6 | 135.7 | 26.4 | 2.0 | 0.0 | 0.0 | 0.0 | 215.6 | 773.5 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 25.4 | 136.9 | 288.3 | 466.0 | 595.6 | 673.8 | 749.1 | 804.0 | 770.2 | 516.2 | 463.6 | 207.6 | 165.9 | 129.0 | 23.8 | 1.0 | 0.0 | 0.0 | 0.0 | 250.7 | 804.0 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 14.7 | 17.8 | 26.8 | 79.4 | 268.3 | 639.6 | 654.7 | 779.5 | 572.0 | 472.5 | 532.4 | 87.4 | 151.5 | 91.1 | 20.7 | 1.0 | 0.0 | 0.0 | 0.0 | 183.7 | 779.5 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 23.8 | 141.3 | 263.1 | 415.3 | 338.9 | 158.3 | 134.8 | 289.6 | 318.2 | 592.6 | 566.3 | 368.2 | 266.4 | 89.1 | 23.8 | 1.0 | 0.0 | 0.0 | 0.0 | 166.3 | 592.6 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 22.6 | 151.2 | 313.6 | 344.9 | 498.4 | 540.9 | 568.3 | 704.1 | 761.9 | 514.1 | 380.3 | 244.7 | 208.4 | 82.8 | 13.7 | 0.5 | 0.0 | 0.0 | 0.0 | 223.0 | 761.9 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 16.3 | 46.3 | 71.3 | 180.7 | 365.7 | 561.0 | 506.6 | 542.2 | 584.9 | 381.5 | 320.2 | 254.4 | 231.0 | 76.7 | 16.7 | 0.3 | 0.0 | 0.0 | 0.0 | 173.2 | 584.9 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 22.3 | 90.6 | 223.9 | 301.0 | 464.9 | 622.3 | 698.1 | 721.4 | 695.0 | 629.0 | 540.5 | 402.4 | 267.8 | 68.6 | 16.8 | 0.5 | 0.0 | 0.0 | 0.0 | 240.2 | 721.4 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 21.2 | 166.9 | 286.5 | 436.5 | 552.0 | 656.2 | 708.3 | 705.4 | 691.0 | 652.3 | 523.6 | 373.9 | 247.9 | 69.4 | 16.2 | 0.4 | 0.0 | 0.0 | 0.0 | 254.5 | 708.3 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 33.6 | 117.6 | 173.8 | 328.1 | 284.4 | 362.5 | 539.0 | 659.1 | 684.1 | 605.7 | 476.6 | 358.8 | 222.4 | 66.4 | 14.1 | 0.2 | 0.0 | 0.0 | 0.0 | 205.3 | 684.1 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 12.2 | 59.8 | 106.7 | 234.5 | 205.9 | 186.5 | 449.8 | 388.9 | 326.3 | 165.1 | 198.3 | 153.0 | 39.4 | 9.1 | 4.6 | 0.0 | 0.0 | 0.0 | 0.0 | 105.8 | 449.8 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 | 69.5 | 199.2 | 332.7 | 355.2 | 500.2 | 585.4 | 612.0 | 581.1 | 590.2 | 456.2 | 434.0 | 228.7 | 59.5 | 11.3 | 0.0 | 0.0 | 0.0 | 0.0 | 209.4 | 612.0 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.4 | 116.2 | 251.5 | 393.1 | 516.0 | 613.6 | 676.5 | 692.1 | 671.6 | 597.4 | 482.9 | 352.4 | 214.6 | 52.1 | 10.7 | 0.0 | 0.0 | 0.0 | 0.0 | 235.6 | 692.1 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0 | 120.8 | 273.0 | 412.9 | 524.5 | 615.3 | 685.2 | 703.9 | 633.8 | 454.2 | 505.4 | 375.0 | 212.2 | 47.9 | 9.1 | 0.1 | 0.0 | 0.0 | 0.0 | 232.8 | 703.9 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.1 | 114.6 | 183.1 | 347.3 | 514.4 | 571.9 | 516.2 | 433.1 | 571.2 | 351.5 | 120.1 | 118.9 | 25.2 | 40.6 | 11.0 | 0.0 | 0.0 | 0.0 | 0.0 | 163.9 | 571.9 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 25.2 | 43.3 | 109.1 | 380.7 | 581.3 | 592.7 | 570.1 | 638.8 | 218.3 | 316.5 | 233.6 | 63.8 | 30.9 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 158.8 | 638.8 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1 | 58.4 | 154.5 | 156.3 | 278.0 | 547.5 | 610.7 | 673.9 | 627.8 | 591.0 | 496.7 | 385.6 | 224.3 | 39.6 | 8.6 | 0.0 | 0.0 | 0.0 | 0.0 | 202.5 | 673.9 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 37.7 | 176.0 | 357.5 | 485.1 | 595.1 | 650.2 | 663.4 | 629.7 | 580.3 | 462.1 | 332.0 | 177.9 | 40.8 | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 216.7 | 663.4 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | 50.8 | 156.9 | 406.7 | 513.9 | 608.6 | 672.1 | 720.8 | 624.0 | 578.1 | 478.5 | 410.2 | 237.1 | 31.6 | 4.7 | 0.0 | 0.0 | 0.0 | 0.0 | 229.1 | 720.8 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 22.5 | 89.6 | 179.2 | 301.3 | 401.7 | 525.2 | 567.4 | 582.1 | 559.9 | 484.9 | 425.5 | 315.5 | 198.7 | 79.4 | 21.7 | 1.7 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 8.5 | 75.3 | 264.2 | 342.1 | 536.9 | 608.4 | 768.3 | 756.3 | 804.0 | 770.2 | 718.4 | 589.6 | 497.1 | 370.1 | 201.8 | 93.3 | 8.3 | 0.1 | 0.0 | 0.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Global Radiation (GR) - W/m2**

**Fort McKay - Bertha Ganter - August 2026**



| Concentration Ranges (W/m2) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 316 | 42.47 | 42.47 |
| 21 - 100 | 89 | 11.96 | 54.44 |
| 101 - 300 | 102 | 13.71 | 68.15 |
| 301 - 600 | 170 | 22.85 | 90.99 |
| 601 - 900 | 67 | 9.01 | 100.00 |
| > 900 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Fort McKay - Bertha Ganter - August 2026

Maximum Speed: 29 km/h on Aug 2 11:00

Maximum Daily Speed Average: 18.9 km/h on Aug 2

Minimum Speed Value: 1 km/h on Aug 27 07:00

Minimum Daily Speed Average: 0.9 km/h on Aug 9

Maximum Diurnal Speed Average: 2.8 km/h at hour 19

Minimum Diurnal Speed Average: 0.4 km/h at hour 9

Monthly Average Velocity: 1.5 km/h 312.8 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 3 Median = 6 $Q_3$ = 9 $P_{90}$ = 13 $P_{99}$ = 24

Hours in Service: 744

Hours of Data: 740

Hours of Missing Data: 4

Percent Operational Time: 99.5

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | W3 | SW3 | WSW2 | SSW2 | S2 | SSW2 | S4 | SSW1 | NE2 | SE2 | N2 | NNE4 | NNE9 | N11 | N13 | N15 | NNW17 | N16 | N13 | NNW14 | NNW18 | NNW11 | N9 | N10 | N6.2 | NNW18 |
| 2-Aug | WNW3 | NNW13 | N15 | N17 | N12 | NNW10 | N12 | N14 | N17 | N23 | N29 | N27 | N21 | N24 | N28 | N28 | NNW24 | NNW27 | NNW22 | NNW24 | NNW21 | NNW18 | NW16 | NW15 | NNW18.9 | N29 |
| 3-Aug | NW12 | NW11 | NW9 | NW9 | NW9 | NW10 | NW10 | NW10 | N12 | N15 | NNW18 | NNW14 | N10 | N10 | NE8 | NNE9 | NNE7 | NE6 | ENE5 | ESE4 | SSW2 | SW2 | WSW2 | W3 | NNW6.7 | NNW18 |
| 4-Aug | SW3 | S3 | S3 | SW3 | SSW3 | S4 | SSE10 | SSE9 | S7 | S8 | SSW7 | WSW8 | WSW8 | SSW10 | SSW8 | WSW7 | NNE2 | W2 | WNW8 | W4 | NW9 | NW7 | NW7 | WNW9 | SW3.8 | SSW10 |
| 5-Aug | WNW7 | W4 | WSW3 | W4 | WNW7 | WNW8 | NW11 | NNW7 | NW16 | NW20 | NW19 | NW22 | NW19 | NW13 | NW11 | NNW12 | N12 | NNW8 | NW8 | NW9 | WNW6 | WNW7 | WNW7 | WNW9 | NW9.7 | NW22 |
| 6-Aug | WNW6 | WNW7 | WNW9 | WNW10 | WNW9 | WNW9 | WNW6 | NW10 | NW14 | NNW13 | NNW13 | NNW12 | N10 | N8 | NNE5 | NE1 | NW9 | WNW6 | N6 | NW2 | W4 | WNW9 | WNW6 | WNW7 | NW7.2 | NW14 |
| 7-Aug | N1 | NNW1 | WNW3 | WNW5 | NW4 | SSE2 | SSE3 | WNW5 | WNW8 | WNW10 | WNW12 | WNW11 | N9 | NNE5 | NW1 | NNE1 | NE5 | NNE5 | NNE7 | N5 | WSW2 | WNW3 | WNW3 | W2 | NW3.2 | WNW12 |
| 8-Aug | W2 | W1 | W2 | WNW3 | NW2 | NW2 | NW4 | NNW5 | NNE6 | NNE6 | NE6 | NE7 | N7 | NNE6 | NNW7 | W2 | ENE1 | N3 | NNW6 | NNW5 | NNW5 | N4 | NW3 | W3 | N3.1 | NNW7 |
| 9-Aug | W3 | WNW2 | WSW3 | WNW3 | WNW3 | WNW3 | W2 | NNW1 | SSE2 | SE6 | ESE5 | E5 | ENE3 | NNW3 | NNE6 | ENE4 | NNE3 | NNE5 | NNW3 | NNW2 | WNW2 | WNW2 | WSW3 | WNW3 | NNW0.9 | SE6 |
| 10-Aug | W2 | UO | WSW2 | SSW2 | SSW2 | WNW2 | WNW2 | SW2 | NNE1 | NNE2 | NNE6 | N8 | NNE8 | NNE9 | N10 | N9 | N11 | N10 | N8 | NNW7 | N5 | NW6 | WNW4 | WNW3 | N4.2 | N11 |
| 11-Aug | WSW1 | SSW1 | WSW1 | S2 | S1 | SSW1 | SW3 | WNW1 | NE2 | N9 | N12 | N16 | N15 | N15 | NNE16 | N16 | NNE15 | N13 | N15 | N11 | N9 | N6 | N7 | NNW8 | N7.3 | N16 |
| 12-Aug | NNW6 | WNW3 | NW4 | NNW4 | WNW2 | WNW4 | NNW3 | NW3 | NNW7 | NNW9 | N11 | N12 | N13 | N14 | N15 | N12 | N9 | N10 | NNW12 | N9 | NNW7 | NNW9 | N12 | N11 | NNW8.1 | N15 |
| 13-Aug | NNW10 | NNW7 | NNW7 | NNW8 | NNW8 | N6 | NNW3 | N6 | NNE8 | NNE9 | NNE9 | NE8 | NE10 | NNE12 | NE11 | NNE9 | NE7 | NNE8 | N6 | NNW5 | NNW5 | NW2 | WNW4 | WNW3 | N6.3 | NNE12 |
| 14-Aug | WNW3 | WNW3 | WNW4 | WNW3 | WNW4 | WNW4 | W3 | WNW2 | N3 | N5 | NNE6 | NNE6 | NE5 | ENE5 | N11 | NW11 | WNW8 | S6 | SSW5 | SW1 | SSW3 | S2 | S3 | W2 | NW2.0 | NW11 |
| 15-Aug | S3 | S4 | S4 | S4 | SSW4 | SSW4 | S4 | S6 | SSE7 | SSE9 | SSE11 | SW8 | SSW9 | SSW10 | SSW9 | W6 | W5 | SW2 | S4 | SSW4 | SW3 | WSW3 | W4 | W5 | SSW4.4 | SSE11 |
| 16-Aug | WNW4 | WNW5 | NW3 | WNW1 | SW1 | NW4 | WNW5 | N14 | N15 | N15 | N15 | N13 | NNE12 | N12 | N10 | NW8 | NNW8 | NNE8 | ESE2 | WSW1 | WSW3 | WSW3 | WSW3 | WSW2 | N5.5 | N15 |
| 17-Aug | W1 | W2 | W3 | WSW4 | SW3 | SSW3 | S4 | SSE5 | SSE5 | WSW3 | WNW3 | S3 | SE5 | SE6 | SSE8 | SSE9 | SSE10 | SSE9 | S8 | S6 | S6 | S6 | S4 | S3 | S4.0 | SSE10 |
| 18-Aug | S4 | S4 | UO | SSW2 | S4 | S4 | S6 | SSE8 | SSE9 | SSE11 | SSE10 | SSW7 | SW8 | SW8 | SSW9 | SW8 | SW8 | SW7 | SW6 | SW4 | SSW4 | SW3 | WNW4 | NNE1 | SSW5.1 | SSE11 |
| 19-Aug | W2 | SSW2 | S3 | SSW4 | SSE4 | S4 | SSE4 | S4 | SSW2 | NW5 | NW6 | NNW4 | N6 | N9 | NE4 | NNW9 | N15 | N11 | N7 | N6 | W3 | SW2 | WNW6 | WNW3 | NNW2.2 | N15 |
| 20-Aug | S3 | N3 | W1 | SW2 | SSW2 | SW2 | SW2 | NW3 | N1 | NNE3 | N11 | NNE12 | NNE8 | NNE9 | NNE11 | NNE10 | NNE9 | N9 | N5 | WNW2 | WNW2 | WNW2 | WSW3 | WNW2 | N3.4 | NNE12 |
| 21-Aug | SW2 | SE1 | WSW2 | SSW3 | S1 | SSW3 | SSE4 | SSE6 | SE8 | SE9 | SE9 | SSE9 | SSE9 | S11 | S10 | SSE12 | SSE13 | SSE12 | S9 | S8 | S8 | S9 | S10 | SSE10 | SSE7.0 | SSE13 |
| 22-Aug | S9 | S5 | SSW1 | SSE4 | S4 | UO | SSE3 | S5 | SSE8 | SSE10 | SSE11 | SSE10 | SSE12 | SSE11 | SSE11 | SSE10 | SSE8 | S7 | SE3 | SSE6 | SSE7 | SSE7 | SSE7 | SSE7.3 | SSE12 |
| 23-Aug | S7 | S6 | S8 | S8 | S6 | S7 | S5 | S7 | SSE7 | SSE9 | SSE8 | SSE7 | SSE9 | SSE8 | S8 | S1 | S5 | WNW4 | NW12 | NNW8 | NW5 | W3 | SW1 | NW3 | S3.8 | NW12 |
| 24-Aug | SW2 | WNW2 | WNW3 | NW6 | WSW2 | W2 | SW1 | WNW4 | NW7 | WNW7 | NW12 | NW11 | N9 | NNW13 | N12 | NNE8 | NNE9 | NNE8 | N6 | NW6 | WNW3 | WNW4 | N2 | WNW2 | NNW4.8 | NNW13 |
| 25-Aug | W4 | W5 | W3 | WNW4 | NW5 | WNW5 | WNW4 | NNW1 | N5 | NNE5 | ENE3 | ENE5 | ENE4 | SE4 | E4 | NE7 | NE7 | NE6 | NNE5 | N5 | N5 | NNW4 | W3 | NW4 | N2.4 | NE7 |
| 26-Aug | NNW3 | NW1 | NNW3 | W3 | W4 | WSW3 | S3 | SSE6 | SSE11 | SSE11 | SSE11 | SSE12 | SSE15 | SSE16 | SSE14 | SSE16 | SSE15 | SSE13 | SSE8 | SSE6 | SSE5 | S7 | SSE6 | S6 | SSE7.2 | SSE16 |
| 27-Aug | S8 | S4 | E1 | NW1 | SW4 | SW1 | SW1 | SSE3 | SE5 | SSE6 | SSE6 | SSE7 | S13 | SSE13 | S10 | SSE6 | ESE3 | SE13 | SE16 | SE10 | SE10 | SSE13 | SSE11 | SSE9 | SSE6.7 | SE16 |
| 28-Aug | S4 | NE2 | S4 | S10 | SW6 | NW3 | SSE13 | S13 | S11 | S11 | SSW12 | SW14 | SSW15 | SSW17 | SW14 | SW13 | SW13 | SW11 | W10 | WSW9 | SW8 | SW9 | SW10 | SW10 | SSW8.9 | SSW17 |
| 29-Aug | SSW9 | SSW8 | SW8 | SW9 | SSW9 | SSW9 | S10 | SSW13 | SSW11 | SW10 | SW9 | SW11 | WSW11 | SW10 | SW11 | SW10 | SW9 | SW7 | SSW5 | S4 | S3 | S4 | S5 | SSW3 | SSW8.0 | SSW13 |
| 30-Aug | UO | SSW2 | W3 | W1 | WSW3 | W2 | W4 | S4 | SE7 | SE10 | SE10 | SE7 | SE8 | SE7 | SE10 | SSE8 | SSE8 | SSE5 | W2 | WSW2 | NW4 | NNE2 | NNW5 | NW6 | SSE2.7 | SE10 |
| 31-Aug | NNW4 | N5 | W3 | WNW5 | WNW2 | WNW3 | WNW2 | SSW2 | WNW2 | SSW2 | ESE4 | SE6 | E2 | N6 | SSE2 | SW5 | SW6 | WSW6 | NW10 | N8 | NW4 | W4 | SW3 | WSW3 | WNW1.7 | NW10 |
| | W2.1 | W1.8 | W2.2 | W2.4 | W2.2 | W2.2 | SW1.6 | SW1.0 | N0.4 | NNW1.1 | N2.3 | NNW2.5 | NNE2.1 | N2.0 | NNE1.9 | N2.3 | N2.4 | N2.1 | NNW2.8 | NNW2.6 | NW2.4 | W2.1 | W2.4 | WNW2.5 | Diurnal Average | |
| | NW12 | NNW13 | N15 | N17 | N12 | NNW10 | SSE13 | N14 | N17 | N23 | N29 | N27 | N21 | N24 | N28 | N28 | NNW24 | NNW27 | NNW22 | NNW24 | NNW21 | NNW18 | NW16 | NW15 | Diurnal Maximum | |

UO - Unstable Operation

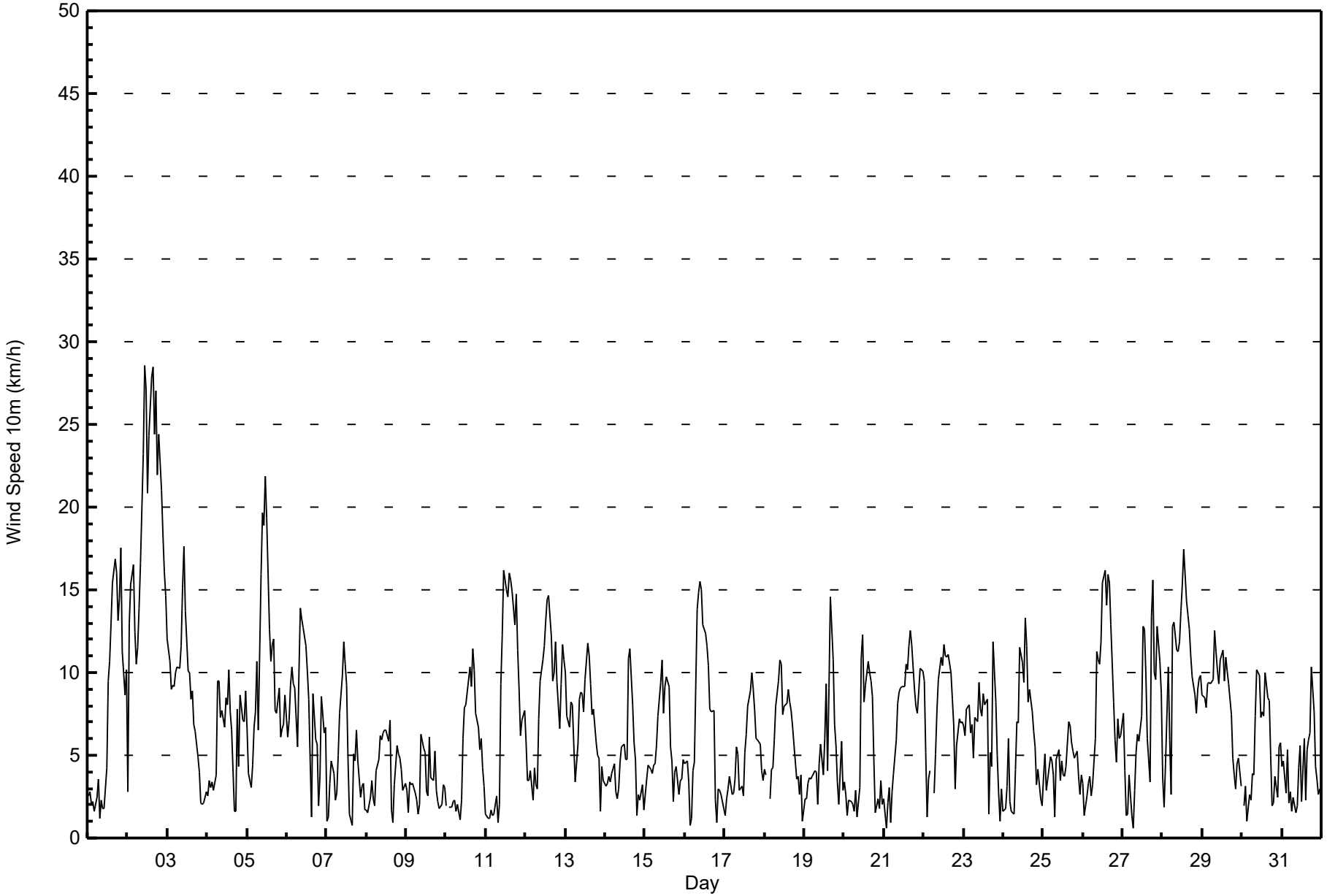
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Fort McKay - Bertha Ganter - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 339 | 45.81 | 45.81 |
| 6 - 11 | 298 | 40.27 | 86.08 |
| 12 - 19 | 89 | 12.03 | 98.11 |
| 20 - 28 | 13 | 1.76 | 99.86 |
| 29 - 38 | 1 | 0.14 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 740

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Fort McKay - Bertha Ganter - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 16 | 15 | 7 | 8 | 4 | 5 | 6 | 15 | 41 | 30 | 26 | 25 | 40 | 58 | 21 | 22 | 339 |
| 6 - 11 | 40 | 29 | 10 | 0 | 0 | 0 | 15 | 53 | 32 | 14 | 23 | 6 | 2 | 26 | 26 | 22 | 298 |
| 12 - 19 | 34 | 5 | 0 | 0 | 0 | 0 | 2 | 14 | 2 | 4 | 4 | 0 | 0 | 1 | 10 | 13 | 89 |
| 20 - 28 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 13 |
| 29 - 38 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 97 | 49 | 17 | 8 | 4 | 5 | 23 | 82 | 75 | 48 | 53 | 31 | 42 | 85 | 59 | 62 | 740 |

Total Number of Valid Hours: 740

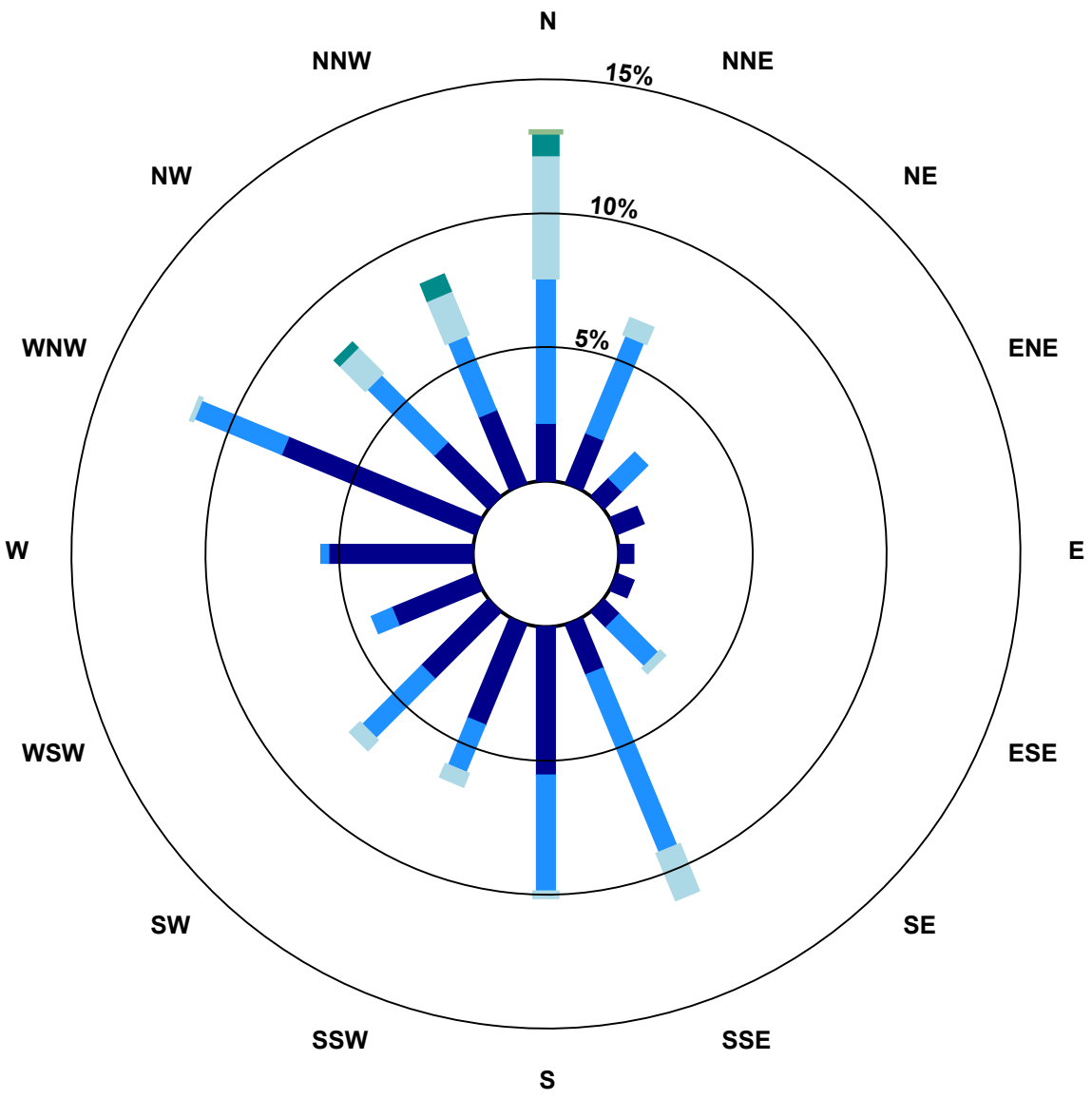
Total Number of Hours: 744

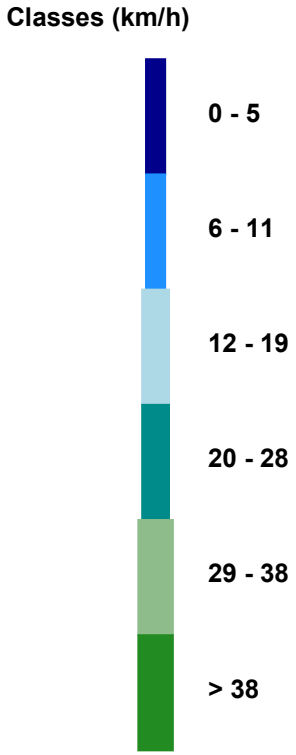
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter




Total Number of Valid Hours: 740

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Aug 1 21:00

Minimum Value: 1 km/h on Aug 11 00:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 740 |
| Hours of Missing Data: | 4 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 9 | 4 | 3 | 6 | 9 |
| 2-Aug | 2 | 4 | 3 | 3 | 4 | 2 | 4 | 3 | 4 | 6 | 7 | 6 | 5 | 5 | 7 | 6 | 5 | 6 | 5 | 6 | 4 | 4 | 4 | 3 | 7 |
| 3-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 5 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 4 | 3 | 5 | 3 | 2 | 3 | 1 | 3 | 2 | 2 | 2 | 5 |
| 5-Aug | 2 | 1 | 1 | 2 | 3 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 6 |
| 6-Aug | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 5 | 1 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 |
| 7-Aug | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 8-Aug | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 5 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 9-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | UO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 4 | 2 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 5 | 3 | 2 | 1 | 1 | 2 | 5 |
| 12-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 3 | 3 | 4 | 5 | 4 | 3 | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 5 |
| 13-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 5 | 4 | 4 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 5 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 |
| 16-Aug | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 4 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| 18-Aug | 1 | 1 | UO | 1 | 1 | 1 | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 4 |
| 19-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 3 | 4 |
| 20-Aug | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 4 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 |
| 22-Aug | 2 | 2 | 2 | 1 | 2 | UO | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 3 |
| 23-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 1 | 2 | 3 | 4 | 4 | 1 | 1 | 1 | 1 | 4 |
| 24-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 4 |
| 25-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 1 | 4 |
| 27-Aug | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 8 | 5 | 2 | 3 | 3 | 2 | 2 | 8 |
| 28-Aug | 2 | 1 | 2 | 5 | 4 | 4 | 3 | 3 | 3 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 3 | 4 | 4 | 4 | 6 |
| 29-Aug | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 5 |
| 30-Aug | UO | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 3 | 2 | 2 | 2 | 3 |
| 31-Aug | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 1 | 2 | 1 | 1 | 2 | 3 |
| | 4 | 4 | 3 | 5 | 4 | 4 | 4 | 4 | 4 | 6 | 7 | 6 | 6 | 6 | 7 | 6 | 6 | 8 | 5 | 6 | 9 | 4 | 4 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Fort McKay - Bertha Ganter - August 2026

Direction of Maximum Speed: 354 deg on Aug 2 11:00
Direction of Maximum Daily Speed Average: 346.3 deg on Aug 2

Direction of Minimum Speed: 235 deg on Aug 27 07:00

Direction of Minimum Daily Speed Average: 0.9 deg on Aug 9

Monthly Average Direction: 312.8 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 740 |
| Hours of Missing Data: | 4 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 268 | 216 | 239 | 209 | 187 | 207 | 183 | 204 | 38 | 141 | 359 | 21 | 13 | 9 | 3 | 352 | 347 | 353 | 352 | 340 | 348 | 348 | 4 | 4 | 352.3 |
| 2-Aug | 290 | 341 | 351 | 353 | 358 | 347 | 353 | 359 | 355 | 354 | 354 | 356 | 353 | 349 | 351 | 351 | 342 | 340 | 347 | 342 | 334 | 328 | 326 | 322 | 346.3 |
| 3-Aug | 322 | 313 | 312 | 314 | 304 | 309 | 316 | 321 | 351 | 355 | 345 | 328 | 351 | 353 | 44 | 31 | 27 | 40 | 75 | 120 | 202 | 216 | 245 | 263 | 339.5 |
| 4-Aug | 227 | 189 | 175 | 217 | 198 | 184 | 167 | 163 | 175 | 179 | 210 | 249 | 238 | 213 | 203 | 243 | 32 | 271 | 300 | 273 | 310 | 306 | 306 | 302 | 229.9 |
| 5-Aug | 296 | 275 | 256 | 279 | 291 | 299 | 317 | 337 | 325 | 319 | 321 | 323 | 325 | 314 | 310 | 342 | 358 | 338 | 322 | 320 | 292 | 289 | 293 | 300 | 316.9 |
| 6-Aug | 289 | 291 | 299 | 302 | 300 | 302 | 296 | 304 | 319 | 329 | 337 | 333 | 357 | 2 | 12 | 52 | 316 | 299 | 353 | 313 | 272 | 294 | 284 | 301 | 316.2 |
| 7-Aug | 3 | 333 | 292 | 292 | 321 | 166 | 161 | 282 | 289 | 294 | 302 | 303 | 11 | 13 | 307 | 25 | 36 | 15 | 18 | 3 | 254 | 296 | 287 | 267 | 319.7 |
| 8-Aug | 271 | 270 | 274 | 288 | 306 | 310 | 321 | 347 | 29 | 33 | 51 | 47 | 8 | 14 | 336 | 263 | 71 | 357 | 340 | 337 | 332 | 354 | 306 | 270 | 349.3 |
| 9-Aug | 275 | 283 | 255 | 287 | 286 | 303 | 262 | 335 | 151 | 138 | 120 | 97 | 70 | 345 | 13 | 61 | 26 | 14 | 332 | 345 | 301 | 297 | 237 | 299 | 344.8 |
| 10-Aug | 270 | UO | 243 | 197 | 205 | 286 | 295 | 222 | 18 | 17 | 23 | 9 | 17 | 14 | 354 | 10 | 8 | 6 | 353 | 339 | 350 | 317 | 285 | 300 | 352.2 |
| 11-Aug | 251 | 205 | 256 | 170 | 176 | 192 | 221 | 297 | 49 | 5 | 359 | 6 | 7 | 8 | 13 | 3 | 12 | 9 | 7 | 10 | 5 | 353 | 352 | 341 | 4.0 |
| 12-Aug | 334 | 297 | 308 | 332 | 303 | 302 | 330 | 315 | 345 | 341 | 349 | 350 | 3 | 6 | 2 | 0 | 357 | 349 | 348 | 353 | 337 | 329 | 349 | 350 | 347.1 |
| 13-Aug | 345 | 348 | 334 | 335 | 345 | 0 | 338 | 8 | 16 | 21 | 26 | 46 | 34 | 14 | 34 | 33 | 46 | 30 | 3 | 336 | 328 | 318 | 295 | 290 | 6.7 |
| 14-Aug | 294 | 293 | 298 | 294 | 292 | 291 | 279 | 291 | 360 | 1 | 16 | 19 | 54 | 77 | 0 | 322 | 294 | 178 | 198 | 214 | 195 | 183 | 191 | 270 | 317.8 |
| 15-Aug | 189 | 173 | 180 | 191 | 200 | 192 | 179 | 183 | 161 | 160 | 153 | 221 | 204 | 205 | 193 | 280 | 276 | 232 | 191 | 204 | 231 | 258 | 272 | 270 | 199.7 |
| 16-Aug | 283 | 282 | 326 | 303 | 231 | 305 | 302 | 2 | 5 | 4 | 1 | 3 | 14 | 8 | 8 | 315 | 336 | 22 | 103 | 246 | 255 | 255 | 242 | 249 | 349.6 |
| 17-Aug | 266 | 275 | 279 | 244 | 215 | 195 | 186 | 155 | 158 | 244 | 290 | 171 | 143 | 144 | 147 | 147 | 159 | 164 | 173 | 171 | 178 | 179 | 180 | 179 | 173.6 |
| 18-Aug | 185 | 179 | UO | 203 | 186 | 178 | 182 | 163 | 161 | 160 | 163 | 198 | 223 | 233 | 212 | 233 | 230 | 231 | 222 | 233 | 205 | 234 | 289 | 15 | 200.0 |
| 19-Aug | 259 | 199 | 178 | 195 | 165 | 189 | 158 | 176 | 213 | 308 | 308 | 336 | 358 | 8 | 51 | 336 | 355 | 5 | 10 | 358 | 268 | 228 | 286 | 285 | 333.2 |
| 20-Aug | 190 | 353 | 265 | 222 | 211 | 230 | 216 | 316 | 3 | 24 | 9 | 12 | 24 | 15 | 21 | 14 | 32 | 10 | 354 | 287 | 303 | 285 | 249 | 284 | 2.7 |
| 21-Aug | 222 | 129 | 247 | 202 | 184 | 206 | 152 | 149 | 145 | 142 | 136 | 154 | 159 | 170 | 174 | 157 | 159 | 162 | 170 | 175 | 176 | 169 | 171 | 168 | 163.8 |
| 22-Aug | 170 | 176 | 192 | 162 | 180 | UO | 149 | 177 | 159 | 164 | 159 | 155 | 149 | 149 | 158 | 155 | 159 | 164 | 171 | 133 | 164 | 165 | 168 | 168 | 161.1 |
| 23-Aug | 181 | 171 | 171 | 174 | 179 | 174 | 171 | 175 | 160 | 166 | 162 | 151 | 157 | 158 | 172 | 179 | 173 | 289 | 317 | 332 | 326 | 269 | 225 | 318 | 180.2 |
| 24-Aug | 227 | 290 | 292 | 325 | 258 | 274 | 214 | 295 | 317 | 302 | 310 | 318 | 3 | 346 | 8 | 13 | 18 | 19 | 1 | 323 | 291 | 292 | 354 | 285 | 334.2 |
| 25-Aug | 275 | 272 | 272 | 299 | 322 | 291 | 286 | 345 | 9 | 16 | 65 | 68 | 68 | 144 | 93 | 37 | 49 | 45 | 30 | 1 | 358 | 342 | 279 | 317 | 3.1 |
| 26-Aug | 327 | 320 | 336 | 276 | 277 | 246 | 183 | 151 | 161 | 162 | 167 | 158 | 159 | 157 | 158 | 162 | 160 | 162 | 165 | 163 | 158 | 169 | 168 | 171 | 165.2 |
| 27-Aug | 173 | 171 | 94 | 313 | 226 | 226 | 235 | 167 | 146 | 151 | 160 | 161 | 171 | 160 | 169 | 147 | 112 | 139 | 135 | 137 | 144 | 149 | 161 | 160 | 154.8 |
| 28-Aug | 179 | 41 | 176 | 171 | 214 | 308 | 168 | 173 | 175 | 189 | 205 | 216 | 212 | 209 | 221 | 224 | 216 | 228 | 264 | 242 | 231 | 217 | 233 | 219 | 209.4 |
| 29-Aug | 212 | 208 | 219 | 222 | 202 | 203 | 187 | 195 | 203 | 218 | 221 | 227 | 239 | 229 | 218 | 218 | 225 | 222 | 203 | 189 | 172 | 178 | 183 | 195 | 211.5 |
| 30-Aug | UO | 205 | 278 | 263 | 242 | 259 | 281 | 169 | 144 | 142 | 140 | 141 | 137 | 146 | 138 | 149 | 152 | 152 | 279 | 251 | 321 | 13 | 334 | 311 | 158.2 |
| 31-Aug | 347 | 355 | 269 | 290 | 300 | 296 | 289 | 207 | 290 | 203 | 105 | 135 | 96 | 359 | 161 | 222 | 216 | 244 | 314 | 349 | 320 | 268 | 223 | 252 | 286.6 |
| | 261.6 | 274.8 | 277.8 | 272.2 | 263.9 | 268.9 | 233.7 | 226.2 | 357.5 | 343.5 | 352.3 | 344.1 | 11.7 | 3.0 | 15.7 | 349.0 | 359.2 | 356.5 | 340.3 | 330.1 | 304.7 | 279.7 | 275.0 | 285.4 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

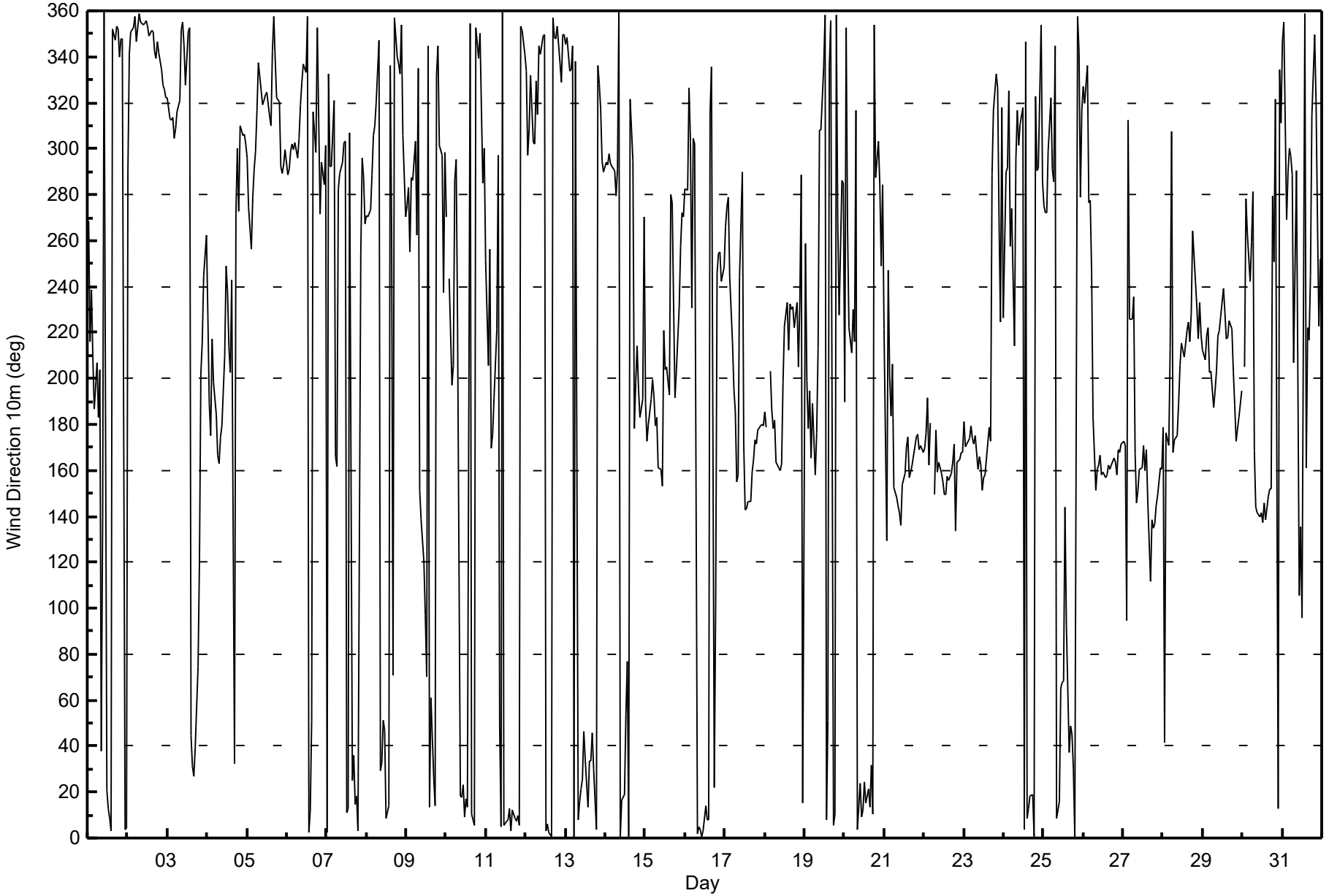
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Fort McKay - Bertha Ganter - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Fort McKay - Bertha Ganter - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Aug 11 08:00

Minimum Value: 6 deg on Aug 24 04:00

Percentiles: $P_1$ = 10 $P_{10}$ = 14 $Q_1$ = 18 Median = 26 $Q_3$ = 45 $P_{90}$ = 61 $P_{99}$ = 89

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 740 |
| Hours of Missing Data: | 4 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 38 | 23 | 24 | 36 | 69 | 54 | 22 | 74 | 63 | 84 | 60 | 50 | 21 | 19 | 18 | 16 | 17 | 19 | 19 | 19 | 33 | 38 | 24 | 59 | 84 |
| 2-Aug | 68 | 16 | 13 | 15 | 17 | 13 | 16 | 16 | 16 | 17 | 19 | 19 | 20 | 17 | 19 | 19 | 19 | 19 | 19 | 17 | 16 | 13 | 12 | 13 | 68 |
| 3-Aug | 12 | 11 | 11 | 12 | 13 | 13 | 13 | 15 | 29 | 24 | 21 | 21 | 37 | 33 | 42 | 33 | 37 | 36 | 41 | 23 | 31 | 24 | 42 | 18 | 42 |
| 4-Aug | 33 | 17 | 17 | 18 | 43 | 32 | 14 | 14 | 33 | 35 | 54 | 57 | 58 | 41 | 43 | 55 | 82 | 86 | 20 | 35 | 22 | 17 | 12 | 15 | 86 |
| 5-Aug | 19 | 40 | 41 | 37 | 29 | 18 | 19 | 35 | 17 | 18 | 19 | 19 | 19 | 20 | 21 | 22 | 24 | 28 | 20 | 19 | 23 | 32 | 23 | 18 | 41 |
| 6-Aug | 24 | 26 | 22 | 17 | 20 | 19 | 28 | 18 | 14 | 16 | 21 | 22 | 37 | 25 | 69 | 95 | 35 | 37 | 28 | 57 | 43 | 22 | 30 | 20 | 95 |
| 7-Aug | 72 | 72 | 62 | 50 | 26 | 40 | 33 | 54 | 31 | 31 | 30 | 35 | 26 | 26 | 81 | 74 | 37 | 21 | 20 | 35 | 26 | 25 | 47 | 33 | 81 |
| 8-Aug | 60 | 58 | 38 | 29 | 39 | 65 | 30 | 36 | 46 | 40 | 47 | 44 | 55 | 50 | 54 | 85 | 80 | 70 | 17 | 10 | 12 | 35 | 14 | 16 | 85 |
| 9-Aug | 20 | 28 | 14 | 17 | 28 | 23 | 28 | 59 | 62 | 22 | 41 | 41 | 65 | 78 | 36 | 48 | 67 | 20 | 26 | 27 | 21 | 27 | 31 | 22 | 78 |
| 10-Aug | 27 | UO | 50 | 52 | 52 | 48 | 46 | 55 | 80 | 70 | 45 | 37 | 37 | 27 | 22 | 29 | 26 | 25 | 23 | 10 | 16 | 13 | 27 | 23 | 80 |
| 11-Aug | 60 | 67 | 61 | 68 | 75 | 79 | 48 | 99 | 70 | 24 | 24 | 24 | 26 | 27 | 26 | 28 | 23 | 23 | 23 | 23 | 20 | 18 | 20 | 15 | 99 |
| 12-Aug | 27 | 16 | 22 | 25 | 56 | 25 | 36 | 22 | 26 | 17 | 17 | 19 | 18 | 19 | 22 | 27 | 24 | 17 | 16 | 35 | 14 | 12 | 14 | 14 | 56 |
| 13-Aug | 12 | 17 | 18 | 9 | 10 | 17 | 31 | 24 | 22 | 28 | 28 | 39 | 40 | 23 | 31 | 32 | 42 | 28 | 16 | 10 | 8 | 34 | 15 | 27 | 42 |
| 14-Aug | 22 | 32 | 10 | 18 | 15 | 12 | 36 | 29 | 33 | 26 | 36 | 35 | 56 | 53 | 35 | 34 | 38 | 25 | 27 | 45 | 43 | 49 | 18 | 41 | 56 |
| 15-Aug | 33 | 17 | 11 | 13 | 18 | 17 | 17 | 24 | 24 | 17 | 18 | 53 | 41 | 42 | 35 | 62 | 56 | 69 | 25 | 15 | 47 | 57 | 69 | 61 | 69 |
| 16-Aug | 53 | 57 | 86 | 86 | 97 | 30 | 29 | 17 | 17 | 19 | 22 | 25 | 25 | 26 | 22 | 44 | 28 | 21 | 51 | 72 | 32 | 14 | 33 | 38 | 97 |
| 17-Aug | 52 | 24 | 24 | 12 | 50 | 61 | 25 | 20 | 28 | 67 | 52 | 52 | 16 | 18 | 16 | 18 | 14 | 15 | 13 | 11 | 10 | 12 | 13 | 20 | 67 |
| 18-Aug | 12 | 14 | UO | 46 | 15 | 13 | 23 | 26 | 21 | 19 | 18 | 50 | 48 | 57 | 46 | 50 | 51 | 55 | 50 | 39 | 26 | 45 | 29 | 67 | 67 |
| 19-Aug | 50 | 46 | 42 | 20 | 21 | 42 | 48 | 47 | 68 | 48 | 42 | 72 | 56 | 22 | 58 | 19 | 16 | 19 | 23 | 16 | 43 | 82 | 30 | 84 | 84 |
| 20-Aug | 36 | 78 | 76 | 60 | 35 | 46 | 52 | 36 | 75 | 89 | 23 | 25 | 40 | 32 | 25 | 27 | 26 | 23 | 21 | 47 | 24 | 26 | 29 | 40 | 89 |
| 21-Aug | 35 | 81 | 44 | 17 | 89 | 38 | 16 | 15 | 12 | 14 | 14 | 24 | 27 | 26 | 28 | 21 | 15 | 13 | 14 | 12 | 11 | 11 | 12 | 12 | 89 |
| 22-Aug | 14 | 23 | 79 | 20 | 48 | UO | 42 | 19 | 16 | 16 | 15 | 15 | 15 | 17 | 17 | 14 | 16 | 14 | 14 | 33 | 16 | 13 | 16 | 14 | 79 |
| 23-Aug | 17 | 12 | 12 | 13 | 14 | 14 | 16 | 16 | 18 | 14 | 16 | 23 | 20 | 17 | 17 | 84 | 16 | 67 | 20 | 32 | 26 | 54 | 76 | 44 | 84 |
| 24-Aug | 64 | 75 | 45 | 6 | 36 | 29 | 54 | 31 | 29 | 24 | 19 | 24 | 31 | 24 | 29 | 29 | 29 | 20 | 20 | 13 | 14 | 21 | 30 | 45 | 75 |
| 25-Aug | 19 | 12 | 26 | 26 | 9 | 16 | 20 | 64 | 32 | 39 | 68 | 57 | 68 | 72 | 55 | 31 | 32 | 35 | 30 | 19 | 14 | 25 | 20 | 22 | 72 |
| 26-Aug | 17 | 77 | 34 | 15 | 15 | 8 | 20 | 22 | 14 | 16 | 20 | 17 | 17 | 16 | 16 | 15 | 15 | 15 | 12 | 12 | 12 | 12 | 12 | 12 | 77 |
| 27-Aug | 13 | 56 | 59 | 38 | 13 | 58 | 74 | 58 | 28 | 25 | 33 | 42 | 20 | 17 | 19 | 42 | 73 | 33 | 18 | 15 | 16 | 15 | 15 | 16 | 74 |
| 28-Aug | 39 | 64 | 57 | 16 | 64 | 88 | 15 | 18 | 17 | 33 | 39 | 39 | 38 | 39 | 50 | 44 | 45 | 50 | 55 | 51 | 50 | 49 | 46 | 42 | 88 |
| 29-Aug | 41 | 35 | 47 | 43 | 34 | 32 | 21 | 28 | 34 | 41 | 45 | 49 | 52 | 59 | 46 | 46 | 51 | 46 | 22 | 18 | 13 | 18 | 15 | 24 | 59 |
| 30-Aug | UO | 47 | 35 | 82 | 61 | 60 | 31 | 59 | 16 | 14 | 15 | 28 | 34 | 24 | 21 | 19 | 19 | 47 | 53 | 22 | 45 | 67 | 35 | 17 | 82 |
| 31-Aug | 29 | 27 | 59 | 28 | 58 | 30 | 55 | 57 | 98 | 89 | 64 | 64 | 87 | 46 | 98 | 55 | 56 | 53 | 14 | 19 | 28 | 22 | 36 | 21 | 98 |
| | 72 | 81 | 86 | 86 | 97 | 88 | 74 | 99 | 98 | 89 | 68 | 72 | 87 | 78 | 98 | 95 | 82 | 86 | 55 | 72 | 50 | 82 | 76 | 84 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS03
## LOWER CAMP METEOROLOGY
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP MET TOWER (AMS03)
AUGUST 2026

MONTHLY SUMMARY for
AMD SECTION III.B.1(c)

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| Temperature 20 m (C) Average | 479 | 0 | 265 | 64.38 | 29.6 | - | 22.3 | - |
| Temperature 45 m (C) Average | 479 | 0 | 265 | 64.38 | 29.4 | - | 22.4 | - |
| Temperature 100 m (C) Average | 479 | 0 | 265 | 64.38 | 29.1 | - | 22.8 | - |
| Temperature 163 m (C) Average | 479 | 0 | 265 | 64.38 | 28.4 | - | 22.6 | - |
| Relative Humidity 20 m (%) Average | 479 | 0 | 265 | 64.38 | 99.4 | - | 89.8 | - |
| Relative Humidity 45 m (%) Average | 479 | 0 | 265 | 64.38 | 99.3 | - | 87.9 | - |
| Relative Humidity 100 m (%) Average | 479 | 0 | 265 | 64.38 | 98.1 | - | 84.7 | - |
| Relative Humidity 163 m (%) Average | 479 | 0 | 265 | 64.38 | 97.6 | - | 80.8 | - |
| Wind Speed 20 m (km/h) Average | 479 | 0 | 265 | 64.38 | 26 | - | 16.0 | - |
| Wind Speed 45 m (km/h) Average | 479 | 0 | 265 | 64.38 | 41 | - | 25.0 | - |
| Wind Speed 100 m (km/h) Average | 0 | 0 | 744 | 0 | -- | - | -- | - |
| Wind Speed 163 m (km/h) Average | 0 | 0 | 744 | 0 | -- | - | -- | - |
| Wind Direction 20 m (deg) Average | 479 | 0 | 265 | 64.38 | - | - | - | - |
| Wind Direction 45 m (deg) Average | 479 | 0 | 265 | 64.38 | - | - | - | - |
| Wind Direction 100 m (deg) Average | 0 | 0 | 744 | 0 | - | - | - | - |
| Wind Direction 163 m (deg) Average | 0 | 0 | 744 | 0 | - | - | - | - |
| Vertical Wind Speed 20 m (km/h) Average | 479 | 0 | 265 | 64.38 | 0.5 | - | 0.0 | - |
| Vertical Wind Speed 45 m (km/h) Average | 479 | 0 | 265 | 64.38 | 1.2 | - | 0.2 | - |
| Vertical Wind Speed 100 m (km/h) Average | 0 | 0 | 744 | 0 | -- | - | -- | - |
| Vertical Wind Speed 163 m (km/h) Average | 0 | 0 | 744 | 0 | -- | - | -- | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP MET TOWER (AMS03)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| Temperature 20 m (C) Average | 479 | 17.33 | 4.5 | - | 9.2 | 11.8 | 13.9 | 16.6 | 20.3 | 23.8 | 29.6 |
| Temperature 45 m (C) Average | 479 | 17.37 | 4.4 | - | 9.2 | 11.9 | 14.1 | 16.6 | 20.1 | 23.7 | 29.4 |
| Temperature 100 m (C) Average | 479 | 17.52 | 4.3 | - | 9.3 | 12.2 | 14.5 | 16.8 | 20.3 | 23.5 | 29.1 |
| Temperature 163 m (C) Average | 479 | 17.08 | 4.2 | - | 8.9 | 11.9 | 14.2 | 16.4 | 19.7 | 23 | 28.4 |
| Relative Humidity 20 m (%) Average | 479 | 70.78 | 19.7 | - | 29 | 43.8 | 52.6 | 74.4 | 89.5 | 94.4 | 99.4 |
| Relative Humidity 45 m (%) Average | 479 | 68.57 | 19.2 | - | 27.9 | 42.6 | 50.8 | 71.7 | 85.6 | 93.3 | 99.3 |
| Relative Humidity 100 m (%) Average | 479 | 66.11 | 17.6 | - | 27.8 | 42.4 | 50.7 | 68.4 | 81.5 | 88.6 | 98.1 |
| Relative Humidity 163 m (%) Average | 479 | 63.46 | 16.9 | - | 27.5 | 40.8 | 48.7 | 64.5 | 77.3 | 84.4 | 97.6 |
| Wind Speed 20 m (km/h) Average | 479 | 8.1 | 5 | - | 0 | 2 | 4 | 7 | 11 | 15 | 26 |
| Wind Speed 45 m (km/h) Average | 479 | 11.9 | 7 | - | 0 | 3 | 6 | 11 | 17 | 21 | 41 |
| Wind Speed 100 m (km/h) Average | 0 | -- | -- | - | -- | 0 | 0 | 0 | 0 | 0 | -- |
| Wind Speed 163 m (km/h) Average | 0 | -- | -- | - | -- | 0 | 0 | 0 | 0 | 0 | -- |
| Wind Direction 20 m (deg) Average | 479 | - | - | - | - | - | - | - | - | - | - |
| Wind Direction 45 m (deg) Average | 479 | - | - | - | - | - | - | - | - | - | - |
| Wind Direction 100 m (deg) Average | 0 | - | - | - | - | - | - | - | - | - | - |
| Wind Direction 163 m (deg) Average | 0 | - | - | - | - | - | - | - | - | - | - |
| Vertical Wind Speed 20 m (km/h) Average | 479 | -0.26 | 0.3 | - | -1.5 | -0.7 | -0.4 | -0.2 | 0 | 0.1 | 0.5 |
| Vertical Wind Speed 45 m (km/h) Average | 479 | -0.13 | 0.3 | - | -0.9 | -0.6 | -0.3 | -0.1 | 0.1 | 0.2 | 1.2 |
| Vertical Wind Speed 100 m (km/h) Average | 0 | -- | -- | - | -- | 0 | 0 | 0 | 0 | 0 | -- |
| Vertical Wind Speed 163 m (km/h) Average | 0 | -- | -- | - | -- | 0 | 0 | 0 | 0 | 0 | -- |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP MET TOWER (AMS03)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| ALL METEOROLOGICAL SENSORS | 07 Aug 2026 16:00 | 11 Aug 2026 13:00 | 94 | Station power failure |
| ALL METEOROLOGICAL SENSORS | 12 Aug 2026 14:00 | 12 Aug 2026 15:00 | 2 | DAS Failure - data not recorded |
| ALL METEOROLOGICAL SENSORS | 21 Aug 2026 10:00 | 24 Aug 2026 06:00 | 69 | DAS Failure - data not recorded |
| ALL METEOROLOGICAL SENSORS | 27 Aug 2026 21:00 | 01 Sep 2026 00:00 | 99-100 | Station power failure |
| Vertical Wind Speed, Wind Speed, Wind Direction at 100m and 163m | 01 Aug 2026 01:00 | 27 Aug 2026 21:00 | 479-480 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ambient Temperature 20m (AT20) - C

## Lower Camp Met Tower - August 2026

Maximum Value: 29.6 C on Aug 26 17:00

Maximum Daily Average: 22.3 C on Aug 27

Minimum Value: 9.2 C on Aug 17 06:00

Minimum Daily Average: 13.3 C on Aug 12

Maximum Diurnal Average: 22.2 C at hour 15

Minimum Diurnal Average: 12.8 C at hour 6

Monthly Average: 17.33 C

Percentiles: $P_1$ = 10.4 $P_{10}$ = 11.8 $Q_1$ = 13.9 Median = 16.6 $Q_3$ = 20.3 $P_{90}$ = 23.8 $P_{99}$ = 28.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.5 | 16.2 | 15.8 | 15.7 | 15.9 | 16.2 | 16.8 | 17.1 | 17.1 | 18.2 | 19.2 | 21.9 | 24.7 | 26.1 | 27.2 | 28.0 | 28.6 | 28.8 | 25.6 | 23.5 | 21.8 | 19.1 | 18.1 | 17.0 | 20.7 | 28.8 |
| 2-Aug | 16.6 | 16.5 | 16.4 | 16.4 | 16.5 | 16.3 | 16.2 | 16.0 | 16.0 | 16.3 | 15.2 | 15.2 | 14.9 | 15.5 | 16.8 | 17.5 | 17.7 | 17.2 | 16.7 | 15.9 | 15.1 | 13.7 | 12.5 | 11.9 | 15.8 | 17.7 |
| 3-Aug | 12.3 | 11.7 | 11.1 | 10.6 | 10.4 | 10.6 | 10.9 | 11.5 | 12.7 | 14.9 | 15.5 | 15.8 | 16.4 | 17.5 | 18.4 | 19.2 | 19.2 | 19.3 | 18.6 | 17.8 | 16.1 | 14.0 | 12.7 | 12.0 | 14.6 | 19.3 |
| 4-Aug | 11.4 | 11.1 | 10.8 | 10.5 | 10.7 | 10.9 | 11.9 | 13.2 | 14.1 | 16.6 | 18.6 | 20.6 | 21.8 | 23.0 | 23.6 | 23.7 | 18.6 | 16.4 | 16.7 | 16.9 | 16.9 | 16.0 | 15.6 | 15.3 | 16.0 | 23.7 |
| 5-Aug | 15.1 | 15.5 | 15.8 | 15.6 | 15.8 | 15.6 | 15.6 | 16.1 | 16.6 | 17.4 | 18.2 | 19.2 | 19.2 | 18.8 | 19.2 | 19.3 | 17.6 | 13.2 | 11.9 | 11.7 | 11.4 | 11.7 | 11.7 | 11.4 | 15.6 | 19.3 |
| 6-Aug | 10.9 | 11.1 | 11.2 | 11.3 | 11.4 | 11.3 | 11.7 | 12.3 | 13.0 | 14.1 | 15.1 | 16.3 | 16.9 | 17.6 | 16.9 | 15.8 | 16.8 | 16.8 | 16.7 | 16.2 | 15.3 | 14.7 | 14.8 | 14.9 | 14.3 | 17.6 |
| 7-Aug | 13.9 | 13.2 | 13.2 | 13.4 | 13.4 | 13.3 | 13.6 | 14.1 | 14.8 | 15.8 | 17.6 | 17.9 | 18.8 | 18.0 | 18.6 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 18.8 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 21.2 | 21.3 | 21.4 | 21.3 | 20.9 | 20.4 | 18.8 | 17.2 | 16.0 | 15.0 | 14.1 | -- | 21.4 |
| 12-Aug | 13.3 | 12.3 | 11.7 | 11.0 | 10.8 | 11.2 | 11.8 | 12.2 | 12.4 | 12.9 | 13.8 | 14.5 | 14.9 | DF | DF | 14.6 | 15.0 | 15.5 | 15.9 | 15.2 | 14.2 | 13.6 | 13.2 | 12.9 | 13.3 | 15.9 |
| 13-Aug | 12.8 | 12.7 | 12.7 | 12.4 | 12.1 | 12.0 | 12.2 | 12.7 | 14.1 | 16.0 | 17.2 | 18.7 | 19.0 | 20.1 | 19.5 | 19.4 | 19.6 | 19.8 | 18.9 | 17.8 | 17.2 | 15.7 | 15.3 | 15.2 | 16.0 | 20.1 |
| 14-Aug | 14.5 | 14.1 | 13.8 | 13.7 | 13.6 | 13.4 | 13.6 | 14.1 | 15.2 | 17.0 | 19.3 | 19.0 | 20.9 | 22.1 | 20.6 | 19.7 | 19.5 | 19.6 | 19.7 | 18.1 | 16.7 | 15.5 | 14.7 | 14.0 | 16.8 | 22.1 |
| 15-Aug | 13.4 | 12.7 | 12.2 | 11.5 | 10.9 | 10.5 | 10.9 | 12.3 | 14.4 | 16.8 | 20.0 | 21.7 | 22.6 | 23.3 | 23.7 | 23.9 | 23.8 | 23.9 | 23.4 | 22.6 | 21.4 | 20.5 | 19.3 | 18.9 | 18.1 | 23.9 |
| 16-Aug | 18.3 | 17.4 | 16.5 | 15.7 | 14.9 | 14.4 | 14.2 | 14.2 | 14.5 | 14.6 | 16.1 | 17.0 | 17.8 | 18.2 | 18.7 | 19.4 | 19.3 | 18.0 | 17.3 | 16.1 | 14.6 | 13.4 | 12.6 | 12.3 | 16.1 | 19.4 |
| 17-Aug | 11.8 | 11.0 | 10.2 | 9.9 | 9.7 | 9.2 | 9.4 | 10.7 | 12.5 | 15.2 | 16.9 | 18.2 | 19.1 | 20.3 | 21.1 | 21.6 | 22.0 | 22.2 | 22.3 | 21.7 | 20.3 | 18.5 | 16.6 | 16.0 | 16.1 | 22.3 |
| 18-Aug | 15.3 | 14.6 | 14.1 | 13.9 | 14.0 | 13.3 | 14.1 | 15.6 | 16.5 | 18.2 | 20.4 | 23.1 | 24.9 | 25.8 | 26.5 | 26.7 | 26.3 | 25.6 | 24.7 | 23.1 | 21.7 | 20.8 | 19.8 | 19.2 | 19.9 | 26.7 |
| 19-Aug | 18.1 | 16.7 | 15.4 | 15.2 | 14.5 | 14.4 | 14.8 | 16.1 | 17.0 | 19.0 | 21.7 | 23.1 | 23.3 | 24.3 | 24.9 | 23.1 | 22.4 | 22.8 | 22.5 | 20.7 | 19.4 | 17.7 | 16.3 | 16.6 | 19.2 | 24.9 |
| 20-Aug | 16.1 | 15.1 | 13.9 | 13.0 | 12.6 | 12.4 | 12.8 | 13.8 | 15.2 | 16.8 | 19.8 | 20.7 | 21.6 | 22.4 | 22.6 | 23.0 | 23.0 | 22.6 | 22.0 | 20.8 | 17.2 | 15.3 | 14.5 | 13.4 | 17.5 | 23.0 |
| 21-Aug | 12.7 | 12.1 | 11.8 | 11.6 | 11.2 | 10.6 | 11.5 | 13.1 | 15.1 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 15.1 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 17.3 | 18.0 | 19.1 | 21.1 | 22.8 | 23.4 | 24.3 | 25.0 | 25.1 | 25.1 | 25.7 | 25.6 | 24.4 | 22.6 | 19.5 | 17.0 | 15.5 | 14.5 | 21.4 | 25.7 |
| 25-Aug | 13.5 | 12.4 | 12.1 | 11.8 | 11.1 | 10.8 | 12.1 | 14.4 | 15.9 | 17.6 | 19.1 | 20.4 | 21.7 | 23.0 | 24.3 | 25.5 | 26.5 | 25.7 | 23.8 | 22.0 | 20.3 | 19.0 | 17.1 | 15.9 | 18.2 | 26.5 |
| 26-Aug | 15.1 | 14.4 | 13.9 | 13.4 | 13.1 | 12.9 | 13.9 | 15.4 | 17.9 | 20.6 | 23.0 | 25.5 | 27.4 | 28.3 | 29.0 | 29.2 | 29.6 | 29.3 | 28.2 | 26.7 | 25.1 | 23.6 | 22.0 | 20.9 | 21.6 | 29.6 |
| 27-Aug | 19.7 | 18.9 | 18.2 | 17.9 | 17.5 | 16.8 | 17.1 | 19.0 | 20.3 | 22.0 | 23.3 | 25.1 | 25.3 | 25.8 | 26.8 | 26.3 | 26.6 | 26.7 | 27.0 | 26.7 | PF | PF | PF | PF | 22.3 | 27.0 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 14.6 | 14.0 | 13.5 | 13.2 | 13.0 | 12.8 | 13.4 | 14.4 | 15.4 | 17.1 | 18.6 | 19.9 | 20.8 | 21.8 | 22.2 | 22.1 | 22.0 | 21.5 | 20.8 | 19.7 | 18.0 | 16.6 | 15.6 | 15.1 | Diurnal Average | |
| | 19.7 | 18.9 | 18.2 | 17.9 | 17.5 | 16.8 | 17.3 | 19.0 | 20.3 | 22.0 | 23.3 | 25.5 | 27.4 | 28.3 | 29.0 | 29.2 | 29.6 | 29.3 | 28.2 | 26.7 | 25.1 | 23.6 | 22.0 | 20.9 | Diurnal Maximum | |

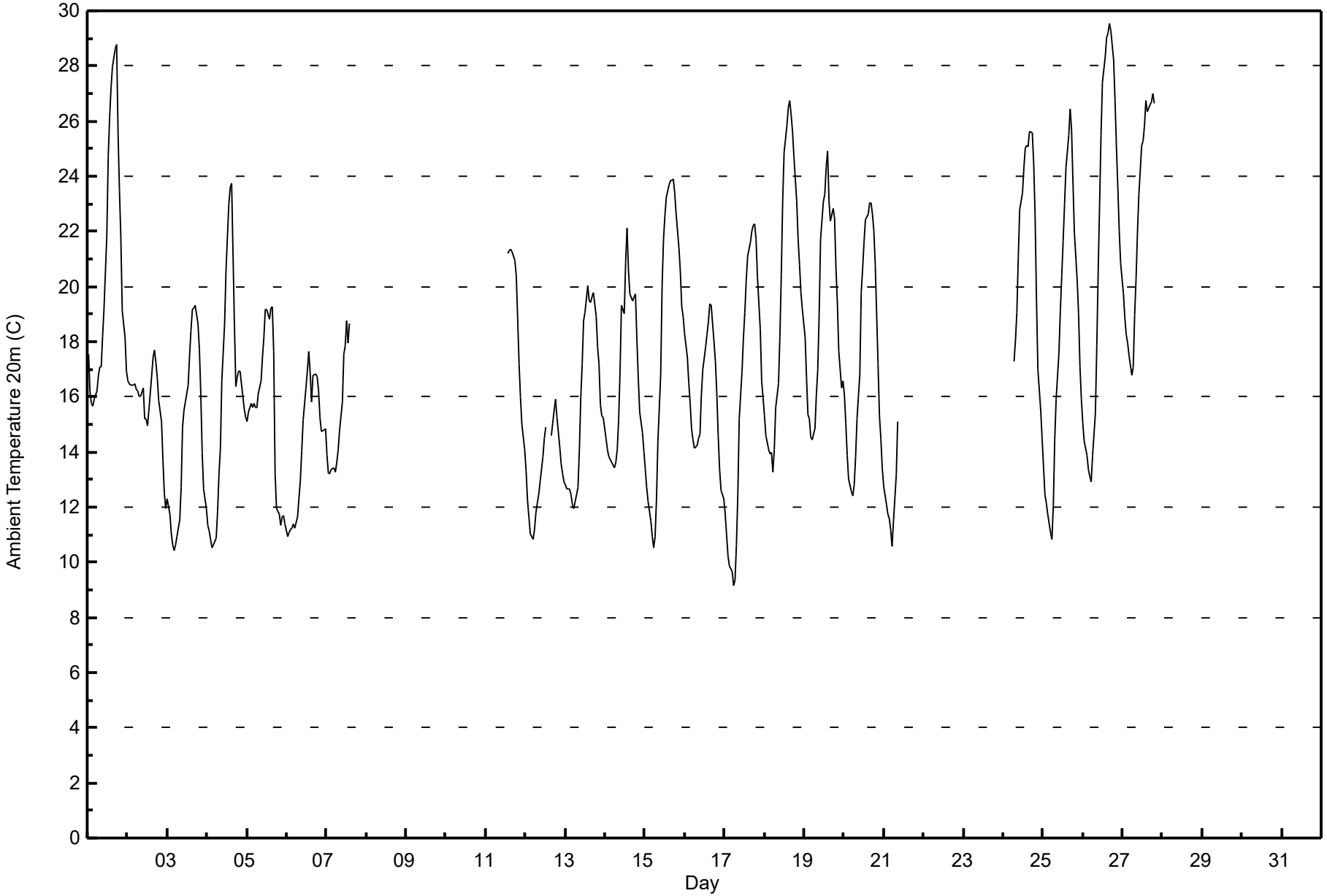
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 20m (AT20) - C**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 4 | 0.84 | 0.84 |
| 10 - 20 | 351 | 73.28 | 74.11 |
| > 20 | 124 | 25.89 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ambient Temperature 45m (AT45) - C

## Lower Camp Met Tower - August 2026

Maximum Value: 29.4 C on Aug 26 17:00

Maximum Daily Average: 22.4 C on Aug 27

Minimum Value: 9.2 C on Aug 17 06:00

Minimum Daily Average: 13.4 C on Aug 12

Maximum Diurnal Average: 21.9 C at hour 15

Minimum Diurnal Average: 13.0 C at hour 6

Monthly Average: 17.37 C

Percentiles: $P_1$ = 10.5 $P_{10}$ = 11.9 $Q_1$ = 14.1 Median = 16.6 $Q_3$ = 20.1 $P_{90}$ = 23.7 $P_{99}$ = 28.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 18.7 | 16.8 | 16.4 | 16.1 | 16.0 | 16.2 | 16.7 | 17.2 | 17.1 | 18.0 | 19.0 | 21.4 | 24.4 | 25.9 | 27.0 | 27.8 | 28.6 | 28.9 | 26.2 | 23.5 | 21.7 | 19.2 | 18.2 | 16.9 | 20.7 | 28.9 |
| 2-Aug | 16.6 | 16.4 | 16.3 | 16.3 | 16.4 | 16.2 | 16.1 | 15.9 | 16.0 | 16.2 | 15.1 | 15.1 | 14.8 | 15.4 | 16.6 | 17.3 | 17.5 | 17.1 | 16.6 | 15.9 | 15.1 | 13.7 | 12.6 | 12.0 | 15.7 | 17.5 |
| 3-Aug | 12.3 | 11.7 | 11.1 | 10.8 | 10.5 | 10.6 | 10.8 | 11.3 | 12.4 | 14.4 | 15.0 | 15.4 | 15.9 | 16.9 | 17.7 | 18.6 | 18.8 | 18.9 | 18.3 | 17.7 | 16.9 | 15.7 | 14.3 | 12.9 | 14.5 | 18.9 |
| 4-Aug | 12.1 | 11.5 | 10.9 | 10.6 | 10.5 | 10.8 | 11.7 | 13.0 | 13.9 | 16.3 | 18.5 | 20.3 | 21.4 | 22.6 | 23.4 | 23.6 | 18.5 | 16.2 | 16.9 | 17.1 | 17.1 | 16.1 | 15.7 | 15.4 | 16.0 | 23.6 |
| 5-Aug | 15.3 | 15.6 | 15.9 | 15.7 | 15.9 | 15.6 | 15.4 | 15.8 | 16.3 | 17.0 | 17.8 | 18.7 | 18.8 | 18.6 | 19.0 | 19.2 | 17.6 | 13.1 | 11.9 | 11.7 | 11.4 | 11.8 | 11.8 | 11.4 | 15.5 | 19.2 |
| 6-Aug | 11.0 | 11.2 | 11.2 | 11.2 | 11.3 | 11.1 | 11.5 | 12.1 | 12.8 | 13.7 | 14.8 | 15.8 | 16.6 | 17.2 | 16.6 | 15.6 | 16.7 | 16.9 | 16.7 | 16.2 | 15.4 | 14.9 | 15.0 | 15.0 | 14.2 | 17.2 |
| 7-Aug | 14.0 | 13.3 | 13.2 | 13.5 | 13.5 | 13.5 | 13.7 | 14.0 | 14.6 | 15.6 | 17.0 | 17.4 | 18.4 | 17.7 | 18.2 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 18.4 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 20.6 | 20.8 | 20.9 | 20.9 | 20.7 | 20.3 | 18.8 | 17.4 | 16.3 | 15.3 | 14.5 | -- | 20.9 |
| 12-Aug | 13.7 | 12.7 | 12.0 | 11.3 | 10.9 | 11.4 | 11.9 | 12.1 | 12.3 | 12.7 | 13.5 | 14.2 | 14.6 | DF | DF | 14.7 | 15.0 | 15.3 | 15.8 | 15.5 | 14.4 | 14.0 | 13.5 | 13.0 | 13.4 | 15.8 |
| 13-Aug | 12.8 | 12.6 | 12.6 | 12.4 | 12.1 | 11.9 | 12.1 | 12.4 | 13.7 | 15.5 | 16.7 | 18.1 | 18.6 | 19.5 | 19.0 | 19.2 | 19.4 | 19.4 | 18.8 | 18.0 | 17.5 | 16.8 | 15.9 | 15.9 | 15.9 | 19.5 |
| 14-Aug | 15.4 | 14.5 | 14.1 | 13.9 | 13.8 | 13.6 | 13.7 | 13.9 | 14.9 | 16.4 | 18.5 | 19.0 | 20.6 | 21.6 | 20.3 | 19.6 | 19.3 | 19.5 | 19.6 | 18.3 | 17.4 | 15.8 | 14.9 | 14.1 | 16.8 | 21.6 |
| 15-Aug | 13.5 | 12.8 | 12.5 | 11.7 | 11.0 | 10.5 | 10.9 | 12.5 | 14.6 | 16.6 | 19.8 | 21.4 | 22.2 | 22.8 | 23.3 | 23.6 | 23.7 | 23.6 | 23.3 | 22.7 | 21.7 | 20.6 | 19.4 | 19.1 | 18.1 | 23.7 |
| 16-Aug | 18.5 | 17.5 | 16.5 | 15.9 | 15.0 | 14.6 | 14.2 | 14.1 | 14.3 | 14.4 | 15.6 | 16.4 | 17.2 | 17.7 | 18.3 | 18.9 | 19.1 | 18.0 | 16.9 | 16.2 | 15.4 | 14.8 | 13.9 | 13.4 | 16.1 | 19.1 |
| 17-Aug | 12.6 | 11.6 | 10.7 | 10.2 | 9.8 | 9.2 | 9.4 | 10.5 | 12.4 | 15.0 | 16.6 | 17.7 | 18.8 | 20.0 | 20.8 | 21.3 | 21.8 | 22.1 | 22.2 | 22.0 | 20.7 | 18.9 | 16.8 | 16.0 | 16.1 | 22.2 |
| 18-Aug | 15.3 | 14.7 | 14.1 | 13.9 | 14.0 | 13.6 | 14.2 | 15.4 | 16.1 | 17.9 | 20.1 | 22.8 | 24.5 | 25.5 | 26.3 | 26.5 | 25.9 | 25.3 | 24.6 | 23.2 | 22.2 | 21.2 | 20.1 | 19.3 | 19.9 | 26.5 |
| 19-Aug | 18.2 | 17.0 | 16.3 | 15.7 | 15.2 | 14.5 | 14.9 | 16.3 | 17.0 | 18.8 | 21.1 | 22.5 | 23.0 | 23.8 | 24.5 | 23.2 | 22.5 | 23.0 | 22.5 | 21.0 | 19.8 | 18.8 | 17.9 | 17.0 | 19.4 | 24.5 |
| 20-Aug | 16.6 | 15.8 | 14.5 | 13.3 | 13.0 | 13.4 | 13.4 | 14.0 | 15.1 | 16.5 | 19.1 | 20.1 | 21.0 | 21.8 | 22.1 | 22.6 | 22.6 | 22.3 | 21.9 | 20.9 | 19.3 | 17.3 | 15.9 | 14.4 | 17.8 | 22.6 |
| 21-Aug | 14.3 | 13.2 | 12.3 | 11.9 | 11.3 | 10.8 | 11.4 | 12.8 | 14.8 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 14.8 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 18.0 | 18.2 | 18.7 | 20.7 | 22.3 | 22.9 | 23.8 | 24.5 | 24.8 | 24.7 | 25.3 | 25.3 | 24.4 | 23.1 | 21.7 | 19.4 | 17.1 | 15.3 | 21.7 | 25.3 |
| 25-Aug | 14.7 | 14.0 | 12.8 | 12.5 | 11.7 | 11.2 | 11.7 | 13.5 | 15.3 | 17.1 | 18.6 | 19.9 | 21.2 | 22.6 | 23.9 | 25.0 | 26.1 | 25.3 | 23.7 | 22.1 | 20.9 | 19.6 | 17.8 | 17.2 | 18.3 | 26.1 |
| 26-Aug | 16.0 | 15.7 | 15.2 | 14.3 | 13.8 | 13.4 | 13.8 | 15.1 | 17.5 | 20.3 | 22.5 | 25.2 | 27.2 | 28.1 | 28.9 | 29.0 | 29.4 | 29.3 | 28.4 | 27.1 | 25.5 | 24.3 | 22.8 | 21.7 | 21.9 | 29.4 |
| 27-Aug | 20.1 | 19.2 | 18.7 | 18.1 | 17.5 | 16.8 | 17.0 | 18.6 | 19.9 | 21.5 | 23.0 | 24.8 | 25.1 | 25.6 | 26.6 | 26.5 | 27.2 | 27.0 | 27.0 | 26.8 | PF | PF | PF | PF | 22.4 | 27.2 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 15.1 | 14.4 | 13.9 | 13.5 | 13.2 | 13.0 | 13.4 | 14.2 | 15.2 | 16.7 | 18.2 | 19.5 | 20.4 | 21.4 | 21.9 | 21.9 | 21.8 | 21.4 | 20.8 | 19.9 | 18.5 | 17.3 | 16.2 | 15.5 | Diurnal Average | |
| | 20.1 | 19.2 | 18.7 | 18.1 | 17.5 | 16.8 | 18.0 | 18.6 | 19.9 | 21.5 | 23.0 | 25.2 | 27.2 | 28.1 | 28.9 | 29.0 | 29.4 | 29.3 | 28.4 | 27.1 | 25.5 | 24.3 | 22.8 | 21.7 | Diurnal Maximum | |

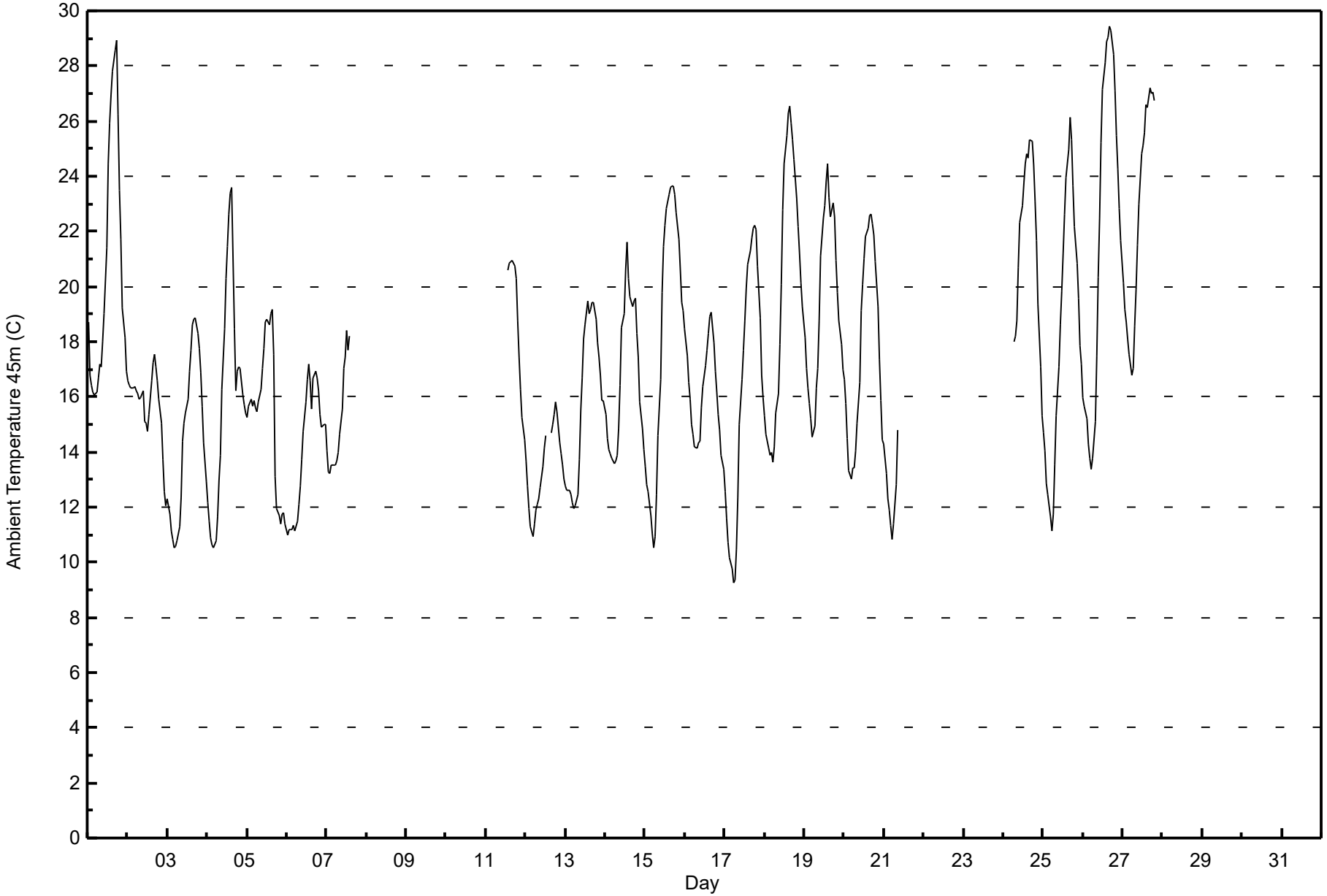
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 45m (AT45) - C**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 3 | 0.63 | 0.63 |
| 10 - 20 | 354 | 73.90 | 74.53 |
| > 20 | 122 | 25.47 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

Maximum Value: 29.1 C on Aug 26 17:00
Maximum Daily Average: 22.8 C on Aug 27

Minimum Value: 9.3 C on Aug 17 06:00
Minimum Daily Average: 13.5 C on Aug 12
Maximum Diurnal Average: 21.6 C at hour 16
Minimum Diurnal Average: 13.4 C at hour 6
Monthly Average: 17.52 C
Percentiles: $P_1$ = 10.5 $P_{10}$ = 12.2 $Q_1$ = 14.5 Median = 16.8 $Q_3$ = 20.3 $P_{90}$ = 23.5 $P_{99}$ = 28.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 19.4 | 17.8 | 17.6 | 16.8 | 16.6 | 16.7 | 17.0 | 17.4 | 17.1 | 18.0 | 18.7 | 21.1 | 24.0 | 25.6 | 26.6 | 27.5 | 28.3 | 29.0 | 27.4 | 24.4 | 21.5 | 19.3 | 18.0 | 16.6 | 20.9 | 29.0 |
| 2-Aug | 16.4 | 16.3 | 16.1 | 16.0 | 16.1 | 15.9 | 15.8 | 15.6 | 15.7 | 15.9 | 14.8 | 14.7 | 14.4 | 15.1 | 16.2 | 16.9 | 17.2 | 16.8 | 16.3 | 15.7 | 14.8 | 13.6 | 12.5 | 12.0 | 15.4 | 17.2 |
| 3-Aug | 12.1 | 11.6 | 11.1 | 10.8 | 10.5 | 10.4 | 10.4 | 10.9 | 11.9 | 14.0 | 14.7 | 14.9 | 15.5 | 16.5 | 17.5 | 18.3 | 18.4 | 18.5 | 18.0 | 17.5 | 17.0 | 16.6 | 16.1 | 14.8 | 14.5 | 18.5 |
| 4-Aug | 13.8 | 12.9 | 11.5 | 11.1 | 10.5 | 10.8 | 11.9 | 13.1 | 14.5 | 16.9 | 18.9 | 19.8 | 21.0 | 22.1 | 23.0 | 23.2 | 18.4 | 16.1 | 17.1 | 17.2 | 17.1 | 16.0 | 15.8 | 15.5 | 16.2 | 23.2 |
| 5-Aug | 15.5 | 15.8 | 15.8 | 15.6 | 15.8 | 15.4 | 15.2 | 15.4 | 15.8 | 16.6 | 17.3 | 18.1 | 18.4 | 18.2 | 18.6 | 18.9 | 17.3 | 12.9 | 11.8 | 11.5 | 11.3 | 11.6 | 11.6 | 11.2 | 15.2 | 18.9 |
| 6-Aug | 10.9 | 11.0 | 11.0 | 11.0 | 11.1 | 10.9 | 11.2 | 11.8 | 12.4 | 13.3 | 14.3 | 15.3 | 16.2 | 16.8 | 16.4 | 15.4 | 16.4 | 16.8 | 16.6 | 16.2 | 15.4 | 14.9 | 15.3 | 15.0 | 14.0 | 16.8 |
| 7-Aug | 14.0 | 13.2 | 13.1 | 13.5 | 13.4 | 13.5 | 13.5 | 13.8 | 14.4 | 15.2 | 16.5 | 17.0 | 18.0 | 17.4 | 17.9 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 18.0 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 20.2 | 20.5 | 20.6 | 20.6 | 20.4 | 20.0 | 18.5 | 17.3 | 16.4 | 15.4 | 14.6 | -- | 20.6 |
| 12-Aug | 14.0 | 13.4 | 12.8 | 11.8 | 11.4 | 12.2 | 12.0 | 11.9 | 12.1 | 12.4 | 13.1 | 13.8 | 14.2 | DF | DF | 14.6 | 14.9 | 15.1 | 15.7 | 15.5 | 14.6 | 14.3 | 13.7 | 13.0 | 13.5 | 15.7 |
| 13-Aug | 12.6 | 12.4 | 12.4 | 12.2 | 12.0 | 11.7 | 11.7 | 12.1 | 13.5 | 15.1 | 16.4 | 17.8 | 18.3 | 19.2 | 18.7 | 18.9 | 19.1 | 19.1 | 18.5 | 18.2 | 17.6 | 17.2 | 17.1 | 16.4 | 15.8 | 19.2 |
| 14-Aug | 16.2 | 16.0 | 15.4 | 14.8 | 14.1 | 13.7 | 13.6 | 14.0 | 14.4 | 16.0 | 19.1 | 18.9 | 20.4 | 21.3 | 20.0 | 19.5 | 18.9 | 19.2 | 19.3 | 18.5 | 17.7 | 16.8 | 16.0 | 14.9 | 17.0 | 21.3 |
| 15-Aug | 14.6 | 14.2 | 13.6 | 13.2 | 12.3 | 11.9 | 11.9 | 12.9 | 15.0 | 17.1 | 19.4 | 21.0 | 21.7 | 22.3 | 22.8 | 23.2 | 23.3 | 23.2 | 23.0 | 22.6 | 22.2 | 21.1 | 19.9 | 19.7 | 18.4 | 23.3 |
| 16-Aug | 18.8 | 17.7 | 16.6 | 16.1 | 15.2 | 15.1 | 14.5 | 14.0 | 13.9 | 14.0 | 15.2 | 16.1 | 16.7 | 17.3 | 17.9 | 18.4 | 18.8 | 17.7 | 16.6 | 15.9 | 15.6 | 15.7 | 15.4 | 14.4 | 16.1 | 18.8 |
| 17-Aug | 13.6 | 12.6 | 11.6 | 10.6 | 9.8 | 9.3 | 9.4 | 10.6 | 12.2 | 14.5 | 16.2 | 17.4 | 18.6 | 19.8 | 20.5 | 21.0 | 21.4 | 21.8 | 22.0 | 22.1 | 21.7 | 20.4 | 17.4 | 15.9 | 16.3 | 22.1 |
| 18-Aug | 15.5 | 15.0 | 14.9 | 14.3 | 14.5 | 14.4 | 14.5 | 15.4 | 15.8 | 17.7 | 19.8 | 22.5 | 24.0 | 25.0 | 25.9 | 26.2 | 25.5 | 24.9 | 24.4 | 23.5 | 23.1 | 22.0 | 20.3 | 19.2 | 19.9 | 26.2 |
| 19-Aug | 18.4 | 17.6 | 17.2 | 16.4 | 15.5 | 16.1 | 15.8 | 16.5 | 16.8 | 18.4 | 20.8 | 22.1 | 22.8 | 23.6 | 24.2 | 23.3 | 22.7 | 23.1 | 22.3 | 20.9 | 19.6 | 18.9 | 18.7 | 17.5 | 19.6 | 24.2 |
| 20-Aug | 17.5 | 16.1 | 15.2 | 14.7 | 15.0 | 14.6 | 14.0 | 14.0 | 14.6 | 15.7 | 18.8 | 19.8 | 20.7 | 21.4 | 21.8 | 22.2 | 22.4 | 22.0 | 21.7 | 20.9 | 20.3 | 19.1 | 17.4 | 17.1 | 18.2 | 22.4 |
| 21-Aug | 16.4 | 15.2 | 14.1 | 13.5 | 13.1 | 12.2 | 12.2 | 13.3 | 15.4 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 16.4 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 18.3 | 18.4 | 18.8 | 20.3 | 21.8 | 22.4 | 23.3 | 24.1 | 24.4 | 24.5 | 25.1 | 25.0 | 24.2 | 23.2 | 22.0 | 21.7 | 20.0 | 18.0 | 22.0 | 25.1 |
| 25-Aug | 16.5 | 16.7 | 15.3 | 14.9 | 13.6 | 12.2 | 12.3 | 12.9 | 15.1 | 16.8 | 18.4 | 19.8 | 21.2 | 22.5 | 24.0 | 25.0 | 26.0 | 25.1 | 23.4 | 22.0 | 21.1 | 19.9 | 19.7 | 18.4 | 18.9 | 26.0 |
| 26-Aug | 17.8 | 16.9 | 16.8 | 16.0 | 15.0 | 13.7 | 14.1 | 15.4 | 17.6 | 20.2 | 22.0 | 24.9 | 26.8 | 27.7 | 28.5 | 28.7 | 29.1 | 29.0 | 28.4 | 27.4 | 26.2 | 25.8 | 24.5 | 23.3 | 22.3 | 29.1 |
| 27-Aug | 21.8 | 21.1 | 20.4 | 19.9 | 18.7 | 17.8 | 18.4 | 18.5 | 19.5 | 21.0 | 22.6 | 24.4 | 24.7 | 25.2 | 26.3 | 26.5 | 27.8 | 27.6 | 27.0 | 26.7 | PF | PF | PF | PF | 22.8 | 27.8 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 15.8 | 15.2 | 14.6 | 14.2 | 13.7 | 13.4 | 13.7 | 14.2 | 15.1 | 16.5 | 17.9 | 19.1 | 20.0 | 21.1 | 21.6 | 21.6 | 21.6 | 21.2 | 20.7 | 19.9 | 18.7 | 18.0 | 17.1 | 16.2 | Diurnal Average | |
| | 21.8 | 21.1 | 20.4 | 19.9 | 18.7 | 17.8 | 18.4 | 18.5 | 19.5 | 21.0 | 22.6 | 24.9 | 26.8 | 27.7 | 28.5 | 28.7 | 29.1 | 29.0 | 28.4 | 27.4 | 26.2 | 25.8 | 24.5 | 23.3 | Diurnal Maximum | |

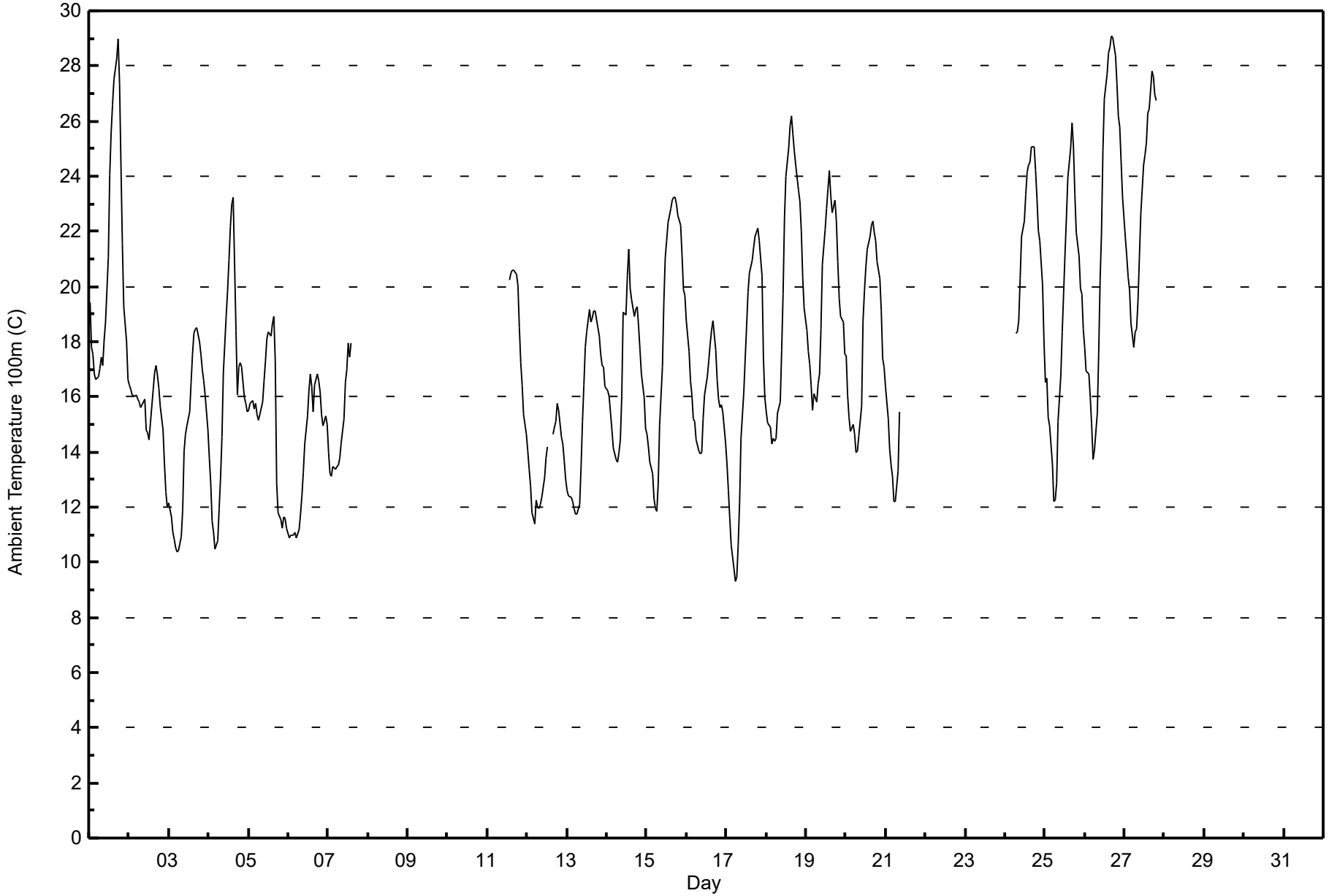
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 100m (AT100) - C**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 3 | 0.63 | 0.63 |
| 10 - 20 | 352 | 73.49 | 74.11 |
| > 20 | 124 | 25.89 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ambient Temperature 163m (AT163) - C

## Lower Camp Met Tower - August 2026

Maximum Value: 28.4 C on Aug 1 18:00

Maximum Daily Average: 22.6 C on Aug 27

Minimum Value: 8.9 C on Aug 17 07:00

Minimum Daily Average: 13.1 C on Aug 6

Maximum Diurnal Average: 20.8 C at hour 16

Minimum Diurnal Average: 13.5 C at hour 6

Monthly Average: 17.08 C

Percentiles: $P_1$ = 9.6 $P_{10}$ = 11.9 $Q_1$ = 14.2 Median = 16.4 $Q_3$ = 19.7 $P_{90}$ = 23.0 $P_{99}$ = 27.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 19.4 | 18.4 | 18.1 | 17.9 | 17.4 | 17.0 | 17.0 | 16.7 | 16.8 | 18.1 | 18.3 | 20.3 | 23.2 | 24.8 | 25.8 | 26.7 | 27.6 | 28.4 | 27.2 | 25.2 | 21.4 | 19.0 | 17.2 | 15.8 | 20.7 | 28.4 |
| 2-Aug | 15.7 | 15.6 | 15.2 | 15.1 | 15.1 | 15.0 | 14.9 | 14.7 | 14.8 | 15.0 | 13.9 | 13.7 | 13.5 | 14.1 | 15.3 | 16.0 | 16.2 | 15.8 | 15.4 | 14.8 | 13.9 | 12.7 | 11.7 | 11.2 | 14.6 | 16.2 |
| 3-Aug | 11.2 | 10.8 | 10.3 | 10.1 | 9.9 | 9.5 | 9.5 | 9.9 | 10.8 | 12.9 | 13.6 | 13.9 | 14.4 | 15.4 | 16.6 | 17.4 | 17.6 | 17.7 | 17.1 | 16.6 | 16.1 | 15.9 | 15.6 | 14.9 | 13.7 | 17.7 |
| 4-Aug | 13.9 | 12.9 | 12.0 | 11.4 | 11.5 | 11.3 | 11.4 | 12.3 | 13.9 | 16.5 | 18.2 | 18.9 | 20.0 | 21.2 | 22.0 | 22.3 | 18.2 | 16.4 | 16.8 | 16.7 | 16.4 | 15.2 | 15.1 | 15.0 | 15.8 | 22.3 |
| 5-Aug | 15.2 | 15.2 | 15.1 | 14.8 | 15.1 | 14.6 | 14.3 | 14.4 | 14.9 | 15.6 | 16.3 | 17.1 | 17.4 | 17.3 | 17.7 | 18.0 | 16.4 | 12.1 | 10.9 | 10.7 | 10.4 | 10.7 | 10.8 | 10.4 | 14.4 | 18.0 |
| 6-Aug | 10.1 | 10.1 | 10.1 | 10.1 | 10.1 | 9.9 | 10.2 | 10.7 | 11.4 | 12.2 | 13.2 | 14.2 | 15.3 | 15.7 | 15.5 | 14.9 | 15.6 | 16.1 | 15.8 | 15.4 | 14.6 | 14.4 | 14.9 | 14.2 | 13.1 | 16.1 |
| 7-Aug | 13.2 | 12.5 | 12.5 | 12.7 | 12.5 | 12.6 | 12.6 | 12.8 | 13.5 | 14.4 | 15.5 | 16.0 | 17.0 | 16.5 | 17.0 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 17.0 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 19.3 | 19.6 | 19.8 | 19.7 | 19.6 | 19.1 | 17.6 | 16.4 | 15.9 | 15.4 | 14.3 | -- | 19.8 |
| 12-Aug | 14.0 | 13.2 | 13.5 | 12.9 | 12.5 | 12.4 | 11.7 | 11.2 | 11.3 | 11.4 | 12.1 | 12.7 | 13.2 | DF | DF | 13.9 | 14.2 | 14.3 | 14.9 | 15.0 | 14.4 | 14.2 | 13.5 | 12.5 | 13.1 | 15.0 |
| 13-Aug | 12.2 | 11.9 | 11.5 | 11.2 | 11.1 | 10.8 | 10.7 | 11.2 | 12.4 | 14.1 | 15.4 | 16.8 | 17.4 | 18.3 | 17.8 | 17.9 | 18.2 | 18.2 | 17.6 | 17.4 | 17.0 | 16.6 | 16.7 | 16.1 | 14.9 | 18.3 |
| 14-Aug | 15.8 | 15.6 | 15.3 | 15.0 | 14.6 | 14.0 | 13.8 | 13.6 | 13.6 | 14.8 | 17.5 | 18.1 | 19.4 | 20.6 | 19.2 | 18.8 | 18.0 | 18.4 | 18.6 | 17.9 | 17.7 | 16.8 | 16.4 | 15.9 | 16.6 | 20.6 |
| 15-Aug | 15.4 | 14.2 | 13.2 | 12.8 | 12.2 | 12.0 | 11.4 | 12.1 | 14.4 | 16.4 | 18.6 | 20.1 | 20.8 | 21.4 | 21.9 | 22.3 | 22.4 | 22.3 | 22.1 | 22.0 | 21.9 | 21.5 | 20.4 | 20.6 | 18.0 | 22.4 |
| 16-Aug | 19.7 | 18.3 | 16.7 | 15.6 | 15.0 | 14.6 | 13.9 | 13.2 | 12.9 | 12.9 | 14.2 | 15.0 | 15.7 | 16.3 | 17.0 | 17.4 | 17.7 | 16.8 | 15.6 | 15.1 | 15.0 | 15.0 | 15.1 | 14.7 | 15.6 | 19.7 |
| 17-Aug | 14.2 | 12.6 | 11.4 | 10.3 | 9.3 | 9.2 | 8.9 | 9.6 | 11.3 | 13.5 | 15.1 | 16.4 | 17.7 | 19.2 | 19.6 | 20.2 | 20.6 | 21.0 | 21.2 | 21.4 | 21.4 | 20.9 | 18.5 | 15.8 | 15.8 | 21.4 |
| 18-Aug | 15.5 | 15.2 | 15.5 | 15.3 | 14.9 | 15.0 | 14.0 | 14.7 | 15.4 | 17.0 | 19.0 | 21.8 | 23.1 | 24.1 | 25.0 | 25.4 | 24.7 | 24.1 | 23.7 | 23.0 | 22.9 | 22.6 | 20.4 | 19.5 | 19.7 | 25.4 |
| 19-Aug | 19.0 | 18.0 | 18.1 | 18.5 | 16.0 | 16.0 | 15.6 | 15.9 | 15.9 | 17.6 | 19.7 | 21.0 | 22.0 | 22.6 | 23.4 | 22.6 | 22.2 | 22.4 | 21.5 | 20.2 | 18.8 | 18.6 | 18.2 | 17.5 | 19.2 | 23.4 |
| 20-Aug | 18.1 | 16.5 | 15.3 | 15.3 | 15.0 | 14.3 | 14.2 | 13.6 | 14.0 | 15.3 | 18.0 | 18.8 | 19.8 | 20.4 | 20.9 | 21.5 | 21.6 | 21.2 | 20.9 | 20.2 | 19.7 | 18.8 | 18.3 | 18.1 | 17.9 | 21.6 |
| 21-Aug | 17.8 | 17.2 | 15.9 | 15.0 | 14.1 | 13.4 | 13.5 | 13.7 | 15.1 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 17.8 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 18.1 | 18.2 | 18.4 | 19.4 | 20.9 | 21.3 | 22.4 | 23.2 | 23.6 | 23.7 | 24.4 | 24.3 | 23.5 | 22.7 | 21.9 | 21.3 | 20.8 | 19.1 | 21.5 | 24.4 |
| 25-Aug | 18.3 | 17.1 | 16.0 | 15.0 | 14.9 | 14.6 | 13.9 | 13.6 | 14.5 | 15.8 | 17.4 | 19.2 | 20.7 | 21.8 | 23.2 | 24.2 | 25.6 | 24.3 | 22.5 | 21.6 | 21.5 | 20.3 | 19.9 | 19.5 | 19.0 | 25.6 |
| 26-Aug | 18.2 | 17.8 | 17.0 | 16.1 | 14.7 | 14.0 | 14.8 | 16.1 | 17.8 | 19.7 | 21.3 | 24.2 | 25.9 | 27.0 | 27.7 | 27.9 | 28.3 | 28.3 | 27.8 | 27.1 | 26.4 | 26.7 | 25.4 | 23.8 | 22.3 | 28.3 |
| 27-Aug | 22.3 | 21.1 | 20.8 | 20.2 | 19.3 | 18.6 | 18.3 | 18.2 | 18.9 | 20.3 | 21.9 | 23.6 | 23.9 | 24.5 | 25.5 | 25.9 | 27.5 | 27.6 | 26.5 | 26.3 | PF | PF | PF | PF | 22.6 | 27.6 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 16.0 | 15.2 | 14.7 | 14.3 | 13.8 | 13.5 | 13.5 | 13.6 | 14.4 | 15.6 | 17.0 | 18.2 | 19.1 | 20.2 | 20.7 | 20.8 | 20.8 | 20.5 | 19.9 | 19.3 | 18.3 | 17.7 | 17.1 | 16.3 | Diurnal Average | |
| | 22.3 | 21.1 | 20.8 | 20.2 | 19.3 | 18.6 | 18.3 | 18.2 | 18.9 | 20.3 | 21.9 | 24.2 | 25.9 | 27.0 | 27.7 | 27.9 | 28.3 | 28.4 | 27.8 | 27.1 | 26.4 | 26.7 | 25.4 | 23.8 | Diurnal Maximum | |

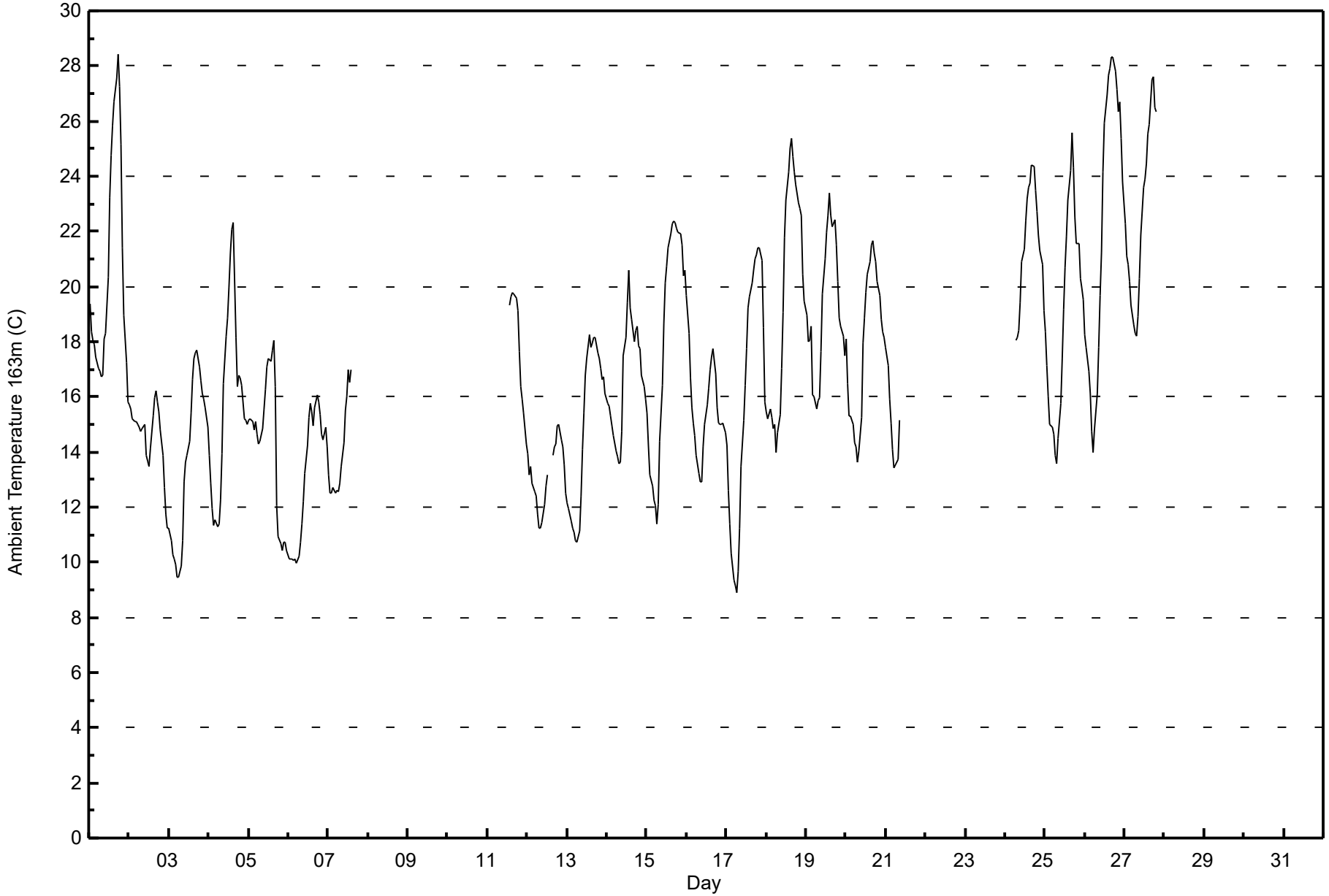
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 163m (AT163) - C**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 9 | 1.88 | 1.88 |
| 10 - 20 | 355 | 74.11 | 75.99 |
| > 20 | 115 | 24.01 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 20m (RH20) - %

## Lower Camp Met Tower - August 2026

Maximum Value: 99.4 % on Aug 25 06:00

Maximum Daily Average: 89.8 % on Aug 12

Minimum Value: 29.0 % on Aug 24 15:00

Minimum Daily Average: 49.0 % on Aug 24

Maximum Diurnal Average: 90.2 % at hour 6

Minimum Diurnal Average: 46.4 % at hour 15

Monthly Average: 70.78 %

Percentiles: $P_1$ = 32.0 $P_{10}$ = 43.8 $Q_1$ = 52.6 Median = 74.4 $Q_3$ = 89.5 $P_{90}$ = 94.4 $P_{99}$ = 98.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 88.0 | 97.4 | 96.7 | 97.5 | 96.7 | 92.7 | 89.8 | 90.4 | 92.2 | 90.1 | 87.0 | 74.2 | 61.9 | 56.5 | 53.3 | 52.6 | 51.4 | 47.0 | 66.9 | 78.1 | 81.6 | 92.2 | 93.1 | 92.7 | 80.0 | 97.5 |
| 2-Aug | 95.9 | 97.9 | 96.6 | 95.5 | 94.0 | 94.2 | 94.3 | 96.0 | 95.6 | 91.6 | 92.0 | 82.7 | 79.5 | 73.2 | 64.4 | 56.3 | 53.8 | 49.9 | 50.1 | 54.0 | 56.9 | 59.3 | 64.0 | 67.2 | 77.3 | 97.9 |
| 3-Aug | 65.7 | 68.8 | 71.5 | 74.5 | 76.0 | 75.7 | 74.4 | 72.5 | 69.8 | 61.9 | 56.2 | 50.3 | 47.4 | 44.1 | 43.8 | 43.4 | 43.8 | 45.0 | 47.6 | 51.0 | 66.5 | 81.5 | 88.3 | 91.0 | 62.9 | 91.0 |
| 4-Aug | 89.7 | 93.3 | 91.4 | 91.0 | 88.7 | 86.8 | 81.1 | 76.9 | 74.8 | 68.0 | 63.3 | 56.5 | 51.3 | 46.6 | 43.8 | 46.4 | 75.0 | 90.1 | 89.9 | 89.1 | 89.8 | 92.3 | 91.1 | 91.3 | 77.4 | 93.3 |
| 5-Aug | 87.2 | 83.8 | 83.2 | 83.9 | 82.0 | 81.8 | 78.7 | 75.7 | 66.6 | 59.3 | 51.8 | 46.0 | 45.7 | 49.2 | 50.8 | 51.2 | 52.8 | 84.3 | 94.8 | 95.6 | 95.0 | 93.4 | 89.2 | 86.9 | 73.7 | 95.6 |
| 6-Aug | 89.4 | 87.9 | 86.2 | 84.7 | 83.3 | 83.1 | 82.1 | 80.0 | 79.3 | 76.0 | 70.5 | 66.5 | 63.3 | 63.2 | 70.1 | 83.7 | 75.2 | 75.7 | 75.3 | 75.1 | 80.2 | 83.9 | 81.3 | 80.0 | 78.2 | 89.4 |
| 7-Aug | 84.8 | 87.4 | 84.5 | 84.3 | 84.5 | 86.1 | 82.6 | 81.1 | 77.6 | 73.0 | 66.4 | 63.1 | 54.9 | 61.8 | 57.7 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 87.4 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 43.9 | 42.4 | 40.7 | 39.5 | 39.3 | 43.5 | 51.0 | 61.7 | 70.0 | 73.0 | 78.8 | -- | 78.8 |
| 12-Aug | 83.8 | 91.8 | 95.3 | 98.0 | 96.6 | 92.7 | 92.0 | 90.6 | 94.8 | 96.3 | 93.8 | 88.2 | 83.1 | DF | DF | 88.7 | 85.8 | 81.2 | 78.3 | 83.4 | 85.3 | 90.0 | 93.1 | 93.5 | 89.8 | 98.0 |
| 13-Aug | 91.9 | 91.9 | 90.8 | 92.0 | 93.5 | 94.1 | 92.6 | 90.2 | 84.0 | 76.2 | 66.2 | 59.7 | 55.9 | 51.0 | 54.2 | 52.6 | 52.2 | 52.8 | 58.9 | 65.5 | 71.1 | 87.3 | 89.6 | 90.5 | 75.2 | 94.1 |
| 14-Aug | 96.0 | 97.4 | 98.1 | 97.4 | 96.4 | 92.2 | 91.4 | 90.8 | 84.0 | 76.0 | 64.3 | 63.6 | 48.2 | 41.9 | 50.9 | 52.2 | 56.1 | 51.5 | 56.1 | 69.3 | 79.1 | 86.2 | 85.8 | 88.1 | 75.5 | 98.1 |
| 15-Aug | 90.7 | 93.0 | 94.1 | 95.1 | 96.1 | 97.0 | 94.4 | 87.4 | 79.6 | 71.8 | 59.7 | 43.5 | 42.4 | 38.6 | 35.9 | 36.0 | 37.5 | 37.7 | 39.7 | 44.4 | 49.2 | 51.5 | 56.6 | 60.6 | 63.8 | 97.0 |
| 16-Aug | 62.0 | 64.4 | 68.2 | 71.6 | 78.5 | 85.7 | 86.2 | 87.9 | 85.7 | 78.1 | 62.6 | 55.2 | 47.7 | 43.9 | 43.8 | 41.9 | 42.6 | 51.1 | 58.3 | 63.2 | 80.7 | 88.4 | 89.2 | 89.3 | 67.7 | 89.3 |
| 17-Aug | 91.7 | 94.4 | 96.2 | 97.4 | 89.6 | 94.0 | 93.2 | 86.0 | 78.1 | 68.6 | 64.2 | 62.3 | 55.3 | 48.7 | 47.6 | 47.0 | 45.3 | 42.6 | 42.0 | 43.7 | 47.5 | 56.2 | 70.7 | 69.1 | 68.0 | 97.4 |
| 18-Aug | 70.2 | 73.0 | 75.6 | 76.4 | 77.0 | 81.7 | 78.4 | 74.0 | 73.7 | 70.6 | 66.9 | 56.5 | 45.5 | 37.9 | 34.9 | 34.2 | 39.2 | 42.2 | 46.7 | 52.9 | 57.1 | 58.8 | 64.4 | 68.7 | 60.7 | 81.7 |
| 19-Aug | 73.5 | 81.4 | 90.4 | 89.9 | 93.0 | 92.4 | 89.5 | 84.0 | 79.3 | 67.9 | 53.7 | 49.3 | 48.5 | 44.4 | 40.6 | 49.6 | 59.7 | 58.8 | 57.5 | 65.1 | 71.4 | 83.1 | 89.6 | 82.7 | 70.6 | 93.0 |
| 20-Aug | 84.2 | 91.9 | 97.1 | 98.2 | 99.2 | 99.3 | 98.1 | 97.2 | 91.3 | 80.9 | 66.2 | 56.9 | 50.9 | 47.7 | 46.7 | 45.4 | 44.2 | 44.8 | 45.2 | 50.6 | 77.8 | 86.9 | 90.4 | 91.8 | 74.3 | 99.3 |
| 21-Aug | 92.1 | 94.1 | 96.0 | 96.6 | 95.7 | 97.0 | 93.1 | 85.0 | 77.0 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 97.0 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 67.7 | 63.9 | 64.2 | 44.5 | 35.0 | 33.4 | 32.7 | 30.3 | 29.0 | 32.8 | 31.8 | 30.7 | 34.9 | 39.9 | 57.1 | 76.8 | 85.0 | 91.8 | 49.0 | 91.8 |
| 25-Aug | 95.3 | 93.3 | 94.1 | 97.7 | 98.8 | 99.4 | 93.8 | 79.4 | 72.9 | 69.0 | 64.1 | 58.9 | 54.0 | 48.5 | 43.8 | 41.1 | 38.9 | 43.7 | 51.3 | 56.0 | 63.4 | 69.0 | 80.5 | 87.7 | 70.6 | 99.4 |
| 26-Aug | 91.6 | 94.8 | 96.0 | 97.6 | 98.7 | 98.2 | 89.3 | 81.2 | 71.6 | 61.3 | 52.9 | 44.0 | 37.5 | 34.6 | 32.0 | 32.6 | 31.9 | 34.2 | 39.1 | 44.1 | 49.3 | 54.7 | 62.1 | 66.3 | 62.3 | 98.7 |
| 27-Aug | 69.5 | 75.4 | 77.5 | 74.9 | 75.9 | 79.3 | 78.5 | 70.7 | 65.5 | 59.2 | 51.8 | 45.0 | 44.3 | 45.8 | 42.2 | 45.8 | 45.7 | 46.7 | 45.8 | 44.7 | PF | PF | PF | PF | 59.2 | 79.3 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 84.7 | 87.7 | 89.0 | 89.7 | 89.7 | 90.2 | 86.7 | 82.9 | 78.9 | 72.0 | 64.4 | 57.8 | 52.5 | 47.6 | 46.4 | 48.7 | 50.1 | 52.5 | 56.1 | 60.8 | 69.5 | 76.9 | 80.9 | 82.5 | Diurnal Average | |
| | 96.0 | 97.9 | 98.1 | 98.2 | 99.2 | 99.4 | 98.1 | 97.2 | 95.6 | 96.3 | 93.8 | 88.2 | 83.1 | 73.2 | 70.1 | 88.7 | 85.8 | 90.1 | 94.8 | 95.6 | 95.0 | 93.4 | 93.1 | 93.5 | Diurnal Maximum | |

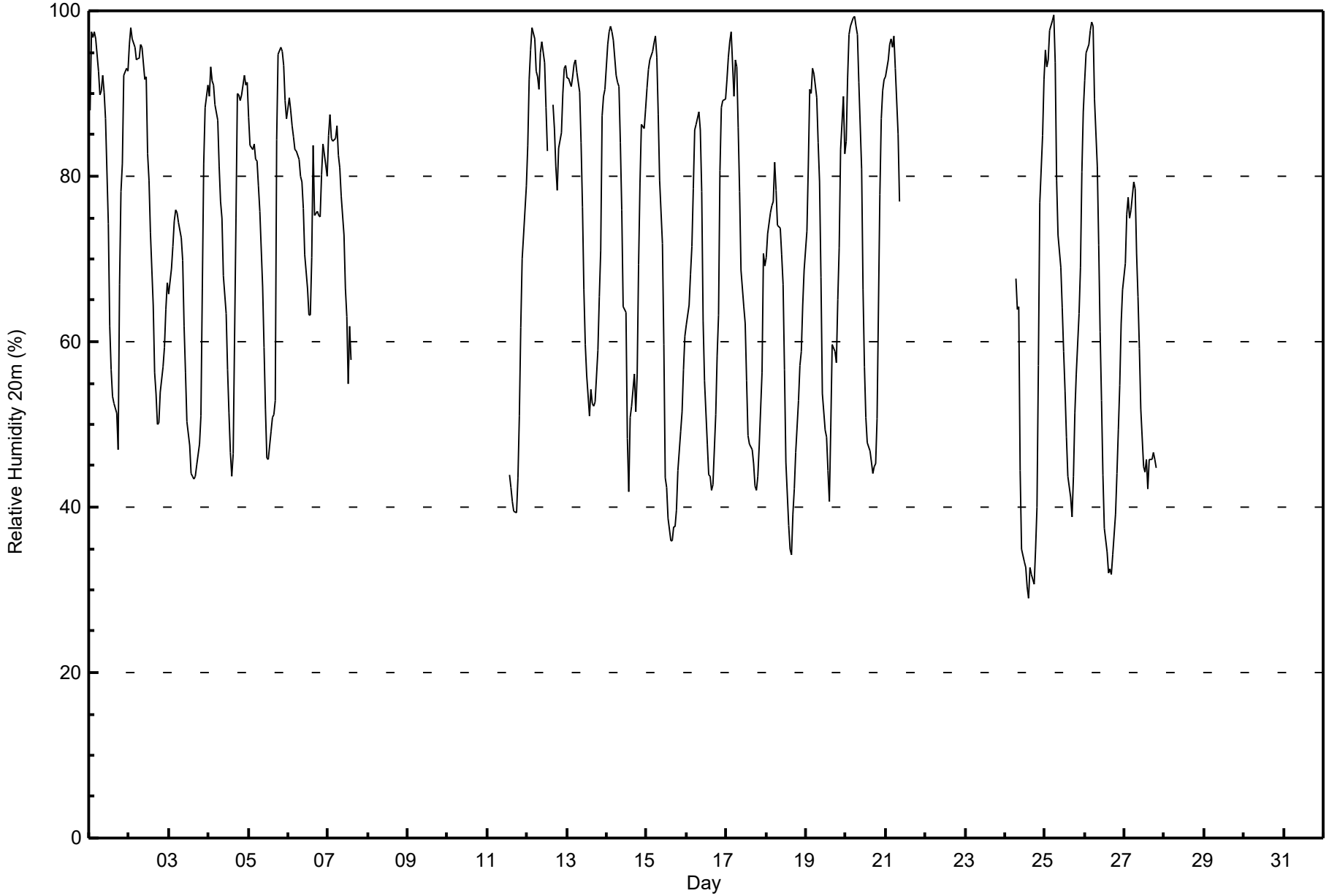
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 20m (RH20) - %**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 30 | 6.26 | 6.26 |
| 40 - 60 | 133 | 27.77 | 34.03 |
| 60 - 80 | 119 | 24.84 | 58.87 |
| 80 - 100 | 197 | 41.13 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 45m (RH45) - %

## Lower Camp Met Tower - August 2026

Maximum Value: 99.3 % on Aug 25 06:00

Maximum Daily Average: 87.9 % on Aug 12

Minimum Value: 27.9 % on Aug 24 15:00

Minimum Daily Average: 44.6 % on Aug 24

Maximum Diurnal Average: 88.8 % at hour 6

Minimum Diurnal Average: 45.6 % at hour 15

Monthly Average: 68.57 %

Percentiles: $P_1$ = 31.5 $P_{10}$ = 42.6 $Q_1$ = 50.8 Median = 71.7 $Q_3$ = 85.6 $P_{90}$ = 93.3 $P_{99}$ = 97.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 77.6 | 93.5 | 93.5 | 95.2 | 95.7 | 92.8 | 90.0 | 88.2 | 90.8 | 90.7 | 87.5 | 74.5 | 61.3 | 55.5 | 52.4 | 51.6 | 49.9 | 45.1 | 61.3 | 77.6 | 81.4 | 91.5 | 92.2 | 92.1 | 78.4 | 95.7 |
| 2-Aug | 95.1 | 98.1 | 96.7 | 95.5 | 94.1 | 94.1 | 94.3 | 96.0 | 95.1 | 91.2 | 91.7 | 82.0 | 78.6 | 72.0 | 62.9 | 54.9 | 52.4 | 48.3 | 48.7 | 52.2 | 55.4 | 57.5 | 62.0 | 65.2 | 76.4 | 98.1 |
| 3-Aug | 64.2 | 67.3 | 69.6 | 71.7 | 73.8 | 74.3 | 73.5 | 71.9 | 69.6 | 61.7 | 55.2 | 49.1 | 46.3 | 43.4 | 43.3 | 42.6 | 42.9 | 44.5 | 46.5 | 47.6 | 52.2 | 57.4 | 66.4 | 78.0 | 58.9 | 78.0 |
| 4-Aug | 86.0 | 91.4 | 90.4 | 89.5 | 88.7 | 85.9 | 80.0 | 76.1 | 73.9 | 67.1 | 61.8 | 56.0 | 50.7 | 46.1 | 43.0 | 45.6 | 74.0 | 89.9 | 86.8 | 86.6 | 87.8 | 90.8 | 88.2 | 89.2 | 76.1 | 91.4 |
| 5-Aug | 84.9 | 81.6 | 81.3 | 82.6 | 80.4 | 80.9 | 78.3 | 75.6 | 65.9 | 58.4 | 50.8 | 44.9 | 44.5 | 47.8 | 49.6 | 49.2 | 50.8 | 82.8 | 93.2 | 94.6 | 93.6 | 91.3 | 86.9 | 85.5 | 72.3 | 94.6 |
| 6-Aug | 87.6 | 85.8 | 84.7 | 83.8 | 82.6 | 82.6 | 81.8 | 79.8 | 79.1 | 76.0 | 70.1 | 66.2 | 62.4 | 62.7 | 68.9 | 81.7 | 72.5 | 72.1 | 73.0 | 73.2 | 78.7 | 81.7 | 78.4 | 77.7 | 76.8 | 87.6 |
| 7-Aug | 83.0 | 85.8 | 83.9 | 82.4 | 83.0 | 82.3 | 80.8 | 79.9 | 76.7 | 72.3 | 66.4 | 62.5 | 54.0 | 60.5 | 56.9 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 85.8 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 43.2 | 41.5 | 39.9 | 38.3 | 37.8 | 41.9 | 49.3 | 58.6 | 66.2 | 70.1 | 75.9 | -- | 75.9 |
| 12-Aug | 81.0 | 86.0 | 92.4 | 96.4 | 95.8 | 88.9 | 90.3 | 89.3 | 94.4 | 96.3 | 93.6 | 87.9 | 82.8 | DF | DF | 85.1 | 82.8 | 79.3 | 76.9 | 80.2 | 83.2 | 87.5 | 91.5 | 91.8 | 87.9 | 96.4 |
| 13-Aug | 91.6 | 91.6 | 90.8 | 92.1 | 93.4 | 94.0 | 93.0 | 90.8 | 84.9 | 76.8 | 65.9 | 59.7 | 55.1 | 50.5 | 53.4 | 51.2 | 49.9 | 51.9 | 57.1 | 61.2 | 66.4 | 75.1 | 84.7 | 81.1 | 73.4 | 94.0 |
| 14-Aug | 84.6 | 94.2 | 96.3 | 96.1 | 94.4 | 92.1 | 90.6 | 90.5 | 84.4 | 76.9 | 65.1 | 59.5 | 47.7 | 41.8 | 50.0 | 50.0 | 55.0 | 50.4 | 54.0 | 64.0 | 70.4 | 82.9 | 84.7 | 87.3 | 73.4 | 96.3 |
| 15-Aug | 89.9 | 92.4 | 91.2 | 93.7 | 95.9 | 97.2 | 93.9 | 85.0 | 76.4 | 70.8 | 59.1 | 42.9 | 42.0 | 38.1 | 35.2 | 35.5 | 36.9 | 36.8 | 38.8 | 42.3 | 46.1 | 49.3 | 54.6 | 57.9 | 62.6 | 97.2 |
| 16-Aug | 59.2 | 62.8 | 66.9 | 68.0 | 75.5 | 81.6 | 84.5 | 87.5 | 85.7 | 77.8 | 62.1 | 55.0 | 47.1 | 43.2 | 42.9 | 41.2 | 41.1 | 49.2 | 57.8 | 60.3 | 70.5 | 73.7 | 75.7 | 80.9 | 64.6 | 87.5 |
| 17-Aug | 82.7 | 89.6 | 92.8 | 96.1 | 87.9 | 92.4 | 92.1 | 85.9 | 77.5 | 68.3 | 63.9 | 61.9 | 54.3 | 47.9 | 46.7 | 45.7 | 44.2 | 41.5 | 40.6 | 40.4 | 44.1 | 51.2 | 67.0 | 67.9 | 65.9 | 96.1 |
| 18-Aug | 68.2 | 71.4 | 74.3 | 75.6 | 75.9 | 78.6 | 77.1 | 73.5 | 73.8 | 70.5 | 67.0 | 56.0 | 44.8 | 37.3 | 34.5 | 33.5 | 38.6 | 41.7 | 45.7 | 51.0 | 53.7 | 55.8 | 61.1 | 67.6 | 59.5 | 78.6 |
| 19-Aug | 72.8 | 77.4 | 82.0 | 84.8 | 87.3 | 91.3 | 87.9 | 81.1 | 77.3 | 66.8 | 53.4 | 48.9 | 47.5 | 43.3 | 39.5 | 46.5 | 57.1 | 55.1 | 55.2 | 61.8 | 67.6 | 73.2 | 77.6 | 77.7 | 67.2 | 91.3 |
| 20-Aug | 77.4 | 84.2 | 93.5 | 96.4 | 98.2 | 95.3 | 94.5 | 93.9 | 90.8 | 81.3 | 66.4 | 56.8 | 50.5 | 47.7 | 46.4 | 44.6 | 43.3 | 43.8 | 43.2 | 44.8 | 53.9 | 70.4 | 80.9 | 86.1 | 70.2 | 98.2 |
| 21-Aug | 82.2 | 88.7 | 94.7 | 95.6 | 95.5 | 97.6 | 94.8 | 85.8 | 77.3 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 97.6 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 62.0 | 57.8 | 62.2 | 42.4 | 33.7 | 32.2 | 31.7 | 29.4 | 27.9 | 31.8 | 30.2 | 29.5 | 32.7 | 37.3 | 43.6 | 57.8 | 74.9 | 86.1 | 44.6 | 86.1 |
| 25-Aug | 82.3 | 88.3 | 92.0 | 95.6 | 98.3 | 99.3 | 93.9 | 83.1 | 74.0 | 70.0 | 65.0 | 58.8 | 53.9 | 48.1 | 43.4 | 40.7 | 38.0 | 43.0 | 50.2 | 54.0 | 58.3 | 62.9 | 69.6 | 72.4 | 68.1 | 99.3 |
| 26-Aug | 82.2 | 78.1 | 81.3 | 89.7 | 94.5 | 95.1 | 89.3 | 81.9 | 71.7 | 59.9 | 52.8 | 43.4 | 37.2 | 34.3 | 31.6 | 32.1 | 31.3 | 33.2 | 37.4 | 41.3 | 46.5 | 49.6 | 55.0 | 59.0 | 58.7 | 95.1 |
| 27-Aug | 65.9 | 72.1 | 74.2 | 75.6 | 75.5 | 78.9 | 78.0 | 71.5 | 65.9 | 59.3 | 51.1 | 44.5 | 43.8 | 45.1 | 41.7 | 44.0 | 41.8 | 44.4 | 44.7 | 43.5 | PF | PF | PF | PF | 58.1 | 78.9 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 79.9 | 84.0 | 86.1 | 87.8 | 88.3 | 88.8 | 85.7 | 82.1 | 78.4 | 71.7 | 64.1 | 57.1 | 51.8 | 46.9 | 45.6 | 47.4 | 48.5 | 51.0 | 54.3 | 58.2 | 63.8 | 69.8 | 74.8 | 77.9 | Diurnal Average | |
| | 95.1 | 98.1 | 96.7 | 96.4 | 98.3 | 99.3 | 94.8 | 96.0 | 95.1 | 96.3 | 93.6 | 87.9 | 82.8 | 72.0 | 68.9 | 85.1 | 82.8 | 89.9 | 93.2 | 94.6 | 93.6 | 91.5 | 92.2 | 92.1 | Diurnal Maximum | |

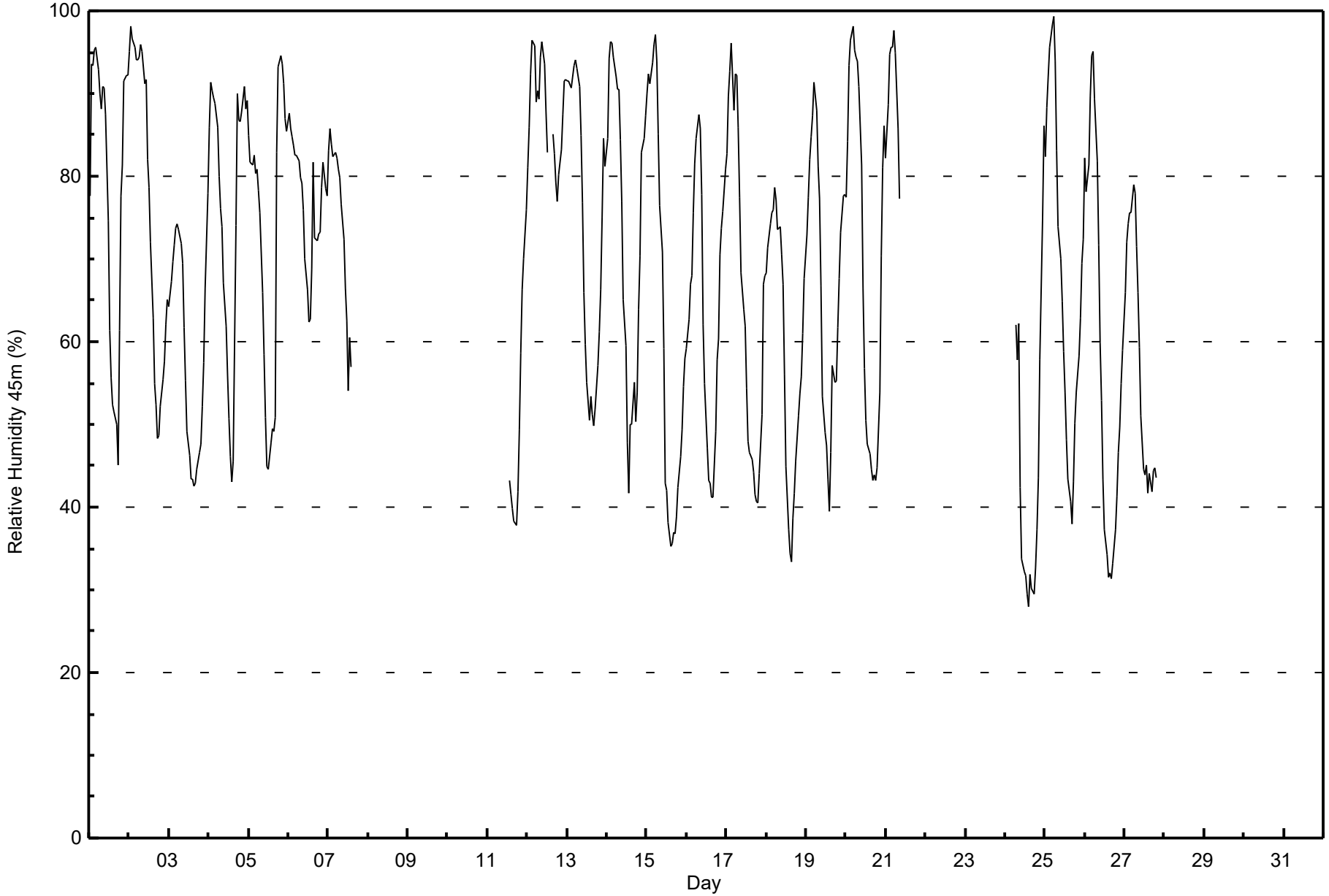
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 45m (RH45) - %**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 32 | 6.68 | 6.68 |
| 40 - 60 | 144 | 30.06 | 36.74 |
| 60 - 80 | 129 | 26.93 | 63.67 |
| 80 - 100 | 174 | 36.33 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 100m (RH100) - %

## Lower Camp Met Tower - August 2026

Maximum Value: 98.1 % on Aug 2 02:00

Maximum Daily Average: 84.7 % on Aug 12

Minimum Value: 27.8 % on Aug 24 15:00

Minimum Daily Average: 39.9 % on Aug 24

Maximum Diurnal Average: 84.0 % at hour 6

Minimum Diurnal Average: 46.4 % at hour 15

Monthly Average: 66.11 %

Percentiles: $P_1$ = 31.8 $P_{10}$ = 42.4 $Q_1$ = 50.7 Median = 68.4 $Q_3$ = 81.5 $P_{90}$ = 88.6 $P_{99}$ = 96.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 72.7 | 82.2 | 83.7 | 89.7 | 90.5 | 89.0 | 87.2 | 85.0 | 87.9 | 87.8 | 87.0 | 75.4 | 63.1 | 57.0 | 53.8 | 53.0 | 51.0 | 44.2 | 52.7 | 70.8 | 82.1 | 89.8 | 92.2 | 92.9 | 75.9 | 92.9 |
| 2-Aug | 95.1 | 98.1 | 97.3 | 96.7 | 95.5 | 95.1 | 95.6 | 97.0 | 95.9 | 92.4 | 92.6 | 83.3 | 79.8 | 73.3 | 64.2 | 56.1 | 53.3 | 49.2 | 49.2 | 53.0 | 56.4 | 58.1 | 62.2 | 65.2 | 77.3 | 98.1 |
| 3-Aug | 65.1 | 67.7 | 69.9 | 71.4 | 73.3 | 75.0 | 75.2 | 73.8 | 72.1 | 63.4 | 56.2 | 50.8 | 47.8 | 44.7 | 43.6 | 43.5 | 44.1 | 45.7 | 47.5 | 48.1 | 49.7 | 51.2 | 56.1 | 64.7 | 58.4 | 75.2 |
| 4-Aug | 69.0 | 76.4 | 84.6 | 84.6 | 88.0 | 83.2 | 75.8 | 73.3 | 68.7 | 64.6 | 59.6 | 58.4 | 52.9 | 48.2 | 44.6 | 47.2 | 72.3 | 89.3 | 83.6 | 84.3 | 86.6 | 89.8 | 85.5 | 87.4 | 73.2 | 89.8 |
| 5-Aug | 81.5 | 80.1 | 81.2 | 82.9 | 80.3 | 81.7 | 79.2 | 77.4 | 67.6 | 60.4 | 52.4 | 46.4 | 45.8 | 48.8 | 50.9 | 49.4 | 50.8 | 82.0 | 92.1 | 94.0 | 92.7 | 90.8 | 86.7 | 85.1 | 72.5 | 94.0 |
| 6-Aug | 86.8 | 85.7 | 85.1 | 84.7 | 83.7 | 83.9 | 83.4 | 81.8 | 81.0 | 78.3 | 72.4 | 68.8 | 63.9 | 64.3 | 68.7 | 78.4 | 72.8 | 71.6 | 70.9 | 72.3 | 78.3 | 80.0 | 73.1 | 76.9 | 76.9 | 86.8 |
| 7-Aug | 82.2 | 84.8 | 84.8 | 83.3 | 84.6 | 82.9 | 81.3 | 81.0 | 77.9 | 73.6 | 68.9 | 64.4 | 55.7 | 60.9 | 57.9 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 84.8 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 43.8 | 42.2 | 40.5 | 38.8 | 37.9 | 42.2 | 50.0 | 59.3 | 63.8 | 68.1 | 73.2 | -- | 73.2 |
| 12-Aug | 78.4 | 78.2 | 80.1 | 85.7 | 86.8 | 83.1 | 85.5 | 89.3 | 94.7 | 97.3 | 94.8 | 89.2 | 84.6 | DF | DF | 82.8 | 80.7 | 78.3 | 75.3 | 78.2 | 82.0 | 82.9 | 87.2 | 89.0 | 84.7 | 97.3 |
| 13-Aug | 91.3 | 91.6 | 92.0 | 93.6 | 95.2 | 95.6 | 94.7 | 92.8 | 86.7 | 78.8 | 67.4 | 60.9 | 56.4 | 51.5 | 54.4 | 52.4 | 50.2 | 53.3 | 57.8 | 57.3 | 65.1 | 69.4 | 69.0 | 75.6 | 73.0 | 95.6 |
| 14-Aug | 72.7 | 72.0 | 74.9 | 78.0 | 82.3 | 88.6 | 89.2 | 88.8 | 86.6 | 78.7 | 63.6 | 57.9 | 48.8 | 42.3 | 50.2 | 48.7 | 56.2 | 51.4 | 54.0 | 60.1 | 65.0 | 77.3 | 77.0 | 81.7 | 68.6 | 89.2 |
| 15-Aug | 78.8 | 78.0 | 79.8 | 81.7 | 86.5 | 86.6 | 86.2 | 81.5 | 73.6 | 67.8 | 59.8 | 44.2 | 43.6 | 39.5 | 36.5 | 36.8 | 38.1 | 37.7 | 39.8 | 41.3 | 42.2 | 45.9 | 52.3 | 52.7 | 58.8 | 86.6 |
| 16-Aug | 54.8 | 60.5 | 66.0 | 66.1 | 71.3 | 75.3 | 79.8 | 87.5 | 87.3 | 79.6 | 63.8 | 56.2 | 48.2 | 44.5 | 43.8 | 42.5 | 41.5 | 49.1 | 59.1 | 61.6 | 62.7 | 61.5 | 62.6 | 69.2 | 62.3 | 87.5 |
| 17-Aug | 71.1 | 75.0 | 81.0 | 84.4 | 88.6 | 89.5 | 88.6 | 82.8 | 77.9 | 70.6 | 66.3 | 62.1 | 53.5 | 47.7 | 46.6 | 45.8 | 45.1 | 42.6 | 41.1 | 37.8 | 36.0 | 41.1 | 58.4 | 66.7 | 62.5 | 89.5 |
| 18-Aug | 65.8 | 67.8 | 70.1 | 74.1 | 72.9 | 73.9 | 75.2 | 73.6 | 75.1 | 71.9 | 68.7 | 57.0 | 46.3 | 38.6 | 35.8 | 34.3 | 39.7 | 42.7 | 45.8 | 48.1 | 49.5 | 52.8 | 60.6 | 68.5 | 58.7 | 75.2 |
| 19-Aug | 72.2 | 73.8 | 74.5 | 77.5 | 83.2 | 78.3 | 81.3 | 79.6 | 78.1 | 67.7 | 54.3 | 50.3 | 47.6 | 43.7 | 40.1 | 45.2 | 54.8 | 53.4 | 55.4 | 62.3 | 68.8 | 72.4 | 73.4 | 72.8 | 65.0 | 83.2 |
| 20-Aug | 67.8 | 81.0 | 87.4 | 88.9 | 87.9 | 87.0 | 91.2 | 89.2 | 92.7 | 86.9 | 68.4 | 58.1 | 51.8 | 49.3 | 47.8 | 45.7 | 43.8 | 44.4 | 43.1 | 43.1 | 45.1 | 50.5 | 59.0 | 60.9 | 65.5 | 92.7 |
| 21-Aug | 68.6 | 76.2 | 81.5 | 83.5 | 84.4 | 87.8 | 89.0 | 83.3 | 73.5 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 89.0 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 57.3 | 53.8 | 55.8 | 42.3 | 34.0 | 32.9 | 31.8 | 29.8 | 27.8 | 31.7 | 29.8 | 29.5 | 32.5 | 36.3 | 41.0 | 42.1 | 52.0 | 57.8 | 39.9 | 57.8 |
| 25-Aug | 64.4 | 65.2 | 73.8 | 71.4 | 76.4 | 79.2 | 80.9 | 85.5 | 74.7 | 71.8 | 66.4 | 59.0 | 54.3 | 48.5 | 43.6 | 40.8 | 38.4 | 44.0 | 51.3 | 54.6 | 56.9 | 60.8 | 59.1 | 64.7 | 61.9 | 85.5 |
| 26-Aug | 65.7 | 69.7 | 70.1 | 76.1 | 82.8 | 90.6 | 85.9 | 79.6 | 70.7 | 59.7 | 54.3 | 44.4 | 38.5 | 35.5 | 32.7 | 33.1 | 32.3 | 33.7 | 37.3 | 40.2 | 43.4 | 42.8 | 45.6 | 49.7 | 54.8 | 90.6 |
| 27-Aug | 56.3 | 60.3 | 64.7 | 64.7 | 71.6 | 74.4 | 69.4 | 70.1 | 66.7 | 60.7 | 52.1 | 45.6 | 45.3 | 45.9 | 43.0 | 44.1 | 38.9 | 42.5 | 45.0 | 43.8 | PF | PF | PF | PF | 55.3 | 74.4 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 73.0 | 76.2 | 79.1 | 80.9 | 83.3 | 84.0 | 82.5 | 81.3 | 78.3 | 72.7 | 65.1 | 58.3 | 53.0 | 47.9 | 46.4 | 47.6 | 48.6 | 51.1 | 53.8 | 56.9 | 61.2 | 64.4 | 67.4 | 71.3 | Diurnal Average | |
| | 95.1 | 98.1 | 97.3 | 96.7 | 95.5 | 95.6 | 95.6 | 97.0 | 95.9 | 97.3 | 94.8 | 89.2 | 84.6 | 73.3 | 68.7 | 82.8 | 80.7 | 89.3 | 92.1 | 94.0 | 92.7 | 90.8 | 92.2 | 92.9 | Diurnal Maximum | |

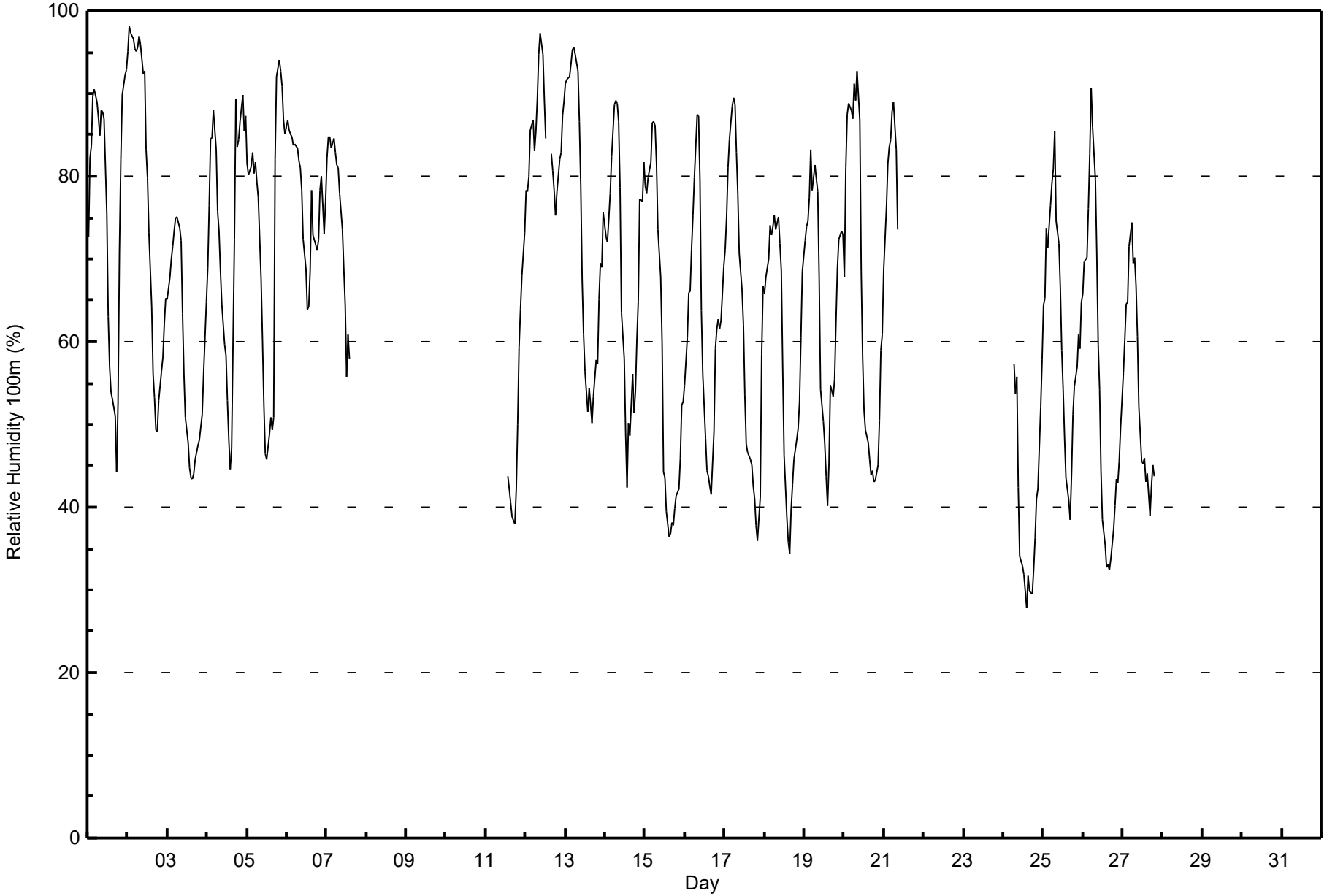
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 100m (RH100) - %**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 33 | 6.89 | 6.89 |
| 40 - 60 | 153 | 31.94 | 38.83 |
| 60 - 80 | 158 | 32.99 | 71.82 |
| 80 - 100 | 135 | 28.18 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 163m (RH163) - %

## Lower Camp Met Tower - August 2026

Maximum Value: 97.6 % on Aug 2 03:00

Maximum Daily Average: 80.8 % on Aug 12

Minimum Value: 27.5 % on Aug 24 15:00

Minimum Daily Average: 37.6 % on Aug 24

Maximum Diurnal Average: 79.3 % at hour 6

Minimum Diurnal Average: 46.4 % at hour 15

Monthly Average: 63.46 %

Percentiles: $P_1$ = 31.4 $P_{10}$ = 40.8 $Q_1$ = 48.7 Median = 64.5 $Q_3$ = 77.3 $P_{90}$ = 84.4 $P_{99}$ = 96.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 69.9 | 74.4 | 77.9 | 79.6 | 82.2 | 84.8 | 83.3 | 83.7 | 83.8 | 76.9 | 80.9 | 74.0 | 63.0 | 57.3 | 54.0 | 53.3 | 50.9 | 43.3 | 48.7 | 61.7 | 79.2 | 86.4 | 91.5 | 92.7 | 72.2 | 92.7 |
| 2-Aug | 93.8 | 96.7 | 97.6 | 97.3 | 96.4 | 96.2 | 96.6 | 97.0 | 96.1 | 93.0 | 93.1 | 84.0 | 80.2 | 73.6 | 64.5 | 56.1 | 53.1 | 49.0 | 48.7 | 52.6 | 56.2 | 57.8 | 61.6 | 64.5 | 77.3 | 97.6 |
| 3-Aug | 64.9 | 67.1 | 69.3 | 70.3 | 71.3 | 74.6 | 75.1 | 74.5 | 73.1 | 64.7 | 56.6 | 51.2 | 48.1 | 45.4 | 43.7 | 43.5 | 44.0 | 45.5 | 47.4 | 48.1 | 49.3 | 49.4 | 52.3 | 56.0 | 57.7 | 75.1 |
| 4-Aug | 60.6 | 67.6 | 72.5 | 75.0 | 72.7 | 72.4 | 72.5 | 72.0 | 67.1 | 63.1 | 58.8 | 59.1 | 53.5 | 48.7 | 44.9 | 47.5 | 66.7 | 77.6 | 78.4 | 81.7 | 84.3 | 88.9 | 83.5 | 83.6 | 68.9 | 88.9 |
| 5-Aug | 77.1 | 77.9 | 80.5 | 82.4 | 78.4 | 80.1 | 78.3 | 77.9 | 68.1 | 60.8 | 52.6 | 46.6 | 45.8 | 48.8 | 51.1 | 48.8 | 50.2 | 79.4 | 90.6 | 92.8 | 91.2 | 90.2 | 85.2 | 83.6 | 71.6 | 92.8 |
| 6-Aug | 84.5 | 84.5 | 84.4 | 84.3 | 83.6 | 84.1 | 83.6 | 82.4 | 81.8 | 79.3 | 73.4 | 69.9 | 64.3 | 65.5 | 68.7 | 71.3 | 71.5 | 70.2 | 68.5 | 71.7 | 77.2 | 76.0 | 67.0 | 75.7 | 76.0 | 84.5 |
| 7-Aug | 81.2 | 83.5 | 84.0 | 82.9 | 85.0 | 82.9 | 81.9 | 81.6 | 77.9 | 73.2 | 69.7 | 64.4 | 56.0 | 59.6 | 57.7 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 85.0 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 43.8 | 42.1 | 40.2 | 38.6 | 37.7 | 42.0 | 50.0 | 59.9 | 60.3 | 62.9 | 70.9 | -- | 70.9 |
| 12-Aug | 72.2 | 73.9 | 71.1 | 74.5 | 77.2 | 79.1 | 81.8 | 90.3 | 94.4 | 97.3 | 95.0 | 89.9 | 85.4 | DF | DF | 80.5 | 77.3 | 74.0 | 73.8 | 73.4 | 75.9 | 75.1 | 80.3 | 85.7 | 80.8 | 97.3 |
| 13-Aug | 88.5 | 88.8 | 91.9 | 93.6 | 95.5 | 96.4 | 95.8 | 93.7 | 88.0 | 79.5 | 68.3 | 61.7 | 56.9 | 51.3 | 54.3 | 52.7 | 50.1 | 53.6 | 58.0 | 57.8 | 63.2 | 66.2 | 65.9 | 69.5 | 72.5 | 96.4 |
| 14-Aug | 73.4 | 72.3 | 73.8 | 74.6 | 76.5 | 79.3 | 81.1 | 83.6 | 85.1 | 79.0 | 66.5 | 57.1 | 49.0 | 41.8 | 48.9 | 47.4 | 55.9 | 50.8 | 52.3 | 57.8 | 54.1 | 69.7 | 68.1 | 65.1 | 65.1 | 85.1 |
| 15-Aug | 65.9 | 72.7 | 78.8 | 80.1 | 81.8 | 80.4 | 82.3 | 80.7 | 71.6 | 66.6 | 59.3 | 44.4 | 43.9 | 39.8 | 36.6 | 36.9 | 38.3 | 37.7 | 39.4 | 39.1 | 38.9 | 40.4 | 42.6 | 40.8 | 55.8 | 82.3 |
| 16-Aug | 44.8 | 51.1 | 59.0 | 63.7 | 67.0 | 73.6 | 81.7 | 89.3 | 88.3 | 80.5 | 64.7 | 56.5 | 48.5 | 44.7 | 43.7 | 42.5 | 41.7 | 48.0 | 59.0 | 61.2 | 60.9 | 60.2 | 59.2 | 60.7 | 60.4 | 89.3 |
| 17-Aug | 61.6 | 69.8 | 75.6 | 82.7 | 85.5 | 86.0 | 86.0 | 83.4 | 78.1 | 71.7 | 66.9 | 61.9 | 51.7 | 46.4 | 46.3 | 45.6 | 45.1 | 42.2 | 40.7 | 36.4 | 32.1 | 35.8 | 46.6 | 59.3 | 59.9 | 86.0 |
| 18-Aug | 59.8 | 62.7 | 65.5 | 67.2 | 69.5 | 71.4 | 73.8 | 74.2 | 74.8 | 72.6 | 69.0 | 56.5 | 46.3 | 38.7 | 35.9 | 34.3 | 39.6 | 42.5 | 45.1 | 46.2 | 46.5 | 47.7 | 56.9 | 62.0 | 56.6 | 74.8 |
| 19-Aug | 64.6 | 68.0 | 64.1 | 59.6 | 74.8 | 73.9 | 77.6 | 78.3 | 78.2 | 66.8 | 54.9 | 51.2 | 47.3 | 44.1 | 40.1 | 44.6 | 51.9 | 53.1 | 55.3 | 61.9 | 68.7 | 69.7 | 71.5 | 67.1 | 62.0 | 78.3 |
| 20-Aug | 59.7 | 70.8 | 81.1 | 78.6 | 80.8 | 83.4 | 81.5 | 86.6 | 88.0 | 81.6 | 67.6 | 59.0 | 52.2 | 49.8 | 48.2 | 45.5 | 43.5 | 44.0 | 42.3 | 42.4 | 44.8 | 49.4 | 48.2 | 46.7 | 61.5 | 88.0 |
| 21-Aug | 47.7 | 53.6 | 62.3 | 62.8 | 66.3 | 70.9 | 70.3 | 73.6 | 70.9 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 73.6 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 53.2 | 50.4 | 48.7 | 41.3 | 33.4 | 32.7 | 31.4 | 29.7 | 27.5 | 31.3 | 29.3 | 29.1 | 31.7 | 35.0 | 38.3 | 40.3 | 43.3 | 49.2 | 37.6 | 53.2 |
| 25-Aug | 54.8 | 63.5 | 66.1 | 72.3 | 70.5 | 70.6 | 74.3 | 74.7 | 73.6 | 72.8 | 67.4 | 58.5 | 53.4 | 48.1 | 43.8 | 40.8 | 37.3 | 43.8 | 51.2 | 52.1 | 51.1 | 54.4 | 54.6 | 56.2 | 58.6 | 74.7 |
| 26-Aug | 58.8 | 61.0 | 64.5 | 69.6 | 75.1 | 78.8 | 74.0 | 69.1 | 64.2 | 58.9 | 54.3 | 44.2 | 38.6 | 35.5 | 32.8 | 33.1 | 32.2 | 33.4 | 36.3 | 38.1 | 39.4 | 35.0 | 38.7 | 44.3 | 50.4 | 78.8 |
| 27-Aug | 50.3 | 56.8 | 58.6 | 61.5 | 64.7 | 66.5 | 66.9 | 66.7 | 65.2 | 60.2 | 52.1 | 45.6 | 45.5 | 46.0 | 43.2 | 43.5 | 37.2 | 39.6 | 43.9 | 42.5 | PF | PF | PF | PF | 52.8 | 66.9 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | 66.7 | 70.8 | 73.9 | 75.6 | 77.7 | 79.3 | 78.7 | 79.2 | 77.0 | 72.0 | 65.2 | 58.4 | 53.1 | 47.9 | 46.4 | 47.0 | 47.7 | 49.7 | 52.7 | 55.1 | 58.5 | 60.7 | 62.1 | 64.9 | Diurnal Average | |
| | 93.8 | 96.7 | 97.6 | 97.3 | 96.4 | 96.4 | 96.6 | 97.0 | 96.1 | 97.3 | 95.0 | 89.9 | 85.4 | 73.6 | 68.7 | 80.5 | 77.3 | 79.4 | 90.6 | 92.8 | 91.2 | 90.2 | 91.5 | 92.7 | Diurnal Maximum | |

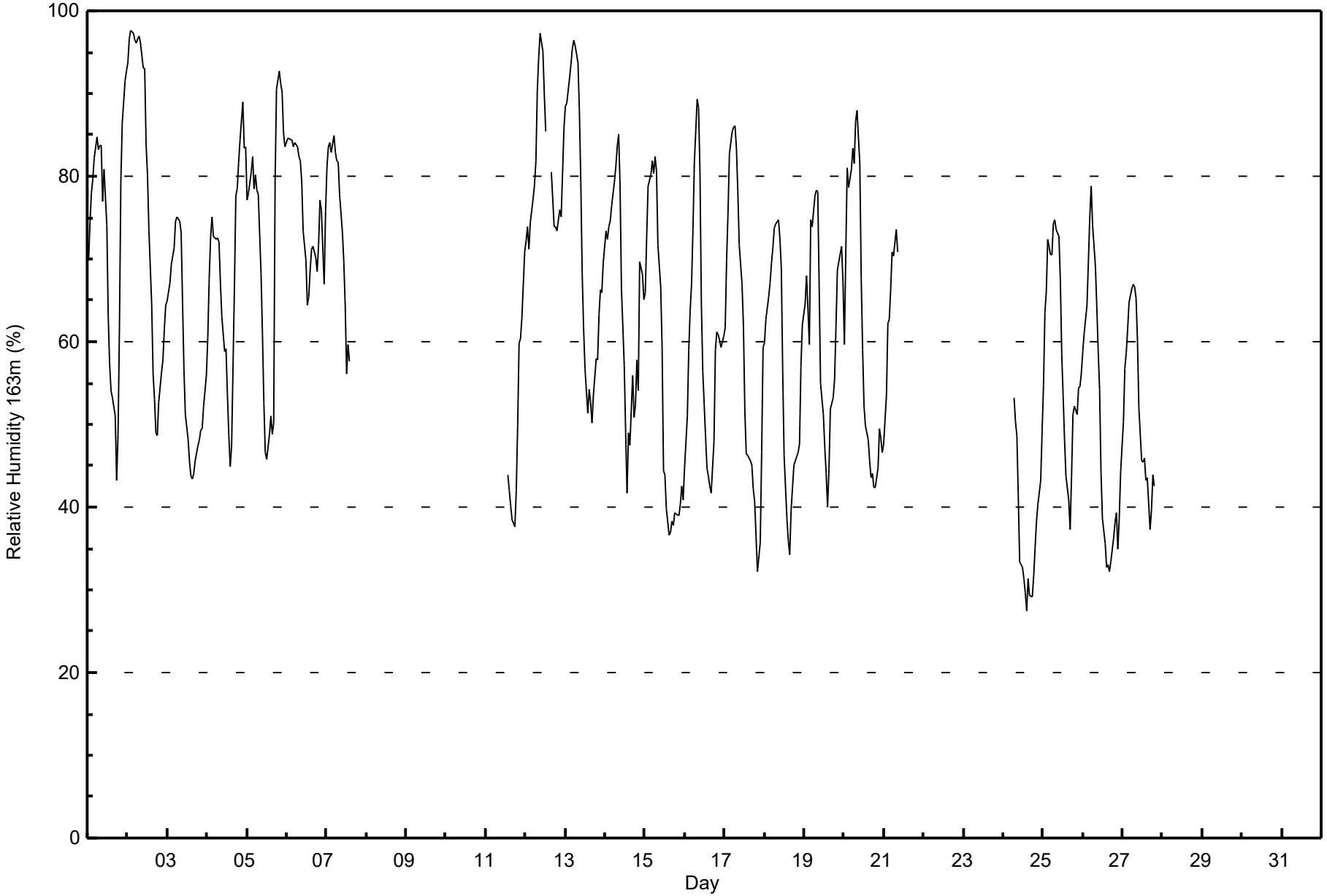
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 163m (RH163) - %**

**Lower Camp Met Tower - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 42 | 8.77 | 8.77 |
| 40 - 60 | 165 | 34.45 | 43.22 |
| 60 - 80 | 176 | 36.74 | 79.96 |
| 80 - 100 | 96 | 20.04 | 100.00 |

Total Number of Valid Hours: 479

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 20m (WS20) - km/h

## Lower Camp Met Tower - August 2026

Maximum Speed: 26 km/h on Aug 2 16:00

Maximum Daily Speed Average: 15.5 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 25 00:00

Minimum Daily Speed Average: 0.8 km/h on Aug 14

Maximum Diurnal Speed Average: 5.3 km/h at hour 12

Minimum Diurnal Speed Average: 0.5 km/h at hour 7

Monthly Average Velocity: 2.1 km/h 328.6 deg

Percentiles: $P_1 = 0$ $P_{10} = 2$ $Q_1 = 4$ Median = 7 $Q_3 = 11$ $P_{90} = 15$ $P_{99} = 21$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Aug | N3 | NE0 | E1 | NNE1 | ESE2 | ESE5 | SE4 | ESE1 | ENE2 | SSE1 | SE2 | NE3 | E5 | ESE11 | ESE11 | ESE11 | ESE10 | SE10 | N7 | NNW7 | NW12 | NNW9 | NW8 | NW7 | ENE2.0 | NW12 |
| 2-Aug | NW9 | NNW11 | NNW11 | NNW13 | N11 | NNW10 | NNW9 | NNW10 | NNW11 | NNW17 | NNW22 | NNW23 | NNW21 | NNW19 | NNW21 | NNW26 | NNW24 | NNW21 | NNW19 | NNW16 | NNW16 | NW13 | NW12 | NW10 | NNW15.5 | NNW26 |
| 3-Aug | NW11 | NW10 | NW9 | NW7 | NNW6 | NW6 | NW5 | NW7 | NW7 | NNW12 | NNW14 | NNW12 | NNW11 | N10 | N9 | N8 | N11 | N9 | NNE6 | NE3 | ESE2 | SE2 | SE1 | ESE1 | NNW6.5 | NNW14 |
| 4-Aug | E2 | ESE4 | ESE5 | ESE6 | SE8 | SE7 | SE11 | SE9 | SE10 | ESE9 | S6 | SW19 | SW21 | WSW20 | SW15 | SW15 | NNW9 | NNE2 | WNW7 | NNW5 | WNW11 | NW11 | NW7 | NNW5 | SW3.2 | SW21 |
| 5-Aug | NW7 | WNW7 | WNW11 | WNW10 | WNW14 | WNW14 | WNW13 | NW11 | NW15 | NW15 | NW14 | NW15 | NW16 | NW14 | NW11 | NW11 | NNW14 | N12 | NW8 | NW10 | NW7 | WNW11 | WNW15 | WNW15 | NW11.6 | NW16 |
| 6-Aug | WNW13 | WNW16 | WNW17 | WNW17 | WNW15 | WNW12 | WNW14 | WNW16 | WNW13 | NW14 | NW11 | NNW8 | NNW8 | NNW8 | NNW10 | NW2 | WSW5 | NW5 | NW7 | NW8 | NW4 | NW6 | NW7 | NW6 | NW9.7 | WNW17 |
| 7-Aug | NNW6 | NW4 | WNW3 | NW4 | NNW4 | NNW4 | NW7 | WNW6 | WNW8 | WNW9 | WNW11 | WNW12 | WNW13 | N8 | N8 | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | WNW13 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | N16 | N16 | N17 | NNW16 | N14 | N12 | N12 | NNW4 | NNW5 | NNW4 | NNW4 | ---- | N17 |
| 12-Aug | NW2 | NNW1 | NW2 | NNW1 | WNW2 | NNW3 | NW3 | NW5 | NW6 | NW7 | NW9 | NNW10 | NNW11 | DF | DF | N5 | N8 | N8 | NW7 | NW4 | NW6 | NW5 | NNW4 | NNW5 | NNW5.0 | NNW11 |
| 13-Aug | NNW7 | NNW7 | NNW7 | NNW4 | NW3 | NW4 | NNW5 | NNW7 | NNW6 | NNW7 | N11 | N10 | N7 | N10 | N13 | NNE8 | NE4 | NE7 | NNE7 | N3 | WNW1 | NNW2 | NW1 | NNW3 | N5.6 | N13 |
| 14-Aug | NNW1 | NNW2 | NNW2 | NW3 | N1 | ENE2 | NNW1 | WNW2 | NNW3 | N5 | NNW5 | WNW5 | E2 | NE1 | E9 | SE1 | SSW7 | S11 | SSW1 | ESE4 | ESE5 | ESE5 | ESE6 | ESE7 | E0.8 | S11 |
| 15-Aug | ESE8 | ESE8 | ESE9 | ESE9 | ESE8 | ESE9 | SE11 | SE10 | SE10 | SE9 | SE5 | SW11 | SW11 | WSW11 | WSW13 | SW13 | SW14 | WSW14 | SW12 | SSW9 | SSW10 | SW13 | WSW11 | WSW9 | SSW6.4 | WSW14 |
| 16-Aug | WSW11 | WSW11 | WSW11 | WNW3 | NNE1 | NW4 | NW4 | NNW5 | NNW13 | NNW18 | NNW16 | N16 | NNW15 | NNW14 | NNW12 | NNW9 | NNW9 | N7 | NNE3 | ENE2 | E1 | ESE2 | ESE1 | ESE3 | NNW6.0 | NNW18 |
| 17-Aug | SE3 | ESE2 | ESE4 | SE2 | SSE2 | SE4 | ESE6 | ESE7 | SE5 | SE3 | WSW4 | N4 | NNE3 | ENE4 | ESE5 | SE7 | SE11 | SSE13 | SSE14 | SSE13 | S13 | SSE9 | ESE7 | ESE5 | SE5.1 | SSE14 |
| 18-Aug | SE11 | SE14 | SE14 | SE14 | SE17 | SE17 | SE10 | SE13 | SE10 | SE13 | SE9 | SW5 | WSW9 | WSW11 | SSW14 | WSW13 | WSW16 | WSW15 | WSW13 | WSW11 | SW9 | SW7 | SSW2 | SSE3 | S6.7 | SE17 |
| 19-Aug | SSW5 | SSE5 | ESE5 | SE6 | ESE7 | ESE10 | SE10 | SE8 | S6 | W6 | NNW7 | NNW8 | NNE4 | N9 | N8 | NNW6 | NNW3 | NNW8 | N10 | N6 | NNW3 | SSE0 | NW1 | NNW6 | NNE1.4 | SE10 |
| 20-Aug | ESE2 | NE1 | NNW3 | NW3 | NE1 | SE2 | NNW2 | NNW1 | NNW4 | N4 | NNW8 | NNW14 | NNW12 | NNW9 | NNW10 | NNW11 | N11 | N10 | N7 | NNE2 | NNW1 | NNW2 | N0 | SSW0 | N4.6 | NNW14 |
| 21-Aug | SE1 | ESE2 | ESE3 | ESE5 | ESE6 | ESE4 | ESE4 | ESE7 | SE7 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | SE7 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 24-Aug | DF | DF | DF | DF | DF | DF | WNW3 | NW2 | N2 | NW8 | NNW12 | NNW11 | NNW11 | NNW11 | NNW13 | N11 | N9 | N10 | N8 | NW3 | SW1 | SW1 | NNW1 | SE0 | NNW6.1 | NNW13 |
| 25-Aug | NNW3 | N2 | NNW2 | NNW2 | N1 | NNW1 | NE0 | N2 | N4 | NNW3 | N3 | NE4 | ENE4 | ENE4 | NE5 | NE4 | NNW6 | NNE6 | N6 | NNW5 | NNW4 | NNE3 | N4 | NNW4 | N3.0 | NNW6 |
| 26-Aug | NW3 | NNW4 | N3 | NNW2 | ENE1 | NE2 | ESE5 | E5 | ESE7 | SE11 | ESE9 | SSE17 | SSE20 | SSE18 | SSE19 | SSE21 | SSE21 | SSE20 | SE16 | SE18 | SE15 | SE15 | SE15 | SE13 | SE10.3 | SSE21 |
| 27-Aug | ESE9 | SE8 | ESE4 | E6 | ESE8 | ESE6 | SE6 | ESE3 | ESE5 | SE7 | SE14 | SE13 | SSE21 | SE12 | SSE19 | SE7 | ESE13 | E11 | ESE9 | SE14 | PF | PF | PF | PF | SE9.2 | SSE21 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| | NW1.6 | WNW1.3 | NW1.3 | N1.1 | ENE0.6 | ENE0.8 | ENE0.5 | N0.7 | N1.6 | NNW3.4 | NNW4.9 | NW5.3 | NW4.1 | NNW4.4 | NNW3.2 | NNW2.8 | NNW3.1 | N2.7 | NNW3.0 | NNW1.3 | WNW2.0 | WNW1.7 | WNW1.9 | NW1.9 | Diurnal Average | |
| | WNW13 | WNW16 | WNW17 | WNW17 | SE17 | SE17 | WNW14 | WNW16 | NW15 | NNW18 | NNW22 | NNW23 | NNW21 | WSW20 | NNW21 | NNW26 | NNW24 | NNW21 | NNW19 | SE18 | NNW16 | SE15 | SE15 | WNW15 | Diurnal Maximum | |

DF - DAS Failure PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 20m (WS20) - km/h

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11 km/h on Aug 2 16:00

Minimum Value: 0 km/h on Aug 21 00:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 3 $Q_3 = 4$ $P_{90} = 6$ $P_{99} = 9$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 9 | 9 | 4 | 5 | 9 |
| 2-Aug | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 7 | 9 | 9 | 10 | 8 | 10 | 11 | 9 | 8 | 9 | 7 | 7 | 5 | 4 | 3 | 11 |
| 3-Aug | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 6 |
| 4-Aug | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 6 | 4 | 5 | 5 | 4 | 4 | 8 | 2 | 4 | 2 | 5 | 4 | 2 | 2 | 8 |
| 5-Aug | 3 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 6 | 7 | 6 | 6 | 6 | 6 | 5 | 4 | 5 | 6 | 3 | 3 | 3 | 5 | 5 | 5 | 7 |
| 6-Aug | 5 | 6 | 6 | 5 | 6 | 5 | 6 | 6 | 5 | 6 | 5 | 3 | 3 | 4 | 4 | 2 | 4 | 4 | 4 | 3 | 1 | 3 | 3 | 2 | 6 |
| 7-Aug | 2 | 1 | 1 | 2 | 2 | 1 | 3 | 2 | 4 | 4 | 5 | 5 | 6 | 3 | 3 | PF | PF | PF | PF | PF | PF | PF | PF | PF | 6 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 7 | 7 | 6 | 5 | 5 | 5 | 5 | 2 | 2 | 2 | 2 | 7 |
| 12-Aug | 1 | 1 | 1 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 5 | 5 | DF | DF | 3 | 4 | 4 | 2 | 1 | 3 | 2 | 1 | 2 | 5 |
| 13-Aug | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 5 | 4 | 3 | 5 | 5 | 5 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 5 |
| 14-Aug | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 4 | 4 | 6 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 6 |
| 15-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 5 | 5 | 5 | 6 | 5 | 6 | 4 | 2 | 2 | 2 | 2 | 3 | 6 |
| 16-Aug | 3 | 4 | 4 | 3 | 1 | 3 | 2 | 2 | 6 | 7 | 6 | 6 | 6 | 6 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 7 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 |
| 18-Aug | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 5 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 4 | 2 | 2 | 6 |
| 19-Aug | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 2 | 3 | 3 | 4 | 2 | 3 | 3 | 2 | 2 | 1 | 3 | 3 | 4 |
| 20-Aug | 3 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 0 | 5 |
| 21-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 3 | 2 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 3 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 1 | 1 | 1 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 5 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 3 | 1 | 2 | 2 | 1 | 1 | 3 |
| 26-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 5 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 5 |
| 27-Aug | 2 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 6 | 6 | 4 | 5 | 3 | 4 | 4 | 5 | 5 | PF | PF | PF | PF | 6 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 5 | 6 | 6 | 5 | 6 | 5 | 6 | 6 | 6 | 7 | 9 | 9 | 10 | 8 | 10 | 11 | 9 | 8 | 9 | 7 | 9 | 9 | 5 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

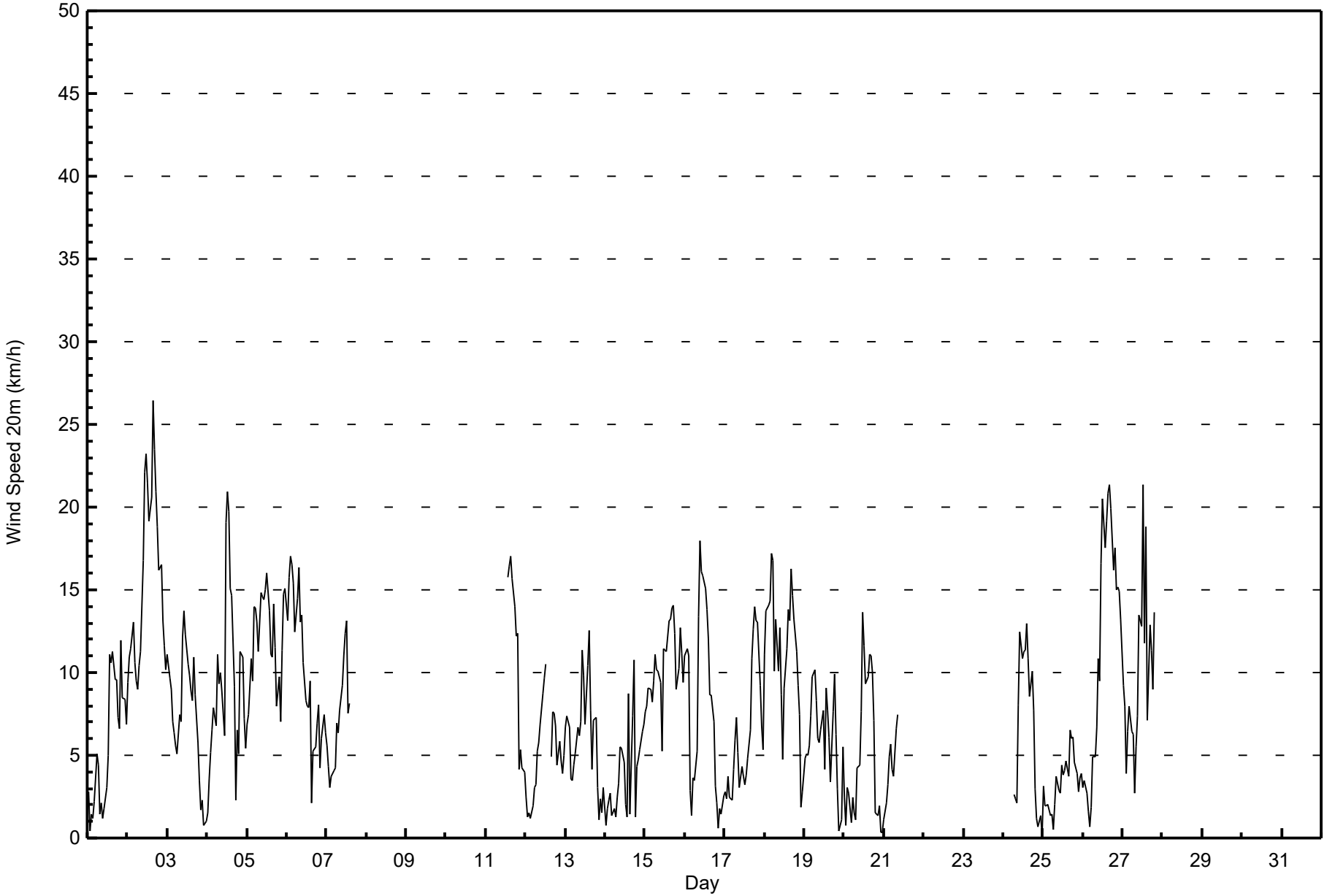
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 20m (WS20) - km/h**

**Lower Camp Met Tower - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 178 | 37.16 | 37.16 |
| 6 - 11 | 191 | 39.87 | 77.04 |
| 12 - 19 | 96 | 20.04 | 97.08 |
| 20 - 28 | 14 | 2.92 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 479

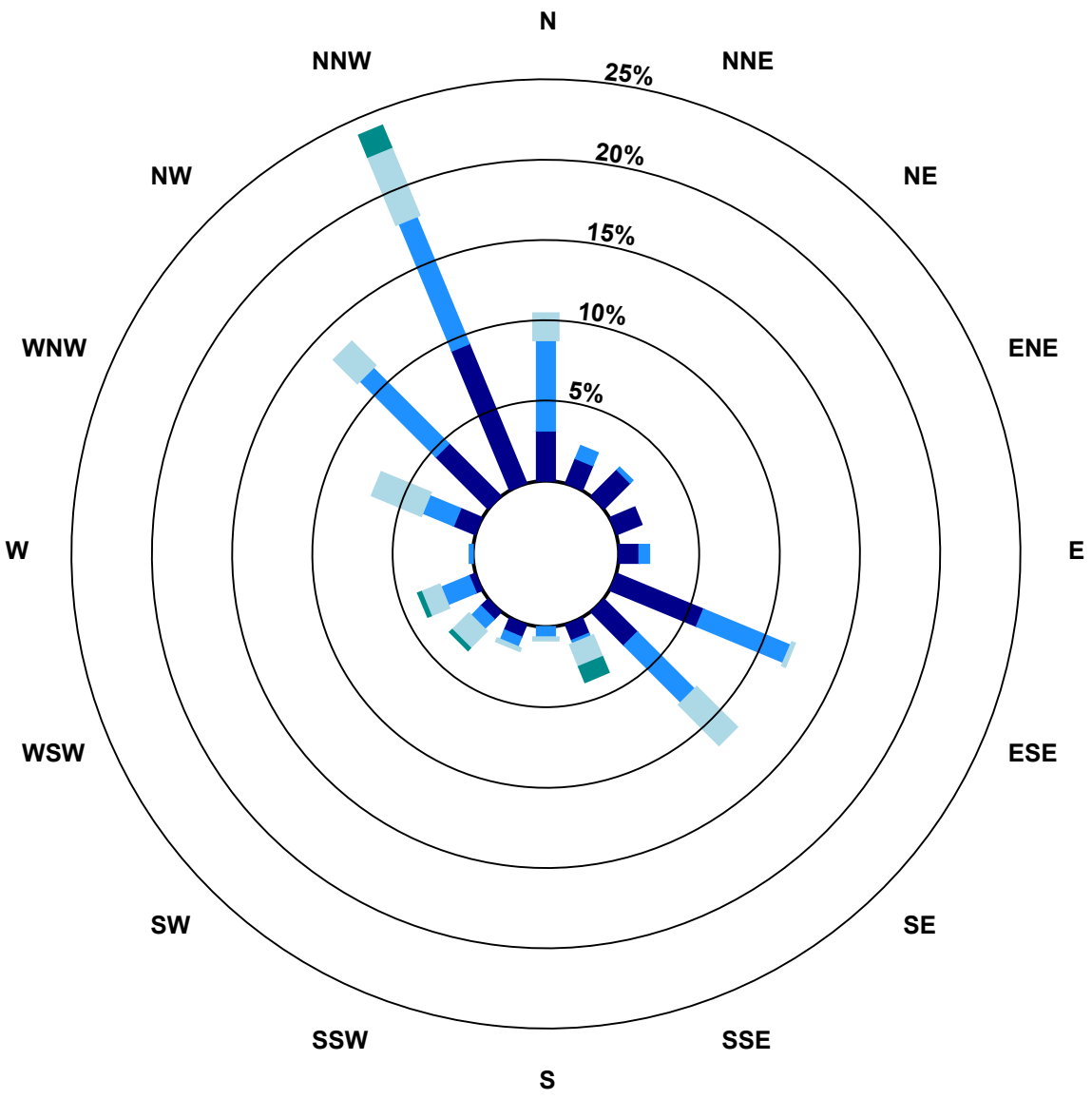
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

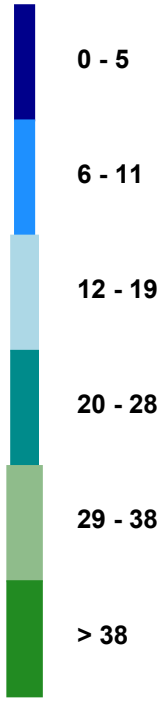
**Wind Rose Aug 2026**

**Wind Speed 20m (WS20) - km/h**

**Lower Camp Met Tower**




**Classes (km/h)**




**Total Number of Valid Hours: 479**

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 45m (WS45) - km/h

## Lower Camp Met Tower - August 2026

Maximum Speed: 41 km/h on Aug 2 16:00

Maximum Daily Speed Average: 24.7 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 20 05:00

Minimum Daily Speed Average: 1.2 km/h on Aug 14

Maximum Diurnal Speed Average: 7.9 km/h at hour 12

Minimum Diurnal Speed Average: 0.3 km/h at hour 6

Monthly Average Velocity: 3.6 km/h 326.9 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 3 $Q_1$ = 6 Median = 11 $Q_3$ = 17 $P_{90}$ = 21 $P_{99}$ = 34

Hours in Service: 744

Hours of Data: 479

Hours of Missing Data: 265

Percent Operational Time: 64.4

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Aug | W2 | N2 | SE4 | SE3 | SE4 | SE8 | SE6 | SE3 | ENE3 | ESE2 | SE3 | ENE4 | E7 | ESE18 | ESE16 | ESE18 | ESE16 | ESE16 | NNW10 | NNW13 | NNW20 | NNW14 | NW13 | NW11 | ENE3.4 | NNW20 |
| 2-Aug | NW15 | NNW17 | NNW19 | NNW20 | N17 | NNW16 | N14 | N16 | NNW19 | NNW27 | NNW35 | NNW34 | NNW33 | NNW32 | NNW34 | NNW41 | NNW36 | NNW34 | NNW30 | NNW28 | NNW27 | NW21 | NW19 | NW17 | NNW24.7 | NNW41 |
| 3-Aug | NW18 | NW15 | NW14 | NW12 | NW12 | NW10 | NW8 | NW10 | NW10 | NW18 | NNW20 | NW19 | NW15 | NNW12 | N12 | N11 | N14 | N12 | NNE10 | NE8 | E4 | SE6 | ESE6 | SE3 | NNW9.3 | NNW20 |
| 4-Aug | SE3 | SE4 | ESE7 | SE8 | SE10 | SE10 | SE14 | SE12 | SE13 | SE12 | S8 | SW22 | SW25 | WSW23 | SW18 | SW17 | NNW15 | NNE4 | WNW12 | NW9 | WNW18 | NW18 | NW13 | NW10 | SW4.2 | SW25 |
| 5-Aug | NW12 | WNW13 | WNW18 | WNW16 | WNW23 | WNW21 | WNW19 | NW17 | NW22 | NW22 | NW21 | NW22 | NW25 | NW22 | NW16 | NW17 | N23 | N19 | NW13 | NW16 | NW11 | WNW19 | WNW23 | WNW23 | NW18.0 | NW25 |
| 6-Aug | WNW21 | WNW25 | WNW27 | WNW24 | WNW23 | WNW18 | WNW21 | WNW23 | WNW19 | NW20 | NW17 | NW12 | NNW12 | NNW11 | NNW14 | WNW3 | WSW8 | NW10 | NW12 | NW13 | NW8 | NW11 | WNW13 | NW11 | WNW15.0 | WNW27 |
| 7-Aug | NNW11 | NW8 | WNW5 | WNW6 | NW5 | NW7 | WNW11 | WNW10 | WNW13 | WNW13 | WNW16 | WNW18 | WNW18 | N12 | N11 | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | WNW18 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | N24 | N24 | N26 | N25 | N21 | N20 | N19 | NW8 | N10 | NNW9 | NNW9 | ---- | N26 |
| 12-Aug | NW6 | NNW3 | WNW2 | NW1 | NW3 | NNW6 | NNW5 | NW10 | NW9 | NW11 | NW13 | NNW14 | NNW16 | DF | DF | N9 | N13 | N12 | NW10 | NNW11 | NNW13 | NNW10 | NNW9 | NNW11 | NNW8.7 | NNW16 |
| 13-Aug | NNW11 | NNW12 | NNW12 | NNW7 | NNW8 | NNW8 | NNW8 | NNW10 | NNW9 | NNW9 | N16 | N14 | N10 | N15 | N18 | NNE12 | NE7 | NE12 | NNE13 | NNE7 | NNW2 | NNW4 | NNW3 | NW5 | N8.9 | N18 |
| 14-Aug | NW3 | NNW2 | N3 | NNW3 | N2 | NE1 | NNW2 | WNW3 | NNW4 | N6 | NNW6 | WNW6 | ENE2 | NE1 | E14 | ESE3 | SW8 | S11 | SSW3 | SE5 | SE7 | ESE9 | SE10 | SE9 | ESE1.2 | E14 |
| 15-Aug | SE11 | SE11 | SE11 | SE12 | SE12 | SE13 | SE14 | SE10 | SE9 | ESE10 | SE6 | SW13 | SW13 | WSW14 | WSW16 | SW15 | SW17 | WSW19 | SW15 | SSW12 | SSW15 | SW17 | WSW16 | WSW15 | SSW8.8 | WSW19 |
| 16-Aug | WSW18 | WSW18 | WSW17 | WNW5 | N2 | NW6 | NNW7 | NNW9 | N20 | N27 | NNW24 | N23 | NNW22 | NNW19 | NNW17 | NNW12 | NNW12 | N13 | NNE6 | ENE3 | SE1 | S2 | SE3 | SE5 | NNW8.7 | N27 |
| 17-Aug | SE5 | SE4 | SE6 | SSE4 | S4 | SSE5 | SE6 | SE8 | SE5 | S3 | W6 | N4 | N3 | ENE4 | ESE6 | ESE9 | SE14 | SSE15 | SSE17 | S18 | S19 | SSE15 | SE12 | ESE8 | SE6.8 | S19 |
| 18-Aug | SE14 | SE17 | SE19 | SE19 | SE22 | SE21 | SE14 | SE17 | SE14 | SE16 | SE11 | SW6 | WSW11 | WSW14 | SSW15 | WSW17 | WSW23 | WSW22 | WSW19 | WSW16 | SW15 | SW13 | SW6 | SSW4 | S9.1 | WSW23 |
| 19-Aug | SW7 | S6 | SE7 | SE7 | SE8 | SE14 | SE13 | SSE8 | SSW9 | W9 | NNW8 | NNW11 | N5 | NNW13 | NNW10 | NNW10 | NW6 | NNW15 | N16 | N11 | N6 | SW0 | WNW1 | NW10 | NNW2.3 | N16 |
| 20-Aug | SSE3 | SW2 | NNW3 | NNW3 | NW0 | SE4 | E1 | N2 | NNW5 | NNW5 | NNW9 | NNW18 | NNW16 | NNW12 | NNW13 | NNW16 | N16 | N15 | N11 | NNE4 | N2 | NW5 | NNW1 | SSE1 | N6.1 | NNW18 |
| 21-Aug | SE4 | SE6 | SE6 | SE8 | SE10 | SE7 | SE6 | ESE9 | ESE9 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | SE10 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 24-Aug | DF | DF | DF | DF | DF | DF | NW6 | WNW5 | NNW3 | NW12 | NW19 | NNW16 | NNW16 | NNW16 | NNW19 | N16 | N13 | N16 | N12 | NNW6 | W3 | WSW3 | WNW3 | NW1 | NNW9.5 | NNW19 |
| 25-Aug | NW4 | NW4 | NNW3 | NW3 | NW3 | NW2 | N1 | NNW2 | NNW4 | NW3 | NNW3 | NE5 | ENE4 | ENE4 | NE5 | NNE4 | NNW8 | NNE10 | NNE10 | NNW8 | N7 | ENE4 | NE3 | NNW3 | N3.7 | NNE10 |
| 26-Aug | NW2 | NNW4 | NNW4 | NNW3 | ESE2 | ESE3 | ESE7 | ESE7 | ESE9 | SE15 | ESE14 | SSE20 | SSE23 | SSE20 | SSE21 | SSE24 | SSE24 | SSE23 | SSE20 | SSE22 | SE20 | SE21 | SE21 | SE19 | SE13.0 | SSE24 |
| 27-Aug | SE14 | SE13 | SE8 | ESE10 | ESE12 | ESE10 | SE10 | ESE4 | ESE8 | ESE11 | SE18 | SE17 | SSE23 | SE15 | SSE21 | SE11 | ESE22 | E20 | ESE16 | ESE21 | PF | PF | PF | PF | SE13.5 | SSE23 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| | WNW2.9 | WNW2.5 | WNW2.1 | NW1.3 | NNW0.4 | E0.3 | N0.3 | NNW1.6 | NNW3.0 | NNW5.3 | NNW7.4 | NW7.9 | NW6.5 | NNW6.7 | NNW5.4 | NNW4.8 | NNW5.3 | N5.4 | NNW5.3 | NNW3.2 | WNW3.8 | WNW3.2 | WNW3.1 | WNW3.5 | Diurnal Average | |
| | WNW21 | WNW25 | WNW27 | WNW24 | WNW23 | SE21 | WNW21 | WNW23 | NW22 | NNW27 | NNW35 | NNW34 | NNW33 | NNW32 | NNW34 | NNW41 | NNW36 | NNW34 | NNW30 | NNW28 | NNW27 | SE21 | WNW23 | WNW23 | Diurnal Maximum | |

DF - DAS Failure PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12 km/h on Aug 1 22:00

Minimum Value: 1 km/h on Aug 25 04:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 3 $Q_3$ = 5 $P_{90}$ = 6 $P_{99}$ = 10

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 4 | 6 | 5 | 4 | 5 | 5 | 4 | 7 | 11 | 12 | 4 | 6 | 12 |
| 2-Aug | 6 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 6 | 8 | 9 | 10 | 8 | 10 | 10 | 9 | 8 | 9 | 7 | 8 | 6 | 4 | 3 | 10 |
| 3-Aug | 4 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 5 | 7 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 7 |
| 4-Aug | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 6 | 4 | 4 | 4 | 3 | 3 | 11 | 3 | 4 | 3 | 6 | 5 | 2 | 2 | 11 |
| 5-Aug | 3 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 6 | 7 | 6 | 6 | 6 | 6 | 5 | 4 | 6 | 8 | 3 | 3 | 3 | 5 | 5 | 5 | 8 |
| 6-Aug | 5 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 6 | 5 | 4 | 4 | 4 | 6 | 2 | 4 | 5 | 5 | 4 | 2 | 4 | 4 | 3 | 6 |
| 7-Aug | 2 | 2 | 1 | 4 | 1 | 2 | 3 | 2 | 5 | 4 | 5 | 5 | 6 | 3 | 3 | PF | PF | PF | PF | PF | PF | PF | PF | PF | 6 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 7 | 8 | 6 | 5 | 6 | 5 | 5 | 2 | 2 | 3 | 3 | 8 |
| 12-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 5 | 5 | DF | DF | 4 | 5 | 5 | 2 | 2 | 3 | 2 | 2 | 2 | 5 |
| 13-Aug | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 4 | 4 | 5 | 6 | 5 | 6 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 6 |
| 14-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 6 | 4 | 6 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 6 |
| 15-Aug | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 5 |
| 16-Aug | 3 | 3 | 3 | 4 | 2 | 3 | 2 | 3 | 6 | 7 | 6 | 6 | 5 | 6 | 5 | 5 | 3 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 7 |
| 17-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 |
| 18-Aug | 3 | 2 | 3 | 2 | 2 | 2 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 4 | 4 | 3 | 3 | 4 | 4 | 2 | 6 |
| 19-Aug | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 5 | 3 | 5 | 2 | 4 | 3 | 5 | 4 | 3 | 3 | 2 | 3 | 1 | 6 | 5 | 6 |
| 20-Aug | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 5 |
| 21-Aug | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 2 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 3 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 1 | 2 | 2 | 4 | 6 | 5 | 6 | 5 | 5 | 4 | 3 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 6 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 4 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 2 | 3 | 5 |
| 27-Aug | 2 | 4 | 5 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 3 | 6 | 5 | 4 | 5 | 4 | 5 | 5 | 6 | 6 | PF | PF | PF | PF | 6 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 7 | 8 | 9 | 10 | 8 | 10 | 10 | 11 | 8 | 9 | 7 | 11 | 12 | 6 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

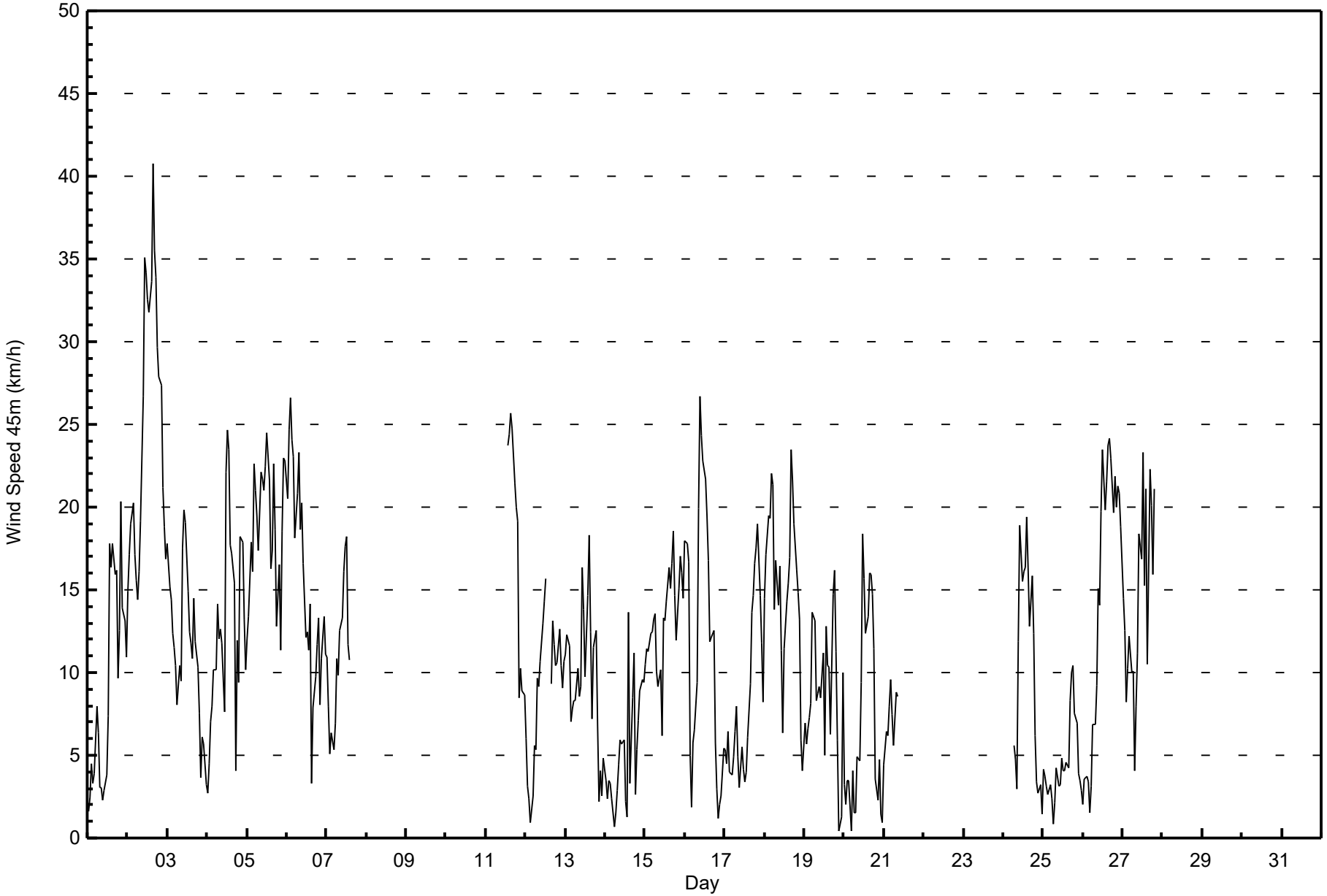
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 45m (WS45) - km/h**

**Lower Camp Met Tower - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 110 | 22.96 | 22.96 |
| 6 - 11 | 135 | 28.18 | 51.15 |
| 12 - 19 | 164 | 34.24 | 85.39 |
| 20 - 28 | 61 | 12.73 | 98.12 |
| 29 - 38 | 8 | 1.67 | 99.79 |
| > 38 | 1 | 0.21 | 100.00 |

Total Number of Valid Hours: 479

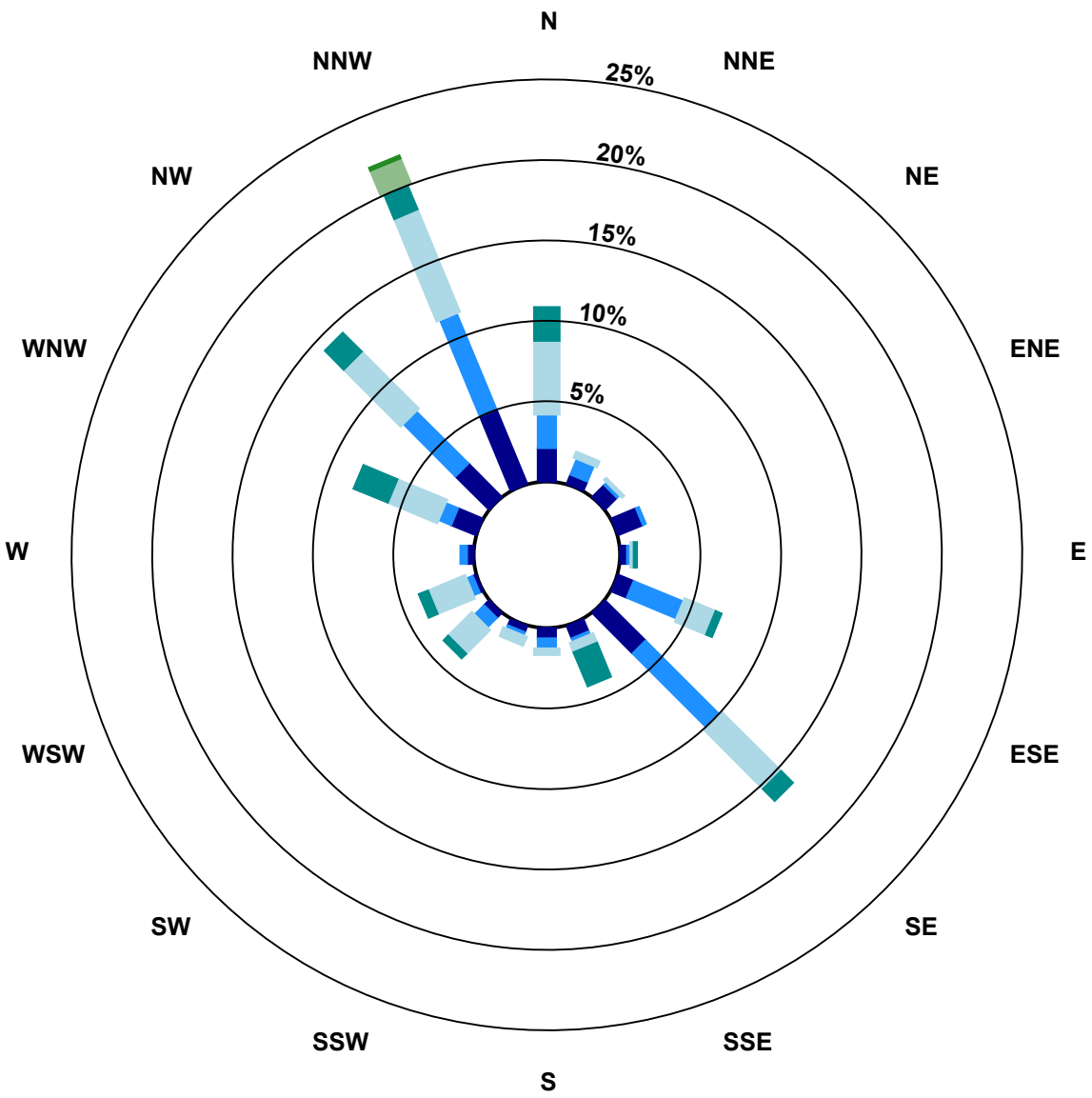
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 45m (WS45) - km/h**

**Lower Camp Met Tower**




**Classes (km/h)**

- 0 - 5
- 6 - 11
- 12 - 19
- 20 - 28
- 29 - 38
- > 38

**Total Number of Valid Hours: 479**

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 100m (WS100) - km/h

## Lower Camp Met Tower - August 2026

Maximum Speed: -- km/h on Aug 1 00:00

Maximum Daily Speed Average: 0.0 km/h on Jan 1

Minimum Speed Value: -- km/h on Aug 1 00:00

Minimum Daily Speed Average: 0.0 km/h on Jan 1

Maximum Diurnal Speed Average: -- km/h at hour 0

Minimum Diurnal Speed Average: -- km/h at hour 0

Monthly Average Velocity: -- km/h -- deg

Percentiles: $P_1 = 0$ $P_{10} = 0$ $Q_1 = 0$ Median = 0 $Q_3 = 0$ $P_{90} = 0$ $P_{99} = 0$

Hours in Service: 744

Hours of Data: 0

Hours of Missing Data: 744

Percent Operational Time: 0.0

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UODF | DF | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | ---- | ---- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | Diurnal Average | |
| | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | Diurnal Maximum | |

DF - DAS Failure UO - Unstable Operation PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 100m (WS100) - km/h

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: -- km/h on Aug 1 00:00

Minimum Value: -- km/h on Aug 1 00:00

Percentiles: $P_1 = 0$ $P_{10} = 0$ $Q_1 = 0$ Median = 0 $Q_3 = 0$ $P_{90} = 0$ $P_{99} = 0$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

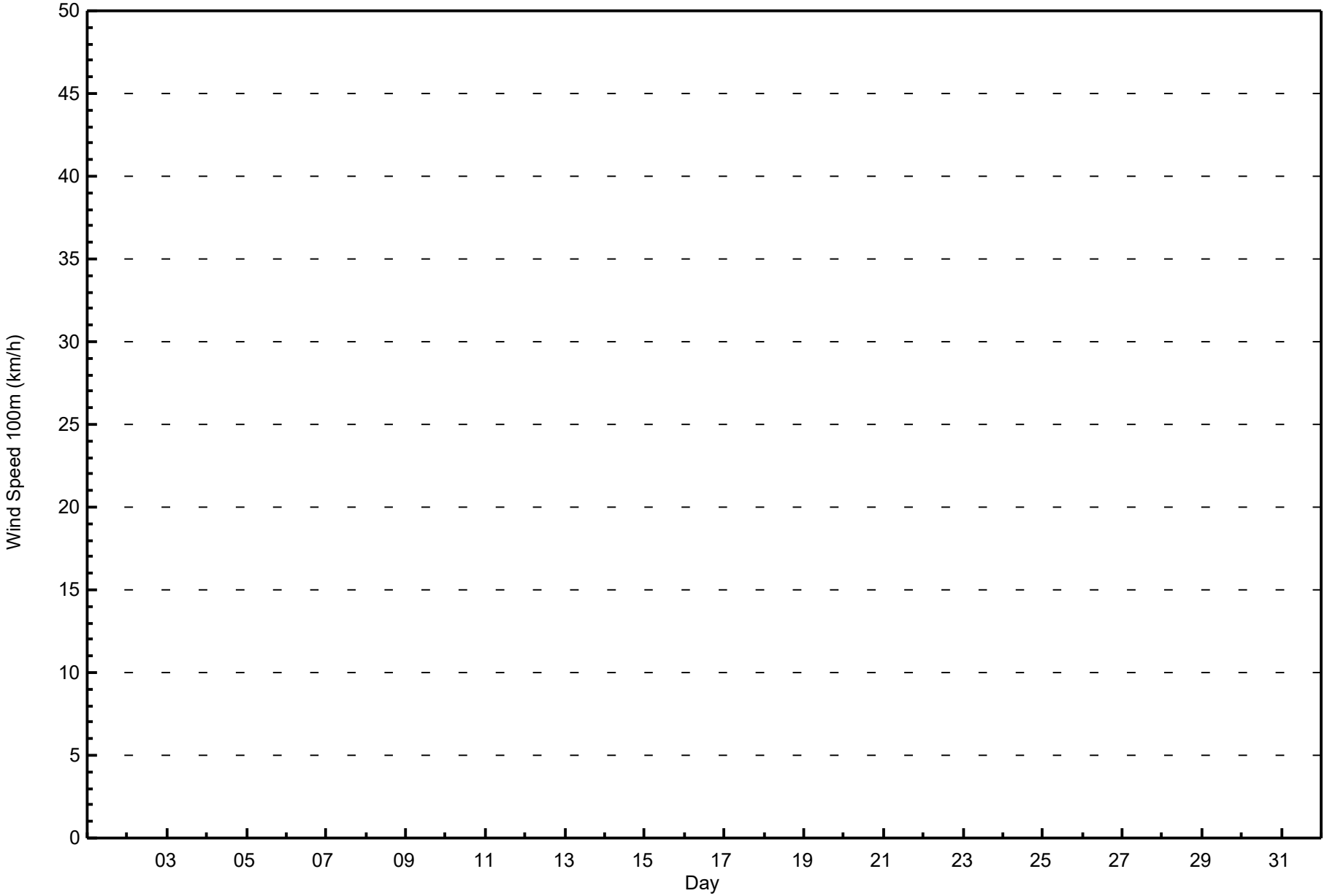
DF - DAS Failure UO - Unstable Operation PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 100m (WS100) - km/h**

**Lower Camp Met Tower - August 2026**

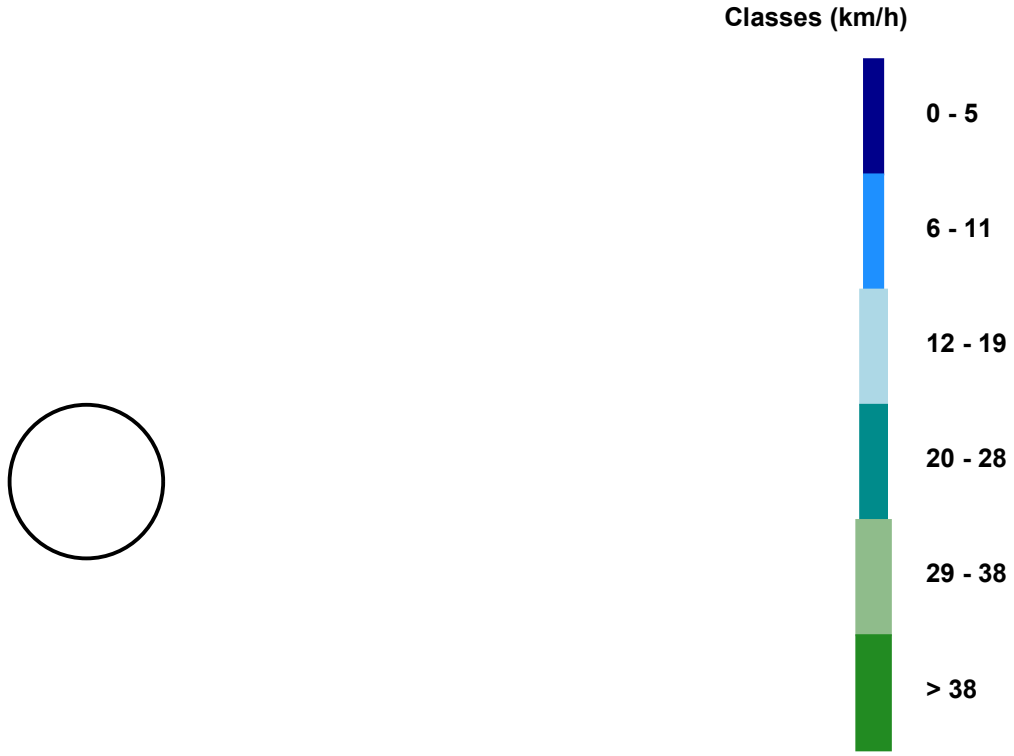


| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 0 | 0.00 | 0.00 |
| 6 - 11 | 0 | 0.00 | 0.00 |
| 12 - 19 | 0 | 0.00 | 0.00 |
| 20 - 28 | 0 | 0.00 | 0.00 |
| 29 - 38 | 0 | 0.00 | 0.00 |
| > 38 | 0 | 0.00 | 0.00 |

Total Number of Valid Hours: 0

Total Number of Hours: 744

## Wind Speed 100m (WS100) - km/h
## Lower Camp Met Tower




**Total Number of Valid Hours: 0**

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 163m (WS163) - km/h

## Lower Camp Met Tower - August 2026

Maximum Speed: -- km/h on Aug 1 00:00

Maximum Daily Speed Average: 0.0 km/h on Jan 1

Minimum Speed Value: -- km/h on Aug 1 00:00

Minimum Daily Speed Average: 0.0 km/h on Jan 1

Maximum Diurnal Speed Average: -- km/h at hour 0

Minimum Diurnal Speed Average: -- km/h at hour 0

Monthly Average Velocity: -- km/h -- deg

Percentiles: $P_1 = 0$ $P_{10} = 0$ $Q_1 = 0$ Median = 0 $Q_3 = 0$ $P_{90} = 0$ $P_{99} = 0$

Hours in Service: 744

Hours of Data: 0

Hours of Missing Data: 744

Percent Operational Time: 0.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | ---- | ---- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | ---- | ---- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | ---- | ---- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | ---- | ---- |
| | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | Diurnal Average | |
| | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | Diurnal Maximum | |

DF - DAS Failure UO - Unstable Operation PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 163m (WS163) - km/h

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: -- km/h on Aug 1 00:00

Minimum Value: -- km/h on Aug 1 00:00

Percentiles: $P_1 = 0$ $P_{10} = 0$ $Q_1 = 0$ Median = 0 $Q_3 = 0$ $P_{90} = 0$ $P_{99} = 0$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

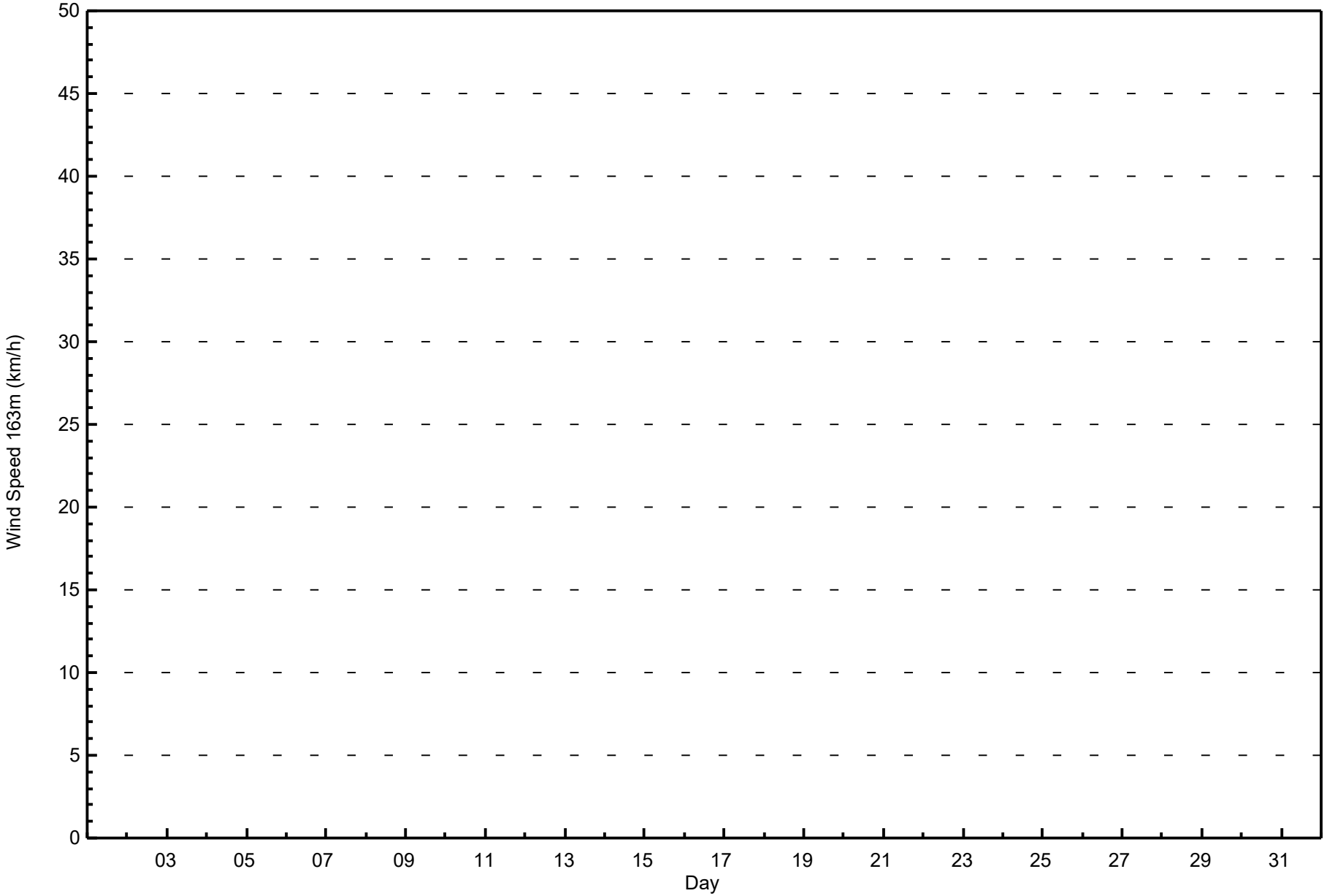
DF - DAS Failure UO - Unstable Operation PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 163m (WS163) - km/h**

**Lower Camp Met Tower - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 0 | 0.00 | 0.00 |
| 6 - 11 | 0 | 0.00 | 0.00 |
| 12 - 19 | 0 | 0.00 | 0.00 |
| 20 - 28 | 0 | 0.00 | 0.00 |
| 29 - 38 | 0 | 0.00 | 0.00 |
| > 38 | 0 | 0.00 | 0.00 |

Total Number of Valid Hours: 0

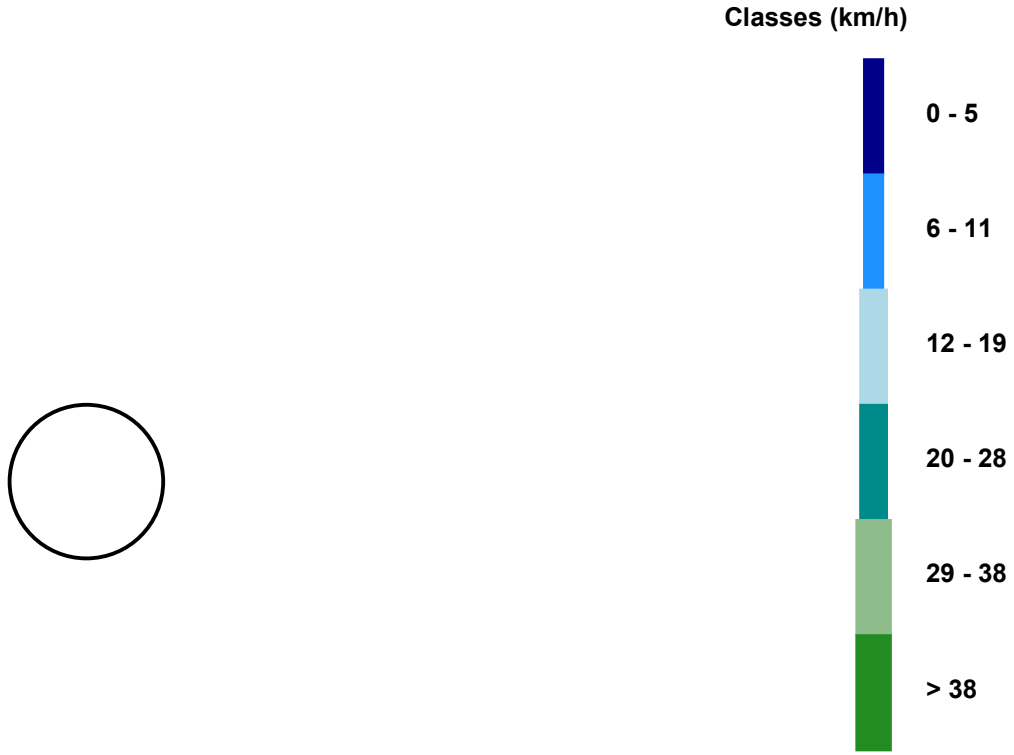
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 163m (WS163) - km/h

Lower Camp Met Tower




Total Number of Valid Hours: 0

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 20m (WD20) - deg

## Lower Camp Met Tower - August 2026

Direction of Maximum Speed: 337 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 334.7 deg on Aug 2

Direction of Minimum Speed: 129 deg on Aug 25 00:00

Direction of Minimum Daily Speed Average: 0.8 deg on Aug 14

Monthly Average Direction: 328.6 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 352 | 41 | 93 | 21 | 116 | 121 | 126 | 114 | 57 | 147 | 142 | 53 | 90 | 111 | 118 | 107 | 104 | 135 | 351 | 330 | 325 | 333 | 321 | 317 | 67.7 |
| 2-Aug | 318 | 331 | 335 | 341 | 351 | 330 | 346 | 344 | 336 | 339 | 336 | 343 | 340 | 332 | 334 | 337 | 339 | 335 | 335 | 333 | 330 | 319 | 314 | 314 | 334.7 |
| 3-Aug | 316 | 314 | 315 | 312 | 327 | 321 | 321 | 308 | 310 | 338 | 342 | 327 | 340 | 354 | 2 | 355 | 349 | 350 | 23 | 56 | 109 | 137 | 134 | 111 | 336.6 |
| 4-Aug | 85 | 103 | 112 | 122 | 134 | 124 | 133 | 132 | 128 | 122 | 174 | 234 | 236 | 238 | 231 | 227 | 329 | 26 | 289 | 333 | 299 | 316 | 322 | 333 | 221.1 |
| 5-Aug | 319 | 291 | 287 | 296 | 290 | 295 | 302 | 314 | 313 | 309 | 313 | 317 | 322 | 319 | 310 | 318 | 348 | 349 | 313 | 317 | 308 | 294 | 292 | 297 | 309.9 |
| 6-Aug | 297 | 290 | 291 | 295 | 296 | 302 | 295 | 298 | 300 | 317 | 321 | 332 | 334 | 340 | 344 | 304 | 257 | 326 | 316 | 312 | 310 | 325 | 312 | 314 | 306.7 |
| 7-Aug | 333 | 311 | 293 | 308 | 334 | 327 | 306 | 289 | 297 | 303 | 299 | 290 | 287 | 0 | 352 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 355 | 351 | 351 | 347 | 355 | 358 | 1 | 342 | 344 | 330 | 333 | -- |
| 12-Aug | 312 | 334 | 320 | 333 | 284 | 333 | 310 | 324 | 321 | 320 | 324 | 335 | 335 | DF | DF | 353 | 351 | 350 | 319 | 325 | 326 | 326 | 330 | 331 | 330.0 |
| 13-Aug | 340 | 338 | 333 | 328 | 318 | 320 | 332 | 337 | 338 | 342 | 352 | 351 | 358 | 352 | 355 | 25 | 46 | 52 | 18 | 355 | 290 | 343 | 304 | 334 | 350.9 |
| 14-Aug | 348 | 345 | 328 | 319 | 8 | 71 | 343 | 289 | 346 | 355 | 336 | 290 | 81 | 39 | 90 | 126 | 206 | 190 | 206 | 113 | 115 | 111 | 113 | 120 | 101.0 |
| 15-Aug | 120 | 115 | 122 | 116 | 117 | 119 | 125 | 128 | 128 | 128 | 144 | 228 | 232 | 252 | 243 | 217 | 217 | 244 | 219 | 199 | 210 | 222 | 241 | 249 | 191.8 |
| 16-Aug | 256 | 258 | 249 | 301 | 20 | 321 | 318 | 334 | 347 | 345 | 340 | 349 | 343 | 339 | 341 | 331 | 346 | 356 | 26 | 75 | 99 | 116 | 123 | 119 | 331.6 |
| 17-Aug | 125 | 107 | 120 | 124 | 167 | 126 | 119 | 123 | 126 | 140 | 254 | 359 | 15 | 69 | 105 | 129 | 137 | 147 | 155 | 165 | 169 | 151 | 117 | 103 | 137.3 |
| 18-Aug | 138 | 139 | 135 | 126 | 135 | 133 | 130 | 137 | 133 | 136 | 131 | 219 | 247 | 250 | 209 | 243 | 250 | 256 | 249 | 241 | 236 | 234 | 193 | 161 | 181.2 |
| 19-Aug | 204 | 160 | 120 | 126 | 120 | 120 | 127 | 132 | 188 | 275 | 344 | 344 | 12 | 352 | 349 | 329 | 333 | 329 | 351 | 355 | 342 | 160 | 323 | 335 | 18.6 |
| 20-Aug | 103 | 43 | 335 | 317 | 53 | 125 | 347 | 331 | 348 | 355 | 344 | 345 | 341 | 339 | 347 | 348 | 355 | 1 | 2 | 18 | 331 | 338 | 7 | 201 | 350.3 |
| 21-Aug | 135 | 115 | 118 | 118 | 109 | 106 | 116 | 120 | 125 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 296 | 326 | 350 | 308 | 330 | 332 | 338 | 341 | 339 | 359 | 350 | 2 | 5 | 323 | 230 | 231 | 329 | 129 | 339.3 |
| 25-Aug | 342 | 352 | 340 | 339 | 354 | 340 | 40 | 5 | 349 | 345 | 351 | 56 | 69 | 71 | 38 | 34 | 345 | 21 | 5 | 332 | 344 | 28 | 357 | 337 | 7.2 |
| 26-Aug | 326 | 334 | 349 | 346 | 72 | 56 | 115 | 99 | 122 | 135 | 123 | 149 | 157 | 158 | 168 | 154 | 156 | 154 | 145 | 142 | 137 | 138 | 135 | 137 | 144.9 |
| 27-Aug | 123 | 139 | 106 | 100 | 115 | 122 | 128 | 118 | 123 | 125 | 134 | 142 | 163 | 141 | 166 | 142 | 117 | 92 | 111 | 126 | PF | PF | PF | PF | 132.0 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 311.5 | 301.0 | 307.8 | 352.4 | 62.6 | 73.8 | 69.7 | 4.0 | 349.9 | 339.8 | 335.4 | 320.6 | 310.3 | 330.3 | 328.5 | 330.3 | 338.3 | 351.7 | 338.2 | 334.7 | 289.0 | 291.5 | 303.5 | 313.6 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

DF - DAS Failure PF - Power Failure
All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 20m (WD20) - deg

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 104 deg on Aug 25 00:00

Minimum Value: 7 deg on Aug 17 20:00

Percentiles: $P_1$ = 8 $P_{10}$ = 14 $Q_1$ = 18 Median = 22 $Q_3$ = 31 $P_{90}$ = 56 $P_{99}$ = 91

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 65 | 75 | 39 | 70 | 51 | 21 | 26 | 80 | 65 | 75 | 66 | 43 | 39 | 28 | 24 | 23 | 23 | 26 | 62 | 58 | 61 | 63 | 29 | 56 | 80 |
| 2-Aug | 36 | 20 | 22 | 19 | 27 | 21 | 22 | 21 | 21 | 19 | 18 | 17 | 20 | 20 | 21 | 18 | 17 | 19 | 19 | 20 | 21 | 17 | 16 | 17 | 36 |
| 3-Aug | 17 | 16 | 13 | 12 | 20 | 25 | 26 | 19 | 26 | 25 | 24 | 26 | 21 | 26 | 24 | 24 | 18 | 19 | 35 | 29 | 40 | 31 | 82 | 76 | 82 |
| 4-Aug | 41 | 26 | 23 | 17 | 15 | 19 | 14 | 17 | 14 | 20 | 57 | 12 | 13 | 15 | 15 | 16 | 80 | 67 | 34 | 27 | 18 | 15 | 17 | 17 | 80 |
| 5-Aug | 22 | 31 | 20 | 23 | 19 | 17 | 19 | 22 | 20 | 27 | 22 | 24 | 20 | 21 | 22 | 20 | 18 | 31 | 16 | 19 | 18 | 21 | 17 | 18 | 31 |
| 6-Aug | 19 | 19 | 18 | 17 | 20 | 19 | 19 | 18 | 20 | 20 | 24 | 24 | 27 | 27 | 20 | 54 | 55 | 59 | 30 | 17 | 25 | 27 | 25 | 21 | 59 |
| 7-Aug | 18 | 19 | 39 | 29 | 23 | 18 | 19 | 26 | 26 | 21 | 29 | 24 | 25 | 24 | 17 | PF | PF | PF | PF | PF | PF | PF | PF | PF | 39 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 25 | 23 | 19 | 20 | 19 | 21 | 18 | 21 | 16 | 25 | 17 | 25 |
| 12-Aug | 37 | 50 | 20 | 27 | 26 | 30 | 22 | 20 | 18 | 24 | 20 | 22 | 20 | DF | DF | 38 | 24 | 26 | 22 | 16 | 19 | 21 | 24 | 20 | 50 |
| 13-Aug | 21 | 19 | 21 | 32 | 21 | 23 | 31 | 23 | 24 | 20 | 23 | 25 | 28 | 27 | 23 | 39 | 52 | 33 | 22 | 35 | 50 | 18 | 35 | 17 | 52 |
| 14-Aug | 92 | 32 | 19 | 11 | 43 | 50 | 53 | 34 | 24 | 21 | 18 | 26 | 64 | 85 | 29 | 85 | 80 | 12 | 96 | 14 | 17 | 14 | 13 | 14 | 96 |
| 15-Aug | 12 | 13 | 12 | 12 | 12 | 12 | 10 | 10 | 11 | 13 | 41 | 24 | 27 | 28 | 21 | 26 | 26 | 18 | 15 | 10 | 9 | 10 | 10 | 11 | 41 |
| 16-Aug | 14 | 17 | 28 | 81 | 75 | 60 | 30 | 21 | 19 | 17 | 21 | 20 | 20 | 23 | 21 | 29 | 20 | 27 | 49 | 49 | 83 | 35 | 29 | 27 | 83 |
| 17-Aug | 23 | 28 | 14 | 38 | 45 | 32 | 14 | 15 | 17 | 40 | 52 | 30 | 33 | 34 | 48 | 27 | 19 | 8 | 7 | 7 | 7 | 20 | 21 | 23 | 52 |
| 18-Aug | 16 | 9 | 12 | 13 | 9 | 9 | 19 | 14 | 21 | 14 | 21 | 70 | 28 | 25 | 29 | 24 | 17 | 18 | 17 | 13 | 10 | 17 | 74 | 57 | 74 |
| 19-Aug | 26 | 36 | 17 | 24 | 14 | 13 | 14 | 28 | 55 | 54 | 40 | 33 | 42 | 20 | 25 | 51 | 40 | 19 | 16 | 14 | 61 | 91 | 93 | 56 | 93 |
| 20-Aug | 68 | 86 | 44 | 24 | 89 | 54 | 71 | 86 | 30 | 25 | 18 | 18 | 20 | 31 | 22 | 22 | 22 | 18 | 21 | 61 | 49 | 31 | 79 | 97 | 97 |
| 21-Aug | 36 | 24 | 15 | 13 | 15 | 16 | 22 | 22 | 18 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 36 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 25 | 39 | 51 | 29 | 23 | 24 | 24 | 24 | 18 | 22 | 20 | 21 | 18 | 29 | 37 | 74 | 50 | 104 | 104 |
| 25-Aug | 14 | 51 | 18 | 19 | 56 | 51 | 78 | 36 | 31 | 47 | 60 | 23 | 31 | 30 | 28 | 33 | 15 | 29 | 32 | 22 | 35 | 38 | 26 | 23 | 78 |
| 26-Aug | 23 | 18 | 24 | 47 | 80 | 48 | 19 | 20 | 23 | 19 | 23 | 15 | 13 | 16 | 15 | 12 | 12 | 11 | 11 | 9 | 11 | 10 | 8 | 9 | 80 |
| 27-Aug | 13 | 39 | 53 | 15 | 15 | 16 | 18 | 49 | 29 | 26 | 18 | 28 | 13 | 19 | 15 | 31 | 20 | 22 | 29 | 22 | PF | PF | PF | PF | 53 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 92 | 86 | 53 | 81 | 89 | 60 | 78 | 86 | 65 | 75 | 66 | 70 | 64 | 85 | 48 | 85 | 80 | 67 | 96 | 61 | 83 | 91 | 93 | 104 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

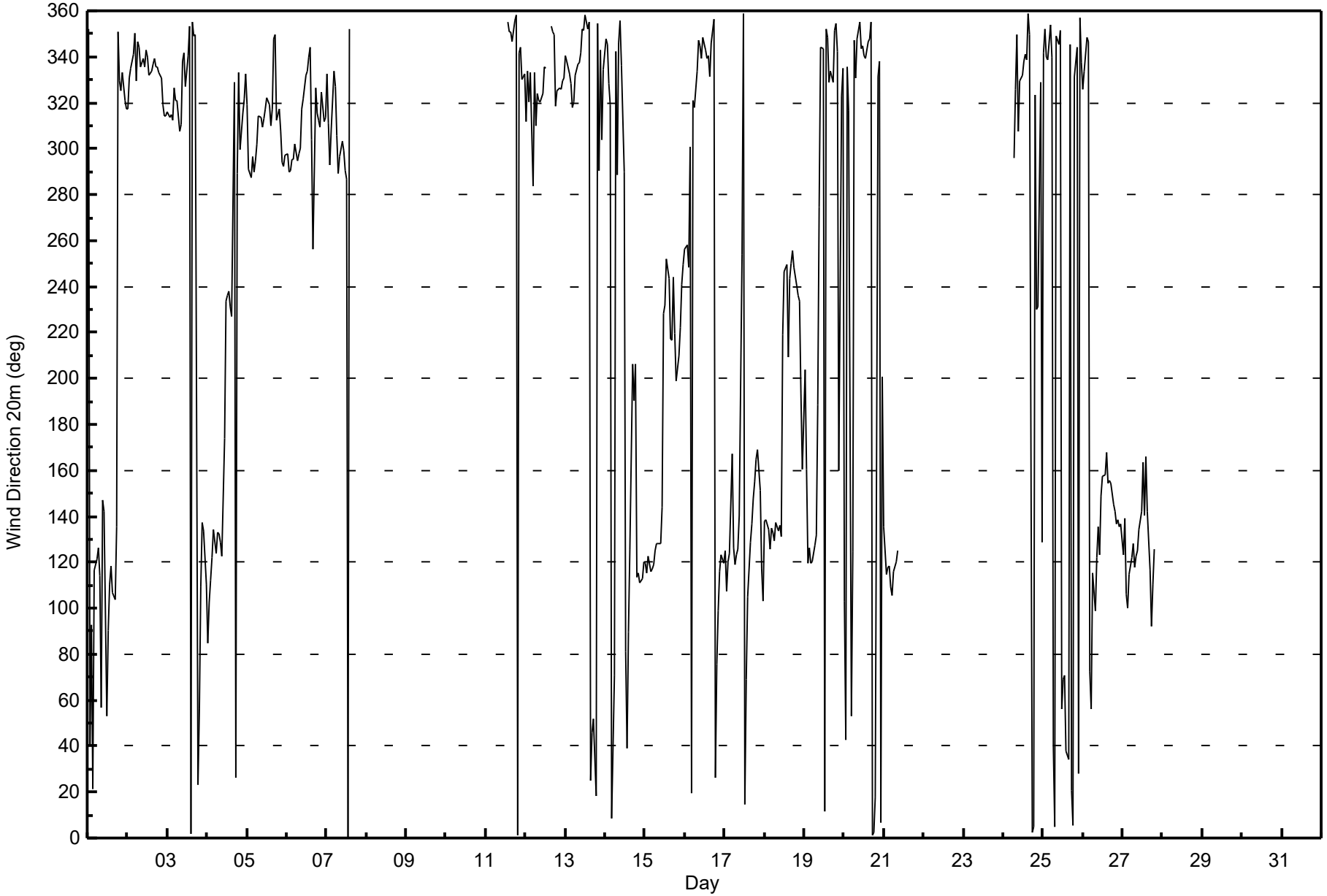
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 20m (WD20) - deg**

**Lower Camp Met Tower - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 45m (WD45) - deg

## Lower Camp Met Tower - August 2026

Direction of Maximum Speed: 337 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 335.9 deg on Aug 2

Direction of Minimum Speed: 309 deg on Aug 20 05:00

Direction of Minimum Daily Speed Average: 1.2 deg on Aug 14

Monthly Average Direction: 326.9 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 279 | 2 | 129 | 132 | 132 | 127 | 129 | 143 | 76 | 114 | 126 | 70 | 90 | 112 | 117 | 106 | 104 | 123 | 348 | 328 | 328 | 347 | 324 | 323 | 74.6 |
| 2-Aug | 321 | 333 | 337 | 344 | 354 | 333 | 349 | 349 | 339 | 341 | 336 | 346 | 340 | 333 | 334 | 337 | 342 | 335 | 334 | 333 | 331 | 319 | 315 | 317 | 335.9 |
| 3-Aug | 316 | 311 | 312 | 315 | 319 | 317 | 317 | 307 | 312 | 339 | 341 | 325 | 337 | 348 | 357 | 351 | 350 | 353 | 28 | 56 | 101 | 127 | 121 | 137 | 336.1 |
| 4-Aug | 135 | 127 | 121 | 133 | 133 | 128 | 133 | 132 | 129 | 124 | 177 | 233 | 235 | 237 | 231 | 226 | 341 | 24 | 285 | 309 | 294 | 313 | 319 | 321 | 230.2 |
| 5-Aug | 304 | 286 | 283 | 292 | 287 | 292 | 300 | 313 | 312 | 309 | 312 | 315 | 321 | 317 | 307 | 316 | 352 | 353 | 314 | 320 | 306 | 290 | 290 | 296 | 307.9 |
| 6-Aug | 293 | 288 | 289 | 293 | 294 | 299 | 292 | 298 | 299 | 315 | 321 | 326 | 335 | 340 | 342 | 302 | 248 | 308 | 315 | 306 | 310 | 312 | 298 | 306 | 303.6 |
| 7-Aug | 329 | 323 | 297 | 289 | 315 | 310 | 296 | 282 | 293 | 298 | 294 | 290 | 286 | 3 | 354 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 357 | 354 | 353 | 351 | 358 | 1 | 5 | 346 | 351 | 344 | 341 | -- |
| 12-Aug | 318 | 331 | 303 | 306 | 316 | 331 | 327 | 325 | 325 | 322 | 323 | 336 | 336 | DF | DF | 358 | 354 | 352 | 326 | 333 | 331 | 336 | 340 | 334 | 333.7 |
| 13-Aug | 345 | 341 | 338 | 340 | 332 | 331 | 334 | 338 | 334 | 342 | 357 | 351 | 1 | 354 | 358 | 29 | 45 | 49 | 20 | 15 | 330 | 332 | 331 | 313 | 354.1 |
| 14-Aug | 323 | 330 | 351 | 348 | 351 | 44 | 334 | 290 | 340 | 353 | 336 | 297 | 69 | 35 | 87 | 109 | 216 | 187 | 196 | 134 | 139 | 123 | 125 | 129 | 110.4 |
| 15-Aug | 131 | 128 | 132 | 129 | 129 | 129 | 131 | 140 | 128 | 123 | 139 | 229 | 235 | 248 | 244 | 219 | 216 | 242 | 219 | 203 | 212 | 222 | 237 | 244 | 194.7 |
| 16-Aug | 249 | 253 | 247 | 298 | 358 | 305 | 331 | 336 | 351 | 349 | 338 | 349 | 344 | 340 | 341 | 332 | 343 | 0 | 30 | 73 | 146 | 190 | 145 | 134 | 330.5 |
| 17-Aug | 134 | 136 | 132 | 164 | 189 | 150 | 141 | 127 | 137 | 169 | 261 | 356 | 8 | 70 | 105 | 122 | 137 | 148 | 156 | 169 | 174 | 161 | 124 | 117 | 145.8 |
| 18-Aug | 135 | 133 | 130 | 126 | 134 | 137 | 134 | 137 | 128 | 130 | 127 | 214 | 247 | 250 | 210 | 241 | 250 | 253 | 247 | 237 | 231 | 227 | 225 | 206 | 183.5 |
| 19-Aug | 221 | 186 | 142 | 137 | 145 | 128 | 134 | 150 | 210 | 271 | 334 | 337 | 7 | 348 | 345 | 328 | 306 | 330 | 357 | 1 | 356 | 234 | 292 | 320 | 338.8 |
| 20-Aug | 150 | 218 | 334 | 327 | 309 | 131 | 82 | 358 | 344 | 339 | 339 | 346 | 341 | 337 | 346 | 348 | 357 | 4 | 8 | 33 | 357 | 326 | 333 | 161 | 350.0 |
| 21-Aug | 141 | 130 | 134 | 132 | 125 | 132 | 130 | 119 | 117 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 307 | 303 | 330 | 305 | 324 | 329 | 336 | 339 | 339 | 2 | 351 | 5 | 9 | 346 | 264 | 255 | 299 | 325 | 336.6 |
| 25-Aug | 320 | 313 | 327 | 307 | 325 | 324 | 355 | 348 | 334 | 322 | 328 | 50 | 66 | 70 | 41 | 28 | 348 | 27 | 16 | 345 | 9 | 69 | 49 | 335 | 5.0 |
| 26-Aug | 318 | 342 | 334 | 341 | 111 | 103 | 122 | 104 | 121 | 130 | 121 | 149 | 157 | 158 | 168 | 154 | 155 | 153 | 147 | 147 | 138 | 144 | 145 | 145 | 145.6 |
| 27-Aug | 130 | 135 | 126 | 117 | 116 | 119 | 124 | 123 | 120 | 121 | 129 | 133 | 161 | 133 | 163 | 136 | 111 | 92 | 104 | 116 | PF | PF | PF | PF | 126.4 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 292.0 | 290.1 | 290.7 | 321.3 | 331.3 | 96.6 | 358.1 | 329.2 | 337.6 | 337.4 | 333.9 | 323.3 | 316.7 | 333.1 | 336.1 | 340.6 | 347.4 | 357.4 | 345.9 | 340.2 | 297.5 | 289.3 | 296.0 | 302.3 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

DF - DAS Failure PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 45m (WD45) - deg

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 93 deg on Aug 19 23:00

Minimum Value: 5 deg on Aug 17 21:00

Percentiles: $P_1$ = 6 $P_{10}$ = 9 $Q_1$ = 11 Median = 15 $Q_3$ = 23 $P_{90}$ = 44 $P_{99}$ = 86

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 86 | 47 | 15 | 18 | 21 | 10 | 16 | 79 | 60 | 57 | 47 | 35 | 28 | 19 | 14 | 13 | 14 | 14 | 55 | 36 | 60 | 62 | 23 | 46 | 86 |
| 2-Aug | 28 | 12 | 12 | 12 | 17 | 13 | 15 | 13 | 12 | 11 | 10 | 11 | 12 | 11 | 11 | 11 | 10 | 10 | 12 | 11 | 12 | 11 | 10 | 9 | 28 |
| 3-Aug | 10 | 10 | 8 | 6 | 10 | 12 | 16 | 13 | 20 | 19 | 18 | 17 | 17 | 21 | 19 | 21 | 13 | 13 | 23 | 14 | 22 | 12 | 13 | 29 | 29 |
| 4-Aug | 24 | 16 | 17 | 13 | 11 | 13 | 9 | 13 | 10 | 11 | 54 | 8 | 8 | 11 | 12 | 12 | 66 | 48 | 21 | 20 | 11 | 9 | 8 | 13 | 66 |
| 5-Aug | 18 | 20 | 12 | 14 | 11 | 11 | 14 | 12 | 13 | 19 | 15 | 16 | 11 | 12 | 13 | 15 | 12 | 23 | 11 | 9 | 12 | 13 | 10 | 12 | 23 |
| 6-Aug | 11 | 10 | 10 | 11 | 12 | 13 | 13 | 12 | 14 | 14 | 17 | 16 | 21 | 19 | 17 | 47 | 58 | 68 | 25 | 12 | 15 | 18 | 16 | 14 | 68 |
| 7-Aug | 9 | 12 | 20 | 24 | 26 | 14 | 13 | 19 | 16 | 15 | 22 | 15 | 20 | 17 | 11 | PF | PF | PF | PF | PF | PF | PF | PF | PF | 26 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 15 | 16 | 14 | 13 | 12 | 13 | 10 | 12 | 11 | 17 | 9 | 17 |
| 12-Aug | 10 | 12 | 24 | 50 | 30 | 13 | 12 | 10 | 11 | 14 | 13 | 16 | 12 | DF | DF | 28 | 15 | 18 | 14 | 8 | 9 | 9 | 9 | 9 | 50 |
| 13-Aug | 11 | 11 | 12 | 18 | 9 | 11 | 16 | 12 | 15 | 18 | 16 | 17 | 20 | 19 | 18 | 31 | 39 | 22 | 11 | 15 | 17 | 11 | 31 | 10 | 39 |
| 14-Aug | 17 | 22 | 7 | 15 | 27 | 74 | 28 | 26 | 19 | 16 | 14 | 24 | 67 | 86 | 23 | 87 | 57 | 11 | 64 | 20 | 19 | 8 | 7 | 8 | 87 |
| 15-Aug | 8 | 7 | 8 | 6 | 6 | 8 | 7 | 15 | 12 | 12 | 41 | 19 | 23 | 19 | 15 | 22 | 22 | 11 | 12 | 8 | 7 | 6 | 6 | 6 | 41 |
| 16-Aug | 7 | 9 | 20 | 55 | 78 | 49 | 14 | 13 | 12 | 11 | 13 | 14 | 13 | 19 | 14 | 24 | 14 | 24 | 31 | 20 | 48 | 26 | 20 | 13 | 78 |
| 17-Aug | 10 | 15 | 10 | 20 | 31 | 31 | 17 | 14 | 27 | 49 | 50 | 26 | 38 | 28 | 34 | 20 | 14 | 6 | 5 | 8 | 5 | 14 | 12 | 16 | 50 |
| 18-Aug | 9 | 6 | 5 | 7 | 5 | 7 | 14 | 12 | 14 | 9 | 15 | 61 | 20 | 18 | 26 | 18 | 11 | 9 | 12 | 8 | 5 | 9 | 57 | 40 | 61 |
| 19-Aug | 15 | 33 | 16 | 17 | 13 | 6 | 10 | 32 | 33 | 40 | 37 | 23 | 44 | 15 | 19 | 36 | 48 | 13 | 8 | 9 | 20 | 91 | 93 | 35 | 93 |
| 20-Aug | 69 | 82 | 41 | 18 | 93 | 26 | 81 | 74 | 37 | 19 | 17 | 13 | 14 | 24 | 16 | 13 | 16 | 13 | 14 | 20 | 34 | 13 | 89 | 77 | 93 |
| 21-Aug | 14 | 8 | 8 | 7 | 7 | 7 | 16 | 12 | 11 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 16 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 18 | 33 | 47 | 19 | 16 | 15 | 21 | 18 | 13 | 14 | 13 | 15 | 10 | 11 | 33 | 30 | 31 | 37 | 47 |
| 25-Aug | 11 | 20 | 16 | 20 | 12 | 26 | 72 | 39 | 28 | 44 | 58 | 18 | 29 | 26 | 25 | 28 | 8 | 21 | 25 | 22 | 17 | 24 | 47 | 49 | 72 |
| 26-Aug | 51 | 22 | 20 | 28 | 42 | 34 | 14 | 15 | 15 | 12 | 15 | 14 | 12 | 15 | 13 | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 8 | 10 | 51 |
| 27-Aug | 7 | 9 | 34 | 9 | 6 | 9 | 9 | 31 | 19 | 18 | 10 | 23 | 13 | 17 | 14 | 25 | 9 | 13 | 19 | 15 | PF | PF | PF | PF | 34 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 86 | 82 | 41 | 55 | 93 | 74 | 81 | 79 | 60 | 57 | 58 | 61 | 67 | 86 | 34 | 87 | 66 | 68 | 64 | 36 | 60 | 91 | 93 | 77 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

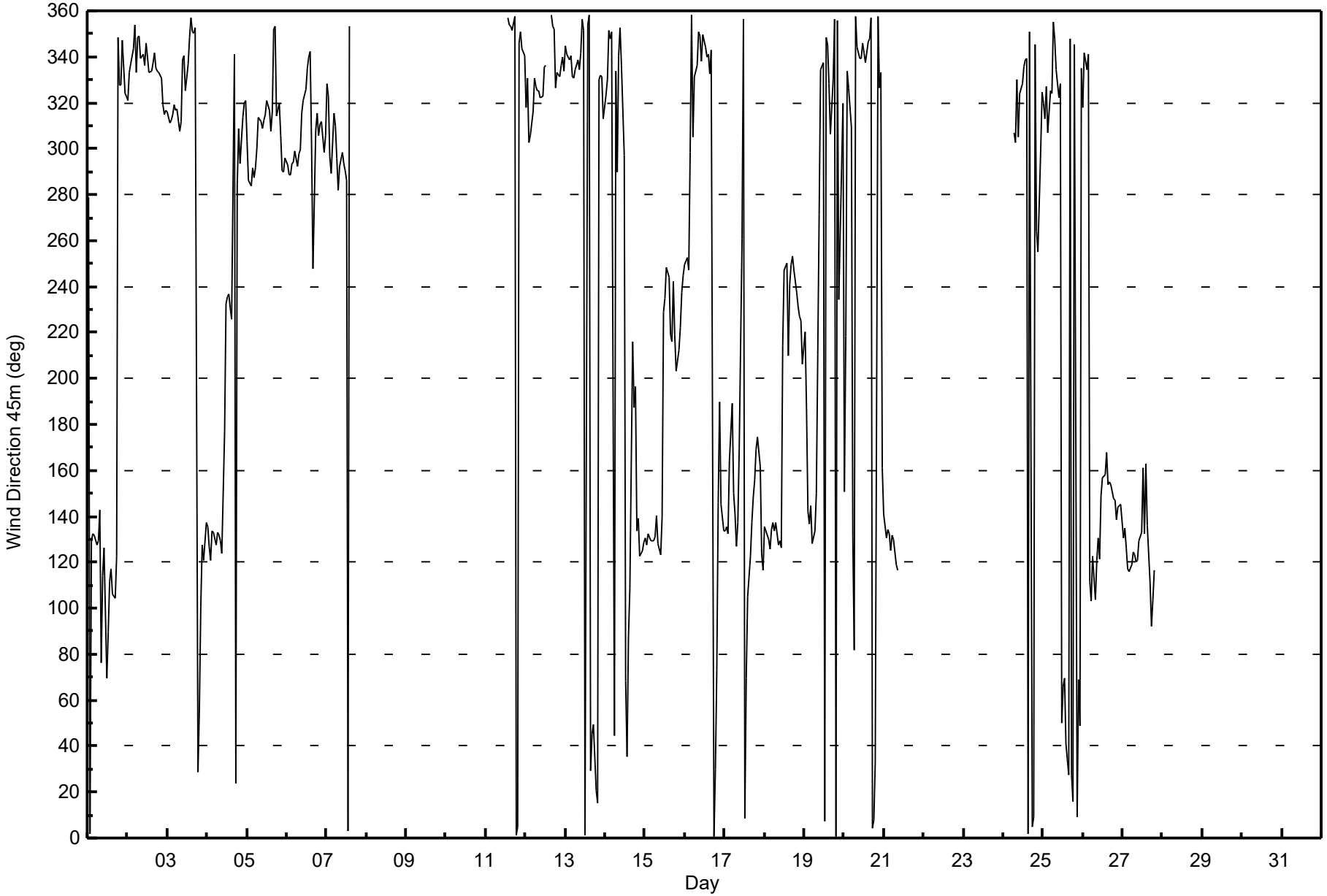
DF - DAS Failure PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 45m (WD45) - deg**

**Lower Camp Met Tower - August 2026**



Direction of Maximum Speed: -- deg on Aug 1 00:00
Direction of Maximum Daily Speed Average: 0.0 deg on Jan 1

Direction of Minimum Speed: -- deg on Aug 1 00:00

Direction of Minimum Daily Speed Average: 0.0 deg on Jan 1

Monthly Average Direction: -- deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

Diurnal Average

DF - DAS Failure UO - Unstable Operation PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 100m (WD100) - deg

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: -- deg on Aug 1 00:00

Minimum Value: -- deg on Aug 1 00:00

Percentiles: $P_1 = 0$ $P_{10} = 0$ $Q_1 = 0$ Median = 0 $Q_3 = 0$ $P_{90} = 0$ $P_{99} = 0$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

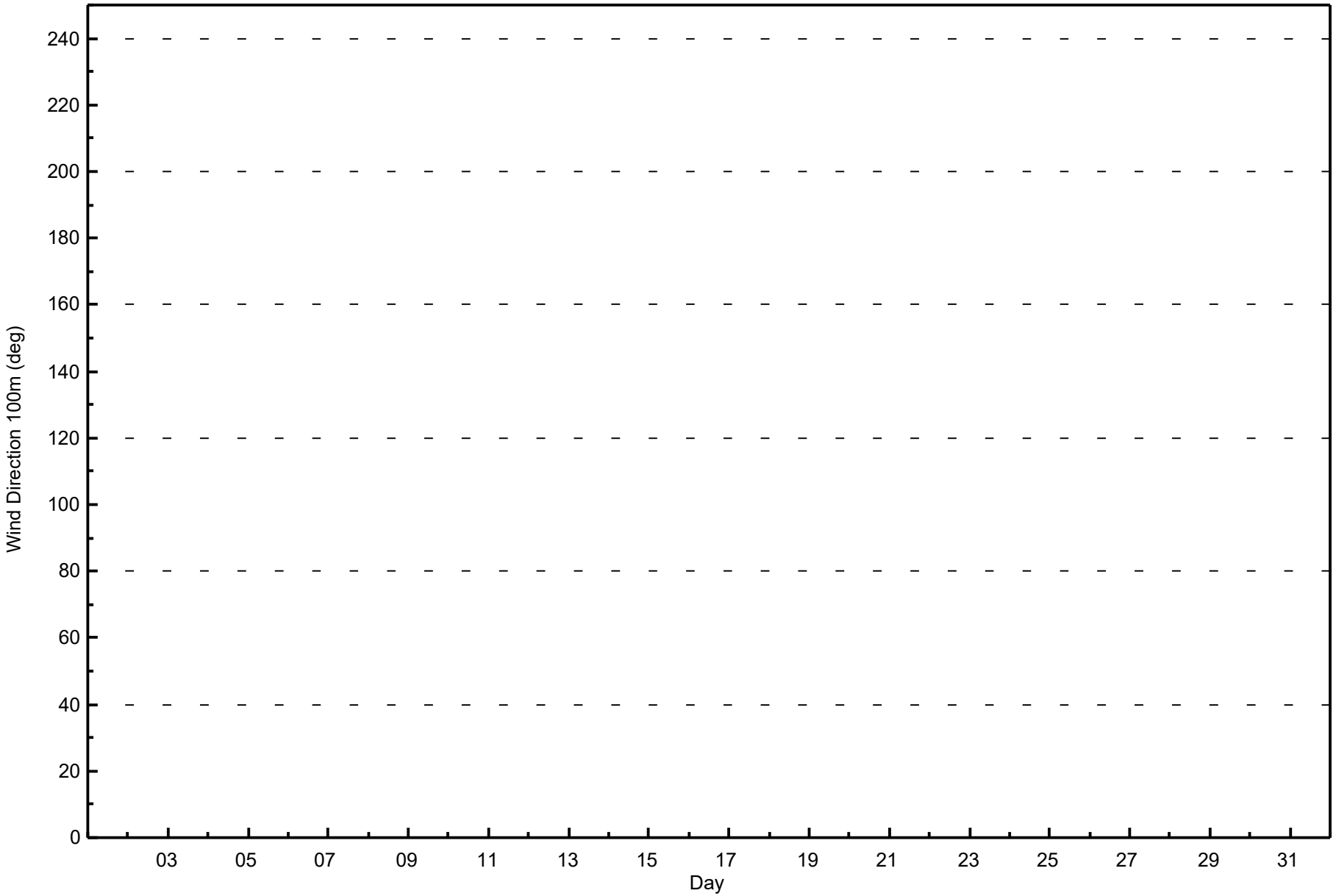
DF - DAS Failure UO - Unstable Operation PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 100m (WD100) - deg**

**Lower Camp Met Tower - August 2026**



Direction of Maximum Speed: -- deg on Aug 1 00:00
Direction of Maximum Daily Speed Average: 0.0 deg on Jan 1

Direction of Minimum Speed: -- deg on Aug 1 00:00

Direction of Minimum Daily Speed Average: 0.0 deg on Jan 1

Monthly Average Direction: -- deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| Diurnal Average | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

DF - DAS Failure UO - Unstable Operation PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 163m (WD163) - deg

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: -- deg on Aug 1 00:00

Minimum Value: -- deg on Aug 1 00:00

Percentiles: $P_1 = 0$ $P_{10} = 0$ $Q_1 = 0$ Median = 0 $Q_3 = 0$ $P_{90} = 0$ $P_{99} = 0$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

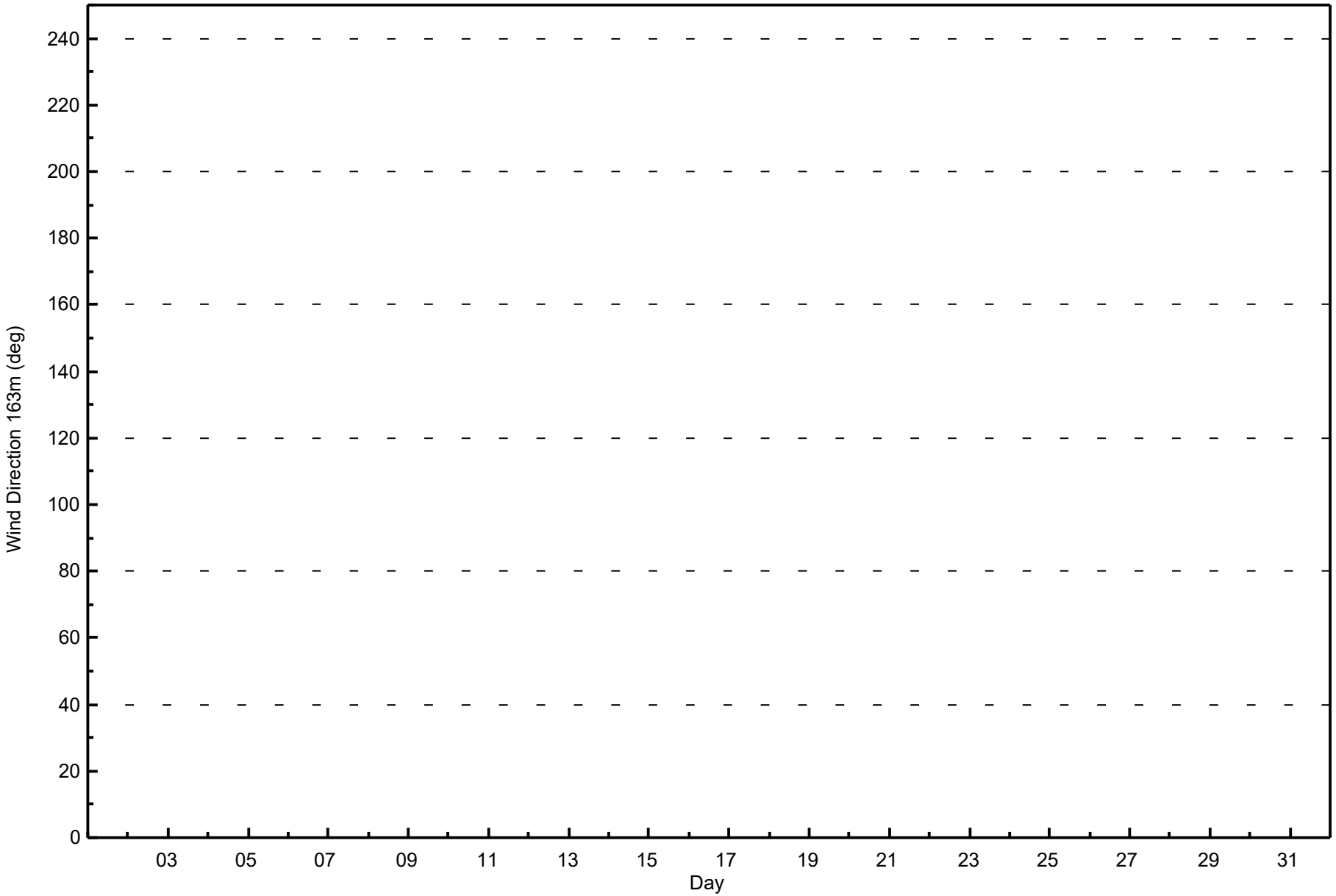
DF - DAS Failure UO - Unstable Operation PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 163m (WD163) - deg**

**Lower Camp Met Tower - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Vertical Wind Speed 20m (VW20) - km/h

## Lower Camp Met Tower - August 2026

Maximum Value: 0.5 km/h on Aug 14 10:00

Maximum Daily Average: 0.0 km/h on Aug 25

Minimum Value: -1.5 km/h on Aug 4 13:00

Minimum Daily Average: -0.6 km/h on Aug 18

Maximum Diurnal Average: -0.1 km/h at hour 22

Minimum Diurnal Average: -0.5 km/h at hour 13

Monthly Average: -0.26 km/h

Percentiles: $P_1$ = -1.0 $P_{10}$ = -0.7 $Q_1$ = -0.4 Median = -0.2 $Q_3$ = 0.0 $P_{90}$ = 0.1 $P_{99}$ = 0.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | -0.2 | 0.1 | -0.2 | 0.1 | 0.1 | -0.1 | -0.3 | -0.5 | -0.5 | -0.6 | -0.3 | -0.2 | -0.2 | 0.0 | -0.3 | -0.1 | -0.3 | -0.4 | -0.2 | 0.1 |
| 2-Aug | -0.3 | -0.3 | -0.3 | -0.3 | -0.2 | -0.2 | -0.1 | -0.2 | -0.1 | -0.4 | -0.3 | -0.5 | -0.5 | -0.3 | 0.0 | -0.5 | -0.6 | -0.4 | -0.3 | -0.2 | -0.2 | -0.5 | -0.4 | -0.5 | -0.3 | 0.0 |
| 3-Aug | -0.6 | -0.7 | -0.6 | -0.2 | -0.3 | -0.1 | -0.2 | -0.5 | -0.4 | -0.4 | -0.6 | -0.2 | -0.2 | -0.3 | -0.1 | -0.2 | -0.6 | -0.4 | 0.0 | -0.1 | 0.1 | 0.1 | 0.0 | 0.0 | -0.3 | 0.1 |
| 4-Aug | 0.1 | 0.1 | -0.5 | -0.2 | -0.3 | -0.2 | -0.9 | -0.5 | -0.6 | -0.2 | -0.3 | -1.2 | -1.5 | -1.4 | -0.8 | -0.7 | -0.3 | 0.0 | -0.2 | 0.0 | -0.6 | -0.5 | -0.2 | -0.1 | -0.5 | 0.1 |
| 5-Aug | -0.3 | -0.3 | -0.5 | -0.3 | -0.6 | -0.8 | -0.8 | -0.4 | -0.8 | -0.7 | -0.6 | -0.4 | -0.5 | -0.4 | -0.7 | -0.4 | -0.2 | -0.2 | -0.4 | -0.1 | -0.3 | -0.4 | -0.7 | -0.8 | -0.5 | -0.1 |
| 6-Aug | -0.5 | -0.7 | -1.0 | -1.0 | -0.7 | -0.6 | -0.7 | -1.0 | -0.6 | -0.6 | -0.1 | -0.2 | -0.3 | -0.2 | -0.2 | -0.1 | -0.2 | -0.4 | -0.2 | -0.4 | -0.2 | -0.1 | -0.1 | -0.3 | -0.4 | -0.1 |
| 7-Aug | -0.1 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.4 | -0.4 | -0.3 | -0.5 | -0.3 | -0.6 | -0.9 | -0.3 | -0.4 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -0.1 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -0.6 | -0.5 | -0.5 | -0.4 | -0.4 | -0.2 | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | -- | 0.0 |
| 12-Aug | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.4 | -0.2 | -0.3 | DF | DF | -0.1 | -0.1 | -0.1 | -0.3 | -0.1 | 0.0 | -0.2 | -0.2 | -0.2 | -0.1 | 0.0 |
| 13-Aug | -0.1 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.3 | -0.2 | -0.1 | -0.1 | 0.0 | -0.2 | -0.4 | -0.1 | -0.4 | -0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.1 |
| 14-Aug | 0.0 | 0.1 | 0.0 | -0.1 | 0.1 | 0.1 | 0.0 | -0.2 | 0.0 | 0.5 | -0.6 | -0.2 | -0.1 | 0.2 | -0.3 | -0.1 | -0.3 | -0.5 | -0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -0.1 | 0.0 | 0.5 |
| 15-Aug | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | -0.4 | -0.5 | -0.5 | -0.6 | -0.3 | -1.0 | -0.7 | -1.0 | -0.9 | -0.7 | -0.5 | -0.9 | -0.5 | -0.2 | -0.2 | -0.4 | -0.7 | -0.6 | -0.4 | 0.2 |
| 16-Aug | -0.7 | -0.8 | -0.7 | -0.1 | 0.0 | -0.1 | -0.2 | 0.0 | -0.1 | -0.5 | -0.3 | -0.7 | -0.4 | -0.4 | -0.5 | -0.4 | -0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | 0.1 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | -0.1 | -0.1 | -0.5 | -0.2 | -0.2 | -0.5 | 0.2 | -0.2 | 0.1 | -0.2 | -0.1 | -0.4 | -0.4 | -0.5 | -0.6 | -0.5 | 0.5 | 0.1 | -0.3 | -0.2 | 0.5 |
| 18-Aug | -0.6 | -0.5 | -0.6 | -0.8 | -0.9 | -0.5 | -0.6 | -0.6 | -0.4 | -0.8 | -0.2 | -0.4 | -0.5 | -0.7 | -1.0 | -0.8 | -1.0 | -0.9 | -0.9 | -0.7 | -0.3 | -0.2 | 0.0 | -0.2 | -0.6 | 0.0 |
| 19-Aug | -0.3 | -0.1 | 0.1 | 0.0 | 0.2 | -0.1 | -0.2 | 0.0 | -0.1 | -0.3 | -0.1 | -0.1 | -0.1 | -0.3 | -0.2 | -0.1 | 0.0 | -0.1 | -0.2 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.2 |
| 20-Aug | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | -0.4 | -0.8 | -0.7 | -0.2 | -0.4 | -0.4 | -0.5 | -0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.2 |
| 21-Aug | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 0.0 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | -0.1 | -0.1 | -0.1 | -0.2 | -0.3 | -0.4 | -0.2 | -0.4 | -0.5 | -0.4 | -0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.2 | 0.1 |
| 25-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | -0.2 | 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | -0.3 | -0.3 | -0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | 0.2 |
| 26-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | -0.1 | -0.1 | -0.2 | -0.7 | -0.3 | -0.9 | -0.9 | -0.8 | -1.0 | -0.9 | -0.9 | -0.8 | -0.5 | -0.5 | -0.6 | -0.3 | -0.3 | -0.2 | -0.4 | 0.1 |
| 27-Aug | -0.3 | -0.3 | -0.1 | -0.2 | -0.4 | -0.3 | -0.3 | 0.0 | -0.2 | -0.2 | -0.8 | -0.6 | -1.4 | -0.4 | -1.1 | -0.3 | -0.5 | -0.6 | -0.2 | -0.3 | PF | PF | PF | PF | -0.4 | 0.0 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.3 | -0.3 | -0.4 | -0.5 | -0.4 | -0.5 | -0.4 | -0.4 | -0.4 | -0.2 | -0.1 | -0.2 | -0.1 | -0.1 | -0.2 | Diurnal Average | |
| | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.1 | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 0.2 | 0.2 | Diurnal Maximum | |

DF - DAS Failure PF - Power Failure

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Vertical Wind Speed 20m (VW20) - km/h

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.4 km/h on Aug 2 16:00

Minimum Value: 0.1 km/h on Aug 13 21:00

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.3 $Q_1$ = 0.8 Median = 1.6 $Q_3$ = 2.2 $P_{90}$ = 2.9 $P_{99}$ = 4.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 0.5 | 0.3 | 0.2 | 0.3 | 0.4 | 0.8 | 0.7 | 0.5 | 0.7 | 0.6 | 0.8 | 1.4 | 1.7 | 2.8 | 2.6 | 2.7 | 2.5 | 2.4 | 1.6 | 1.9 | 3.4 | 3.2 | 1.7 | 1.9 | 3.4 |
| 2-Aug | 1.8 | 2.2 | 2.5 | 2.7 | 2.5 | 2.2 | 2.1 | 2.4 | 2.6 | 3.5 | 4.7 | 4.7 | 4.6 | 4.4 | 4.7 | 5.4 | 4.6 | 4.7 | 4.2 | 3.8 | 3.8 | 2.9 | 2.2 | 1.9 | 5.4 |
| 3-Aug | 2.3 | 1.8 | 1.5 | 1.0 | 1.3 | 1.4 | 1.3 | 1.5 | 1.9 | 2.8 | 2.9 | 3.0 | 2.4 | 2.3 | 2.4 | 2.0 | 2.1 | 1.7 | 1.7 | 1.1 | 0.2 | 0.3 | 0.2 | 0.2 | 3.0 |
| 4-Aug | 0.2 | 0.5 | 1.3 | 0.9 | 1.4 | 1.4 | 2.0 | 1.7 | 1.8 | 2.0 | 2.0 | 2.2 | 2.7 | 2.7 | 2.0 | 1.7 | 3.2 | 0.9 | 1.4 | 1.3 | 2.2 | 2.0 | 1.2 | 1.0 | 3.2 |
| 5-Aug | 1.4 | 1.7 | 2.2 | 2.1 | 2.8 | 2.5 | 2.7 | 2.5 | 3.1 | 3.4 | 3.0 | 3.6 | 3.6 | 3.1 | 2.3 | 2.4 | 3.1 | 2.8 | 1.4 | 2.1 | 1.3 | 2.4 | 2.9 | 3.0 | 3.6 |
| 6-Aug | 2.5 | 3.3 | 3.5 | 3.1 | 3.3 | 2.6 | 3.0 | 3.2 | 2.7 | 3.0 | 2.7 | 2.2 | 2.1 | 1.9 | 1.9 | 1.0 | 1.4 | 1.9 | 1.7 | 1.6 | 0.7 | 1.5 | 1.7 | 1.4 | 3.5 |
| 7-Aug | 1.2 | 0.7 | 0.6 | 0.7 | 0.7 | 0.5 | 1.3 | 1.3 | 2.0 | 2.1 | 2.8 | 2.7 | 2.7 | 1.8 | 1.7 | PF | PF | PF | PF | PF | PF | PF | PF | PF | 2.8 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 3.7 | 3.6 | 3.5 | 3.5 | 3.0 | 2.9 | 2.7 | 0.9 | 0.9 | 1.0 | 0.7 | 3.7 |
| 12-Aug | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.6 | 1.2 | 1.2 | 1.8 | 2.1 | 2.2 | 2.5 | DF | DF | 1.4 | 1.8 | 1.8 | 1.3 | 0.8 | 1.2 | 0.9 | 0.7 | 1.1 | 2.5 |
| 13-Aug | 1.4 | 1.6 | 1.6 | 1.1 | 0.7 | 1.1 | 1.4 | 1.6 | 1.5 | 1.7 | 2.5 | 2.4 | 1.9 | 2.5 | 2.9 | 2.3 | 1.7 | 2.0 | 1.8 | 0.6 | 0.1 | 0.2 | 0.1 | 0.2 | 2.9 |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.6 | 0.9 | 1.8 | 1.5 | 0.8 | 1.6 | 1.5 | 2.7 | 1.6 | 1.4 | 1.0 | 0.7 | 0.6 | 0.5 | 0.6 | 0.9 | 0.8 | 2.7 |
| 15-Aug | 0.9 | 1.1 | 1.2 | 1.1 | 1.1 | 1.4 | 1.5 | 1.4 | 1.5 | 1.6 | 1.8 | 1.8 | 2.3 | 2.4 | 2.5 | 2.0 | 2.1 | 2.3 | 1.4 | 0.8 | 1.0 | 1.3 | 1.3 | 1.2 | 2.5 |
| 16-Aug | 1.8 | 2.1 | 2.1 | 0.9 | 0.4 | 0.8 | 0.8 | 1.3 | 2.9 | 3.5 | 3.5 | 3.2 | 3.4 | 3.3 | 2.4 | 2.2 | 1.8 | 1.7 | 1.2 | 0.4 | 0.1 | 0.2 | 0.2 | 0.2 | 3.5 |
| 17-Aug | 0.2 | 0.4 | 0.3 | 0.4 | 0.8 | 0.8 | 0.9 | 1.3 | 1.3 | 1.4 | 1.4 | 1.3 | 1.2 | 1.6 | 1.7 | 1.8 | 1.7 | 1.1 | 1.0 | 0.7 | 1.0 | 1.2 | 1.4 | 1.2 | 1.8 |
| 18-Aug | 1.4 | 1.6 | 2.0 | 2.0 | 2.1 | 1.8 | 1.7 | 2.1 | 2.4 | 2.2 | 2.2 | 2.0 | 2.2 | 2.2 | 2.2 | 2.1 | 3.1 | 2.8 | 2.2 | 1.4 | 0.9 | 1.1 | 0.6 | 0.8 | 3.1 |
| 19-Aug | 0.8 | 0.8 | 0.7 | 0.6 | 0.8 | 1.6 | 1.5 | 1.4 | 1.4 | 1.9 | 2.1 | 2.2 | 1.3 | 1.9 | 1.7 | 1.4 | 0.8 | 1.4 | 1.9 | 1.0 | 0.7 | 0.2 | 0.7 | 1.5 | 2.2 |
| 20-Aug | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 1.2 | 1.2 | 1.8 | 2.7 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 1.9 | 1.6 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 2.7 |
| 21-Aug | 0.1 | 0.2 | 0.3 | 0.6 | 0.9 | 0.6 | 0.7 | 1.4 | 1.6 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 1.6 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 0.3 | 0.5 | 0.8 | 2.2 | 2.9 | 2.5 | 2.7 | 2.7 | 2.6 | 2.6 | 1.7 | 2.2 | 1.4 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 2.9 |
| 25-Aug | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.6 | 1.3 | 1.5 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.2 | 1.1 | 1.5 | 1.6 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 1.7 |
| 26-Aug | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 | 0.9 | 1.2 | 1.7 | 2.3 | 2.5 | 2.2 | 2.4 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 1.7 | 2.0 | 1.6 | 1.7 | 1.5 | 1.4 | 2.5 |
| 27-Aug | 1.4 | 1.1 | 0.9 | 0.9 | 1.2 | 1.1 | 1.2 | 1.1 | 1.6 | 2.2 | 2.5 | 2.6 | 2.0 | 2.3 | 1.7 | 1.4 | 2.3 | 2.8 | 2.5 | 3.4 | PF | PF | PF | PF | 3.4 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 2.5 | 3.3 | 3.5 | 3.1 | 3.3 | 2.6 | 3.0 | 3.2 | 3.1 | 3.5 | 4.7 | 4.7 | 4.6 | 4.4 | 4.7 | 5.4 | 4.6 | 4.7 | 4.2 | 3.8 | 3.8 | 3.2 | 2.9 | 3.0 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

DF - DAS Failure PF - Power Failure

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Vertical Wind Speed 45m (VW45) - km/h

## Lower Camp Met Tower - August 2026

Maximum Value: 1.2 km/h on Aug 17 22:00

Maximum Daily Average: 0.2 km/h on Aug 15

Minimum Value: -0.9 km/h on Aug 16 10:00

Minimum Daily Average: -0.5 km/h on Aug 2

Maximum Diurnal Average: 0.1 km/h at hour 22

Minimum Diurnal Average: -0.3 km/h at hour 13

Monthly Average: -0.13 km/h

Percentiles: $P_1$ = -0.8 $P_{10}$ = -0.6 $Q_1$ = -0.3 Median = -0.1 $Q_3$ = 0.1 $P_{90}$ = 0.2 $P_{99}$ = 0.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | -0.1 | 0.3 | 0.1 | 0.2 | 0.0 | 0.0 | 0.2 | -0.3 | 0.1 | 0.3 | -0.1 | -0.3 | -0.2 | 0.1 | -0.3 | -0.2 | 0.5 | -0.2 | 0.0 | -0.7 | 0.1 | -0.2 | -0.3 | 0.0 | 0.5 |
| 2-Aug | -0.4 | -0.3 | -0.3 | -0.3 | -0.2 | -0.4 | -0.1 | 0.1 | -0.2 | -0.5 | -0.6 | -0.2 | -0.7 | -0.8 | -0.3 | -0.8 | -0.8 | -0.8 | -0.6 | -0.6 | -0.5 | -0.6 | -0.6 | -0.7 | -0.5 | 0.1 |
| 3-Aug | -0.6 | -0.7 | -0.6 | -0.2 | -0.5 | -0.4 | -0.3 | -0.3 | -0.3 | -0.6 | -0.7 | -0.4 | -0.5 | -0.4 | -0.5 | -0.3 | -0.7 | -0.5 | -0.1 | -0.3 | 0.1 | 0.2 | 0.1 | 0.2 | -0.4 | 0.2 |
| 4-Aug | 0.1 | 0.1 | -0.5 | -0.2 | 0.1 | -0.1 | -0.5 | -0.4 | -0.3 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | 0.2 | 0.2 | -0.1 | -0.1 | 0.1 | 0.1 | -0.4 | -0.7 | -0.4 | -0.3 | -0.1 | 0.2 |
| 5-Aug | -0.2 | 0.0 | -0.1 | -0.1 | -0.3 | -0.4 | -0.6 | -0.6 | -0.9 | -0.6 | -0.5 | -0.5 | -0.8 | -0.8 | -0.7 | -0.5 | -0.3 | -0.1 | -0.3 | -0.5 | -0.5 | -0.2 | -0.7 | -0.5 | -0.4 | 0.0 |
| 6-Aug | -0.4 | -0.5 | -0.8 | -0.7 | -0.2 | -0.4 | -0.4 | -0.6 | -0.4 | -0.5 | -0.6 | -0.2 | -0.5 | -0.1 | -0.4 | -0.1 | 0.2 | -0.4 | -0.1 | -0.5 | -0.2 | -0.1 | -0.1 | -0.3 | -0.4 | 0.2 |
| 7-Aug | -0.2 | -0.3 | -0.2 | -0.2 | -0.3 | -0.3 | -0.4 | -0.2 | -0.1 | -0.2 | 0.0 | -0.3 | -0.4 | -0.3 | -0.4 | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | 0.0 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -0.5 | -0.4 | -0.6 | -0.6 | -0.5 | -0.1 | -0.2 | -0.2 | -0.1 | 0.0 | -0.1 | -- | 0.0 |
| 12-Aug | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.3 | -0.2 | 0.0 | -0.4 | -0.2 | -0.3 | DF | DF | -0.2 | 0.0 | -0.2 | -0.2 | -0.1 | -0.2 | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 |
| 13-Aug | -0.1 | -0.2 | -0.2 | 0.1 | 0.1 | -0.1 | -0.2 | -0.3 | -0.3 | -0.3 | -0.5 | -0.1 | -0.2 | -0.1 | -0.3 | -0.4 | -0.1 | -0.5 | -0.1 | 0.2 | 0.0 | 0.0 | 0.1 | -0.1 | -0.1 | 0.2 |
| 14-Aug | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | -0.1 | -0.1 | -0.2 | 0.5 | -0.8 | -0.4 | 0.0 | 0.4 | -0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.5 |
| 15-Aug | 0.4 | 0.7 | 0.6 | 0.5 | 0.8 | 0.3 | 0.1 | -0.3 | 0.0 | -0.3 | -0.1 | -0.2 | 0.1 | -0.4 | -0.1 | 0.3 | 0.7 | -0.1 | 0.2 | 0.3 | 0.6 | 0.7 | 0.1 | -0.1 | 0.2 | 0.8 |
| 16-Aug | -0.3 | -0.3 | 0.3 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | -0.9 | -0.8 | -0.8 | -0.7 | -0.8 | -0.8 | -0.4 | -0.5 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | -0.3 | 0.3 |
| 17-Aug | 0.2 | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | -0.1 | -0.3 | -0.1 | -0.1 | -0.2 | 0.2 | -0.2 | 0.2 | 0.0 | 0.5 | 0.0 | 0.0 | -0.2 | -0.1 | 0.3 | 1.2 | 0.4 | -0.6 | 0.1 | 1.2 |
| 18-Aug | -0.6 | 0.3 | 0.2 | -0.5 | -0.1 | -0.1 | -0.7 | -0.2 | 0.0 | -0.2 | -0.3 | 0.3 | 0.1 | -0.2 | -0.1 | 0.2 | -0.1 | -0.2 | 0.0 | 0.1 | 0.5 | 0.5 | 0.4 | -0.1 | 0.0 | 0.5 |
| 19-Aug | -0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.1 | 0.2 | 0.2 | 0.5 | 0.2 | -0.3 | 0.0 | -0.1 | -0.4 | -0.5 | -0.1 | -0.1 | -0.2 | -0.3 | -0.1 | -0.2 | 0.1 | 0.1 | -0.3 | 0.0 | 0.5 |
| 20-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | -0.1 | -0.6 | -0.8 | -0.7 | -0.6 | -0.8 | -0.7 | -0.4 | -0.2 | -0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.2 | 0.1 |
| 21-Aug | 0.0 | 0.3 | 0.1 | 0.3 | 0.4 | 0.1 | 0.2 | -0.1 | 0.2 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 0.4 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 0.0 | -0.1 | 0.0 | -0.2 | -0.5 | -0.5 | -0.3 | -0.6 | -0.4 | -0.2 | -0.3 | -0.3 | -0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | -0.2 | 0.1 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.1 | 0.0 | -0.3 | 0.7 | 0.2 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | -0.4 | -0.2 | -0.4 | -0.3 | 0.1 | -0.1 | 0.1 | 0.1 | -0.1 | 0.7 |
| 26-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | -0.4 | -0.2 | 0.0 | 0.1 | -0.2 | -0.1 | -0.1 | 0.3 | 0.4 | 0.2 | 0.7 | 0.6 | 0.6 | 0.1 | 0.7 |
| 27-Aug | 0.1 | 0.3 | 0.0 | -0.4 | -0.4 | -0.3 | -0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | -0.6 | 0.5 | -0.1 | -0.1 | 0.2 | -0.2 | 0.2 | 0.4 | PF | PF | PF | PF | 0.0 | 0.5 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.1 | -0.2 | -0.1 | -0.1 | -0.3 | -0.2 | -0.3 | -0.3 | -0.3 | -0.2 | -0.2 | -0.2 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | Diurnal Average | |
| | 0.4 | 0.7 | 0.6 | 0.5 | 0.8 | 0.3 | 0.2 | 0.2 | 0.5 | 0.7 | 0.3 | 0.3 | 0.1 | 0.5 | 0.2 | 0.5 | 0.7 | 0.5 | 0.3 | 0.4 | 0.6 | 1.2 | 0.6 | 0.6 | Diurnal Maximum | |

DF - DAS Failure PF - Power Failure

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Vertical Wind Speed 45m (VW45) - km/h

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.0 km/h on Aug 2 16:00

Minimum Value: 0.1 km/h on Aug 16 22:00

Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.4 $Q_1$ = 0.8 Median = 1.5 $Q_3$ = 2.2 $P_{90}$ = 2.6 $P_{99}$ = 4.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 479 |
| Hours of Missing Data: | 265 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 64.4 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 0.8 | 0.5 | 0.4 | 0.5 | 0.4 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 | 0.8 | 1.2 | 1.6 | 2.3 | 2.3 | 2.4 | 2.3 | 2.5 | 1.7 | 2.0 | 3.3 | 3.0 | 1.5 | 1.8 | 3.3 |
| 2-Aug | 1.5 | 2.0 | 2.4 | 2.6 | 2.5 | 2.2 | 1.9 | 2.3 | 2.4 | 3.3 | 4.5 | 4.2 | 4.2 | 4.3 | 4.6 | 5.0 | 4.0 | 4.3 | 3.9 | 3.8 | 3.8 | 2.8 | 2.4 | 1.9 | 5.0 |
| 3-Aug | 2.2 | 1.8 | 1.3 | 0.8 | 1.2 | 1.4 | 1.5 | 1.5 | 1.8 | 2.6 | 2.5 | 2.8 | 2.2 | 2.5 | 2.2 | 2.0 | 1.7 | 1.7 | 1.7 | 0.8 | 0.3 | 0.4 | 0.4 | 0.4 | 2.8 |
| 4-Aug | 0.3 | 0.5 | 1.2 | 1.0 | 1.3 | 1.3 | 1.6 | 1.5 | 1.4 | 1.5 | 1.8 | 2.1 | 2.3 | 2.3 | 2.1 | 1.8 | 2.8 | 1.0 | 1.4 | 1.5 | 2.2 | 1.9 | 1.0 | 1.0 | 2.8 |
| 5-Aug | 1.5 | 1.7 | 2.1 | 2.0 | 2.4 | 2.2 | 2.7 | 2.4 | 3.1 | 3.3 | 3.2 | 3.5 | 3.5 | 3.0 | 2.4 | 2.3 | 2.6 | 2.4 | 1.4 | 2.0 | 1.3 | 2.2 | 2.3 | 2.7 | 3.5 |
| 6-Aug | 2.3 | 2.6 | 3.1 | 3.0 | 3.1 | 2.6 | 2.9 | 3.2 | 2.6 | 2.9 | 2.5 | 2.2 | 1.9 | 1.9 | 1.7 | 1.0 | 1.4 | 1.9 | 1.7 | 1.6 | 0.7 | 1.7 | 1.7 | 1.4 | 3.2 |
| 7-Aug | 1.1 | 0.7 | 0.7 | 0.8 | 0.8 | 0.6 | 1.2 | 1.4 | 2.0 | 2.3 | 2.9 | 2.7 | 2.6 | 1.4 | 1.5 | PF | PF | PF | PF | PF | PF | PF | PF | PF | 2.9 |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | 3.0 | 3.1 | 3.0 | 2.9 | 2.5 | 2.5 | 2.3 | 0.8 | 1.0 | 1.2 | 0.7 | 3.1 |
| 12-Aug | 0.3 | 0.2 | 0.3 | 0.3 | 0.5 | 0.4 | 0.7 | 1.2 | 1.3 | 1.8 | 2.1 | 2.2 | 2.2 | DF | DF | 1.2 | 1.7 | 1.6 | 1.2 | 0.6 | 1.2 | 0.8 | 0.7 | 1.2 | 2.2 |
| 13-Aug | 1.3 | 1.5 | 1.6 | 1.2 | 0.7 | 1.0 | 1.4 | 1.5 | 1.6 | 1.6 | 2.1 | 2.2 | 1.6 | 2.2 | 2.4 | 2.0 | 1.5 | 1.9 | 1.4 | 0.6 | 0.3 | 0.2 | 0.2 | 0.3 | 2.4 |
| 14-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.4 | 0.8 | 1.8 | 1.2 | 0.6 | 1.7 | 1.7 | 2.4 | 1.5 | 1.6 | 1.2 | 0.9 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 2.4 |
| 15-Aug | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.2 | 1.3 | 1.3 | 1.1 | 1.3 | 1.8 | 2.3 | 2.5 | 2.3 | 2.7 | 2.2 | 2.4 | 1.9 | 1.6 | 1.0 | 1.1 | 1.3 | 1.0 | 1.1 | 2.7 |
| 16-Aug | 1.5 | 1.8 | 1.8 | 0.9 | 0.5 | 0.7 | 0.9 | 1.1 | 2.5 | 2.9 | 3.0 | 2.9 | 2.7 | 2.5 | 2.1 | 2.2 | 1.6 | 1.6 | 1.3 | 0.5 | 0.2 | 0.1 | 0.2 | 0.3 | 3.0 |
| 17-Aug | 0.5 | 0.5 | 0.4 | 0.6 | 1.1 | 1.0 | 1.0 | 1.2 | 1.2 | 1.3 | 1.5 | 1.2 | 1.0 | 1.4 | 1.6 | 2.0 | 1.6 | 1.0 | 1.1 | 0.5 | 0.9 | 1.2 | 1.4 | 1.2 | 2.0 |
| 18-Aug | 1.5 | 1.2 | 1.3 | 1.5 | 1.4 | 1.6 | 1.8 | 1.8 | 2.1 | 1.7 | 1.9 | 2.1 | 2.2 | 2.3 | 2.6 | 2.2 | 2.6 | 2.3 | 1.7 | 1.2 | 0.8 | 1.0 | 0.9 | 1.1 | 2.6 |
| 19-Aug | 1.1 | 0.9 | 0.7 | 0.7 | 1.0 | 1.1 | 1.1 | 1.4 | 1.6 | 1.8 | 2.0 | 2.1 | 1.3 | 1.6 | 1.5 | 1.1 | 1.1 | 1.3 | 1.3 | 1.0 | 0.9 | 0.4 | 0.5 | 1.5 | 2.1 |
| 20-Aug | 0.6 | 0.6 | 0.4 | 0.2 | 0.2 | 0.5 | 0.3 | 0.5 | 1.1 | 1.1 | 1.7 | 2.1 | 2.1 | 2.3 | 1.9 | 2.0 | 1.9 | 1.8 | 1.3 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 2.3 |
| 21-Aug | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 1.2 | 1.5 | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 1.5 |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | 0.3 | 0.4 | 0.8 | 2.3 | 2.9 | 2.7 | 2.8 | 2.5 | 2.3 | 2.1 | 1.4 | 1.9 | 1.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 2.9 |
| 25-Aug | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.7 | 1.2 | 1.5 | 1.9 | 1.4 | 1.5 | 1.5 | 1.4 | 1.1 | 0.8 | 1.3 | 1.5 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 1.9 |
| 26-Aug | 0.7 | 0.4 | 0.5 | 0.3 | 0.2 | 0.5 | 1.0 | 1.1 | 1.5 | 1.9 | 2.2 | 2.2 | 2.9 | 2.6 | 2.6 | 2.6 | 2.6 | 2.3 | 1.9 | 2.3 | 1.6 | 1.6 | 1.5 | 1.3 | 2.9 |
| 27-Aug | 1.2 | 1.0 | 1.1 | 0.9 | 0.9 | 1.0 | 1.0 | 1.2 | 1.6 | 1.9 | 1.7 | 2.5 | 2.5 | 2.3 | 2.2 | 1.6 | 1.8 | 2.5 | 2.8 | 3.5 | PF | PF | PF | PF | 3.5 |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | 2.3 | 2.6 | 3.1 | 3.0 | 3.1 | 2.6 | 2.9 | 3.2 | 3.1 | 3.3 | 4.5 | 4.2 | 4.2 | 4.3 | 4.6 | 5.0 | 4.0 | 4.3 | 3.9 | 3.8 | 3.8 | 3.0 | 2.4 | 2.7 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

DF - DAS Failure PF - Power Failure

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Vertical Wind Speed 100m (VW100) - km/h

## Lower Camp Met Tower - August 2026

Maximum Value: -- km/h on Aug 1 00:00

Maximum Daily Average: -- km/h on Jul 31

Minimum Value: -- km/h on Aug 1 00:00

Minimum Daily Average: -- km/h on Jul 31

Maximum Diurnal Average: -- km/h at hour 0

Minimum Diurnal Average: -- km/h at hour 0

Monthly Average: -- km/h

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Diurnal Average | |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Diurnal Maximum | |

DF - DAS Failure  UO - Unstable Operation  PF - Power Failure

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Vertical Wind Speed 100m (VW100) - km/h

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: -- km/h on Aug 1 00:00

Minimum Value: -- km/h on Aug 1 00:00

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

DF - DAS Failure UO - Unstable Operation PF - Power Failure

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Vertical Wind Speed 163m (VW163) - km/h

## Lower Camp Met Tower - August 2026

Maximum Value: -- km/h on Aug 1 00:00

Maximum Daily Average: -- km/h on Jul 31

Minimum Value: -- km/h on Aug 1 00:00

Minimum Daily Average: -- km/h on Jul 31

Maximum Diurnal Average: -- km/h at hour 0

Minimum Diurnal Average: -- km/h at hour 0

Monthly Average: -- km/h

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | -- | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Diurnal Average | |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Diurnal Maximum | |

DF - DAS Failure  UO - Unstable Operation  PF - Power Failure

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Vertical Wind Speed 163m (VW163) - km/h

## Lower Camp Met Tower - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: -- km/h on Aug 1 00:00

Minimum Value: -- km/h on Aug 1 00:00

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 0 |
| Hours of Missing Data: | 744 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 0.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 2-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 3-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 4-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 5-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 7-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 8-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 9-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 10-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 11-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 12-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 13-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 15-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 16-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 17-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 19-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 20-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 22-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | PF | PF | PF | -- |
| 28-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 29-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 30-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| 31-Aug | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | PF | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

DF - DAS Failure UO - Unstable Operation PF - Power Failure

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS04
## BUFFALO VIEWPOINT
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BUFFALO VIEWPOINT (AMS04)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 695 | 36 | 49 | 98.25 | 47.2 | 0 | 6 | 0 |
| H2S (ppb) Average | 695 | 36 | 49 | 98.25 | 4.8 | 0 | 1 | 0 |
| THC (ppm) Average | 695 | 36 | 49 | 98.25 | 3.2 | - | 2.5 | - |
| NMHC(ppm) Average | 695 | 36 | 49 | 98.25 | 0.094 | - | 0.021 | - |
| CH4(ppm) Average | 695 | 36 | 49 | 98.25 | 3.2 | - | 2.4 | - |
| O3(ppb) Average | 697 | 34 | 47 | 98.25 | 49.6 | 0 | 26.4 | - |
| NO2(ppb) Average | 696 | 35 | 48 | 98.25 | 19.6 | 0 | 9.5 | - |
| NO(ppb) Average | 696 | 35 | 48 | 98.25 | 51.5 | - | 9.6 | - |
| NOX(ppb) Average | 696 | 35 | 48 | 98.25 | 64.3 | - | 19 | - |
| PM2.5(ug/m3) Average | 730 | 1 | 14 | 98.25 | 67.5 | 0 | 36.2 | 1 |
| Temperature (C) Average | 743 | 0 | 1 | 99.87 | 29.4 | - | 21 | - |
| Relative Humidity (%) Average | 743 | 0 | 1 | 99.87 | 97.5 | - | 85.4 | - |
| Wind Speed 10 m (km/h) Average | 743 | 0 | 1 | 99.87 | 29 | - | 20 | - |
| Wind Direction 10 m (deg) Average | 743 | 0 | 1 | 99.87 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BUFFALO VIEWPOINT (AMS04)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 695 | 0.66 | 2.9 | - | 0 | 0 | 0 | 0.1 | 0.2 | 1.1 | 47.2 |
| H2S (ppb) Average | 695 | 0.44 | 0.6 | - | 0 | 0.1 | 0.1 | 0.2 | 0.5 | 1.1 | 4.8 |
| THC (ppm) Average | 695 | 2.22 | 0.2 | - | 2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 3.2 |
| NMHC(ppm) Average | 695 | 0.001 | 0.008 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.094 |
| CH4(ppm) Average | 695 | 2.22 | 0.2 | - | 2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 3.2 |
| O3(ppb) Average | 697 | 18.68 | 9.7 | - | 1 | 5.4 | 11.1 | 18.7 | 25.7 | 31.4 | 49.6 |
| NO2(ppb) Average | 696 | 3.33 | 4.1 | - | 0 | 0.2 | 0.6 | 1.7 | 4.4 | 10.2 | 19.6 |
| NO(ppb) Average | 696 | 1.6 | 5.1 | - | 0 | 0 | 0 | 0 | 0.5 | 3.4 | 51.5 |
| NOX(ppb) Average | 696 | 4.92 | 8.3 | - | 0 | 0.2 | 0.6 | 1.9 | 5.1 | 14.1 | 64.3 |
| PM2.5(ug/m3) Average | 730 | 11.07 | 9.7 | - | 0.5 | 3.1 | 4.9 | 7.7 | 13.6 | 22.5 | 67.5 |
| Temperature 2 m (C) Average | 743 | 17.1 | 4.7 | - | 6.3 | 11.4 | 13.4 | 16.5 | 20.5 | 23.8 | 29.4 |
| Relative Humidity (%) Average | 743 | 69.72 | 17.9 | - | 29 | 44.7 | 55 | 70.7 | 86.4 | 93.1 | 97.5 |
| Wind Speed 10 m (km/h) Average | 743 | 8.1 | 4 | - | 0 | 3 | 5 | 7 | 10 | 14 | 29 |
| Wind Direction 10 m (deg) Average | 743 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BUFFALO VIEWPOINT (AMS04)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| AIR QUALITY ANALYZERS | 01 Aug 2026 21:00 | 02 Aug 2026 08:00 | 12 | Station power failure |
| H2S | 02 Aug 2026 12:00 | 02 Aug 2026 12:00 | 1 | Maintenance - reinitiated daily QA check |
| NO2 | 02 Aug 2026 13:00 | 02 Aug 2026 13:00 | 1 | Maintenance - reinitiated daily QA check |
| O3 | 02 Aug 2026 14:00 | 02 Aug 2026 14:00 | 1 | Maintenance - reinitiated daily QA check |
| SO2 | 02 Aug 2026 11:00 | 02 Aug 2026 11:00 | 1 | Maintenance - reinitiated daily QA check |
| THC | 02 Aug 2026 13:00 | 02 Aug 2026 13:00 | 1 | Maintenance - reinitiated daily QA check |
| PM2.5 | 08 Aug 2026 06:00 | 08 Aug 2026 06:00 | 1 | DAS Failure - data not recorded |
| ALL METEOROLOGICAL SENSORS | 01 Aug 2026 21:00 | 01 Aug 2026 21:00 | 1 | Station power failure |

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Sulphur Dioxide ($SO_2$) - ppb

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 47.2 ppb on Aug 9 13:00 Maximum Daily Average: 6.0 ppb on Aug 9

Minimum Value: 0.0 ppb on Aug 1 01:00 Minimum Daily Average: 0.0 ppb on Aug 13
Maximum Diurnal Average: 2.4 ppb at hour 13 Minimum Diurnal Average: 0.0 ppb at hour 1
Monthly Average: 0.66 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 1.1 $P_{99}$ = 10.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 695 |
| Hours of Missing Data: | 49 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 2.6 | 5.9 | 0.9 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | PF | PF | PF | PF | 0.6 | 5.9 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 0.0 | 0.0 | M | 0.0 | 0.0 | 7.2 | 9.2 | 6.8 | 11.1 | 3.9 | 3.1 | 5.3 | 10.5 | 1.0 | 0.4 | 0.2 | -- | 11.1 |
| 3-Aug | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.4 | 1.7 | 4.4 | 0.7 | 0.7 | 0.8 | 1.6 | 2.5 | 0.6 | 0.7 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.7 | 4.4 |
| 4-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 5-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | C | C | C | 0.4 | 0.2 | 0.0 | 0.6 | 1.5 | 0.5 | 0.0 | 0.0 | 0.0 | -- | 1.5 |
| 6-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.1 | 0.6 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.1 |
| 7-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 7.2 | 4.6 | 2.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 7.2 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 3.6 | 1.5 | 0.2 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 3.6 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.1 | 0.2 | 2.5 | 12.1 | 42.7 | 47.2 | 18.9 | 7.9 | 2.3 | 0.7 | 1.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.5 | 0.3 | 6.0 | 47.2 |
| 10-Aug | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 1.9 | 1.7 | 0.8 | 3.1 | 1.8 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 3.1 |
| 11-Aug | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 2.6 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.6 |
| 12-Aug | 0.0 | 0.1 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 13-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.7 | 4.1 | 7.3 | 1.1 | 1.1 | 5.1 | 6.3 | 3.1 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 1.3 | 7.3 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.9 | 0.7 | 0.2 | 0.6 | 3.2 | 1.5 | 0.2 | 0.7 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 3.2 |
| 17-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1.1 | 4.3 | 4.5 | 2.4 | 2.3 | 1.8 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.8 | 4.5 |
| 18-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 19-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 5.6 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 5.6 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 3.1 | 1.5 | 0.4 | 0.4 | 4.9 | 6.1 | 0.9 | 0.9 | 0.2 | 0.1 | 0.0 | 0.1 | 0.5 | 0.0 | 0.0 | 0.8 | 6.1 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 22-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.5 |
| 23-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 |
| 24-Aug | 0.1 | 0.0 | Z | 0.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 3.8 | 2.8 | 4.4 | 2.5 | 0.4 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.7 | 4.4 |
| 25-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 4.4 | 12.0 | 16.1 | 4.9 | 3.8 | 1.2 | 0.8 | 1.1 | 5.3 | 0.6 | 0.3 | 0.2 | 0.3 | 1.2 | 0.4 | 2.3 | 16.1 |
| 26-Aug | 0.2 | 0.1 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 27-Aug | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.3 | 0.5 | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.7 |
| 28-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 29-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 30-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 | 1.3 | 0.9 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 1.3 |
| 31-Aug | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.7 | 3.6 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 3.6 |
| | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.9 | 1.5 | 2.3 | 2.4 | 1.8 | 1.9 | 1.2 | 0.9 | 0.6 | 0.3 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.2 | 0.2 | 0.1 | 0.6 | 0.2 | 0.1 | 0.2 | 0.2 | 0.7 | 4.4 | 12.1 | 42.7 | 47.2 | 18.9 | 9.2 | 7.2 | 11.1 | 5.3 | 3.1 | 5.3 | 10.5 | 1.0 | 1.2 | 0.4 | Diurnal Maximum | |

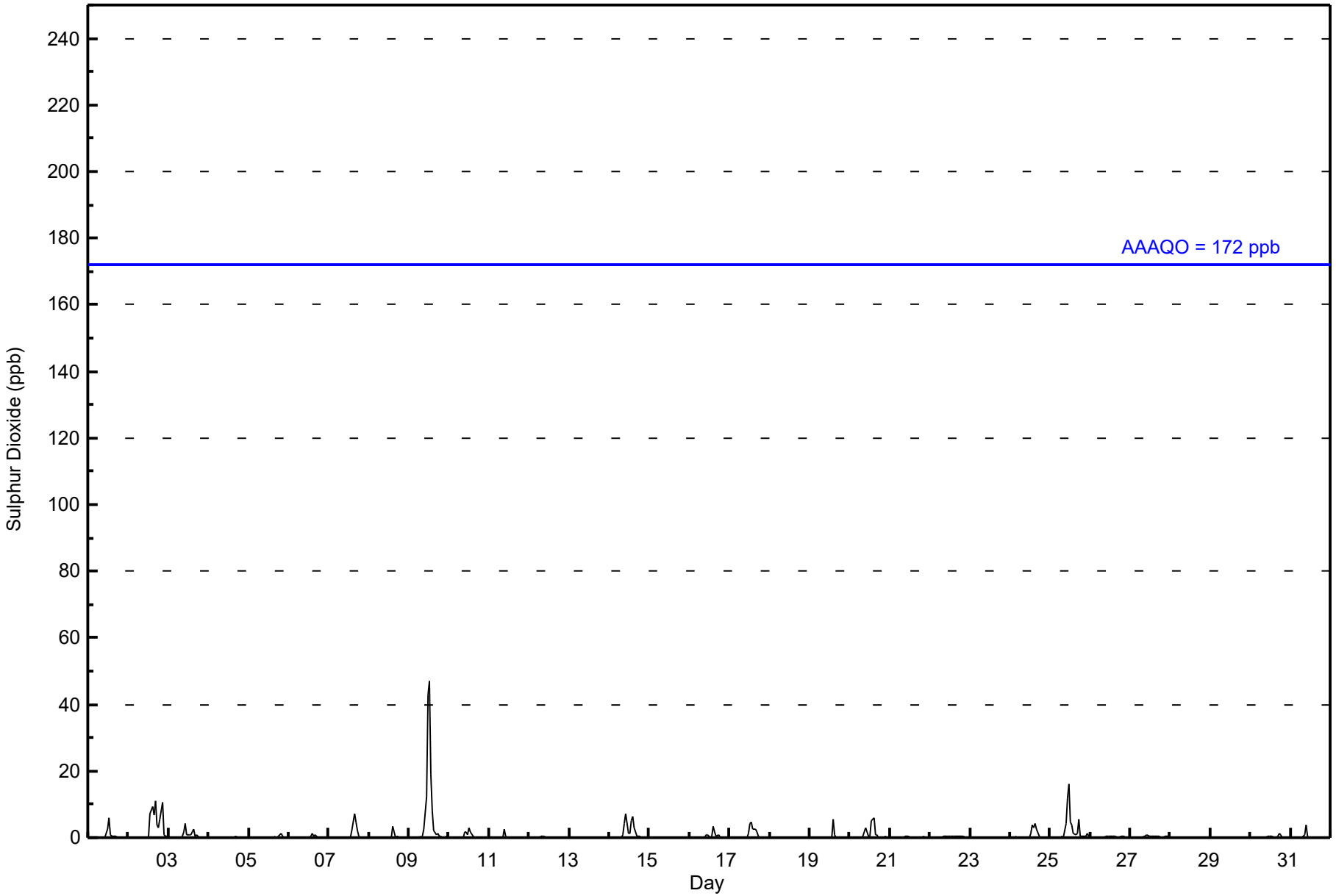
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 687 | 98.85 | 98.85 |
| 11 - 20 | 6 | 0.86 | 99.71 |
| 21 - 60 | 2 | 0.29 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 695

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 93 | 31 | 18 | 5 | 8 | 20 | 29 | 119 | 54 | 28 | 31 | 55 | 23 | 44 | 74 | 55 | 687 |
| 11 - 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 6 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 95 | 31 | 18 | 5 | 8 | 20 | 29 | 119 | 54 | 28 | 32 | 55 | 23 | 45 | 75 | 58 | 695 |

Total Number of Valid Hours: 695

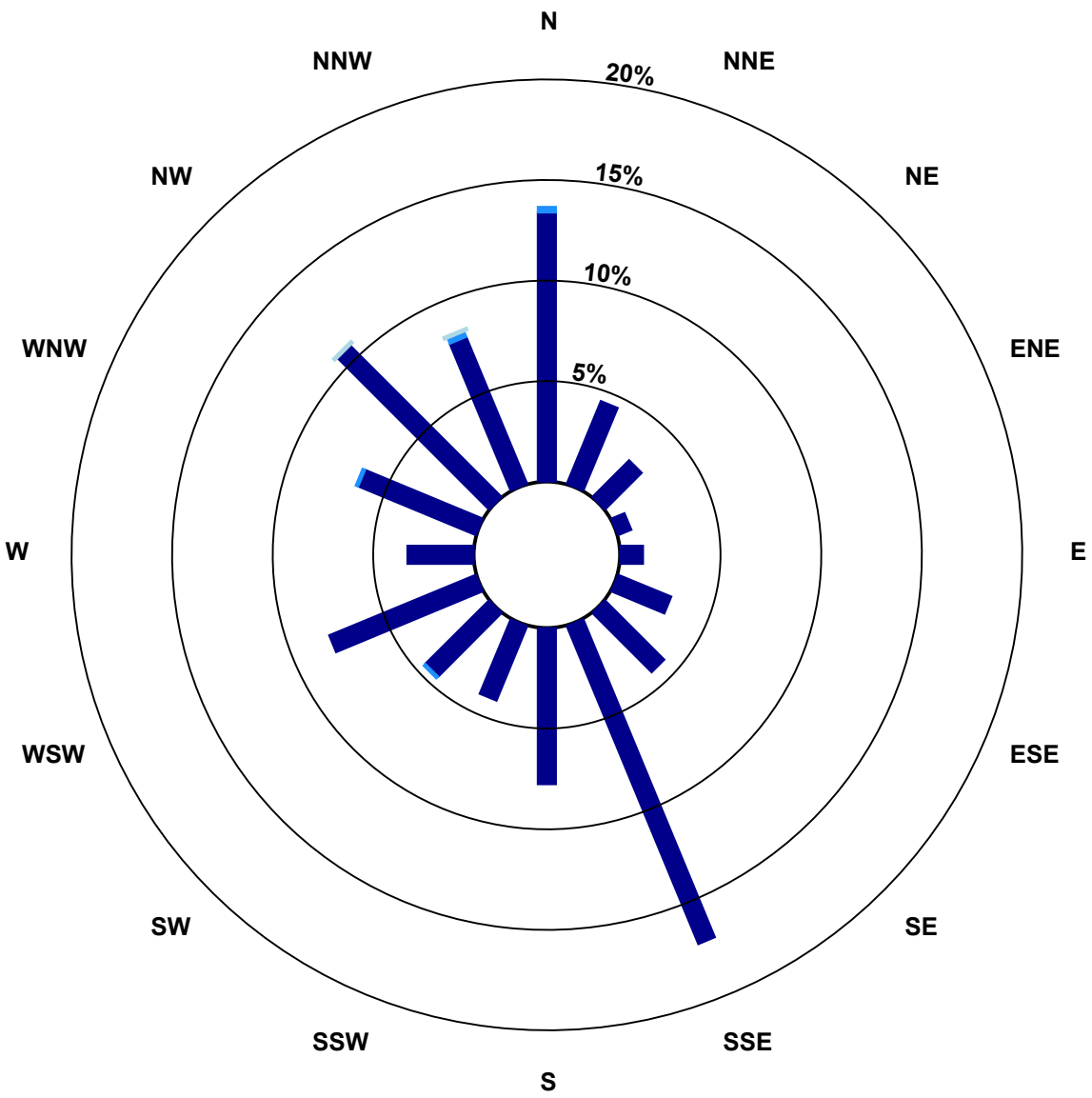
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Buffalo Viewpoint




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

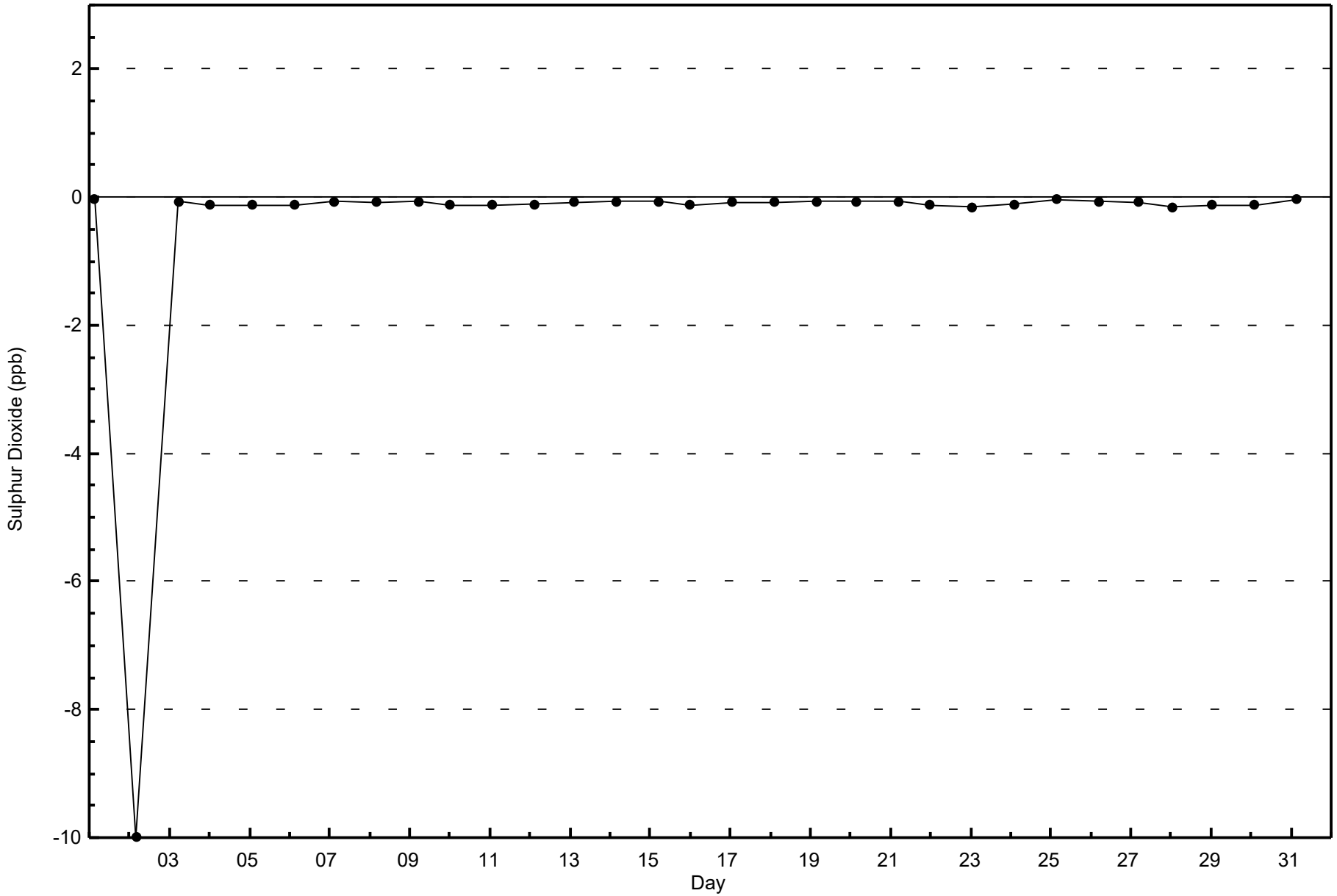
Total Number of Valid Hours: 695

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Buffalo Viewpoint - August 2026**

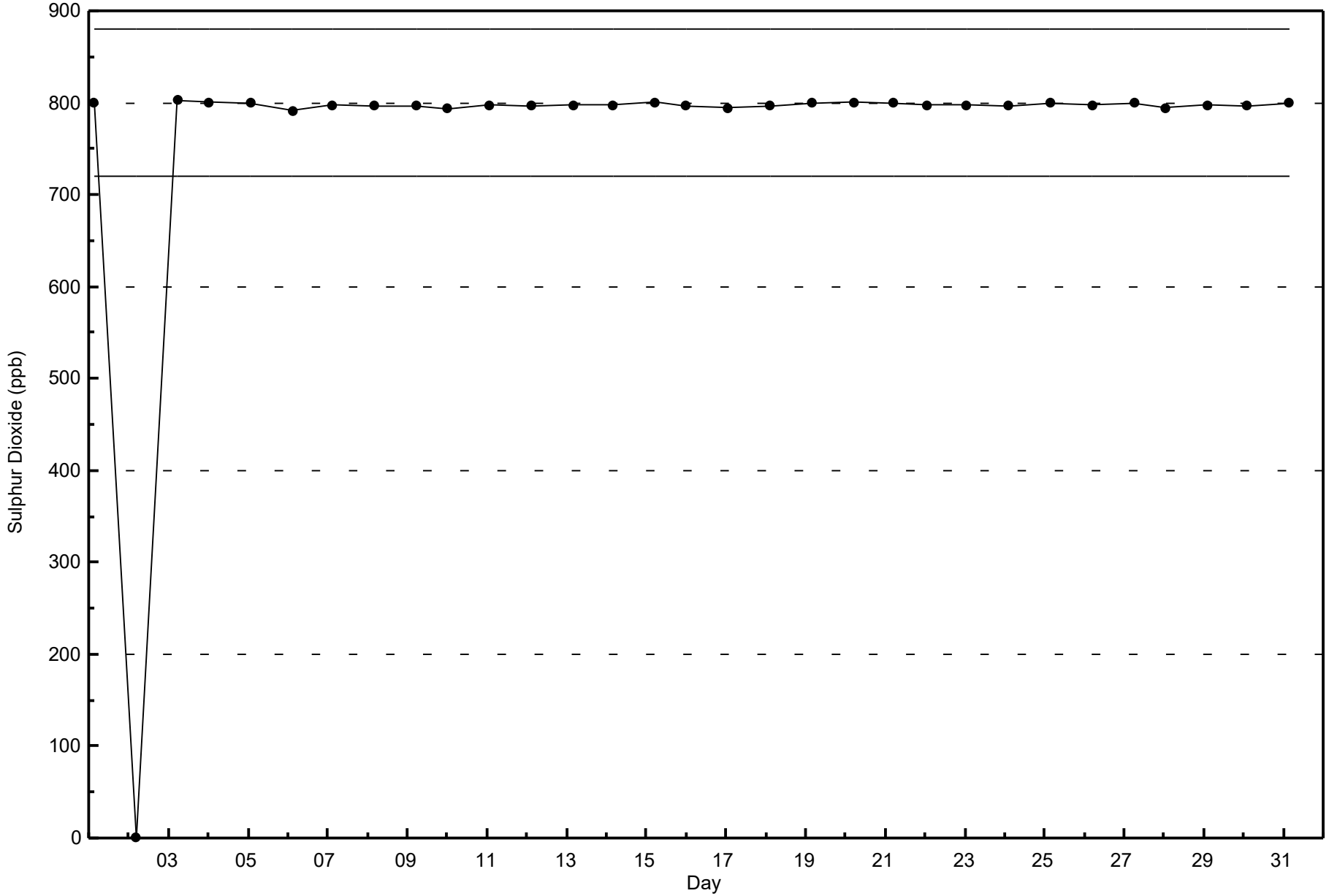


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.8 ppb on Aug 2 18:00 Maximum Daily Average: 1.0 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 11 13:00 Minimum Daily Average: 0.1 ppb on Aug 29
Maximum Diurnal Average: 0.7 ppb at hour 4 Minimum Diurnal Average: 0.2 ppb at hour 13
Monthly Average: 0.44 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.5 $P_{90}$ = 1.1 $P_{99}$ = 2.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 695 |
| Hours of Missing Data: | 49 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.6 | 0.3 | 0.4 | Z | 0.5 | 0.4 | 0.3 | 0.3 | 1.0 | 0.3 | 2.9 | 1.6 | 1.1 | 0.2 | 0.3 | 0.6 | 0.2 | 0.3 | 3.7 | PF | PF | PF | PF | 0.8 | 3.7 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 0.6 | 0.3 | 0.3 | M | 0.3 | 0.4 | 0.4 | 0.6 | 1.9 | 4.8 | 2.2 | 4.1 | 3.3 | 0.6 | 0.5 | 0.8 | -- | 4.8 |
| 3-Aug | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.8 | 1.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.8 | 0.3 | 1.1 |
| 4-Aug | 0.8 | Z | 0.6 | 0.5 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 1.5 | 0.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 1.5 |
| 5-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.2 | 0.7 | 0.2 | 1.7 | 2.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.4 | 2.3 |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 |
| 7-Aug | 0.1 | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.9 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 1.1 | 0.6 | 0.3 | 1.1 |
| 8-Aug | 0.8 | 0.7 | 0.9 | 0.6 | 0.6 | Z | 0.4 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.1 | 1.4 | 0.5 | 0.2 | 0.6 | 0.5 | 0.3 | 0.4 | 0.6 | 0.5 | 1.4 |
| 9-Aug | Z | 0.5 | 1.0 | 1.0 | 1.2 | 1.1 | 1.3 | 1.2 | 1.2 | 1.8 | 1.4 | 1.3 | 1.0 | 0.8 | 0.5 | 0.2 | 0.2 | 0.7 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 1.8 |
| 10-Aug | 0.8 | Z | 1.3 | 1.3 | 0.8 | 0.8 | 1.0 | 0.6 | 0.7 | 2.6 | C | C | C | C | C | C | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 1.1 | 1.8 | -- | 2.6 |
| 11-Aug | 1.2 | 0.8 | Z | 0.6 | 0.6 | 0.9 | 1.2 | 0.8 | 0.1 | 1.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.4 | 1.2 |
| 12-Aug | 0.8 | 2.0 | 0.7 | Z | 0.6 | 0.4 | 0.4 | 2.5 | 1.2 | 1.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 1.5 | 0.2 | 0.1 | 0.6 | 2.5 |
| 13-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.3 | 1.4 | 0.2 | 1.4 |
| 14-Aug | 1.2 | 1.3 | 1.0 | 0.9 | 0.8 | Z | 1.2 | 1.3 | 3.4 | 3.3 | 1.7 | 0.4 | 0.4 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.4 | 0.9 | 3.4 |
| 15-Aug | Z | 0.8 | 1.6 | 1.0 | 0.7 | 0.9 | 0.8 | 0.7 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 1.1 | 1.0 | 0.5 | 0.5 | 1.6 |
| 16-Aug | 0.2 | Z | 0.2 | 0.2 | 0.7 | 0.5 | 0.8 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.2 | 0.4 | 0.6 | 0.6 | 0.8 | 0.4 | 0.8 |
| 17-Aug | 1.0 | 1.4 | Z | 0.9 | 0.9 | 1.3 | 1.1 | 0.9 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 1.4 |
| 18-Aug | 0.8 | 0.8 | 0.5 | Z | 0.7 | 0.7 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.3 | 0.4 | 0.3 | 0.8 |
| 19-Aug | 0.2 | 0.3 | 0.6 | 0.4 | Z | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.6 |
| 20-Aug | 0.5 | 0.7 | 0.4 | 2.3 | 1.6 | Z | 0.6 | 0.7 | 0.4 | 1.7 | 2.1 | 0.6 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.6 | 2.3 |
| 21-Aug | Z | 0.5 | 0.7 | 0.5 | 0.6 | 1.0 | 0.8 | 0.8 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.5 | 0.7 | 0.3 | 0.3 | 1.0 |
| 22-Aug | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 |
| 23-Aug | 0.3 | 0.3 | Z | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 1.0 | 0.6 | 0.3 | 0.4 | 0.3 | 1.0 |
| 24-Aug | 0.3 | 0.3 | 0.4 | Z | 1.1 | 0.9 | 0.4 | 0.5 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.8 | 1.6 | 1.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 0.2 | 0.7 | 0.4 | 1.6 |
| 25-Aug | 1.7 | 1.8 | 1.8 | 2.6 | Z | 1.9 | 2.7 | 1.6 | 0.8 | 0.5 | 0.7 | 1.6 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 1.6 | 0.9 | 1.0 | 2.7 |
| 26-Aug | 0.6 | 0.7 | 1.3 | 0.6 | 0.6 | Z | 0.8 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 1.3 |
| 27-Aug | Z | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1.1 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 1.1 |
| 28-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 29-Aug | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 |
| 30-Aug | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.4 | 0.3 | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.2 | 0.8 |
| 31-Aug | 3.7 | 1.6 | 0.7 | 0.7 | Z | 0.4 | 0.3 | 0.4 | 0.6 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.5 | 0.5 | 0.6 | 0.5 | 3.7 |
| | 0.7 | 0.7 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | Diurnal Average | |
| | 3.7 | 2.0 | 1.8 | 2.6 | 1.6 | 1.9 | 2.7 | 2.5 | 3.4 | 3.3 | 2.1 | 2.9 | 1.6 | 1.1 | 1.6 | 1.4 | 1.9 | 4.8 | 2.2 | 4.1 | 3.3 | 1.5 | 1.6 | 1.8 | Diurnal Maximum | |

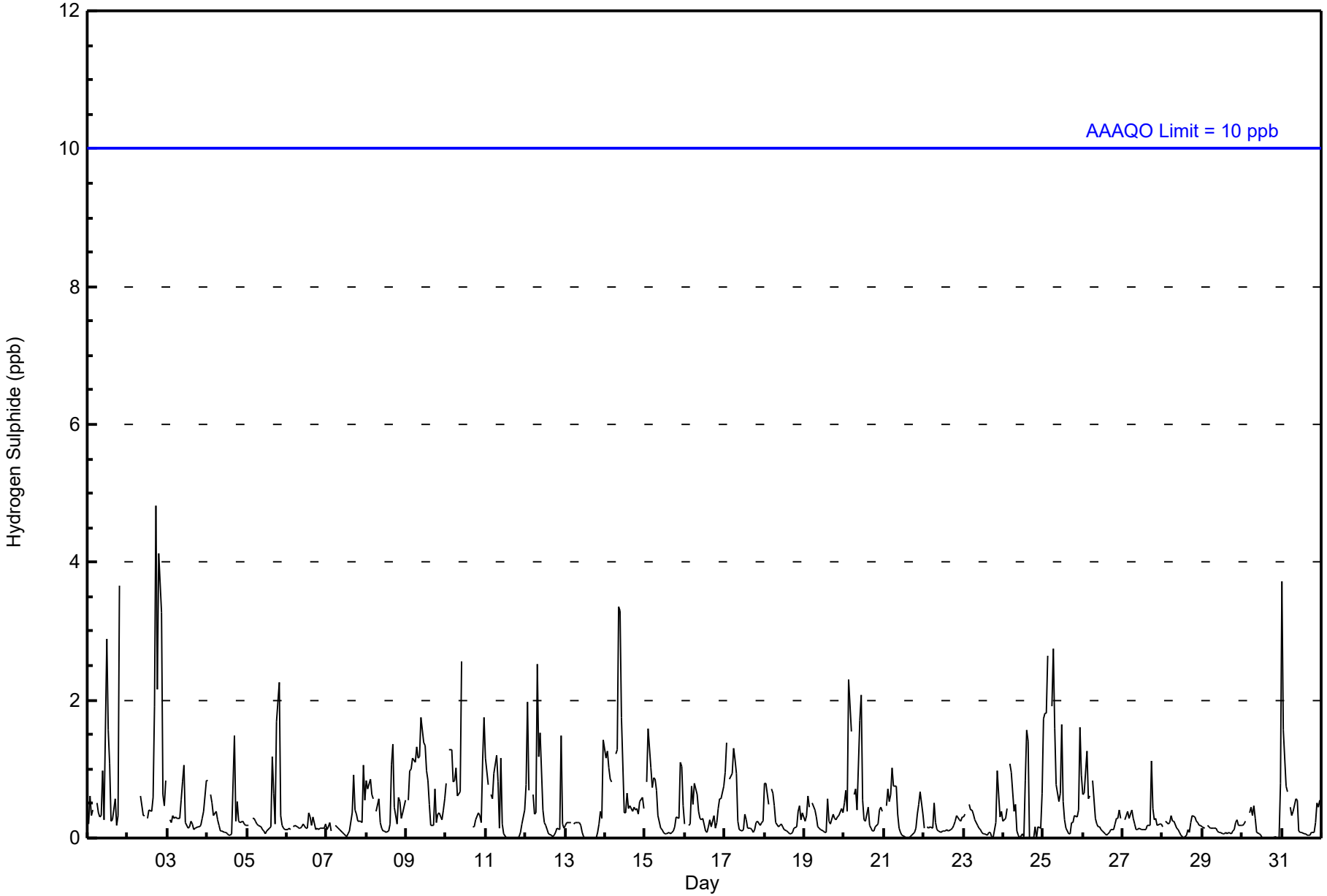
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 683 | 98.27 | 98.27 |
| 3 - 4 | 11 | 1.58 | 99.86 |
| 5 - 7 | 1 | 0.14 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 695

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 87 | 31 | 18 | 5 | 5 | 20 | 28 | 115 | 58 | 29 | 33 | 53 | 24 | 44 | 80 | 53 | 683 |
| 3 - 4 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 11 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 89 | 31 | 18 | 5 | 6 | 20 | 28 | 115 | 58 | 29 | 33 | 53 | 24 | 45 | 83 | 58 | 695 |

Total Number of Valid Hours: 695

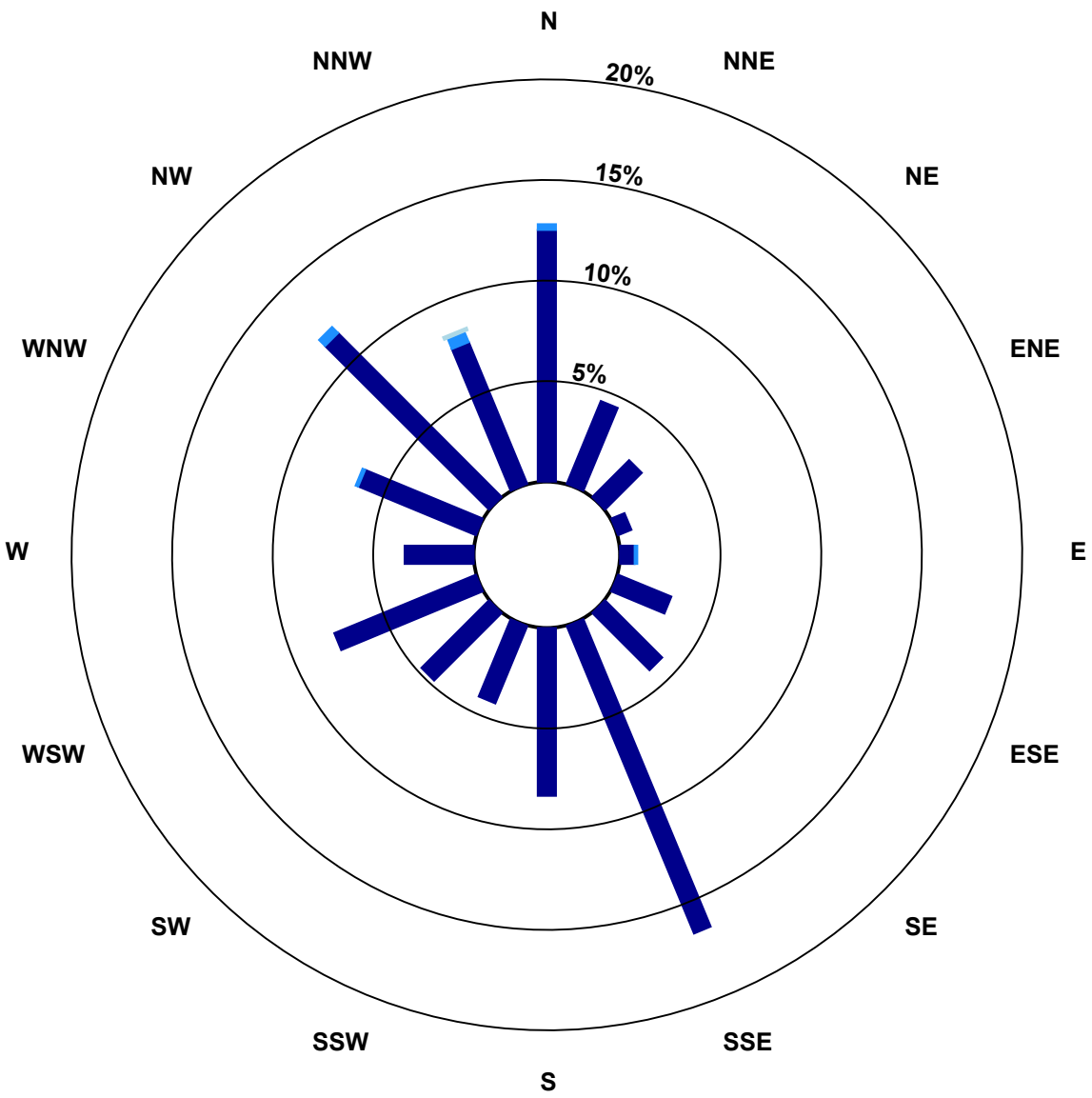
Total Number of Hours: 744

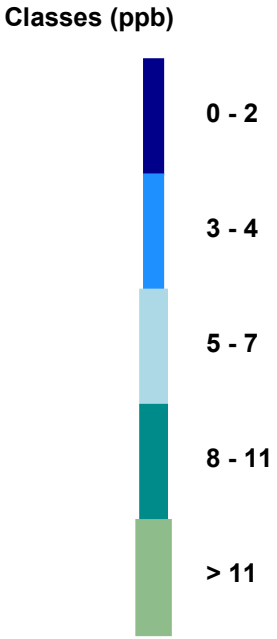
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Buffalo Viewpoint**



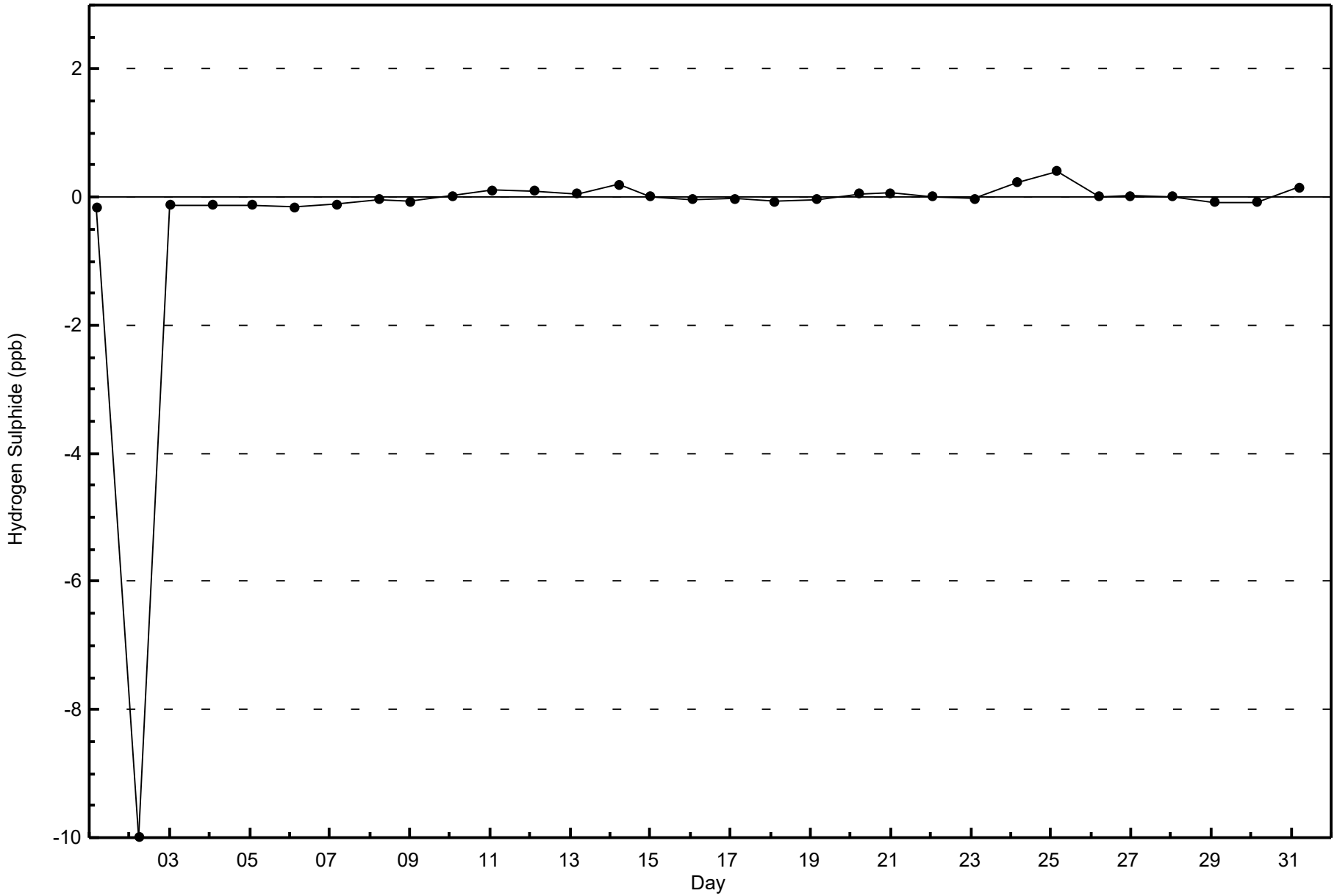

**Total Number of Valid Hours: 695**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Buffalo Viewpoint - August 2026**

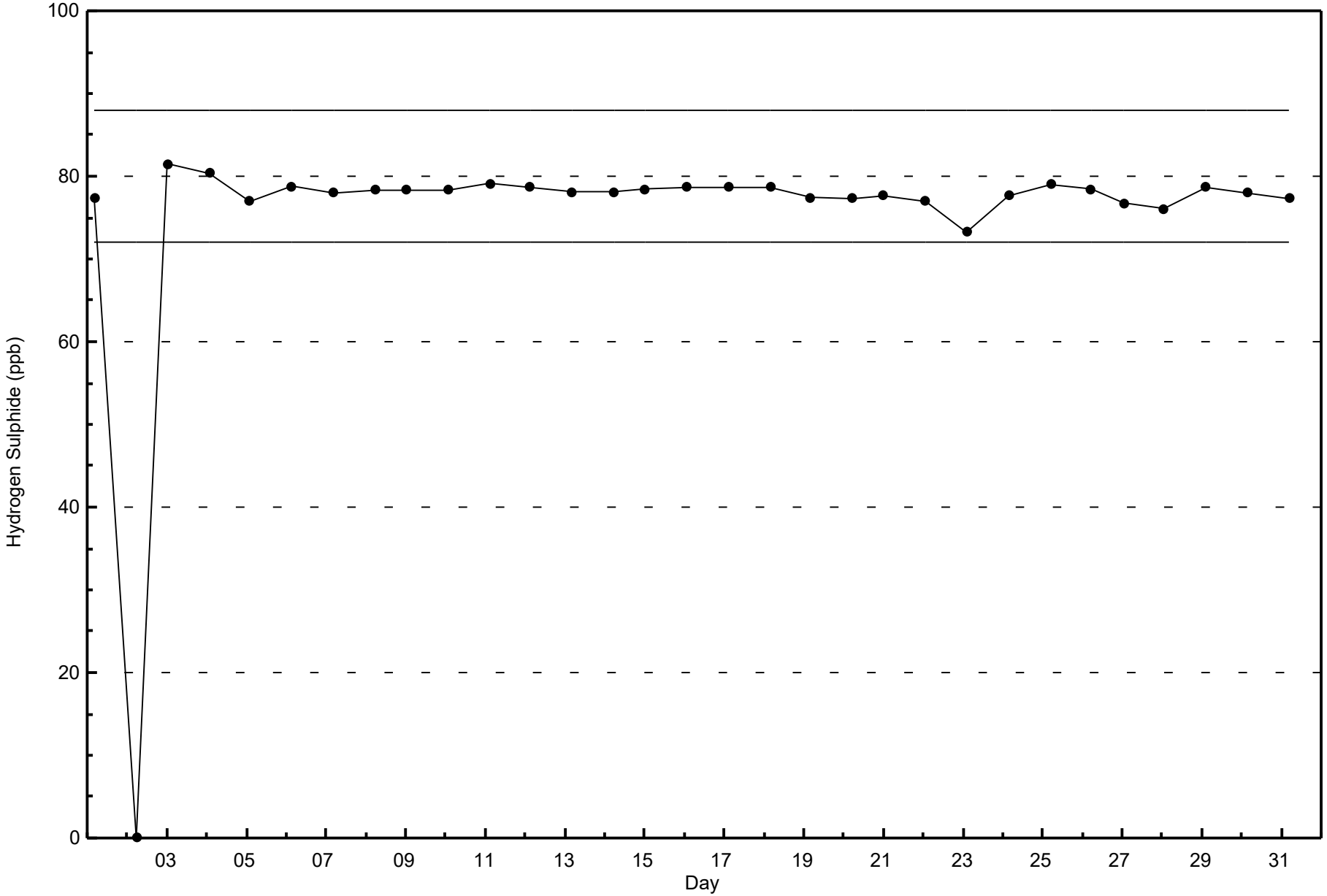


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Buffalo Viewpoint - August 2026

Maximum Value: 3.2 ppm on Aug 10 10:00

Maximum Daily Average: 2.5 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 19 13:00

Minimum Daily Average: 2.1 ppm on Aug 6

Maximum Diurnal Average: 2.4 ppm at hour 7

Minimum Diurnal Average: 2.1 ppm at hour 18

Monthly Average: 2.22 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.1 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.3 $P_{90}$ = 2.4 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 695 |
| Hours of Missing Data: | 49 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.4 | 2.4 | 2.4 | Z | 2.6 | 2.6 | 2.5 | 2.6 | 2.6 | 2.7 | 2.4 | 2.8 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.8 | PF | PF | PF | PF | 2.5 | 2.8 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 2.1 | 2.1 | 2.1 | 2.1 | M | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | -- | 2.1 |
| 3-Aug | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | Z | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.1 | 2.4 |
| 4-Aug | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 5-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | C | C | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | -- | 2.2 |
| 6-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 7-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 8-Aug | 2.3 | 2.5 | 2.5 | 2.4 | Z | 2.4 | 2.4 | 2.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.6 |
| 9-Aug | 2.2 | 2.4 | 2.4 | 2.3 | 2.3 | Z | 3.2 | 2.7 | 2.6 | 2.6 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 3.2 |
| 10-Aug | Z | 2.6 | 2.7 | 2.7 | 2.6 | 2.5 | 2.5 | 2.5 | 2.6 | 3.2 | 2.8 | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.4 | 3.2 |
| 11-Aug | 2.5 | Z | 2.4 | 2.5 | 2.6 | 2.7 | 2.6 | 2.7 | 2.2 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.7 |
| 12-Aug | 2.2 | 2.5 | Z | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 13-Aug | 2.2 | 2.3 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.2 | 2.4 |
| 14-Aug | 2.5 | 2.5 | 2.5 | 2.6 | Z | 3.0 | 2.8 | 2.7 | 3.0 | 2.7 | 2.4 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 3.0 |
| 15-Aug | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.4 |
| 16-Aug | Z | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.7 | 2.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.5 | 2.3 | 2.2 | 2.7 |
| 17-Aug | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 18-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 |
| 19-Aug | 2.2 | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 20-Aug | 2.1 | 2.1 | 2.1 | 2.4 | Z | 2.4 | 2.3 | 2.4 | 2.3 | 2.7 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.7 |
| 21-Aug | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.5 |
| 22-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 23-Aug | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | 2.5 | 2.3 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.3 | 2.3 | 2.6 |
| 24-Aug | 2.1 | 2.1 | Z | 2.3 | 2.3 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.4 | 2.3 | 2.2 | 2.4 |
| 25-Aug | 2.5 | 2.6 | 2.6 | Z | 2.4 | 2.4 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.7 |
| 26-Aug | 2.4 | 2.7 | 2.8 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.8 |
| 27-Aug | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 28-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 29-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.1 | 2.3 |
| 30-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.5 | 2.2 | 2.5 |
| 31-Aug | 2.6 | 2.9 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.9 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | Diurnal Average | |
| | 2.6 | 2.9 | 2.8 | 2.7 | 2.6 | 3.0 | 3.2 | 2.7 | 3.0 | 3.2 | 2.8 | 2.8 | 2.4 | 2.5 | 2.5 | 2.6 | 2.5 | 2.3 | 2.3 | 2.8 | 2.3 | 2.3 | 2.5 | 2.5 | Diurnal Maximum | |

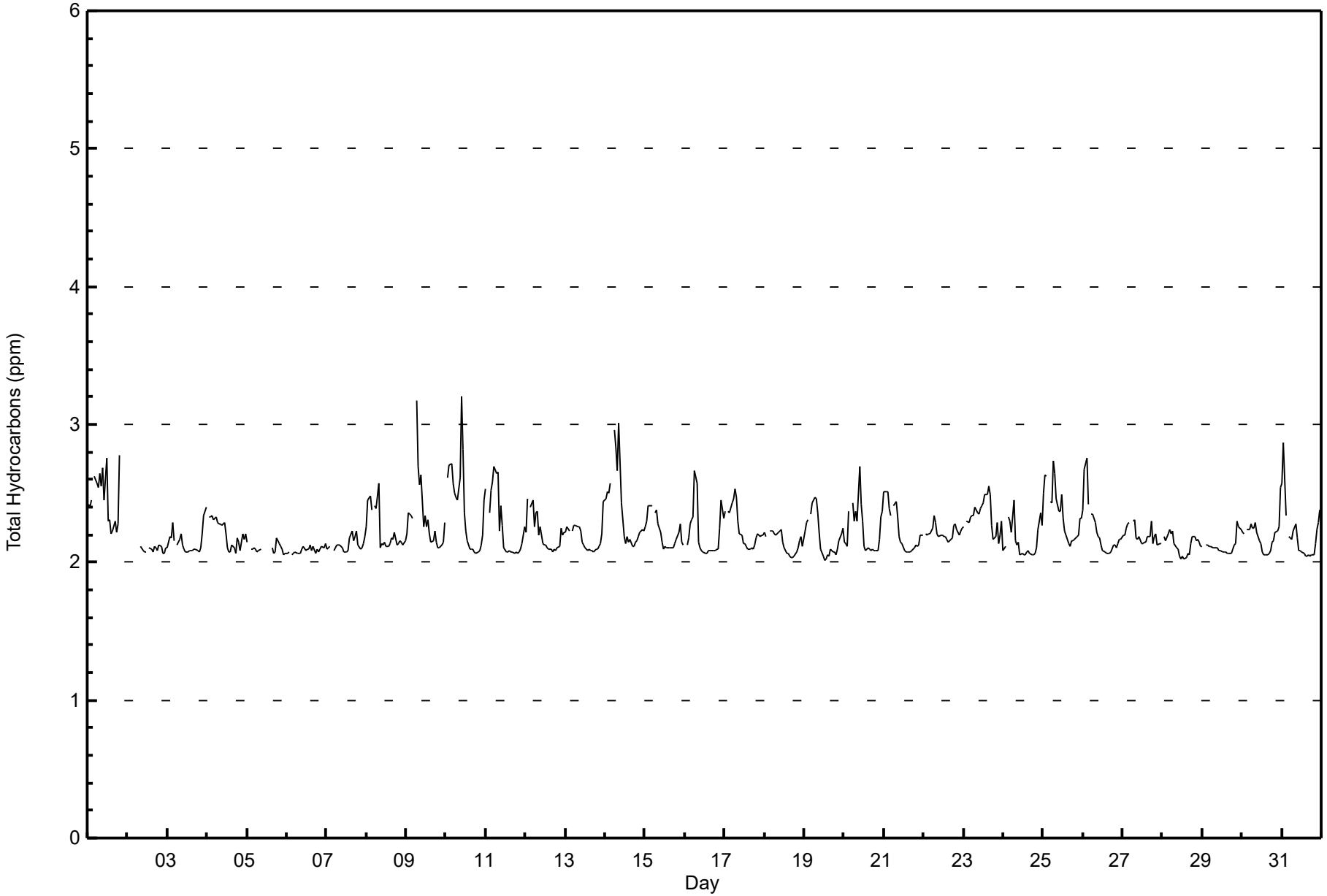
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 18 | 2.59 | 2.59 |
| 2.1 - 3.0 | 675 | 97.12 | 99.71 |
| 3.1 - 10.0 | 2 | 0.29 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 695

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 3 | 1 | 2 | 1 | 18 |
| 2.1 - 3.0 | 94 | 29 | 18 | 5 | 8 | 20 | 29 | 119 | 54 | 28 | 29 | 48 | 20 | 44 | 73 | 57 | 675 |
| 3.1 - 10.0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 95 | 31 | 18 | 5 | 8 | 20 | 29 | 119 | 54 | 28 | 32 | 55 | 23 | 45 | 75 | 58 | 695 |

Total Number of Valid Hours: 695

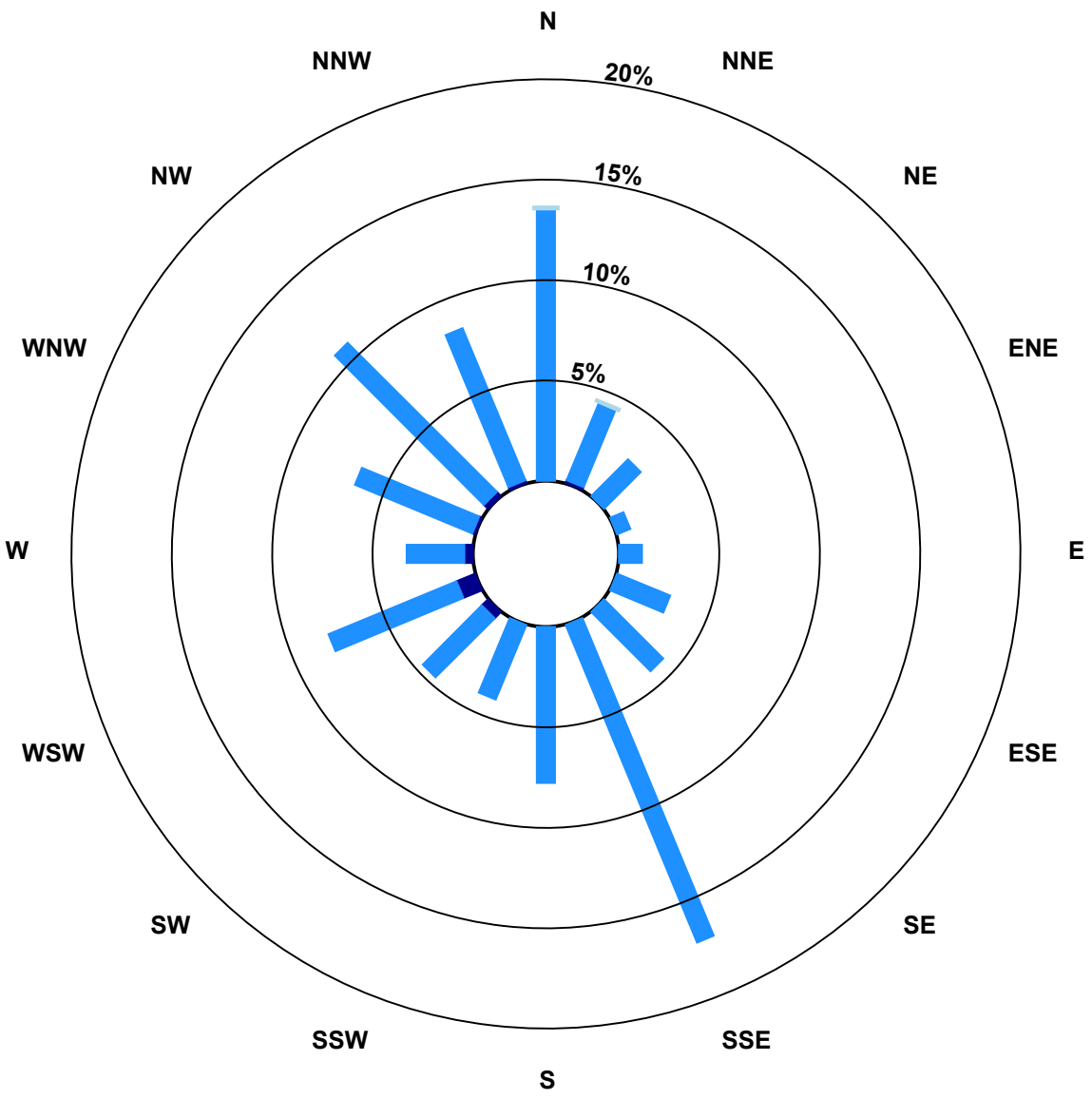
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Hydrocarbons (THC) - ppm**

**Buffalo Viewpoint**




**Classes (ppm)**

- 0 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

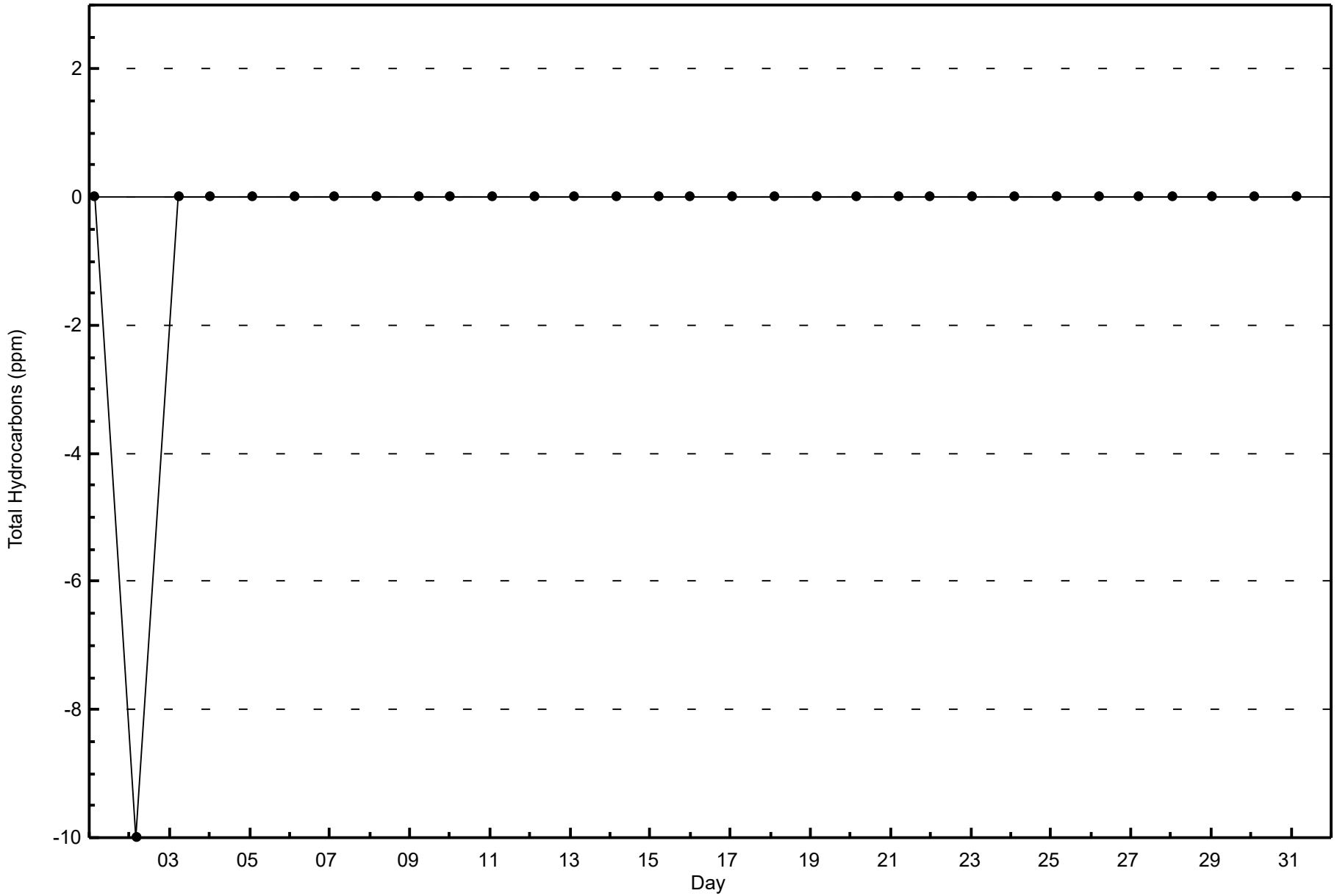
**Total Number of Valid Hours: 695**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Buffalo Viewpoint - August 2026**

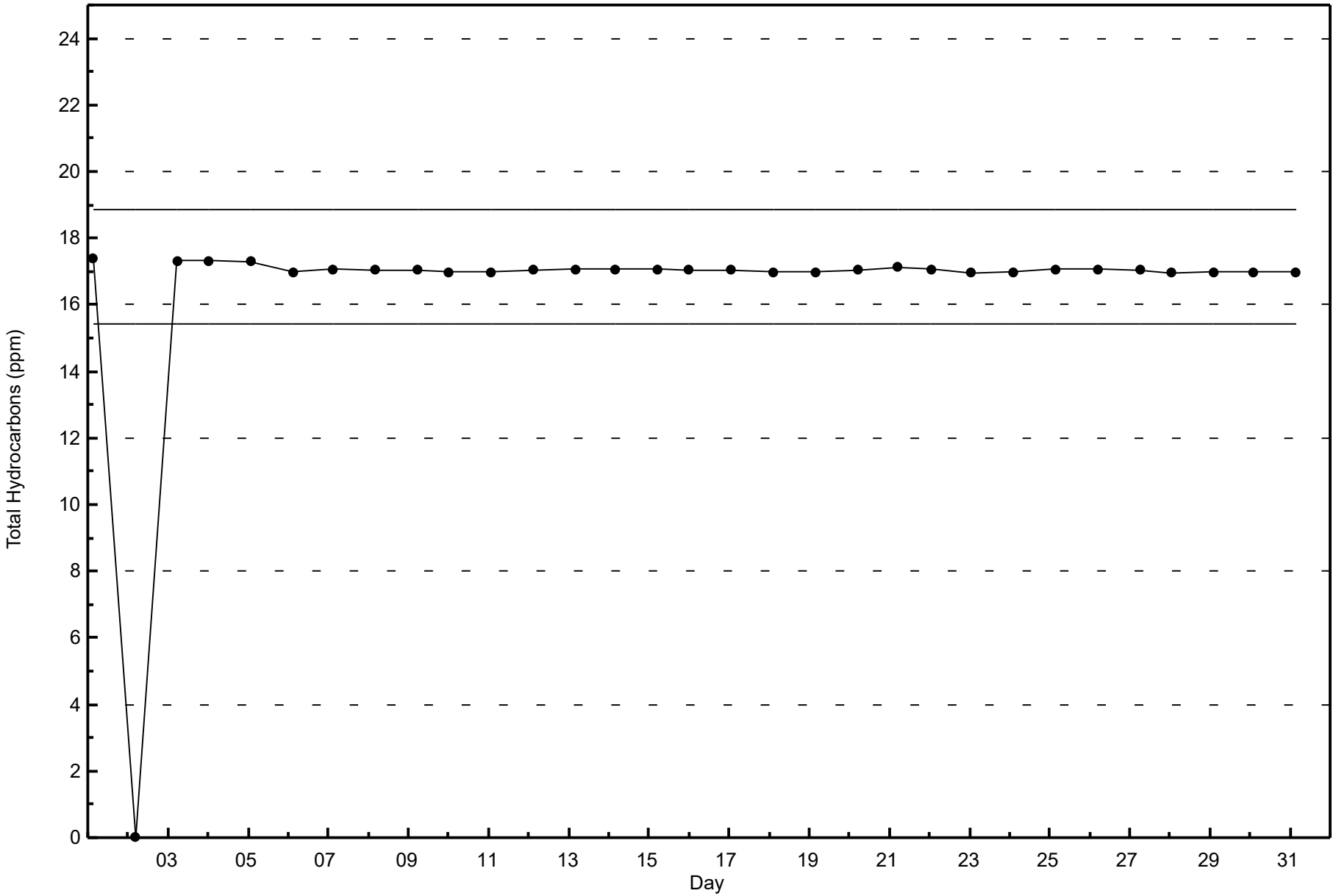


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Non Methane Hydrocarbons (NMHC) - ppm

## Buffalo Viewpoint - August 2026

Maximum Value: 0.094 ppm on Aug 23 16:00

Maximum Daily Average: 0.021 ppm on Aug 23

Minimum Value: 0.000 ppm on Aug 1 01:00

Minimum Daily Average: 0.000 ppm on Aug 4

Maximum Diurnal Average: 0.005 ppm at hour 17

Minimum Diurnal Average: 0.000 ppm at hour 1

Monthly Average: 0.001 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 695 |
| Hours of Missing Data: | 49 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.000 | 0.001 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.021 | 0.009 | 0.025 | 0.057 | 0.034 | 0.000 | PF | PF | PF | PF | 0.008 | 0.057 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 0.000 | 0.000 | 0.000 | 0.000 | M | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 |
| 3-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | C | C | 0.023 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.023 |
| 6-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 11-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 18-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 21-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 22-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.003 | 0.024 | 0.020 | 0.060 | 0.049 | 0.003 | 0.000 | 0.000 | 0.000 | 0.007 | 0.060 |
| 23-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.021 | 0.062 | 0.077 | 0.083 | 0.094 | 0.092 | 0.045 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.021 | 0.094 |
| 24-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 25-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 26-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27-Aug | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 28-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 29-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.003 | 0.003 | 0.004 | 0.005 | 0.004 | 0.003 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | Diurnal Average | |
| | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.021 | 0.062 | 0.077 | 0.083 | 0.094 | 0.092 | 0.057 | 0.060 | 0.049 | 0.003 | 0.000 | 0.000 | 0.000 | Diurnal Maximum | |

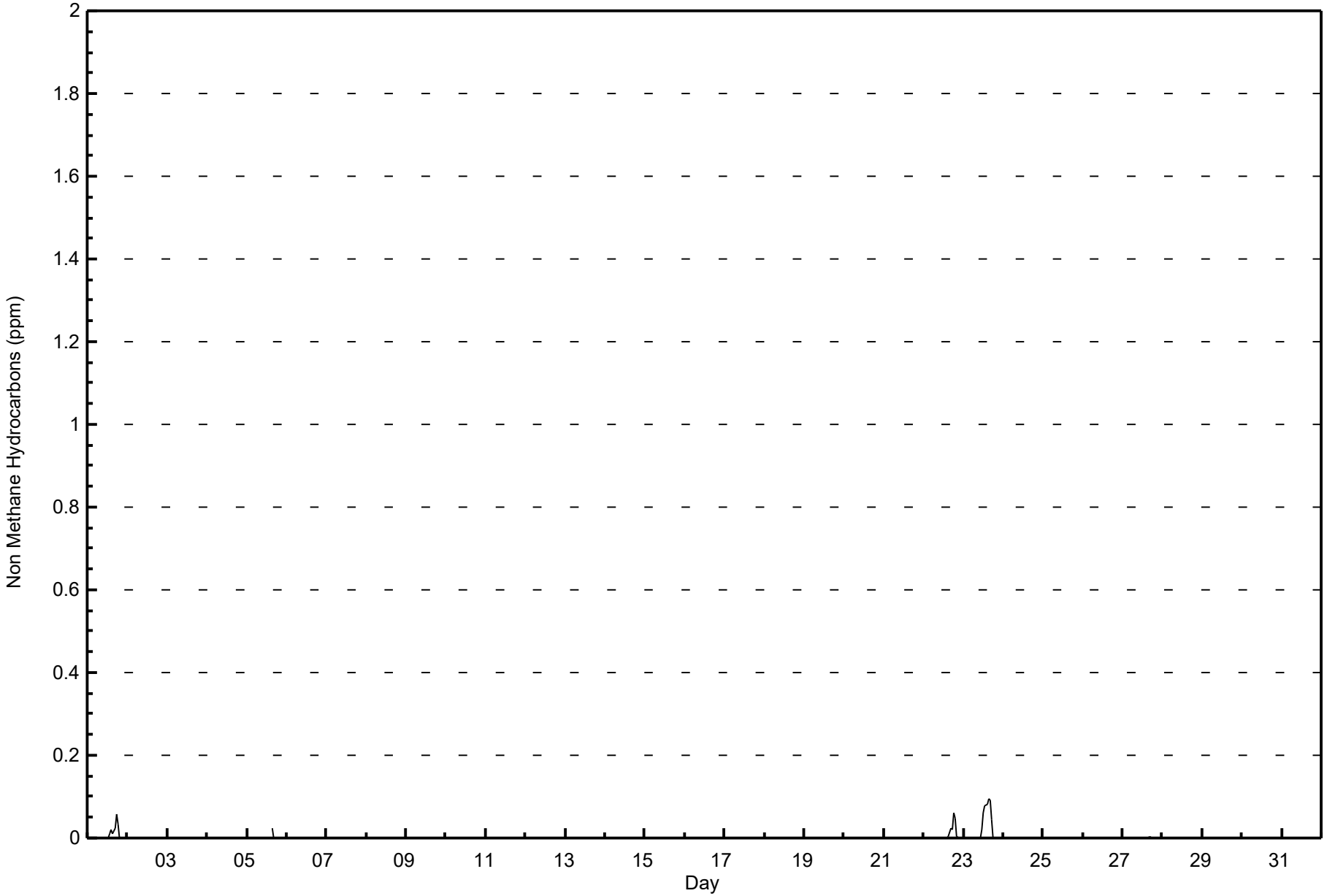
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 677 | 97.41 | 97.41 |
| 0.006 - 0.05 | 11 | 1.58 | 98.99 |
| 0.06 - 0.1 | 7 | 1.01 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 695

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 95 | 31 | 18 | 5 | 7 | 16 | 23 | 116 | 54 | 26 | 32 | 54 | 23 | 45 | 75 | 57 | 677 |
| 0.006 - 0.05 | 0 | 0 | 0 | 0 | 1 | 4 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 11 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 95 | 31 | 18 | 5 | 8 | 20 | 29 | 119 | 54 | 28 | 32 | 55 | 23 | 45 | 75 | 58 | 695 |

Total Number of Valid Hours: 695

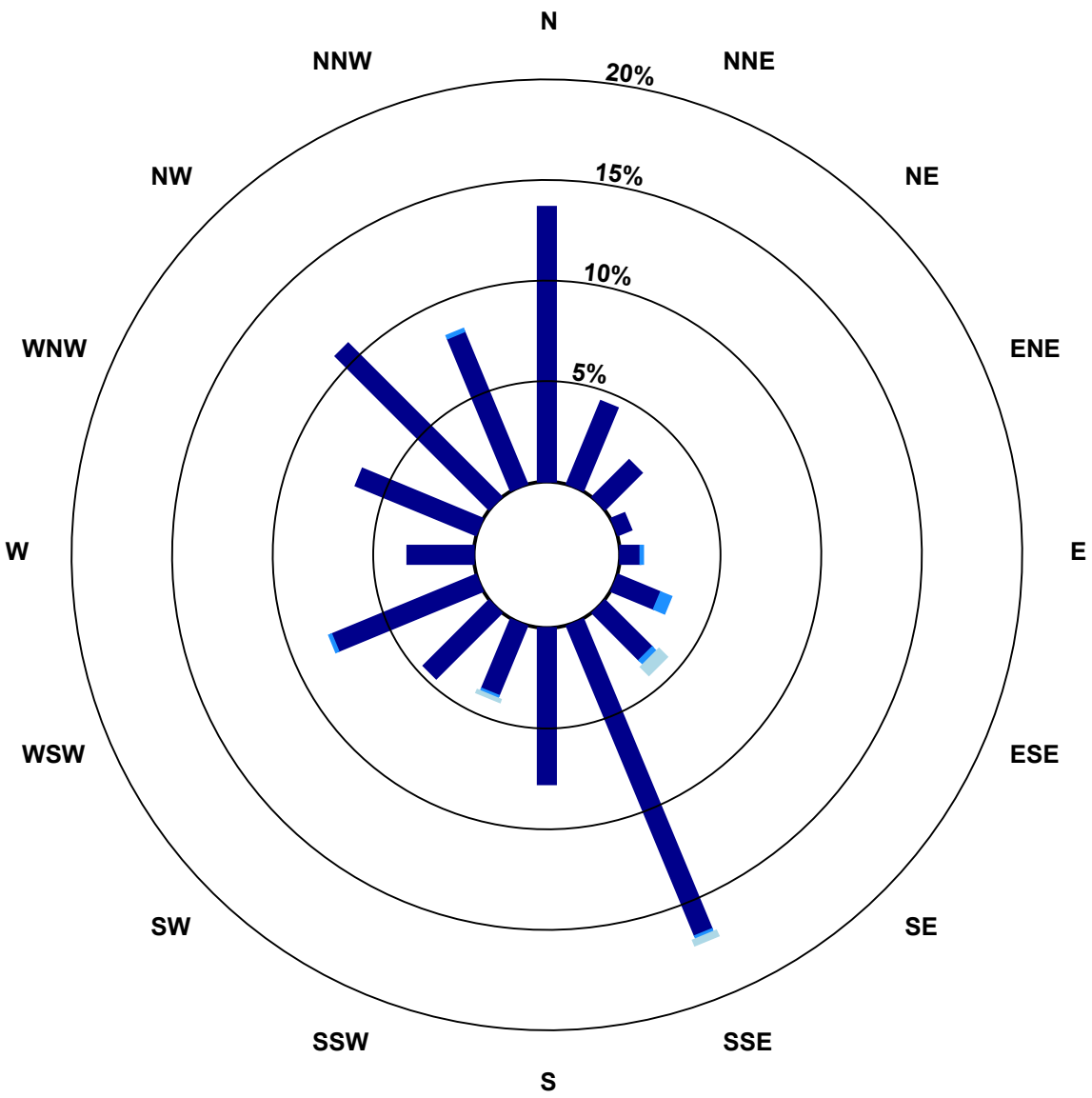
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Buffalo Viewpoint**




**Classes (ppm)**

- 0 - 0.005
- 0.006 - 0.05
- 0.06 - 0.1
- > 0.1

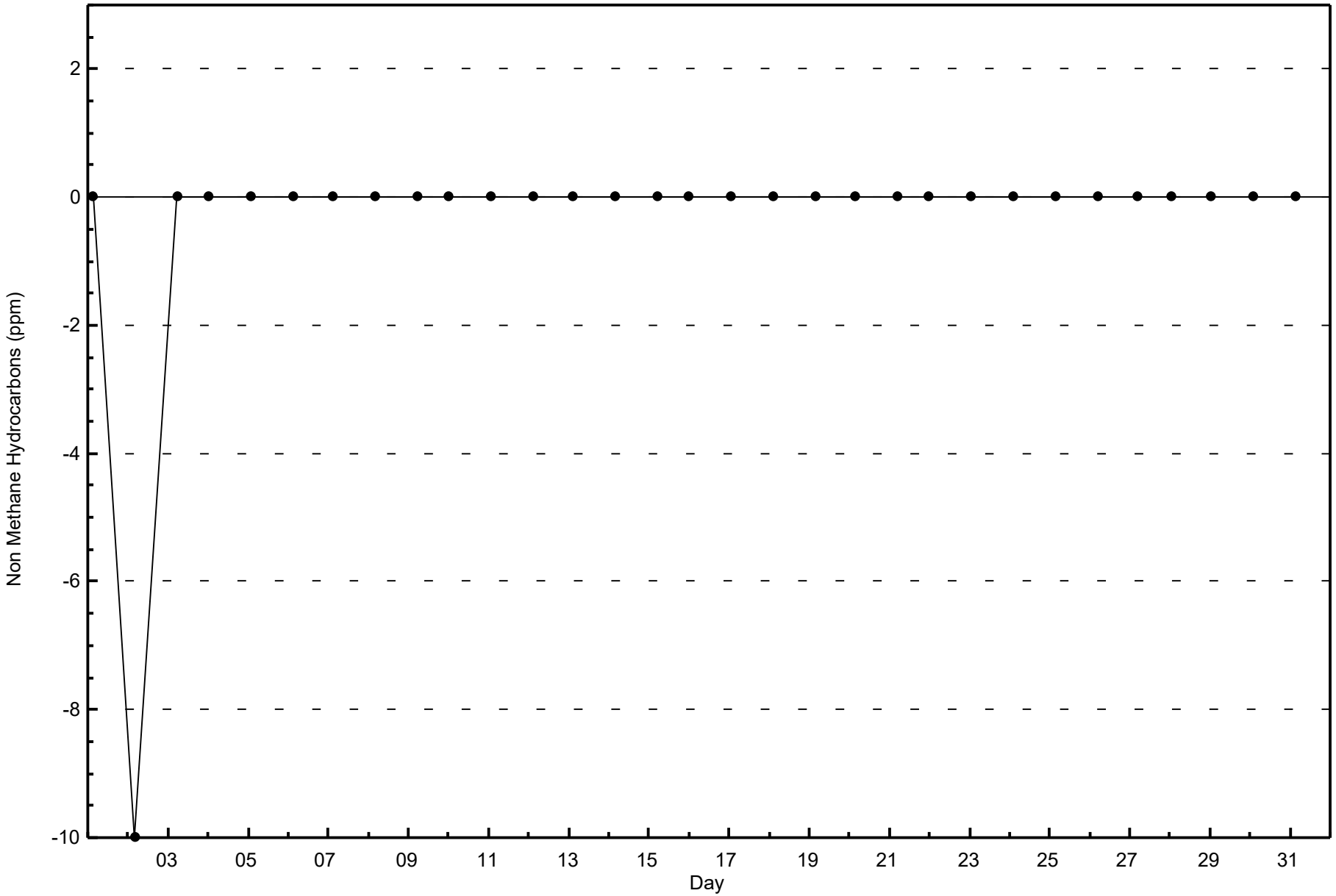
**Total Number of Valid Hours: 695**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Buffalo Viewpoint - August 2026**

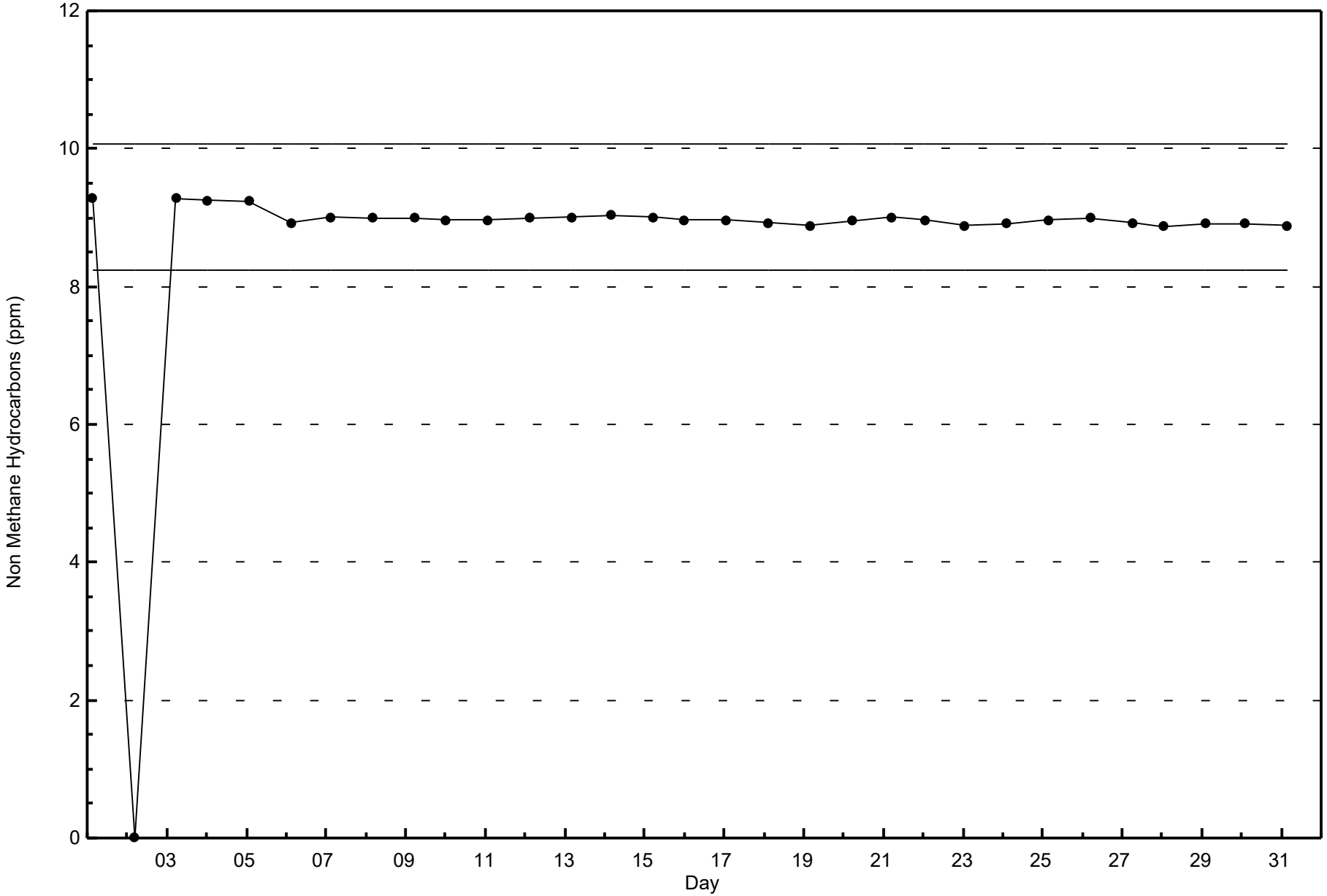


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Methane ($CH_4$) - ppm

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.2 ppm on Aug 10 10:00
Maximum Daily Average: 2.4 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 19 13:00
Minimum Daily Average: 2.1 ppm on Aug 6
Maximum Diurnal Average: 2.4 ppm at hour 7
Minimum Diurnal Average: 2.1 ppm at hour 17
Monthly Average: 2.22 ppm
Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.1 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.3 $P_{90}$ = 2.4 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 695 |
| Hours of Missing Data: | 49 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.4 | 2.4 | 2.4 | Z | 2.6 | 2.6 | 2.5 | 2.6 | 2.6 | 2.7 | 2.4 | 2.8 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.8 | PF | PF | PF | PF | 2.4 | 2.8 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 2.1 | 2.1 | 2.1 | 2.1 | M | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | -- | 2.1 |
| 3-Aug | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | Z | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.1 | 2.4 |
| 4-Aug | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 5-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | C | C | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | -- | 2.2 |
| 6-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 7-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 8-Aug | 2.3 | 2.5 | 2.5 | 2.4 | Z | 2.4 | 2.4 | 2.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.6 |
| 9-Aug | 2.2 | 2.4 | 2.4 | 2.3 | 2.3 | Z | 3.2 | 2.7 | 2.6 | 2.6 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 3.2 |
| 10-Aug | Z | 2.6 | 2.7 | 2.7 | 2.6 | 2.5 | 2.5 | 2.5 | 2.6 | 3.2 | 2.8 | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.4 | 3.2 |
| 11-Aug | 2.5 | Z | 2.4 | 2.5 | 2.6 | 2.7 | 2.6 | 2.7 | 2.2 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.7 |
| 12-Aug | 2.2 | 2.5 | Z | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 13-Aug | 2.2 | 2.3 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.2 | 2.4 |
| 14-Aug | 2.5 | 2.5 | 2.5 | 2.6 | Z | 3.0 | 2.8 | 2.7 | 3.0 | 2.7 | 2.4 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 3.0 |
| 15-Aug | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.4 |
| 16-Aug | Z | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.7 | 2.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.5 | 2.3 | 2.2 | 2.7 |
| 17-Aug | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 18-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 |
| 19-Aug | 2.2 | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 20-Aug | 2.1 | 2.1 | 2.1 | 2.4 | Z | 2.4 | 2.3 | 2.4 | 2.3 | 2.7 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.7 |
| 21-Aug | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.5 |
| 22-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 23-Aug | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.3 | 2.3 | 2.5 |
| 24-Aug | 2.1 | 2.1 | Z | 2.3 | 2.3 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.4 | 2.3 | 2.2 | 2.4 |
| 25-Aug | 2.5 | 2.6 | 2.6 | Z | 2.4 | 2.4 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.7 |
| 26-Aug | 2.4 | 2.7 | 2.8 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.8 |
| 27-Aug | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 28-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 29-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.1 | 2.3 |
| 30-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.5 | 2.2 | 2.5 |
| 31-Aug | 2.6 | 2.9 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.9 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | Diurnal Average | |
| | 2.6 | 2.9 | 2.8 | 2.7 | 2.6 | 3.0 | 3.2 | 2.7 | 3.0 | 3.2 | 2.8 | 2.8 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.8 | 2.3 | 2.3 | 2.5 | 2.5 | Diurnal Maximum | |

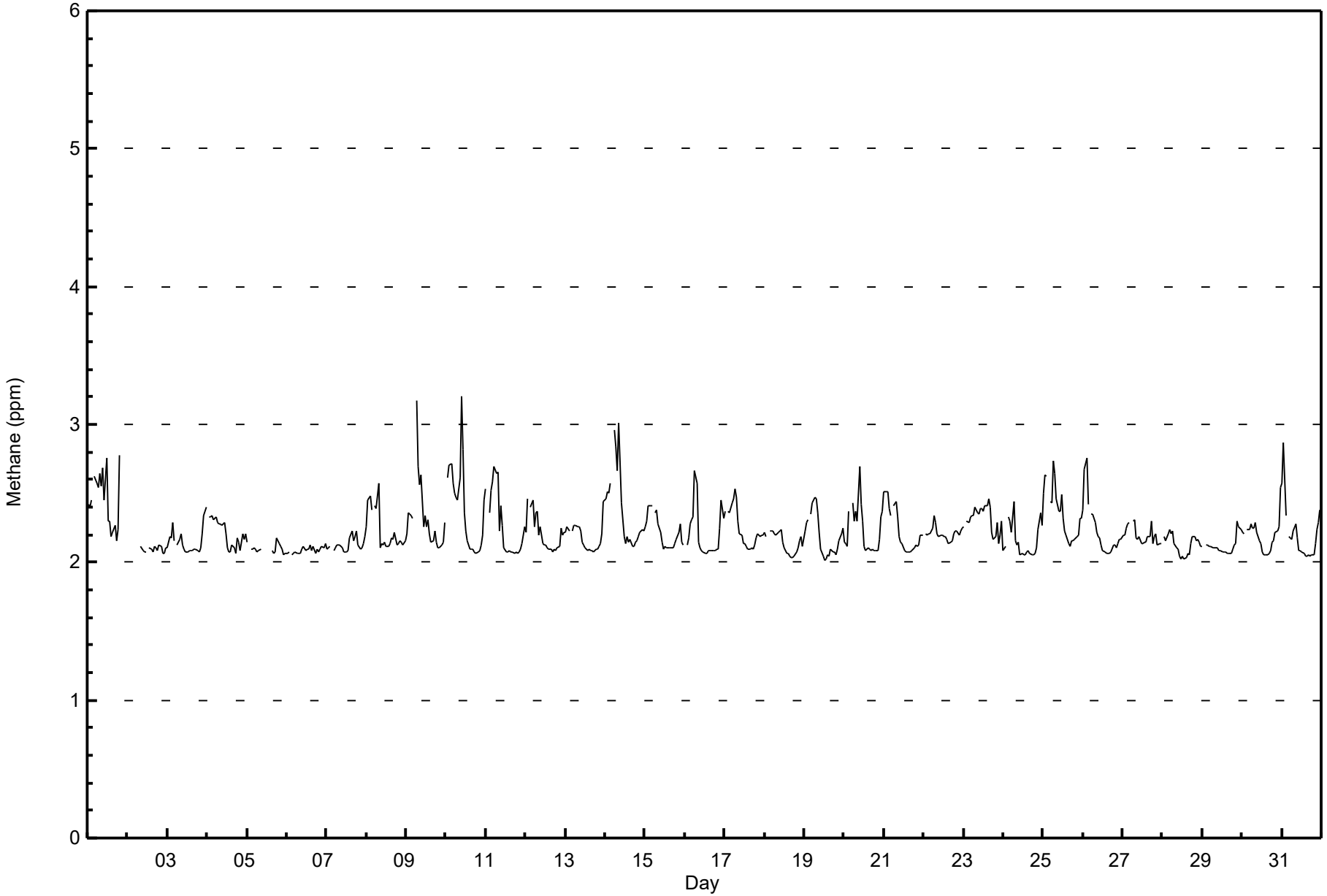
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Buffalo Viewpoint - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 18 | 2.59 | 2.59 |
| 2.1 - 3.0 | 675 | 97.12 | 99.71 |
| 3.1 - 10.0 | 2 | 0.29 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 695

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 3 | 1 | 2 | 1 | 18 |
| 2.1 - 3.0 | 94 | 29 | 18 | 5 | 8 | 20 | 29 | 119 | 54 | 28 | 29 | 48 | 20 | 44 | 73 | 57 | 675 |
| 3.1 - 10.0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 95 | 31 | 18 | 5 | 8 | 20 | 29 | 119 | 54 | 28 | 32 | 55 | 23 | 45 | 75 | 58 | 695 |

Total Number of Valid Hours: 695

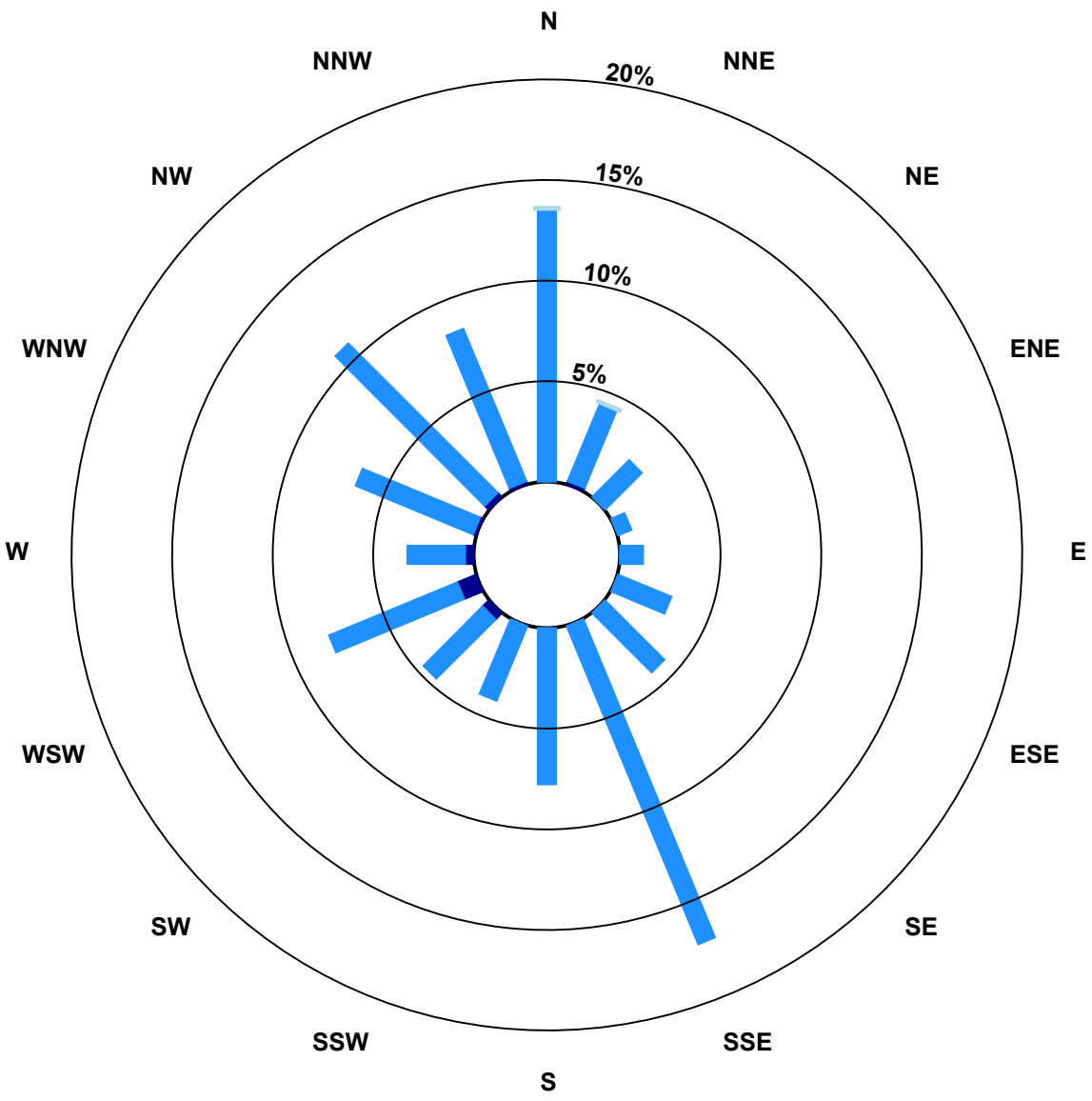
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Buffalo Viewpoint




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

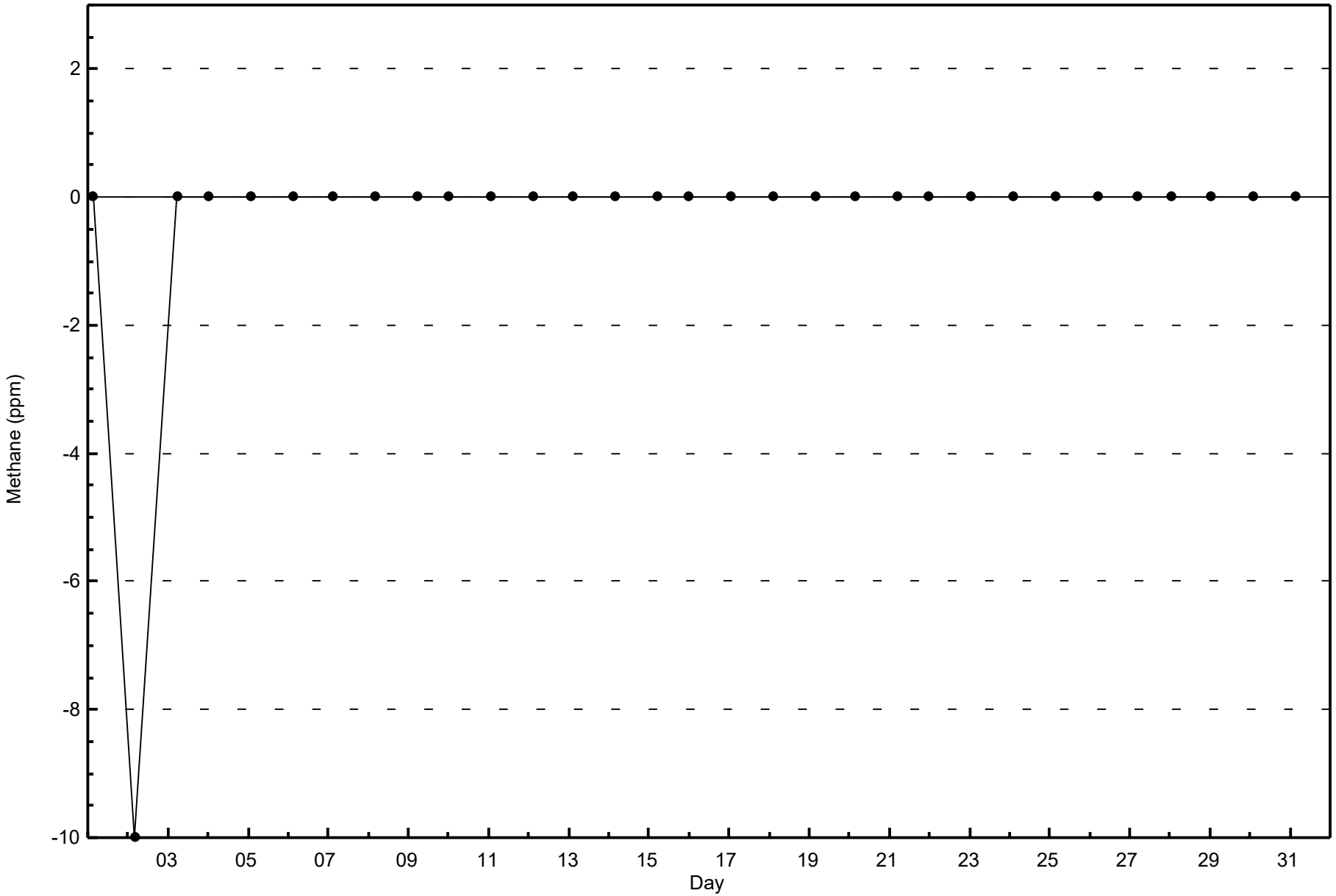
Total Number of Valid Hours: 695

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Buffalo Viewpoint - August 2026**

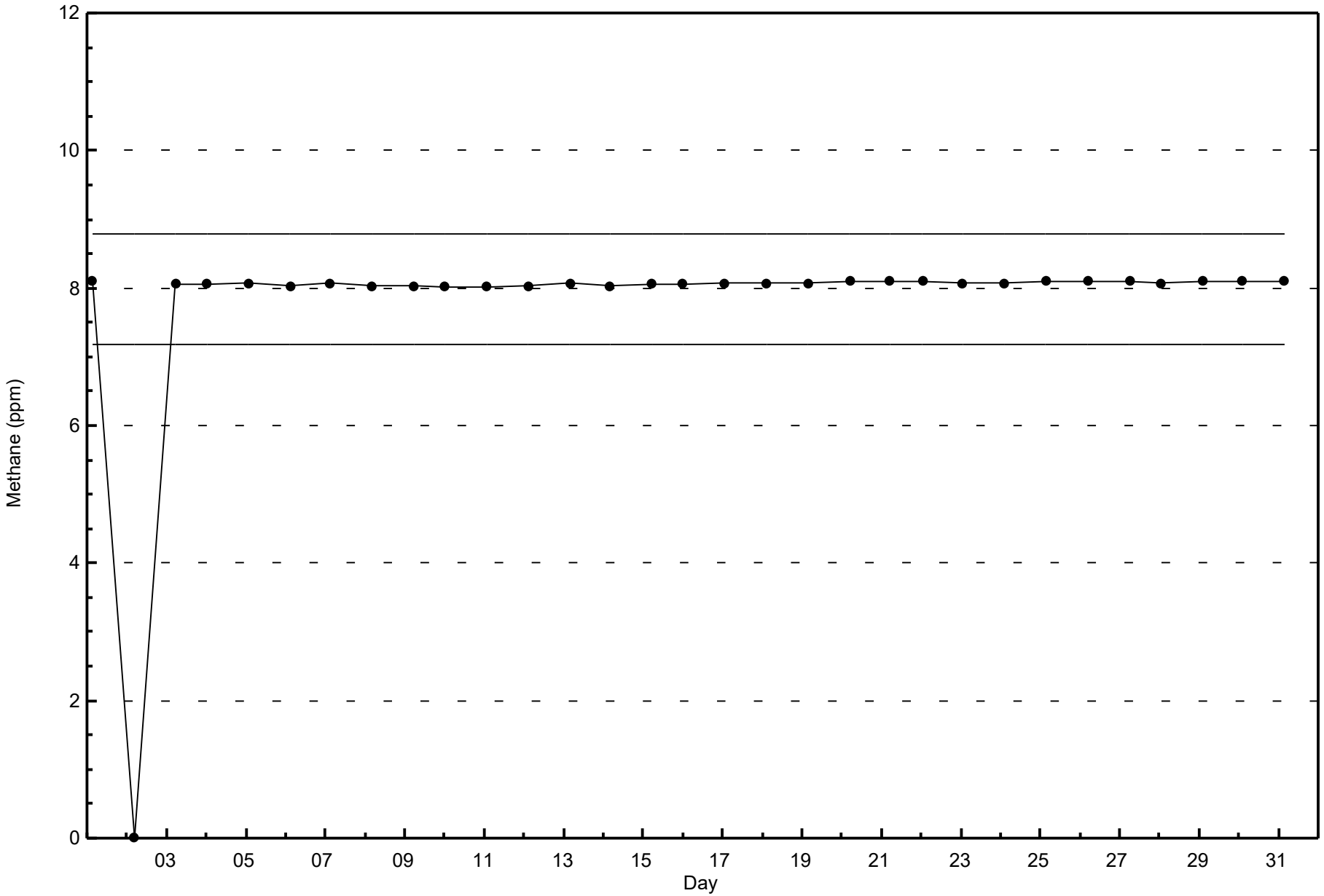


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Buffalo Viewpoint - August 2026

Maximum Value: 51.5 ppb on Aug 9 07:00

Maximum Daily Average: 9.6 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 1 02:00

Minimum Daily Average: 0.0 ppb on Aug 28

Maximum Diurnal Average: 6.0 ppb at hour 7

Minimum Diurnal Average: 0.0 ppb at hour 23

Monthly Average: 1.60 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.5 $P_{90}$ = 3.4 $P_{99}$ = 29.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 696 |
| Hours of Missing Data: | 48 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.3 | 0.2 | 1.6 | 2.3 | 3.9 | 14.3 | 3.0 | 0.4 | 0.4 | 0.5 | 0.4 | 0.2 | 0.2 | 0.3 | PF | PF | PF | PF | 1.5 | 14.3 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 0.6 | 0.4 | 0.8 | 0.3 | M | 6.3 | 5.4 | 2.4 | 2.9 | 0.2 | 0.9 | 0.8 | 1.1 | 0.0 | 0.0 | 0.0 | -- | 6.3 |
| 3-Aug | 0.0 | 0.0 | Z | 1.0 | 0.5 | 0.7 | 1.5 | 1.8 | 4.5 | 1.0 | 0.7 | 0.2 | 0.1 | 0.3 | 0.4 | 0.7 | 1.0 | 1.1 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 4.5 |
| 4-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.5 | 0.6 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.4 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.2 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.8 |
| 7-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.6 | 2.0 | 1.2 | 0.4 | 0.3 | 1.9 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 2.0 |
| 8-Aug | 0.0 | Z | 12.5 | 1.6 | 0.0 | 26.0 | 24.9 | 20.6 | 0.9 | 1.2 | 2.4 | 3.2 | 1.5 | 1.0 | 2.2 | 1.0 | 0.6 | 0.7 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4 | 26.0 |
| 9-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 10.2 | 51.5 | 19.6 | 9.6 | 12.8 | 6.4 | 16.3 | 9.3 | 3.5 | 1.3 | 0.5 | 1.1 | 1.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.3 | 51.5 |
| 10-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.8 | 1.9 | 8.8 | 34.1 | 11.1 | 2.8 | 2.9 | 1.7 | 0.5 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 2.9 | 34.1 |
| 11-Aug | 1.1 | 0.2 | 0.0 | 0.0 | Z | 0.3 | 0.2 | 0.5 | 1.9 | 10.7 | 5.9 | 1.3 | 0.5 | 0.5 | 0.2 | 0.3 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 1.1 | 10.7 |
| 12-Aug | 0.0 | 2.8 | 6.1 | 13.1 | 6.7 | Z | 8.9 | 4.5 | 1.1 | 3.0 | C | C | C | C | C | 0.5 | 0.3 | 0.4 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 1.3 | 2.7 | 13.1 |
| 13-Aug | Z | 7.6 | 2.0 | 0.1 | 2.6 | 3.8 | 1.9 | 3.7 | 7.7 | 6.0 | 0.9 | 0.4 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.7 | 7.7 |
| 14-Aug | 10.8 | Z | 7.5 | 6.0 | 17.9 | 29.9 | 18.6 | 19.2 | 29.7 | 17.8 | 10.5 | 2.6 | 0.9 | 1.7 | 1.6 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6 | 29.9 |
| 15-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 1.2 | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.2 |
| 16-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 9.5 | 5.0 | 0.4 | 0.4 | 0.7 | 0.2 | 0.2 | 0.4 | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 9.5 |
| 17-Aug | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 1.1 | 0.8 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.1 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.8 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 19-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.9 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.1 | 1.1 |
| 20-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 6.2 | 13.1 | 35.9 | 9.7 | 9.7 | 1.3 | 1.5 | 1.0 | 0.4 | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 35.9 |
| 21-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 1.0 | 1.1 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.1 |
| 22-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.2 | 0.9 | 0.7 | 2.3 | 0.3 | 3.2 |
| 24-Aug | 0.0 | 0.5 | 13.9 | 3.7 | 0.1 | Z | 18.1 | 4.2 | 4.4 | 2.4 | 0.6 | 0.3 | 0.2 | 0.3 | 0.1 | 0.8 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 18.1 |
| 25-Aug | Z | 11.8 | 23.4 | 30.7 | 17.7 | 14.3 | 40.7 | 37.3 | 9.7 | 8.2 | 10.6 | 8.6 | 4.4 | 1.8 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6 | 40.7 |
| 26-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 27-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.5 |
| 28-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.8 | 0.3 | 6.8 |
| 31-Aug | Z | 13.3 | 2.2 | 0.9 | 0.0 | 0.0 | 0.0 | 2.2 | 6.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 13.3 |
| | 0.5 | 1.4 | 2.7 | 2.3 | 1.8 | 3.4 | 6.0 | 4.3 | 3.3 | 4.6 | 2.3 | 2.0 | 0.9 | 0.7 | 0.6 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.5 | Diurnal Average | |
| | 10.8 | 13.3 | 23.4 | 30.7 | 17.9 | 29.9 | 51.5 | 37.3 | 29.7 | 35.9 | 11.1 | 16.3 | 9.3 | 6.3 | 5.4 | 2.4 | 2.9 | 1.4 | 1.9 | 0.8 | 3.2 | 0.9 | 0.7 | 6.8 | Diurnal Maximum | |

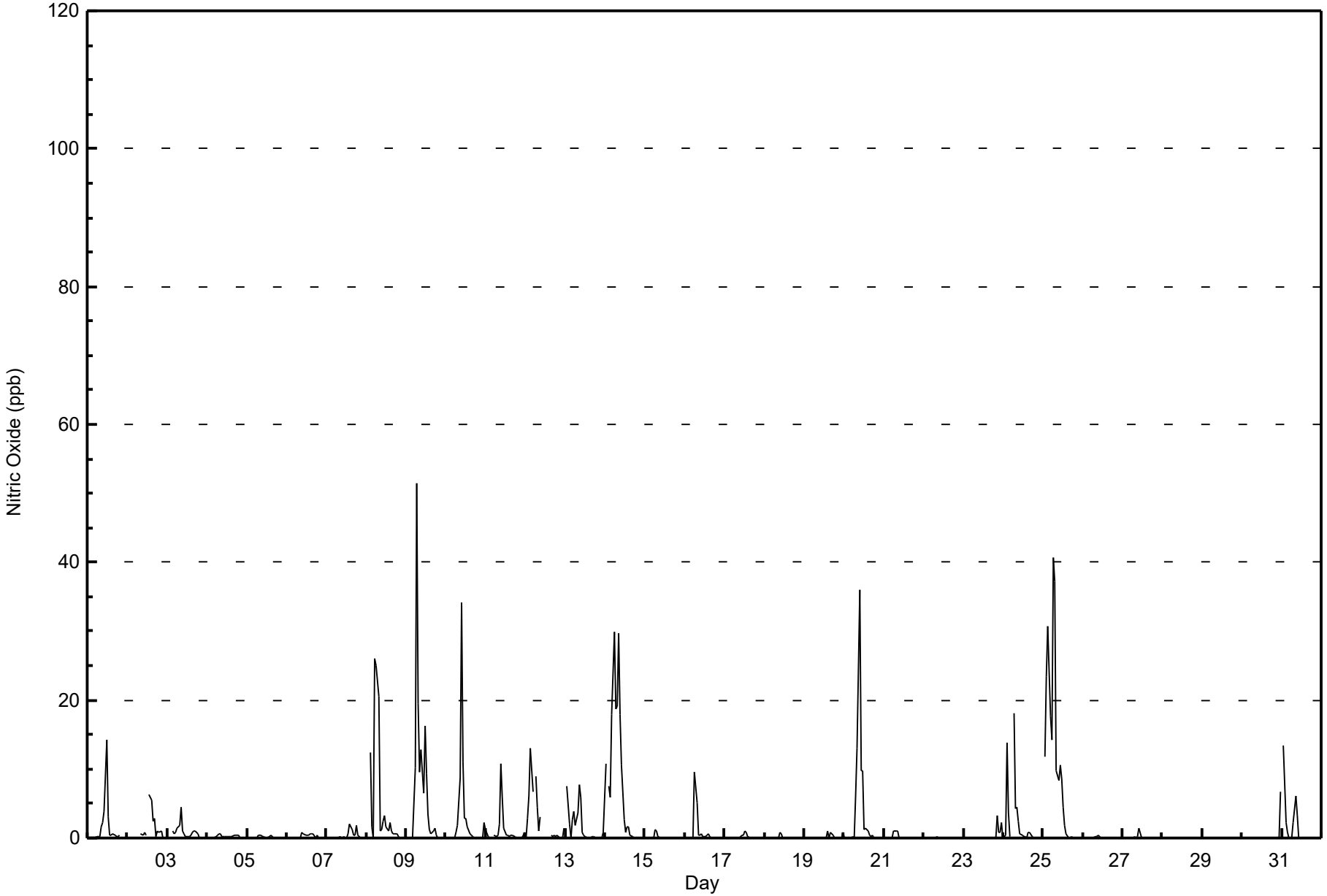
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 684 | 98.28 | 98.28 |
| 21 - 40 | 10 | 1.44 | 99.71 |
| 11 - 80 | 2 | 0.29 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 696

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 89 | 30 | 18 | 5 | 7 | 20 | 30 | 119 | 54 | 28 | 32 | 55 | 24 | 41 | 74 | 58 | 684 |
| 21 - 40 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 1 | 10 |
| 11 - 80 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 90 | 31 | 18 | 5 | 8 | 20 | 30 | 119 | 54 | 28 | 32 | 55 | 24 | 42 | 81 | 59 | 696 |

Total Number of Valid Hours: 696

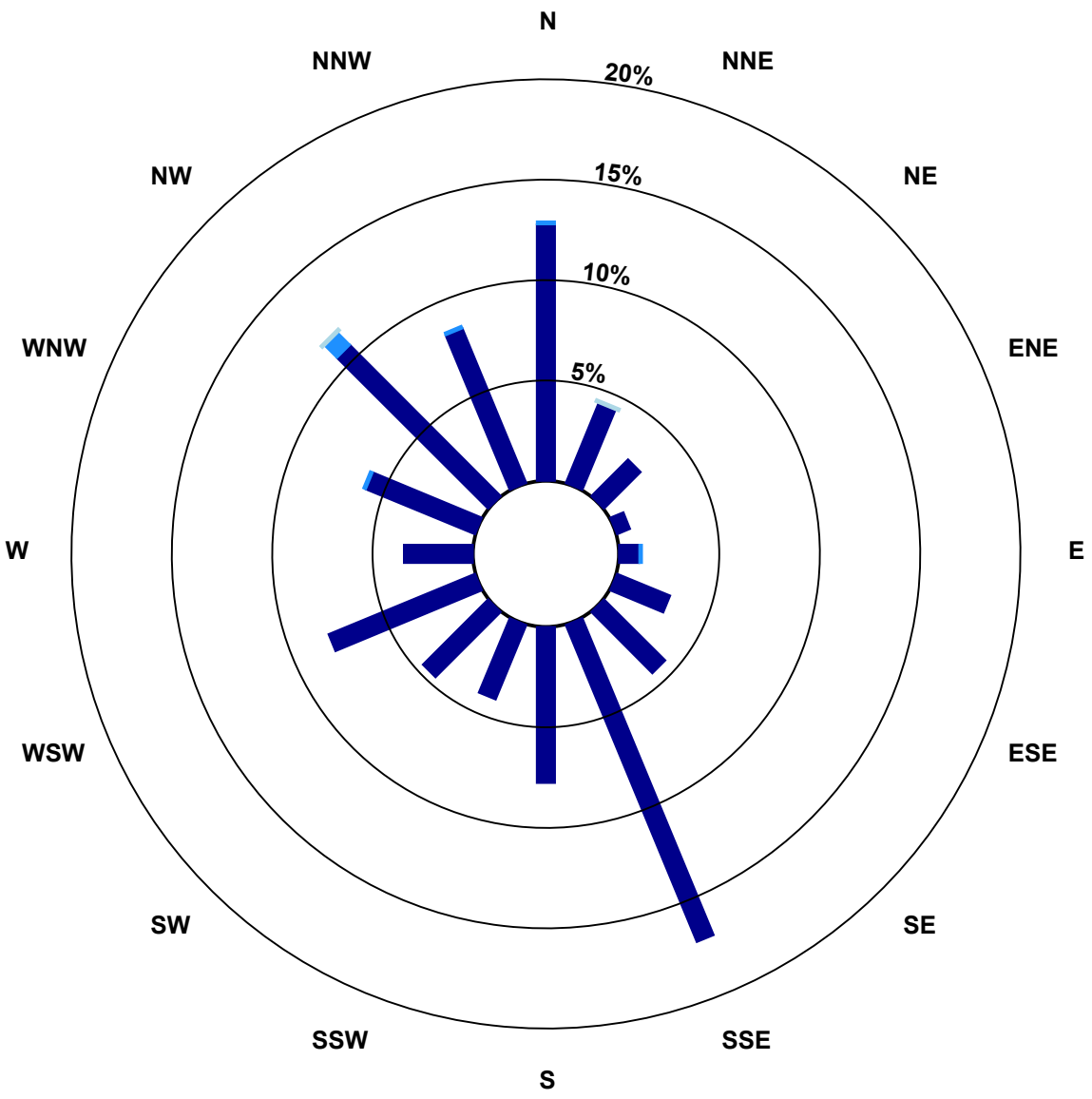
Total Number of Hours: 744

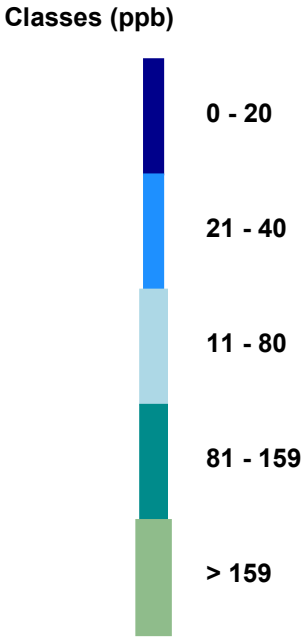
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Nitric Oxide (NO) - ppb**

**Buffalo Viewpoint**



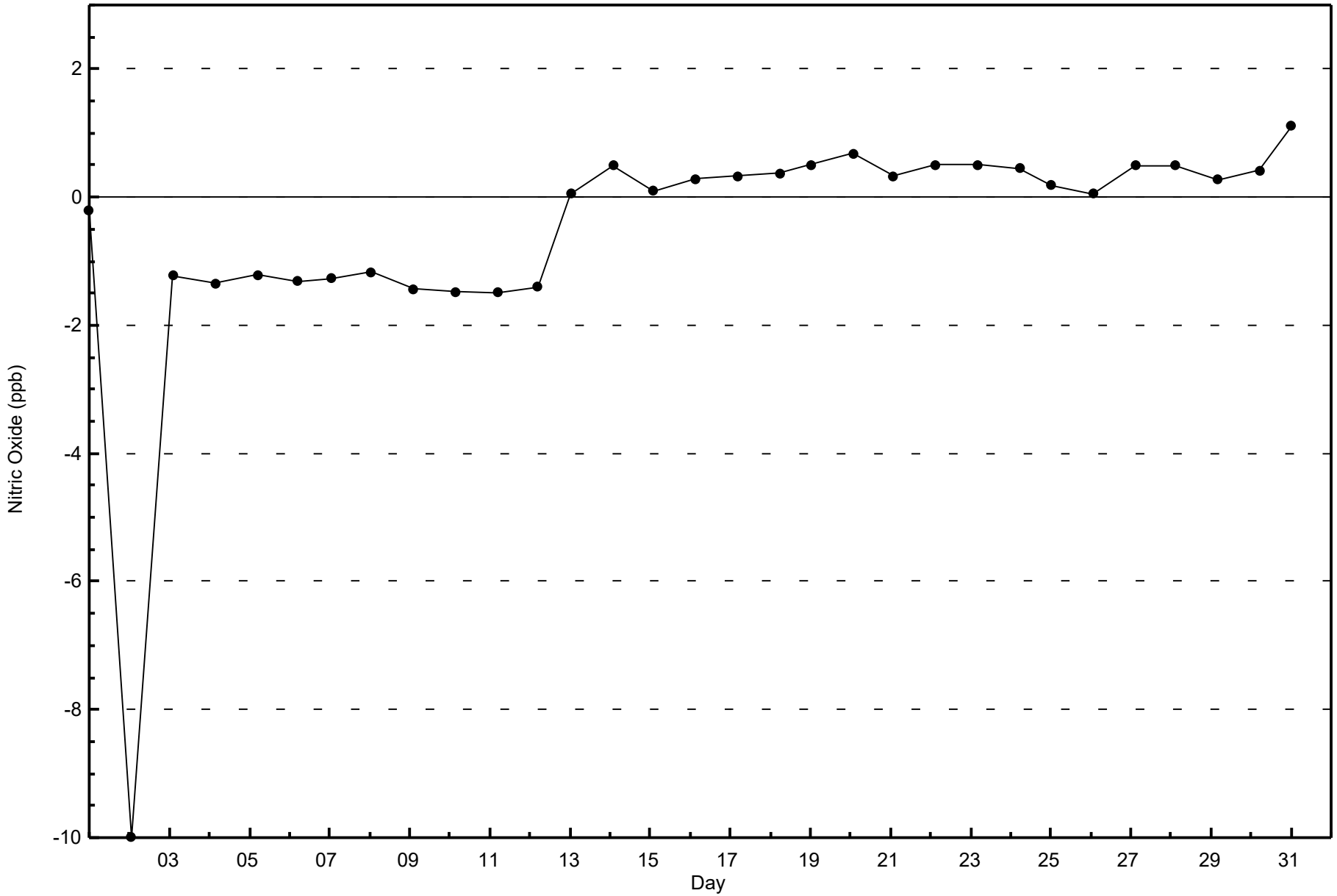

**Total Number of Valid Hours: 696**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Buffalo Viewpoint - August 2026**

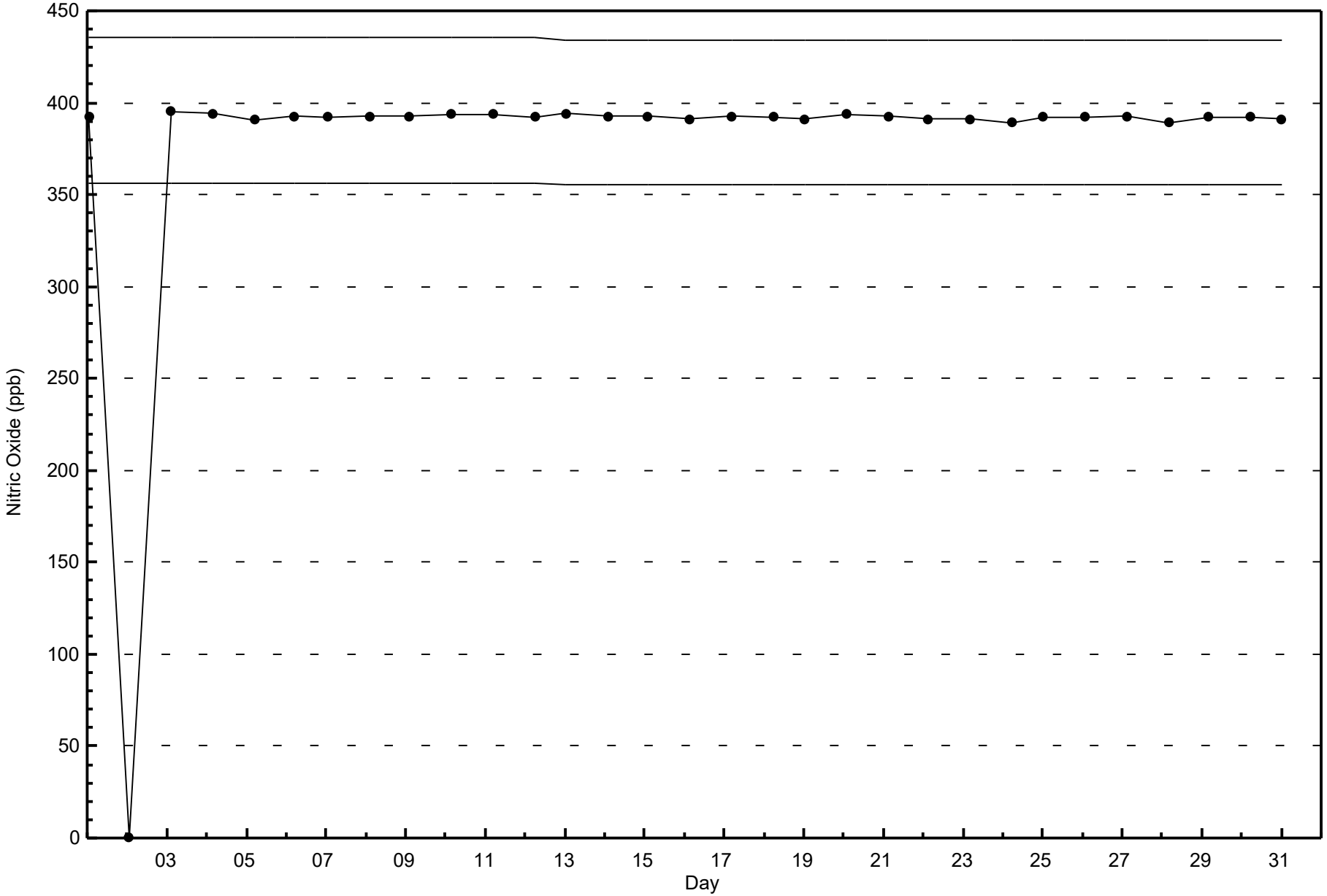


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Dioxide ($NO_2$) - ppb

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 19.6 ppb on Aug 24 03:00 Maximum Daily Average: 9.5 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 5 23:00 Minimum Daily Average: 0.3 ppb on Aug 29
Maximum Diurnal Average: 4.9 ppb at hour 24 Minimum Diurnal Average: 2.1 ppb at hour 16
Monthly Average: 3.33 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.6 Median = 1.7 $Q_3$ = 4.4 $P_{90}$ = 10.2 $P_{99}$ = 17.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 696 |
| Hours of Missing Data: | 48 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 1.2 | 1.7 | 1.0 | 0.7 | 0.9 | 1.0 | 1.3 | 2.4 | 5.1 | 4.6 | 14.2 | 6.2 | 1.5 | 1.1 | 2.3 | 1.5 | 0.4 | 0.9 | 10.6 | PF | PF | PF | PF | 3.1 | 14.2 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 3.0 | 1.3 | 2.7 | 1.4 | M | 9.1 | 8.1 | 4.7 | 5.6 | 1.7 | 4.5 | 4.8 | 4.2 | 1.6 | 1.4 | 2.9 | -- | 9.1 |
| 3-Aug | 3.1 | 11.1 | Z | 15.9 | 13.4 | 7.3 | 6.8 | 5.4 | 7.0 | 2.3 | 1.8 | 0.9 | 0.7 | 0.9 | 1.2 | 2.1 | 3.1 | 3.9 | 3.2 | 2.1 | 1.6 | 4.0 | 3.0 | 2.8 | 4.5 | 15.9 |
| 4-Aug | 1.9 | 1.6 | 1.9 | Z | 1.7 | 1.9 | 1.2 | 1.0 | 1.2 | 0.7 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 2.7 | 2.6 | 3.9 | 8.3 | 2.4 | 5.7 | 6.1 | 8.2 | 2.4 | 8.3 |
| 5-Aug | 9.5 | 1.9 | 0.3 | 0.4 | Z | 0.2 | 1.2 | 1.8 | 1.8 | 1.5 | 1.2 | 0.8 | 0.9 | 1.7 | 2.4 | 2.0 | 2.7 | 4.1 | 6.0 | 6.4 | 4.4 | 0.3 | 0.0 | 0.1 | 2.2 | 9.5 |
| 6-Aug | 0.5 | 0.0 | 0.0 | 0.0 | 0.2 | Z | 0.1 | 0.1 | 0.2 | 1.6 | 1.4 | 1.2 | 1.2 | 2.0 | 2.6 | 2.7 | 2.5 | 1.2 | 2.3 | 0.1 | 0.5 | 5.3 | 1.0 | 0.2 | 1.2 | 5.3 |
| 7-Aug | Z | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 1.0 | 0.6 | 0.8 | 0.5 | 0.6 | 0.6 | 0.2 | 1.4 | 3.7 | 4.4 | 1.9 | 4.1 | 10.4 | 5.5 | 3.2 | 2.6 | 3.3 | 3.3 | 2.1 | 10.4 |
| 8-Aug | 5.5 | Z | 10.8 | 7.5 | 1.7 | 11.0 | 10.1 | 9.4 | 1.6 | 1.8 | 3.0 | 3.5 | 3.1 | 3.7 | 3.9 | 5.9 | 3.4 | 4.0 | 4.5 | 4.7 | 8.8 | 4.4 | 3.1 | 4.0 | 5.2 | 11.0 |
| 9-Aug | 5.7 | 2.4 | Z | 4.5 | 5.6 | 8.5 | 12.8 | 12.8 | 10.5 | 12.9 | 8.4 | 17.0 | 16.3 | 10.2 | 5.8 | 4.1 | 6.5 | 10.5 | 6.1 | 2.9 | 2.3 | 3.3 | 4.4 | 3.0 | 7.7 | 17.0 |
| 10-Aug | 2.0 | 1.2 | 1.3 | Z | 1.8 | 1.9 | 1.9 | 3.6 | 6.3 | 13.9 | 12.0 | 5.9 | 6.9 | 5.2 | 3.2 | 2.9 | 2.5 | 1.6 | 1.4 | 1.8 | 5.4 | 13.9 | 16.0 | 17.5 | 5.7 | 17.5 |
| 11-Aug | 13.3 | 7.4 | 2.5 | 2.9 | Z | 2.0 | 1.5 | 1.4 | 3.2 | 11.8 | 10.1 | 4.0 | 2.4 | 2.2 | 1.9 | 2.0 | 2.5 | 2.5 | 2.7 | 0.8 | 0.5 | 1.2 | 5.3 | 17.6 | 4.4 | 17.6 |
| 12-Aug | 4.6 | 14.4 | 18.5 | 18.0 | 16.0 | Z | 11.4 | 8.8 | 4.4 | 6.5 | C | C | C | C | C | 1.7 | 1.5 | 2.0 | 0.9 | 4.1 | 3.1 | 4.7 | 7.3 | 11.7 | 7.8 | 18.5 |
| 13-Aug | Z | 12.6 | 10.9 | 6.8 | 9.1 | 10.0 | 4.6 | 4.8 | 6.9 | 5.6 | 1.5 | 1.0 | 1.2 | 0.8 | 0.9 | 1.1 | 2.5 | 2.5 | 2.2 | 2.4 | 2.4 | 2.5 | 6.0 | 12.1 | 4.8 | 12.6 |
| 14-Aug | 13.8 | Z | 11.4 | 10.3 | 10.9 | 11.2 | 7.2 | 11.4 | 14.8 | 14.3 | 12.9 | 4.8 | 3.0 | 5.4 | 6.0 | 6.8 | 4.2 | 2.2 | 1.6 | 1.4 | 1.8 | 1.7 | 0.9 | 0.9 | 6.9 | 14.8 |
| 15-Aug | 0.7 | 0.8 | Z | 1.6 | 1.1 | 1.3 | 1.7 | 1.2 | 0.7 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.1 | 0.5 | 1.7 |
| 16-Aug | 0.1 | 0.2 | 0.2 | Z | 0.3 | 1.5 | 12.3 | 14.3 | 6.1 | 4.9 | 4.1 | 1.9 | 1.7 | 2.0 | 3.1 | 2.3 | 2.0 | 2.7 | 2.0 | 1.9 | 1.1 | 1.1 | 2.2 | 2.8 | 3.1 | 14.3 |
| 17-Aug | 4.3 | 2.1 | 2.0 | 1.6 | Z | 1.9 | 0.9 | 0.6 | 0.4 | 0.7 | 1.2 | 1.8 | 4.3 | 3.4 | 1.8 | 1.5 | 1.6 | 0.8 | 0.8 | 0.7 | 0.9 | 0.2 | 0.1 | 0.0 | 1.5 | 4.3 |
| 18-Aug | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | Z | 0.9 | 0.6 | 1.1 | 2.2 | 2.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 | 0.0 | 0.4 | 2.2 |
| 19-Aug | Z | 1.1 | 1.3 | 0.7 | 0.6 | 0.5 | 1.2 | 0.7 | 0.5 | 0.4 | 0.3 | 0.0 | 0.3 | 0.7 | 3.1 | 1.5 | 6.4 | 4.8 | 5.2 | 1.8 | 2.3 | 2.1 | 2.4 | 9.4 | 2.1 | 9.4 |
| 20-Aug | 6.3 | Z | 1.1 | 7.1 | 4.6 | 3.3 | 0.8 | 5.0 | 11.0 | 17.3 | 11.5 | 12.5 | 4.6 | 4.7 | 5.4 | 3.7 | 3.3 | 4.2 | 3.7 | 3.3 | 3.8 | 4.9 | 2.1 | 2.0 | 5.5 | 17.3 |
| 21-Aug | 2.1 | 1.2 | Z | 0.9 | 1.8 | 2.1 | 2.1 | 1.7 | 2.1 | 1.2 | 1.0 | 1.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.6 | 1.0 | 1.3 | 2.4 | 1.2 | 1.1 | 2.4 |
| 22-Aug | 0.4 | 0.3 | 0.5 | Z | 0.5 | 1.7 | 1.8 | 1.9 | 2.2 | 1.4 | 1.0 | 0.6 | 0.6 | 0.6 | 0.8 | 0.6 | 0.5 | 0.7 | 1.3 | 1.5 | 0.9 | 0.3 | 0.4 | 0.2 | 0.9 | 2.2 |
| 23-Aug | 0.3 | 0.5 | 0.4 | 0.5 | Z | 0.6 | 0.9 | 1.3 | 0.9 | 0.6 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 0.6 | 0.4 | 0.0 | 5.4 | 13.1 | 7.8 | 4.8 | 14.3 | 2.3 | 14.3 |
| 24-Aug | 10.8 | 15.8 | 19.6 | 15.3 | 9.5 | Z | 18.6 | 10.1 | 9.8 | 6.5 | 3.0 | 2.4 | 1.7 | 1.7 | 1.5 | 3.4 | 3.9 | 2.4 | 2.3 | 2.3 | 2.0 | 2.3 | 2.6 | 4.2 | 6.6 | 19.6 |
| 25-Aug | Z | 12.6 | 13.5 | 15.1 | 14.3 | 12.8 | 11.4 | 13.9 | 8.6 | 9.6 | 13.1 | 16.8 | 12.2 | 8.5 | 5.9 | 2.9 | 2.2 | 5.8 | 3.5 | 4.4 | 6.1 | 7.2 | 11.1 | 6.1 | 9.5 | 16.8 |
| 26-Aug | 4.0 | Z | 2.5 | 1.6 | 1.3 | 0.6 | 0.8 | 0.9 | 1.1 | 1.7 | 1.5 | 0.7 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.8 | 1.1 | 1.0 | 1.4 | 2.0 | 2.0 | 1.2 | 4.0 |
| 27-Aug | 1.6 | 1.2 | Z | 1.8 | 2.0 | 2.0 | 2.3 | 2.0 | 1.4 | 2.0 | 5.6 | 1.0 | 0.7 | 0.9 | 0.9 | 3.9 | 5.0 | 6.2 | 5.2 | 4.3 | 10.7 | 6.8 | 0.7 | 1.0 | 3.0 | 10.7 |
| 28-Aug | 0.8 | 1.8 | 1.1 | Z | 0.4 | 0.3 | 0.8 | 0.6 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.5 | 0.6 | 0.5 | 0.2 | 0.2 | 0.1 | 0.0 | 0.4 | 1.8 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.7 | 3.6 | 0.2 | 0.1 | 0.3 | 3.6 |
| 30-Aug | 0.0 | 0.1 | 0.2 | 0.3 | 1.0 | Z | 1.5 | 1.2 | 0.9 | 0.4 | 0.9 | 0.9 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.6 | 0.4 | 0.2 | 1.2 | 1.3 | 4.8 | 16.7 | 1.5 | 16.7 |
| 31-Aug | Z | 16.8 | 12.5 | 7.4 | 1.5 | 1.1 | 0.9 | 2.7 | 4.7 | 3.7 | 0.4 | 0.3 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.7 | 1.7 | 2.8 | 2.6 | 16.8 |
| | 3.8 | 4.2 | 4.6 | 4.9 | 4.0 | 3.4 | 4.0 | 4.0 | 3.7 | 4.3 | 3.6 | 3.2 | 2.4 | 2.3 | 2.2 | 2.1 | 2.2 | 2.4 | 2.5 | 2.7 | 3.0 | 3.2 | 3.2 | 4.9 | Diurnal Average | |
| | 13.8 | 16.8 | 19.6 | 18.0 | 16.0 | 12.8 | 18.6 | 14.3 | 14.8 | 17.3 | 13.1 | 17.0 | 16.3 | 10.2 | 8.1 | 6.8 | 6.5 | 10.5 | 10.4 | 10.6 | 13.1 | 13.9 | 16.0 | 17.6 | Diurnal Maximum | |

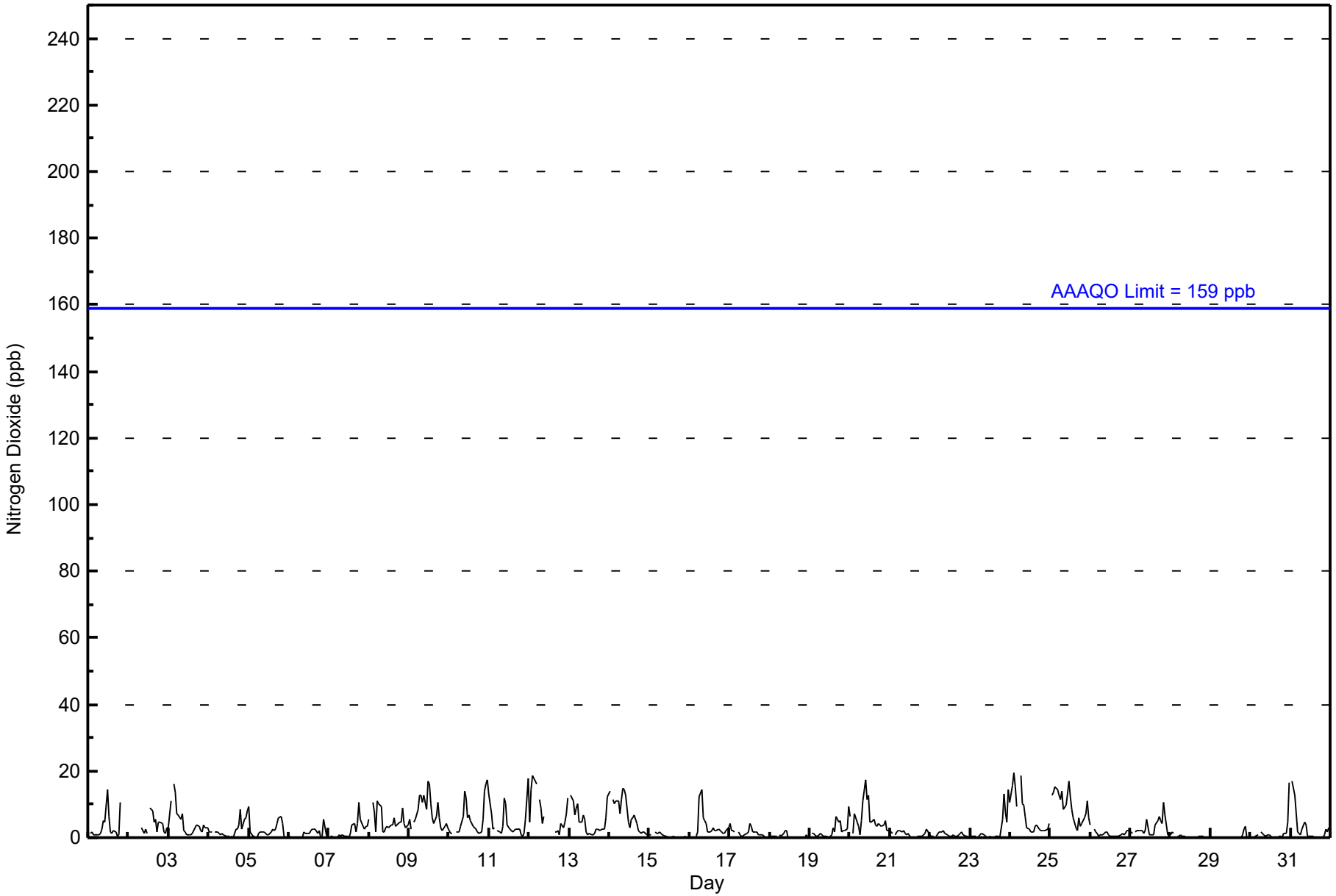
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Buffalo Viewpoint - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Buffalo Viewpoint - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 696 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 696

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 90 | 31 | 18 | 5 | 8 | 20 | 30 | 119 | 54 | 28 | 32 | 55 | 24 | 42 | 81 | 59 | 696 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 90 | 31 | 18 | 5 | 8 | 20 | 30 | 119 | 54 | 28 | 32 | 55 | 24 | 42 | 81 | 59 | 696 |

Total Number of Valid Hours: 696

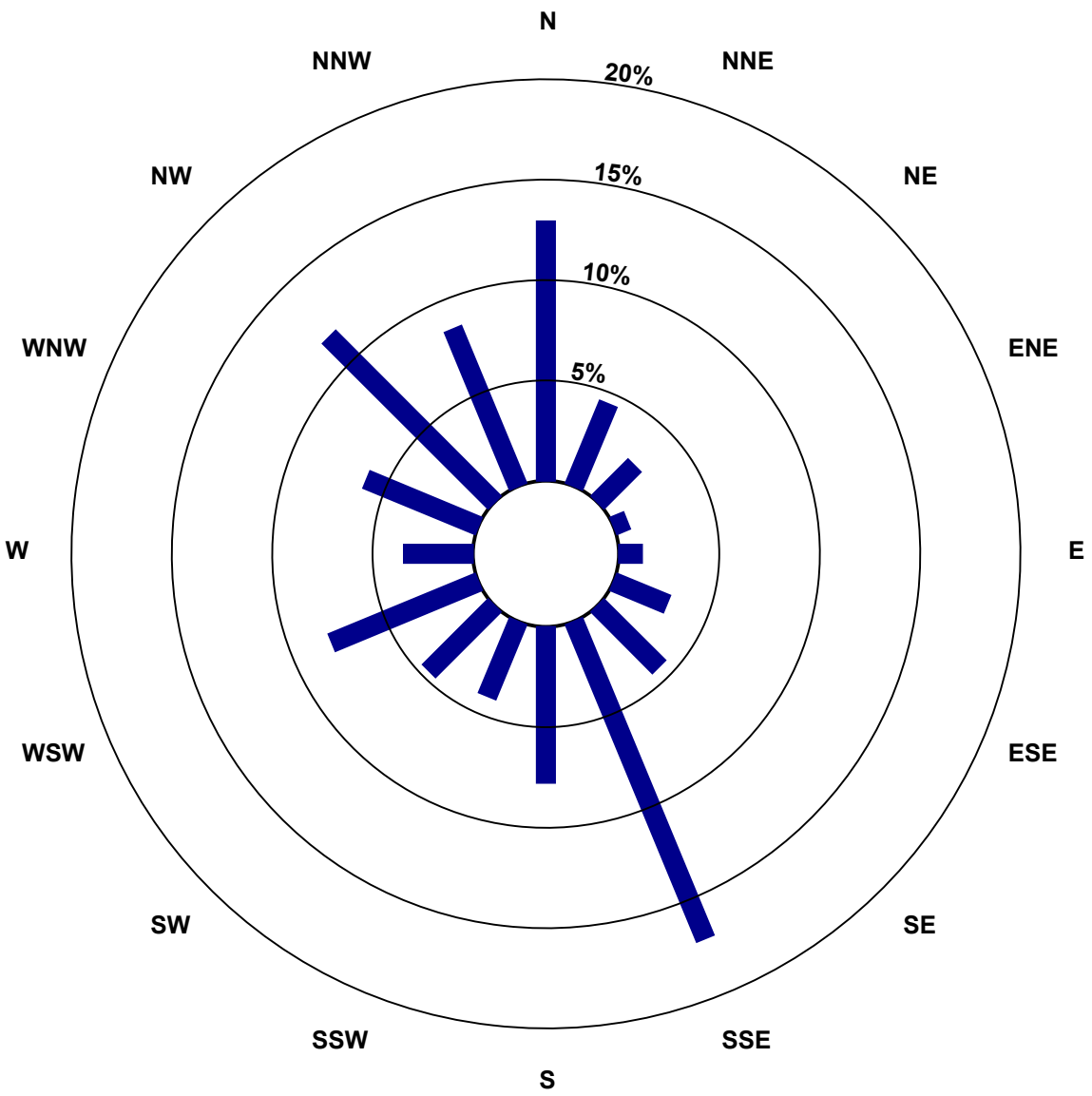
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Buffalo Viewpoint




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

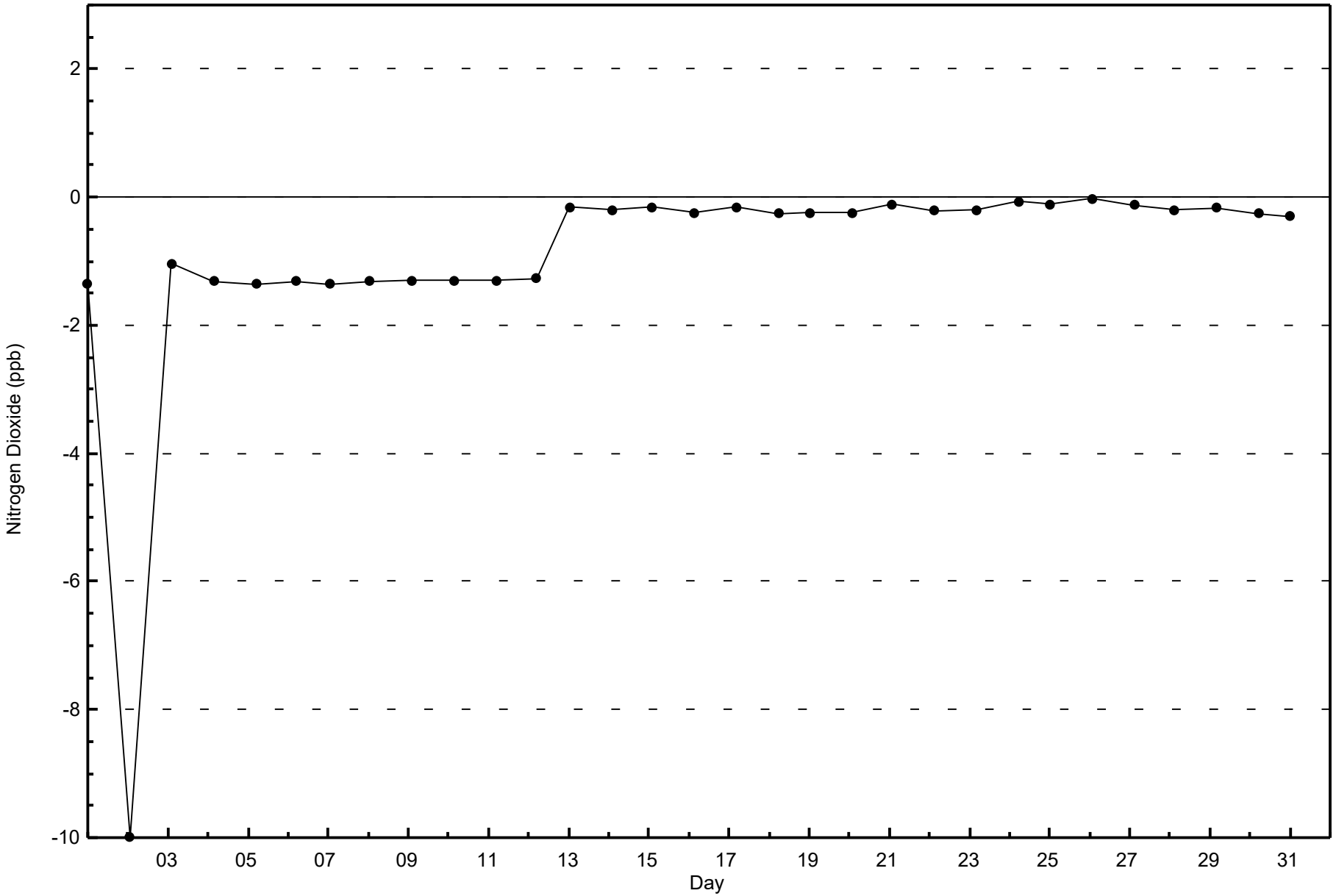
Total Number of Valid Hours: 696

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Buffalo Viewpoint - August 2026**

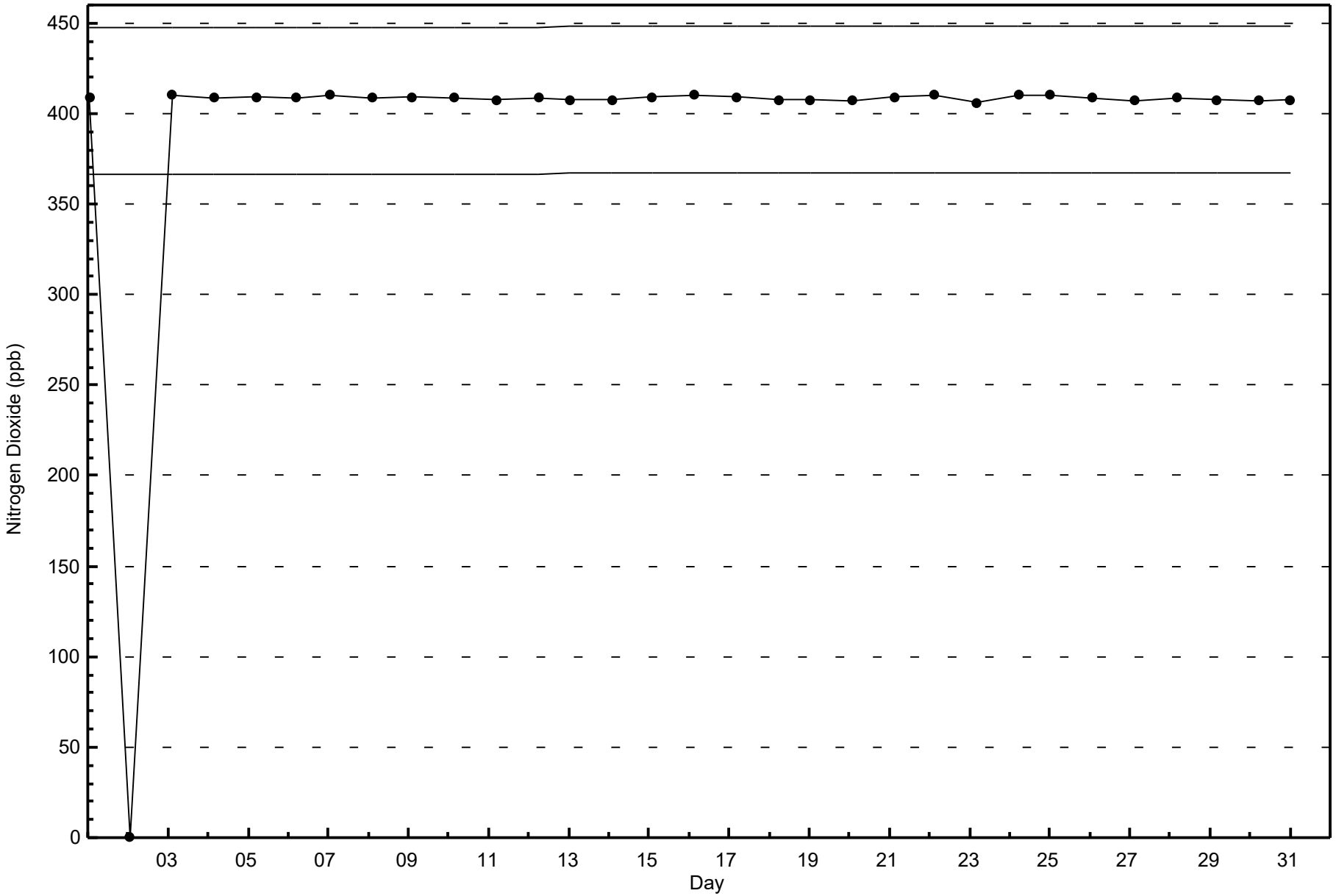


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxides ($NO_X$) - ppb

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 64.3 ppb on Aug 9 07:00 Maximum Daily Average: 19.0 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 5 23:00
Maximum Diurnal Average: 10.0 ppb at hour 7
Monthly Average: 4.92 ppb

Minimum Daily Average: 0.3 ppb on Aug 29
Minimum Diurnal Average: 2.4 ppb at hour 16
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.6 Median = 1.9 $Q_3$ = 5.1 $P_{90}$ = 14.1 $P_{99}$ = 41.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 696 |
| Hours of Missing Data: | 48 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 1.2 | 1.7 | 1.1 | 0.7 | 1.1 | 1.3 | 1.5 | 4.0 | 7.4 | 8.5 | 28.5 | 9.2 | 1.9 | 1.5 | 2.8 | 1.9 | 0.6 | 1.1 | 10.9 | PF | PF | PF | PF | 4.6 | 28.5 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 3.6 | 1.7 | 3.5 | 1.7 | M | 15.4 | 13.5 | 7.1 | 8.5 | 1.9 | 5.4 | 5.6 | 5.3 | 1.6 | 1.4 | 2.9 | -- | 15.4 |
| 3-Aug | 3.1 | 11.1 | Z | 16.9 | 13.9 | 8.0 | 8.3 | 7.2 | 11.5 | 3.3 | 2.5 | 1.1 | 0.8 | 1.2 | 1.6 | 2.8 | 4.1 | 5.0 | 3.7 | 2.2 | 1.6 | 4.0 | 3.0 | 2.8 | 5.2 | 16.9 |
| 4-Aug | 1.9 | 1.6 | 1.9 | Z | 1.7 | 2.1 | 1.7 | 1.6 | 1.7 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 3.0 | 3.0 | 4.2 | 8.7 | 2.5 | 5.7 | 6.1 | 8.2 | 2.6 | 8.7 |
| 5-Aug | 9.5 | 1.9 | 0.3 | 0.4 | Z | 0.2 | 1.2 | 2.2 | 2.3 | 1.7 | 1.3 | 0.8 | 0.9 | 1.9 | 2.8 | 2.3 | 2.7 | 4.1 | 6.0 | 6.4 | 4.4 | 0.3 | 0.0 | 0.1 | 2.3 | 9.5 |
| 6-Aug | 0.5 | 0.0 | 0.0 | 0.0 | 0.2 | Z | 0.1 | 0.1 | 0.2 | 2.4 | 2.1 | 1.6 | 1.6 | 2.4 | 3.2 | 3.2 | 3.1 | 1.3 | 2.7 | 0.1 | 0.5 | 5.3 | 1.0 | 0.2 | 1.4 | 5.3 |
| 7-Aug | Z | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 1.0 | 0.6 | 0.9 | 0.5 | 0.7 | 0.6 | 0.2 | 2.0 | 5.7 | 5.6 | 2.3 | 4.4 | 12.3 | 5.9 | 3.2 | 2.6 | 3.3 | 3.3 | 2.5 | 12.3 |
| 8-Aug | 5.5 | Z | 23.3 | 9.1 | 1.7 | 37.0 | 35.0 | 30.0 | 2.5 | 3.0 | 5.4 | 6.7 | 4.6 | 4.7 | 6.1 | 6.9 | 4.0 | 4.7 | 5.1 | 4.8 | 8.8 | 4.4 | 3.1 | 4.0 | 9.6 | 37.0 |
| 9-Aug | 5.7 | 2.4 | Z | 4.5 | 5.6 | 18.7 | 64.3 | 32.4 | 20.1 | 25.7 | 14.8 | 33.3 | 25.6 | 13.7 | 7.1 | 4.6 | 7.6 | 11.9 | 6.4 | 2.9 | 2.3 | 3.3 | 4.4 | 3.0 | 13.9 | 64.3 |
| 10-Aug | 2.0 | 1.2 | 1.3 | Z | 1.8 | 2.0 | 2.7 | 5.5 | 15.1 | 48.0 | 23.1 | 8.7 | 9.8 | 6.9 | 3.7 | 3.4 | 2.8 | 1.6 | 1.4 | 1.8 | 5.4 | 13.9 | 16.0 | 19.7 | 8.6 | 48.0 |
| 11-Aug | 14.4 | 7.6 | 2.5 | 2.9 | Z | 2.3 | 1.7 | 1.9 | 5.1 | 22.5 | 16.0 | 5.3 | 2.9 | 2.7 | 2.1 | 2.3 | 2.9 | 2.7 | 2.8 | 0.8 | 0.5 | 1.2 | 5.3 | 18.3 | 5.5 | 22.5 |
| 12-Aug | 4.6 | 17.2 | 24.6 | 31.1 | 22.7 | Z | 20.3 | 13.3 | 5.5 | 9.5 | C | C | C | C | C | 2.2 | 1.8 | 2.4 | 1.0 | 4.4 | 3.1 | 4.7 | 7.3 | 13.0 | 10.5 | 31.1 |
| 13-Aug | Z | 20.2 | 12.9 | 6.9 | 11.7 | 13.8 | 6.5 | 8.5 | 14.6 | 11.6 | 2.4 | 1.4 | 1.3 | 0.8 | 1.0 | 1.2 | 2.8 | 2.7 | 2.2 | 2.4 | 2.4 | 2.5 | 6.0 | 13.0 | 6.5 | 20.2 |
| 14-Aug | 24.6 | Z | 18.9 | 16.3 | 28.8 | 41.1 | 25.8 | 30.6 | 44.5 | 32.1 | 23.4 | 7.4 | 3.9 | 7.1 | 7.6 | 7.3 | 4.5 | 2.2 | 1.6 | 1.4 | 1.8 | 1.7 | 0.9 | 0.9 | 14.5 | 44.5 |
| 15-Aug | 0.7 | 0.8 | Z | 1.6 | 1.1 | 1.4 | 2.9 | 2.2 | 0.9 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.1 | 0.7 | 2.9 |
| 16-Aug | 0.1 | 0.2 | 0.2 | Z | 0.3 | 1.5 | 21.8 | 19.3 | 6.5 | 5.3 | 4.8 | 2.1 | 1.9 | 2.4 | 3.7 | 2.6 | 2.1 | 2.7 | 2.0 | 1.9 | 1.1 | 1.1 | 2.2 | 2.8 | 3.8 | 21.8 |
| 17-Aug | 4.4 | 2.1 | 2.0 | 1.6 | Z | 2.0 | 0.9 | 0.6 | 0.4 | 0.7 | 1.6 | 2.2 | 5.4 | 4.2 | 2.0 | 1.6 | 1.6 | 0.8 | 0.8 | 0.7 | 0.9 | 0.2 | 0.1 | 0.0 | 1.6 | 5.4 |
| 18-Aug | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | Z | 0.9 | 0.6 | 1.1 | 3.0 | 2.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 | 0.0 | 0.5 | 3.0 |
| 19-Aug | Z | 1.1 | 1.3 | 0.7 | 0.6 | 0.5 | 1.2 | 0.7 | 0.5 | 0.4 | 0.3 | 0.0 | 0.3 | 0.7 | 4.2 | 1.5 | 7.3 | 5.2 | 5.2 | 1.8 | 2.3 | 2.1 | 2.4 | 10.1 | 2.2 | 10.1 |
| 20-Aug | 6.3 | Z | 1.1 | 7.1 | 4.6 | 3.5 | 0.8 | 11.2 | 24.1 | 53.2 | 21.2 | 22.2 | 5.9 | 6.2 | 6.4 | 4.1 | 3.5 | 4.6 | 3.8 | 3.3 | 3.8 | 4.9 | 2.1 | 2.0 | 9.0 | 53.2 |
| 21-Aug | 2.1 | 1.2 | Z | 0.9 | 1.8 | 2.1 | 3.1 | 2.8 | 3.1 | 1.2 | 1.0 | 1.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.6 | 1.0 | 1.3 | 2.4 | 1.2 | 1.3 | 3.1 |
| 22-Aug | 0.4 | 0.3 | 0.5 | Z | 0.5 | 1.7 | 1.8 | 2.0 | 2.4 | 1.4 | 1.0 | 0.6 | 0.6 | 0.6 | 0.8 | 0.6 | 0.5 | 0.7 | 1.3 | 1.5 | 0.9 | 0.3 | 0.4 | 0.2 | 0.9 | 2.4 |
| 23-Aug | 0.3 | 0.5 | 0.4 | 0.5 | Z | 0.6 | 0.9 | 1.3 | 0.9 | 0.6 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 0.6 | 0.4 | 0.0 | 5.4 | 16.3 | 8.7 | 5.5 | 16.6 | 2.7 | 16.6 |
| 24-Aug | 10.8 | 16.3 | 33.5 | 19.0 | 9.6 | Z | 36.7 | 14.3 | 14.2 | 8.9 | 3.6 | 2.7 | 1.9 | 2.0 | 1.6 | 4.2 | 4.7 | 2.5 | 2.3 | 2.3 | 2.0 | 2.3 | 2.6 | 4.2 | 8.8 | 36.7 |
| 25-Aug | Z | 24.4 | 36.9 | 45.8 | 31.9 | 27.1 | 52.1 | 51.2 | 18.3 | 17.8 | 23.7 | 25.4 | 16.6 | 10.3 | 6.5 | 2.9 | 2.2 | 6.0 | 3.5 | 4.4 | 6.1 | 7.2 | 11.1 | 6.1 | 19.0 | 52.1 |
| 26-Aug | 4.0 | Z | 2.5 | 1.6 | 1.3 | 0.6 | 0.8 | 1.0 | 1.3 | 2.1 | 1.6 | 0.7 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.8 | 1.1 | 1.0 | 1.4 | 2.0 | 2.0 | 1.2 | 4.0 |
| 27-Aug | 1.6 | 1.2 | Z | 1.8 | 2.0 | 2.0 | 2.3 | 2.2 | 1.4 | 2.1 | 7.1 | 1.0 | 0.7 | 0.9 | 0.9 | 4.0 | 5.1 | 6.2 | 5.2 | 4.3 | 10.7 | 6.8 | 0.7 | 1.0 | 3.1 | 10.7 |
| 28-Aug | 0.8 | 1.8 | 1.1 | Z | 0.4 | 0.3 | 0.8 | 0.6 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.5 | 0.6 | 0.5 | 0.2 | 0.2 | 0.1 | 0.0 | 0.4 | 1.8 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.7 | 3.6 | 0.2 | 0.1 | 0.3 | 3.6 |
| 30-Aug | 0.0 | 0.1 | 0.2 | 0.3 | 1.0 | Z | 1.5 | 1.2 | 0.9 | 0.4 | 0.9 | 0.9 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.6 | 0.4 | 0.2 | 1.2 | 1.3 | 4.8 | 23.5 | 1.7 | 23.5 |
| 31-Aug | Z | 30.1 | 14.7 | 8.3 | 1.5 | 1.1 | 0.9 | 4.9 | 10.7 | 7.0 | 0.4 | 0.3 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.7 | 1.7 | 2.8 | 3.9 | 30.1 |
| | 4.3 | 5.6 | 7.3 | 7.2 | 5.9 | 6.8 | 10.0 | 8.4 | 7.1 | 8.9 | 5.8 | 5.2 | 3.3 | 3.0 | 2.8 | 2.4 | 2.6 | 2.6 | 2.7 | 2.8 | 3.1 | 3.2 | 3.2 | 5.4 | Diurnal Average | |
| | 24.6 | 30.1 | 36.9 | 45.8 | 31.9 | 41.1 | 64.3 | 51.2 | 44.5 | 53.2 | 23.7 | 33.3 | 25.6 | 15.4 | 13.5 | 7.3 | 8.5 | 11.9 | 12.3 | 10.9 | 16.3 | 13.9 | 16.0 | 23.5 | Diurnal Maximum | |

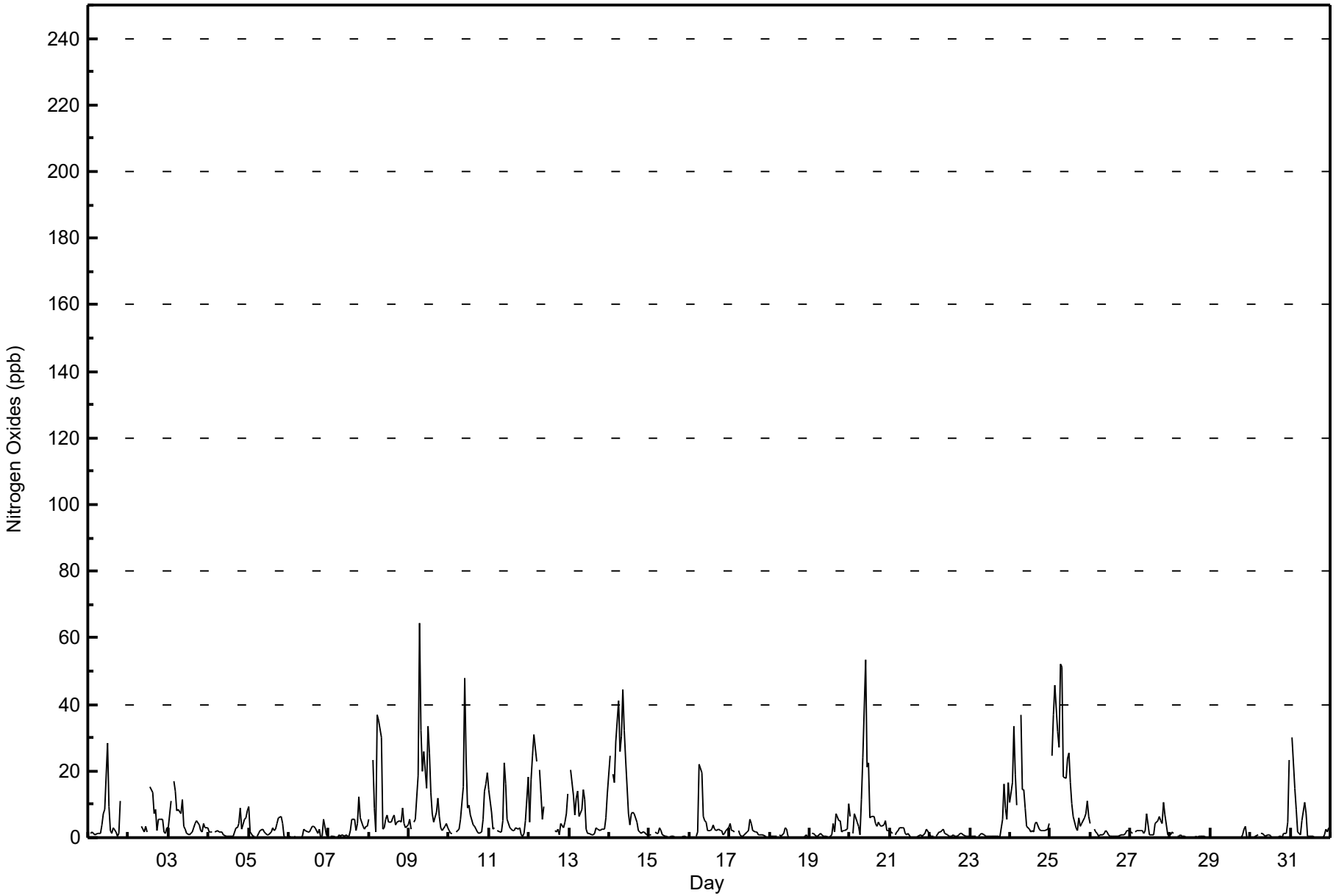
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 654 | 93.97 | 93.97 |
| 21 - 40 | 34 | 4.89 | 98.85 |
| 11 - 80 | 8 | 1.15 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 696

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 85 | 29 | 18 | 5 | 6 | 20 | 30 | 119 | 54 | 28 | 32 | 55 | 22 | 36 | 63 | 52 | 654 |
| 21 - 40 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 14 | 7 | 34 |
| 11 - 80 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 8 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 90 | 31 | 18 | 5 | 8 | 20 | 30 | 119 | 54 | 28 | 32 | 55 | 24 | 42 | 81 | 59 | 696 |

Total Number of Valid Hours: 696

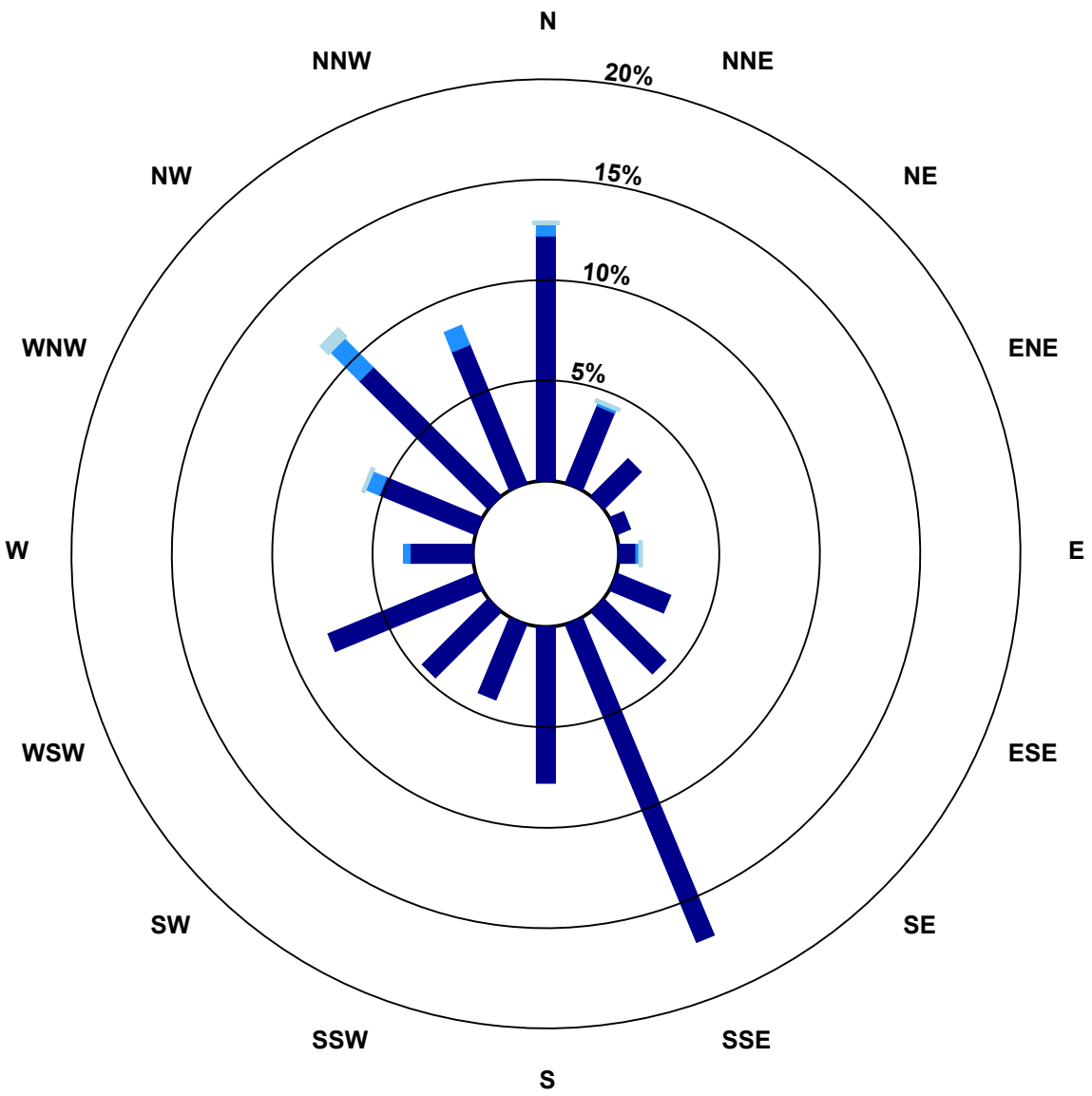
Total Number of Hours: 744

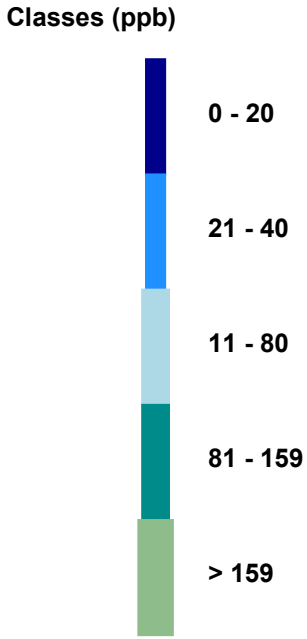
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Nitrogen Oxides ($NO_X$) - ppb**

**Buffalo Viewpoint**



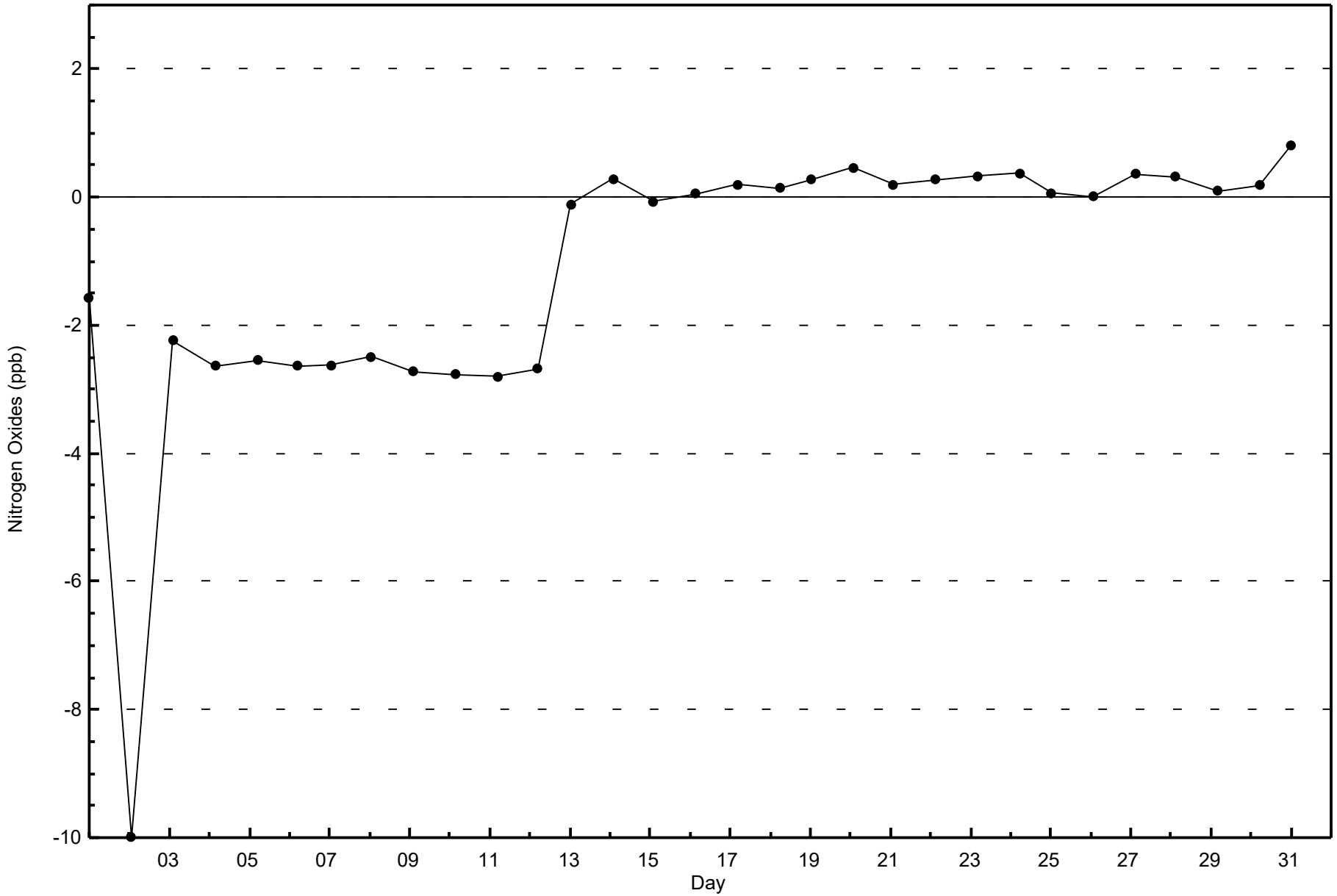

**Total Number of Valid Hours: 696**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Buffalo Viewpoint - August 2026**

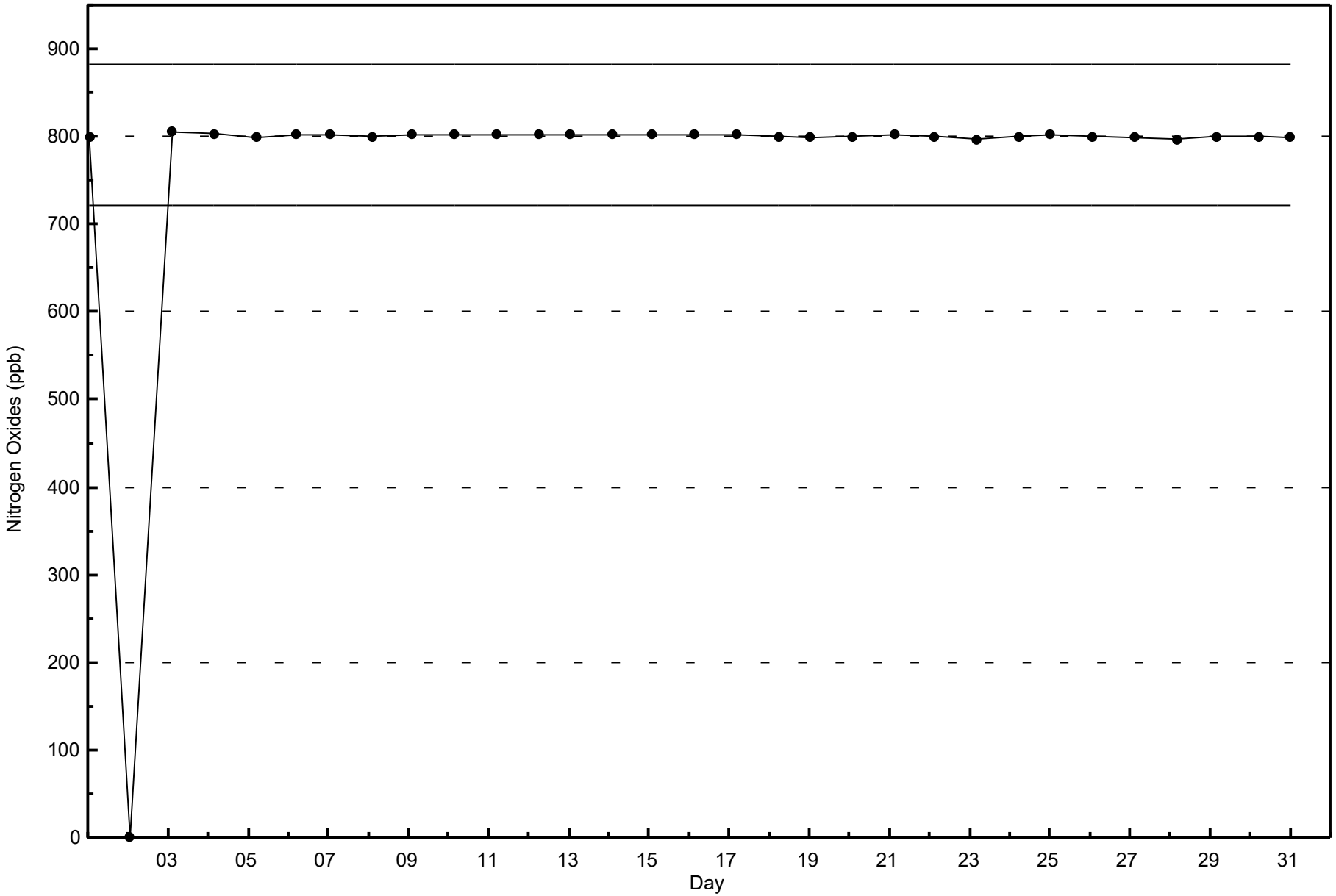


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

**Ozone ($O_3$) - ppb**

**Buffalo Viewpoint - August 2026**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 49.6 ppb on Aug 25 16:00
Maximum Daily Average: 26.4 ppb on Aug 27

Minimum Value: 1.0 ppb on Aug 31 02:00
Maximum Diurnal Average: 29.5 ppb at hour 15
Monthly Average: 18.68 ppb
Minimum Daily Average: 11.8 ppb on Aug 12
Minimum Diurnal Average: 9.1 ppb at hour 7
Percentiles: $P_1$ = 1.7 $P_{10}$ = 5.4 $Q_1$ = 11.1 Median = 18.7 $Q_3$ = 25.7 $P_{90}$ = 31.4 $P_{99}$ = 40.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 697 |
| Hours of Missing Data: | 47 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 8.2 | 8.8 | 5.6 | 5.4 | 5.4 | Z | 5.4 | 5.3 | 4.7 | 7.4 | 7.9 | 11.3 | 23.9 | 31.6 | 30.6 | 28.8 | 28.3 | 33.1 | 27.2 | 9.6 | PF | PF | PF | PF | 15.2 | 33.1 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 13.0 | 15.5 | 13.1 | 16.3 | 17.9 | M | 14.4 | 20.3 | 21.2 | 25.9 | 21.4 | 18.8 | 18.9 | 21.2 | 21.1 | 18.9 | -- | 25.9 |
| 3-Aug | 18.8 | Z | 7.0 | 4.5 | 6.5 | 11.9 | 12.1 | 13.0 | 11.7 | 18.1 | 22.1 | 23.6 | 26.3 | 27.3 | 27.8 | 27.2 | 27.2 | 25.1 | 24.6 | 23.3 | 23.3 | 13.9 | 10.3 | 8.5 | 18.0 | 27.8 |
| 4-Aug | 10.6 | 12.2 | Z | 9.5 | 8.7 | 7.0 | 8.4 | 11.5 | 15.5 | 18.3 | 21.0 | 25.7 | 30.3 | 31.8 | 30.8 | 27.2 | 28.3 | 24.0 | 18.5 | 13.5 | 20.0 | 18.4 | 17.2 | 14.5 | 18.4 | 31.8 |
| 5-Aug | 13.2 | 19.8 | 17.2 | Z | 16.1 | 19.2 | 19.2 | 18.1 | 19.6 | 23.7 | 26.4 | 29.3 | 29.2 | 26.2 | 23.8 | 23.6 | 23.2 | 21.0 | 19.4 | 17.3 | 17.2 | 21.0 | 22.1 | 21.8 | 21.2 | 29.3 |
| 6-Aug | 21.0 | 20.3 | 18.4 | 16.9 | Z | 13.7 | 12.4 | 12.0 | 11.5 | 10.3 | 12.1 | 14.8 | 21.6 | 23.2 | 23.4 | 21.1 | 20.9 | 19.8 | 19.0 | 20.8 | 21.9 | 13.8 | 15.0 | 15.3 | 17.4 | 23.4 |
| 7-Aug | 15.3 | 16.5 | 13.7 | 14.3 | 13.4 | Z | 10.6 | 10.6 | 11.5 | 14.7 | 18.6 | 19.6 | 23.8 | 23.1 | 21.3 | 20.4 | 21.8 | 17.3 | 8.9 | 11.4 | 12.0 | 12.9 | 8.4 | 9.3 | 15.2 | 23.8 |
| 8-Aug | Z | 2.2 | 1.7 | 6.1 | 10.7 | 2.6 | 3.3 | 6.5 | 14.1 | 15.7 | 16.1 | 17.4 | 19.0 | 16.6 | 19.7 | 17.0 | 19.5 | 21.2 | 19.0 | 12.6 | 10.1 | 15.8 | 15.8 | 13.2 | 12.9 | 21.2 |
| 9-Aug | 10.3 | Z | 7.3 | 7.4 | 6.2 | 3.6 | 2.1 | 3.9 | 8.5 | 9.9 | 20.3 | 16.2 | 21.3 | 29.1 | 35.4 | 34.5 | 34.0 | 31.7 | 27.1 | 24.9 | 25.1 | 23.0 | 19.6 | 11.0 | 17.9 | 35.4 |
| 10-Aug | 6.7 | 4.7 | Z | 3.9 | 5.8 | 6.1 | 6.3 | 8.2 | 5.7 | 5.1 | 15.1 | 25.2 | 29.2 | 31.5 | 32.2 | 33.5 | 33.8 | 32.2 | 28.2 | 24.8 | 20.3 | 13.3 | 8.6 | 2.6 | 16.7 | 33.8 |
| 11-Aug | 2.2 | 5.2 | 11.6 | Z | 3.3 | 4.2 | 5.8 | 6.3 | 15.8 | 14.2 | 20.6 | 29.7 | 31.3 | 31.4 | 31.4 | 31.6 | 31.5 | 30.8 | 28.4 | 26.0 | 23.0 | 20.0 | 14.0 | 3.9 | 18.3 | 31.6 |
| 12-Aug | 15.0 | 6.1 | 1.3 | 1.2 | Z | 4.4 | 3.7 | 4.4 | 7.5 | 6.9 | 14.0 | 17.5 | 17.3 | 21.0 | 24.7 | 22.7 | 20.1 | 18.1 | 16.2 | 11.9 | 15.6 | 11.8 | 7.0 | 2.4 | 11.8 | 24.7 |
| 13-Aug | 1.6 | 1.5 | 2.4 | 5.4 | 2.8 | Z | 7.1 | 7.7 | 7.9 | 9.8 | 16.2 | 20.7 | 22.8 | 25.0 | 24.1 | 24.6 | 23.1 | 24.5 | 21.0 | 19.9 | 16.8 | 14.2 | 9.2 | 3.6 | 13.6 | 25.0 |
| 14-Aug | Z | 1.9 | 1.9 | 1.8 | 1.6 | 1.8 | 2.3 | 4.0 | 5.7 | 11.2 | 17.5 | 23.8 | 29.2 | 32.1 | 34.2 | 27.8 | 26.8 | 30.3 | 29.2 | 25.0 | 22.1 | 15.4 | 14.6 | 15.5 | 16.3 | 34.2 |
| 15-Aug | 14.2 | Z | 11.4 | 10.0 | 7.6 | 7.4 | 6.7 | 9.1 | 13.9 | 15.8 | 23.2 | 27.2 | 28.1 | 30.2 | 30.0 | 29.3 | 28.6 | 27.7 | 25.8 | 23.4 | 19.4 | 18.5 | 22.9 | 25.9 | 19.8 | 30.2 |
| 16-Aug | 26.3 | 24.6 | Z | 17.1 | 14.3 | 12.2 | 3.1 | 4.1 | 19.9 | 26.6 | 31.9 | 35.6 | 34.5 | 30.9 | 30.7 | 32.9 | 32.2 | 27.3 | 24.2 | 22.5 | 22.6 | 11.0 | 7.3 | 8.5 | 21.8 | 35.6 |
| 17-Aug | 6.6 | 7.8 | 7.3 | Z | 9.0 | 7.0 | 8.0 | 10.2 | 14.8 | 19.6 | 20.2 | 27.0 | 29.6 | 34.6 | 36.7 | 37.9 | 38.8 | 34.0 | 30.0 | 24.9 | 20.9 | 22.7 | 23.4 | 23.5 | 21.5 | 38.8 |
| 18-Aug | 22.6 | 20.7 | 18.9 | 17.7 | Z | 18.2 | 18.7 | 17.9 | 17.4 | 17.1 | 19.6 | 22.8 | 27.5 | 31.1 | 31.7 | 34.5 | 32.3 | 30.0 | 28.3 | 26.4 | 25.1 | 22.4 | 19.5 | 20.9 | 23.5 | 34.5 |
| 19-Aug | 17.7 | 12.6 | 8.0 | 8.5 | 9.6 | Z | 8.0 | 7.0 | 10.2 | 15.6 | 21.4 | 21.8 | 23.5 | 24.9 | 25.2 | 22.4 | 14.4 | 14.7 | 18.5 | 19.5 | 18.5 | 15.9 | 11.4 | 15.1 | 15.9 | 25.2 |
| 20-Aug | Z | 13.7 | 14.1 | 6.8 | 4.7 | 4.3 | 6.4 | 5.0 | 5.2 | 4.2 | C | C | C | C | 30.4 | 30.6 | 30.6 | 27.0 | 24.4 | 23.5 | 22.6 | 15.0 | 6.3 | 3.3 | 14.6 | 30.6 |
| 21-Aug | 2.3 | Z | 3.2 | 6.0 | 6.2 | 4.5 | 5.6 | 8.6 | 13.2 | 21.9 | 25.9 | 27.1 | 27.9 | 28.4 | 28.1 | 29.5 | 28.9 | 28.0 | 27.7 | 25.6 | 24.1 | 20.8 | 17.1 | 18.2 | 18.6 | 29.5 |
| 22-Aug | 19.8 | 20.5 | Z | 21.0 | 20.6 | 16.1 | 13.1 | 15.3 | 19.1 | 21.7 | 24.2 | 25.5 | 28.1 | 32.2 | 37.7 | 37.9 | 36.9 | 35.7 | 29.0 | 26.3 | 27.8 | 28.3 | 24.9 | 23.7 | 25.4 | 37.9 |
| 23-Aug | 21.9 | 20.1 | 17.0 | Z | 12.6 | 11.7 | 10.2 | 10.3 | 11.9 | 12.4 | 10.2 | 12.0 | 13.7 | 13.3 | 13.4 | 11.3 | 12.2 | 17.6 | 14.9 | 10.9 | 5.0 | 9.1 | 9.3 | 3.7 | 12.4 | 21.9 |
| 24-Aug | 9.4 | 5.1 | 1.7 | 6.6 | Z | 2.6 | 3.1 | 10.9 | 16.6 | 22.3 | 28.4 | 30.2 | 31.3 | 31.2 | 31.1 | 29.9 | 30.0 | 30.6 | 25.4 | 22.8 | 24.0 | 15.1 | 9.3 | 12.2 | 18.7 | 31.3 |
| 25-Aug | 4.1 | 1.8 | 1.6 | 1.8 | 1.8 | Z | 2.4 | 3.8 | 11.9 | 14.0 | 15.9 | 25.7 | 33.0 | 42.2 | 49.3 | 49.6 | 46.3 | 46.8 | 31.8 | 24.5 | 21.1 | 16.8 | 11.1 | 15.9 | 20.6 | 49.6 |
| 26-Aug | Z | 5.3 | 7.4 | 9.6 | 10.3 | 10.9 | 10.9 | 13.8 | 18.1 | 23.3 | 28.5 | 33.8 | 38.8 | 41.0 | 40.6 | 40.1 | 40.9 | 38.5 | 36.0 | 33.9 | 31.9 | 27.9 | 24.6 | 24.8 | 25.7 | 41.0 |
| 27-Aug | 24.5 | Z | 23.1 | 20.9 | 19.7 | 18.0 | 17.5 | 18.6 | 24.1 | 28.5 | 30.1 | 35.8 | 34.9 | 36.9 | 36.0 | 26.8 | 24.0 | 24.0 | 25.5 | 27.6 | 21.5 | 25.7 | 31.6 | 31.7 | 26.4 | 36.9 |
| 28-Aug | 31.0 | 29.0 | Z | 25.0 | 25.3 | 26.6 | 24.0 | 25.7 | 22.7 | 26.8 | 35.2 | 39.0 | 36.2 | 37.1 | 35.2 | 30.6 | 29.8 | 19.4 | 15.6 | 11.8 | 10.6 | 10.1 | 10.9 | 12.4 | 24.8 | 39.0 |
| 29-Aug | 13.0 | 11.8 | 12.9 | Z | 15.6 | 15.2 | 15.6 | 14.8 | 16.4 | 16.6 | 20.1 | 20.8 | 21.5 | 22.9 | 23.4 | 24.0 | 25.0 | 26.8 | 25.8 | 23.2 | 17.8 | 11.5 | 17.5 | 17.2 | 18.7 | 26.8 |
| 30-Aug | 17.7 | 17.3 | 16.5 | 15.3 | Z | 12.6 | 12.1 | 12.1 | 12.3 | 18.4 | 25.8 | 30.7 | 35.8 | 37.3 | 37.9 | 37.8 | 37.1 | 36.4 | 31.5 | 26.4 | 22.5 | 21.4 | 17.8 | 1.7 | 23.2 | 37.9 |
| 31-Aug | 2.9 | 1.0 | 3.5 | 5.9 | 9.1 | Z | 9.7 | 8.9 | 9.6 | 16.1 | 21.6 | 21.3 | 21.2 | 21.8 | 23.5 | 27.4 | 26.5 | 25.7 | 24.0 | 21.6 | 15.8 | 11.6 | 7.1 | 3.7 | 14.8 | 27.4 |
| | 13.7 | 11.6 | 9.4 | 9.9 | 9.9 | 10.1 | 9.1 | 10.2 | 13.2 | 16.2 | 20.8 | 24.2 | 27.0 | 29.2 | 29.5 | 28.8 | 28.2 | 27.3 | 24.1 | 21.1 | 19.9 | 17.3 | 15.2 | 13.4 | Diurnal Average | |
| | 31.0 | 29.0 | 23.1 | 25.0 | 25.3 | 26.6 | 24.0 | 25.7 | 24.1 | 28.5 | 35.2 | 39.0 | 38.8 | 42.2 | 49.3 | 49.6 | 46.3 | 46.8 | 36.0 | 33.9 | 31.9 | 28.3 | 31.6 | 31.7 | Diurnal Maximum | |

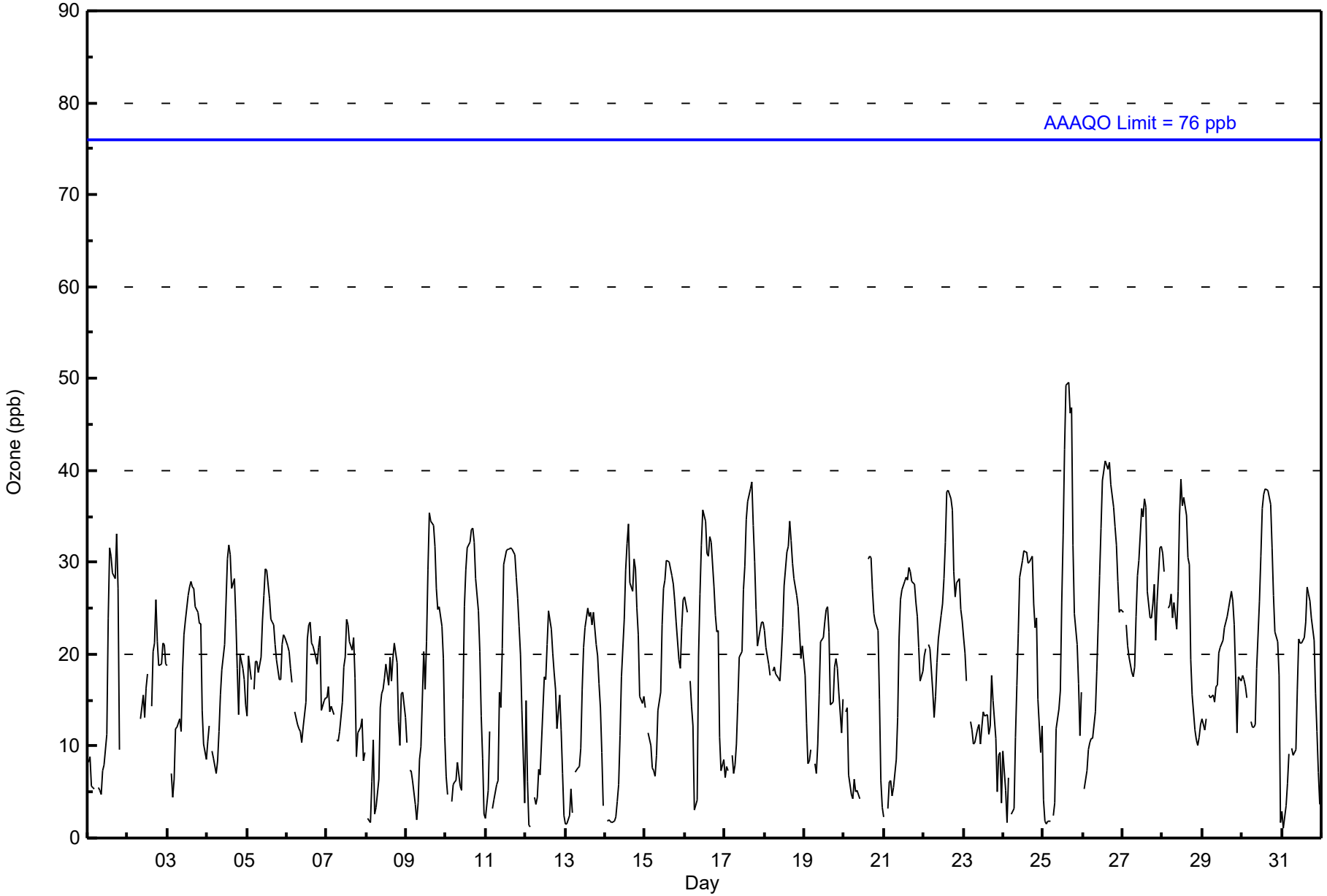
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 389 | 55.81 | 55.81 |
| 21 - 50 | 308 | 44.19 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 697

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 46 | 15 | 6 | 1 | 5 | 2 | 15 | 67 | 38 | 16 | 17 | 20 | 15 | 35 | 55 | 36 | 389 |
| 21 - 50 | 47 | 16 | 12 | 4 | 3 | 18 | 16 | 50 | 16 | 11 | 16 | 35 | 7 | 9 | 26 | 22 | 308 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 93 | 31 | 18 | 5 | 8 | 20 | 31 | 117 | 54 | 27 | 33 | 55 | 22 | 44 | 81 | 58 | 697 |

Total Number of Valid Hours: 697

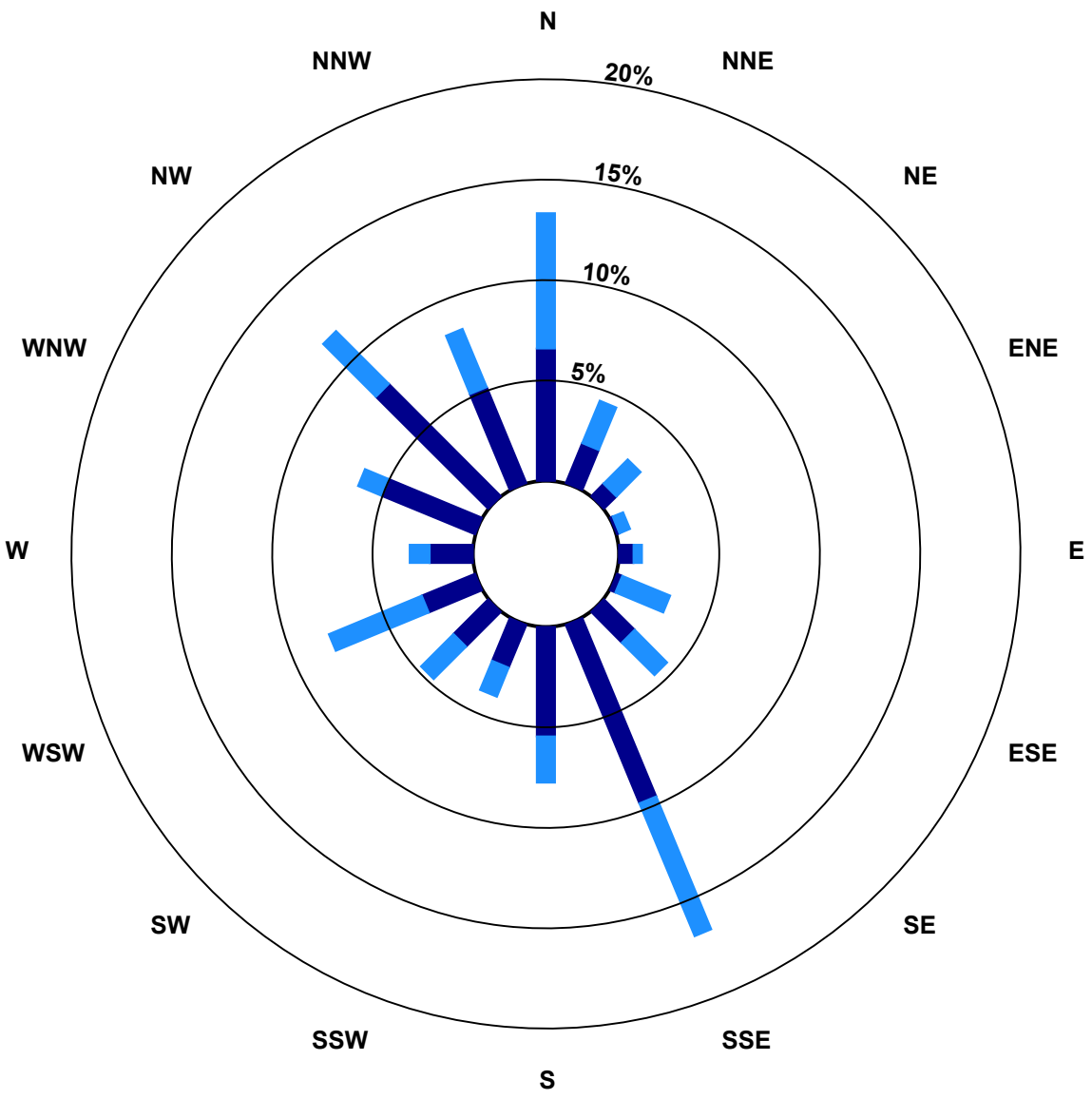
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

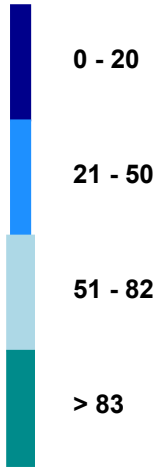
**Wind Rose Aug 2026**

**Ozone ($O_3$) - ppb**

**Buffalo Viewpoint**




**Classes (ppb)**



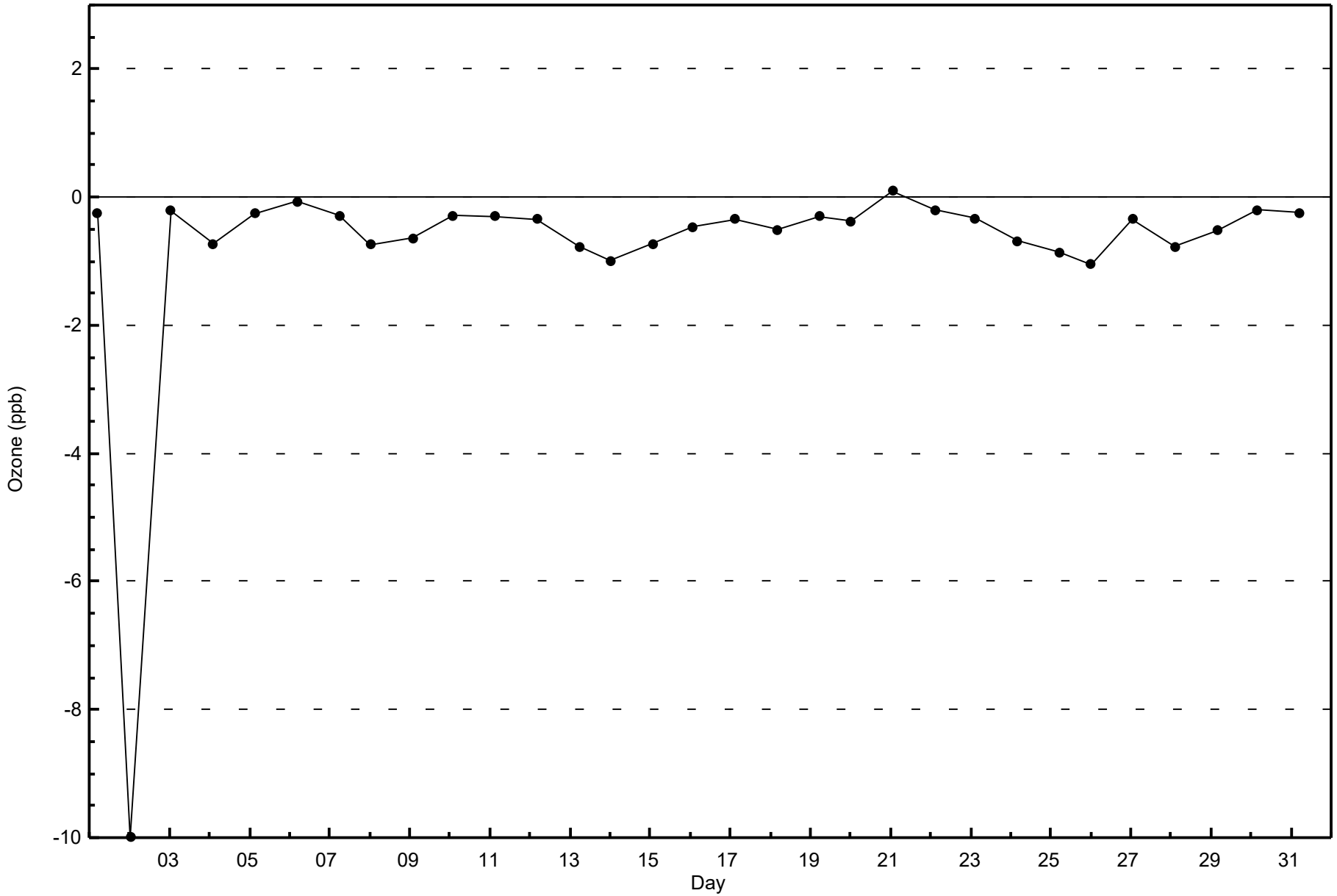

**Total Number of Valid Hours: 697**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Buffalo Viewpoint - August 2026**

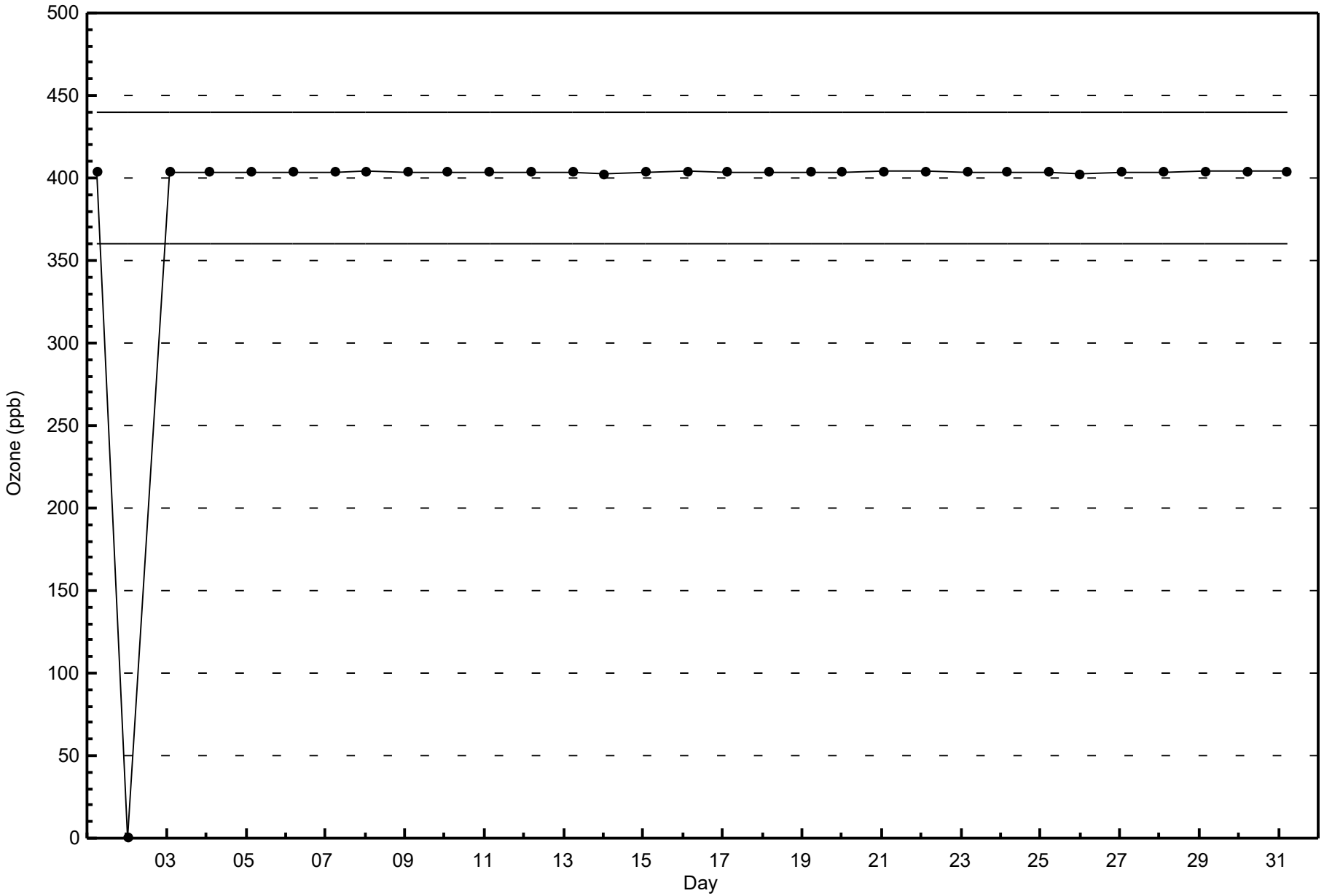


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Buffalo Viewpoint - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 1

Maximum Value: 67.5 $\mu g/m^3$ on Aug 19 22:00

Maximum Daily Average: 36.2 $\mu g/m^3$ on Aug 25

Minimum Value: 0.5 $\mu g/m^3$ on Aug 6 10:00

Minimum Daily Average: 1.5 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 12.9 $\mu g/m^3$ at hour 18

Minimum Diurnal Average: 10.1 $\mu g/m^3$ at hour 1

Monthly Average: 11.07 $\mu g/m^3$

Percentiles: $P_1$ = 0.7 $P_{10}$ = 3.1 $Q_1$ = 4.9 Median = 7.7 $Q_3$ = 13.6 $P_{90}$ = 22.5 $P_{99}$ = 51.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 730 |
| Hours of Missing Data: | 14 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 98.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 4.6 | 4.6 | 4.7 | 4.8 | 5.0 | 5.8 | 7.0 | 8.1 | 9.9 | 13.5 | 12.6 | 19.2 | 19.9 | 14.8 | 13.2 | 15.8 | 15.1 | 16.8 | 18.2 | 24.0 | PF | PF | PF | PF | 11.9 | 24.0 |
| 2-Aug | PF | PF | PF | PF | PF | PF | PF | PF | 7.2 | 5.4 | 5.8 | 4.5 | 3.6 | 17.7 | 21.6 | 11.1 | 11.2 | 6.9 | 6.4 | 7.4 | 7.3 | 2.5 | 2.2 | 2.5 | -- | 21.6 |
| 3-Aug | 2.7 | 4.4 | 3.7 | 4.3 | 3.6 | 2.8 | 2.8 | 3.0 | 4.0 | 3.3 | 5.4 | 5.0 | 4.1 | 3.4 | 4.0 | 5.5 | 5.9 | 6.6 | 5.9 | 5.5 | 4.4 | 4.8 | 5.3 | 6.4 | 4.4 | 6.6 |
| 4-Aug | 7.0 | 6.7 | 6.3 | 5.6 | 5.4 | 5.7 | 4.8 | 6.0 | 10.9 | 11.8 | 13.2 | 9.2 | 5.7 | 4.5 | 4.7 | 5.4 | 11.9 | 7.4 | 7.5 | 6.1 | 6.9 | 8.8 | 8.9 | 11.0 | 7.6 | 13.2 |
| 5-Aug | 14.5 | 16.6 | 15.2 | 16.6 | 15.2 | 11.7 | 9.0 | 9.8 | 7.7 | 6.4 | 5.5 | 5.9 | 5.7 | 5.6 | 7.2 | 6.7 | 4.0 | 4.0 | 3.5 | 4.4 | 2.7 | 2.3 | 1.6 | 1.2 | 7.6 | 16.6 |
| 6-Aug | 1.2 | 0.9 | 0.6 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 1.2 | 1.9 | 3.1 | 3.5 | 4.1 | 1.8 | 1.7 | 1.6 | 1.5 | 1.9 | 2.0 | 2.1 | 1.5 | 4.1 |
| 7-Aug | 2.3 | 2.4 | 2.5 | 2.4 | 2.3 | 2.4 | 2.6 | 2.8 | 2.9 | 3.4 | 4.5 | 4.3 | 4.6 | 5.9 | 9.7 | 10.2 | 8.2 | 7.4 | 8.1 | 5.8 | 3.3 | 3.3 | 3.5 | 4.1 | 4.5 | 10.2 |
| 8-Aug | 4.9 | 5.5 | 5.7 | 4.9 | 4.2 | DF | 4.0 | 4.1 | 2.6 | 2.8 | 2.9 | 2.6 | 3.4 | 5.0 | 5.2 | 5.1 | 4.2 | 6.6 | 3.7 | 3.9 | 6.4 | 4.7 | 3.1 | 4.6 | 4.3 | 6.6 |
| 9-Aug | 7.2 | 4.2 | 4.2 | 4.2 | 4.8 | 7.3 | 11.2 | 10.3 | 6.9 | 7.6 | 4.5 | 22.4 | 24.2 | 17.8 | 13.0 | 14.2 | 8.5 | 13.5 | 6.7 | 5.0 | 5.7 | 5.9 | 4.6 | 4.9 | 9.1 | 24.2 |
| 10-Aug | 5.3 | 5.6 | 5.4 | 5.3 | 5.4 | 6.7 | 9.0 | 8.0 | 9.0 | 17.5 | 16.4 | 10.0 | 11.1 | 10.9 | 12.4 | 10.8 | 11.0 | 6.2 | 3.8 | 5.0 | 6.9 | 10.6 | 9.8 | 13.1 | 9.0 | 17.5 |
| 11-Aug | 10.2 | 7.8 | 5.9 | 5.6 | 5.6 | 5.8 | 7.4 | 7.0 | 7.4 | 13.5 | 11.9 | 15.0 | 15.8 | 13.8 | 13.6 | 13.2 | 13.1 | 11.4 | 6.2 | 6.0 | 5.8 | 4.5 | 4.5 | 6.3 | 9.1 | 15.8 |
| 12-Aug | 4.2 | 7.4 | 6.7 | 7.1 | 10.7 | 8.0 | 8.1 | 8.3 | 3.0 | 6.9 | 1.8 | 1.7 | 1.6 | 1.8 | 2.2 | 2.0 | 1.5 | 2.0 | 2.2 | 2.8 | 2.5 | 3.6 | 3.1 | 3.1 | 4.3 | 10.7 |
| 13-Aug | 3.1 | 3.2 | 3.3 | 3.2 | 3.4 | 3.4 | 3.4 | 3.6 | 3.8 | 3.5 | 3.1 | 3.0 | 3.2 | 3.2 | 3.3 | 3.3 | 3.8 | 3.6 | 3.6 | 3.9 | 4.2 | 4.1 | 4.9 | 7.7 | 3.7 | 7.7 |
| 14-Aug | 8.7 | 7.5 | 6.0 | 5.6 | 6.3 | 7.9 | 6.2 | 7.4 | 10.9 | 15.4 | 23.9 | 8.6 | 5.8 | 11.1 | 12.6 | 12.5 | 10.1 | 7.1 | 6.1 | 6.0 | 5.8 | 6.2 | 6.6 | 7.3 | 8.8 | 23.9 |
| 15-Aug | 7.7 | 7.9 | 6.9 | 7.6 | 7.7 | 7.5 | 5.5 | 5.1 | 5.2 | 5.1 | 4.7 | 4.0 | 4.0 | 5.7 | 5.0 | 4.1 | 4.0 | 3.7 | 3.4 | 3.1 | 3.1 | 3.2 | 3.2 | 3.1 | 5.0 | 7.9 |
| 16-Aug | 3.0 | 3.2 | 3.5 | 4.5 | 5.1 | 4.5 | 6.6 | 7.9 | 15.2 | 19.2 | 21.7 | 22.0 | 18.5 | 14.1 | 21.1 | 35.3 | 52.9 | 52.4 | 34.0 | 30.7 | 30.0 | 30.5 | 29.7 | 34.3 | 20.8 | 52.9 |
| 17-Aug | 33.7 | 34.1 | 34.9 | 34.1 | 26.7 | 26.8 | 24.5 | 23.4 | 19.5 | 20.5 | 21.9 | 24.4 | 28.6 | 26.3 | 22.7 | 21.6 | 21.3 | 17.7 | 16.8 | 15.3 | 14.0 | 12.4 | 12.2 | 12.7 | 22.8 | 34.9 |
| 18-Aug | 12.8 | 12.3 | 11.7 | 10.9 | 10.5 | 10.7 | 10.5 | 9.4 | 8.7 | 9.5 | 9.5 | 7.5 | 6.1 | 5.7 | 5.2 | 4.3 | 7.0 | 5.0 | 4.7 | 3.8 | 4.2 | 4.2 | 4.8 | 4.8 | 7.7 | 12.8 |
| 19-Aug | 5.0 | 5.2 | 5.2 | 5.0 | 5.2 | 11.3 | 8.7 | 6.2 | 6.8 | 7.2 | 7.8 | 4.8 | 5.2 | 6.1 | 8.6 | 13.2 | 16.4 | 21.2 | 30.7 | 32.1 | 55.3 | 67.5 | 57.6 | 35.8 | 17.8 | 67.5 |
| 20-Aug | 20.6 | 19.3 | 17.8 | 20.5 | 18.6 | 17.6 | 21.8 | 21.6 | 20.9 | 26.1 | 24.4 | 24.5 | 19.8 | 20.8 | C | 23.1 | 19.4 | 15.2 | 9.9 | 6.9 | 6.9 | 7.8 | 8.0 | 8.0 | 17.4 | 26.1 |
| 21-Aug | 8.3 | 8.6 | 9.5 | 10.3 | 10.9 | 11.8 | 12.2 | 12.5 | 13.4 | 10.7 | 9.3 | 10.2 | 7.8 | 7.6 | 7.3 | 8.5 | 9.5 | 10.8 | 10.4 | 9.7 | 9.7 | 10.2 | 11.5 | 11.2 | 10.1 | 13.4 |
| 22-Aug | 10.3 | 10.1 | 10.2 | 10.4 | 10.4 | 12.2 | 10.1 | 9.2 | 7.8 | 8.0 | 8.5 | 8.5 | 8.5 | 8.8 | 9.2 | 9.4 | 9.4 | 10.8 | 11.7 | 13.2 | 15.4 | 14.1 | 12.9 | 12.0 | 10.5 | 15.4 |
| 23-Aug | 11.4 | 12.2 | 12.2 | 12.2 | 12.8 | 13.6 | 13.6 | 14.0 | 14.3 | 14.4 | 14.4 | 15.8 | 17.0 | 18.4 | 20.6 | 20.5 | 22.1 | 22.8 | 14.9 | 12.5 | 15.4 | 11.7 | 9.1 | 10.0 | 14.8 | 22.8 |
| 24-Aug | 11.0 | 12.2 | 16.0 | 13.2 | 13.8 | 16.8 | 24.0 | 21.0 | 16.7 | 16.4 | 21.9 | 9.6 | 9.8 | 8.9 | 7.1 | 9.5 | 11.3 | 10.2 | 8.1 | 10.6 | 8.7 | 12.9 | 7.6 | 12.2 | 12.9 | 24.0 |
| 25-Aug | 20.7 | 28.1 | 28.0 | 28.4 | 26.6 | 43.5 | 40.7 | 42.3 | 39.7 | 43.7 | 43.3 | 54.9 | 49.5 | 43.6 | 37.8 | 29.2 | 23.8 | 29.4 | 33.7 | 32.5 | 38.2 | 38.2 | 37.3 | 36.1 | 36.2 | 54.9 |
| 26-Aug | 32.9 | 31.9 | 29.9 | 29.3 | 27.3 | 26.8 | 25.9 | 20.5 | 15.6 | 13.4 | 11.1 | 6.8 | 5.7 | 5.2 | 4.6 | 4.5 | 4.9 | 4.6 | 4.9 | 5.3 | 5.1 | 5.2 | 5.4 | 5.6 | 13.9 | 32.9 |
| 27-Aug | 6.0 | 7.0 | 7.5 | 8.2 | 8.9 | 13.5 | 13.8 | 14.2 | 13.4 | 14.4 | 19.4 | 17.0 | 17.9 | 18.9 | 17.0 | 18.5 | 18.7 | 18.5 | 30.6 | 30.1 | 25.6 | 23.7 | 20.0 | 20.4 | 16.8 | 30.6 |
| 28-Aug | 20.6 | 20.5 | 21.3 | 19.9 | 17.6 | 14.5 | 14.0 | 14.4 | 14.3 | 15.9 | 10.7 | 7.1 | 4.7 | 5.1 | 4.9 | 9.8 | 12.2 | 59.2 | 65.5 | 40.5 | 22.3 | 21.3 | 10.7 | 3.3 | 18.8 | 65.5 |
| 29-Aug | 2.9 | 3.1 | 2.9 | 3.4 | 5.1 | 7.0 | 7.2 | 6.7 | 7.2 | 7.3 | 7.6 | 7.2 | 6.6 | 6.6 | 6.2 | 5.7 | 6.2 | 5.9 | 6.5 | 6.5 | 7.1 | 7.1 | 7.3 | 8.6 | 6.2 | 8.6 |
| 30-Aug | 9.1 | 11.3 | 12.1 | 11.9 | 12.5 | 12.1 | 16.0 | 15.7 | 13.8 | 10.8 | 10.9 | 10.5 | 8.4 | 7.3 | 6.5 | 6.8 | 6.7 | 8.1 | 7.5 | 7.5 | 7.2 | 7.6 | 8.8 | 17.0 | 10.2 | 17.0 |
| 31-Aug | 11.1 | 12.7 | 6.5 | 7.1 | 17.6 | 6.0 | 5.9 | 12.4 | 12.9 | 13.5 | 6.3 | 5.5 | 5.7 | 7.1 | 5.8 | 2.7 | 2.8 | 3.0 | 2.5 | 2.5 | 4.3 | 5.6 | 4.8 | 5.3 | 7.1 | 17.6 |
| | 10.1 | 10.5 | 10.2 | 10.2 | 10.3 | 11.2 | 11.2 | 11.2 | 10.7 | 11.9 | 11.8 | 11.4 | 10.8 | 10.8 | 10.5 | 11.2 | 11.7 | 12.9 | 12.2 | 11.3 | 11.2 | 11.5 | 10.4 | 10.5 | Diurnal Average | |
| | 33.7 | 34.1 | 34.9 | 34.1 | 27.3 | 43.5 | 40.7 | 42.3 | 39.7 | 43.7 | 43.3 | 54.9 | 49.5 | 43.6 | 37.8 | 35.3 | 52.9 | 59.2 | 65.5 | 40.5 | 55.3 | 67.5 | 57.6 | 36.1 | Diurnal Maximum | |

C - Calibration DF - DAS Failure PF - Power Failure

Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 223 | 30.55 | 30.55 |
| 6 - 15 | 357 | 48.90 | 79.45 |
| 16 - 25 | 91 | 12.47 | 91.92 |
| 26 - 80 | 59 | 8.08 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 730

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Buffalo Viewpoint - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 39 | 13 | 7 | 0 | 0 | 1 | 5 | 17 | 11 | 6 | 15 | 26 | 12 | 22 | 29 | 20 | 223 |
| 6 - 15 | 37 | 12 | 7 | 2 | 3 | 7 | 17 | 85 | 40 | 15 | 15 | 21 | 10 | 18 | 37 | 31 | 357 |
| 16 - 25 | 15 | 2 | 0 | 0 | 3 | 7 | 9 | 13 | 4 | 6 | 2 | 6 | 2 | 4 | 11 | 7 | 91 |
| 26 - 80 | 5 | 4 | 4 | 3 | 2 | 5 | 1 | 9 | 5 | 2 | 2 | 3 | 1 | 4 | 7 | 2 | 59 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 96 | 31 | 18 | 5 | 8 | 20 | 32 | 124 | 60 | 29 | 34 | 56 | 25 | 48 | 84 | 60 | 730 |

Total Number of Valid Hours: 730

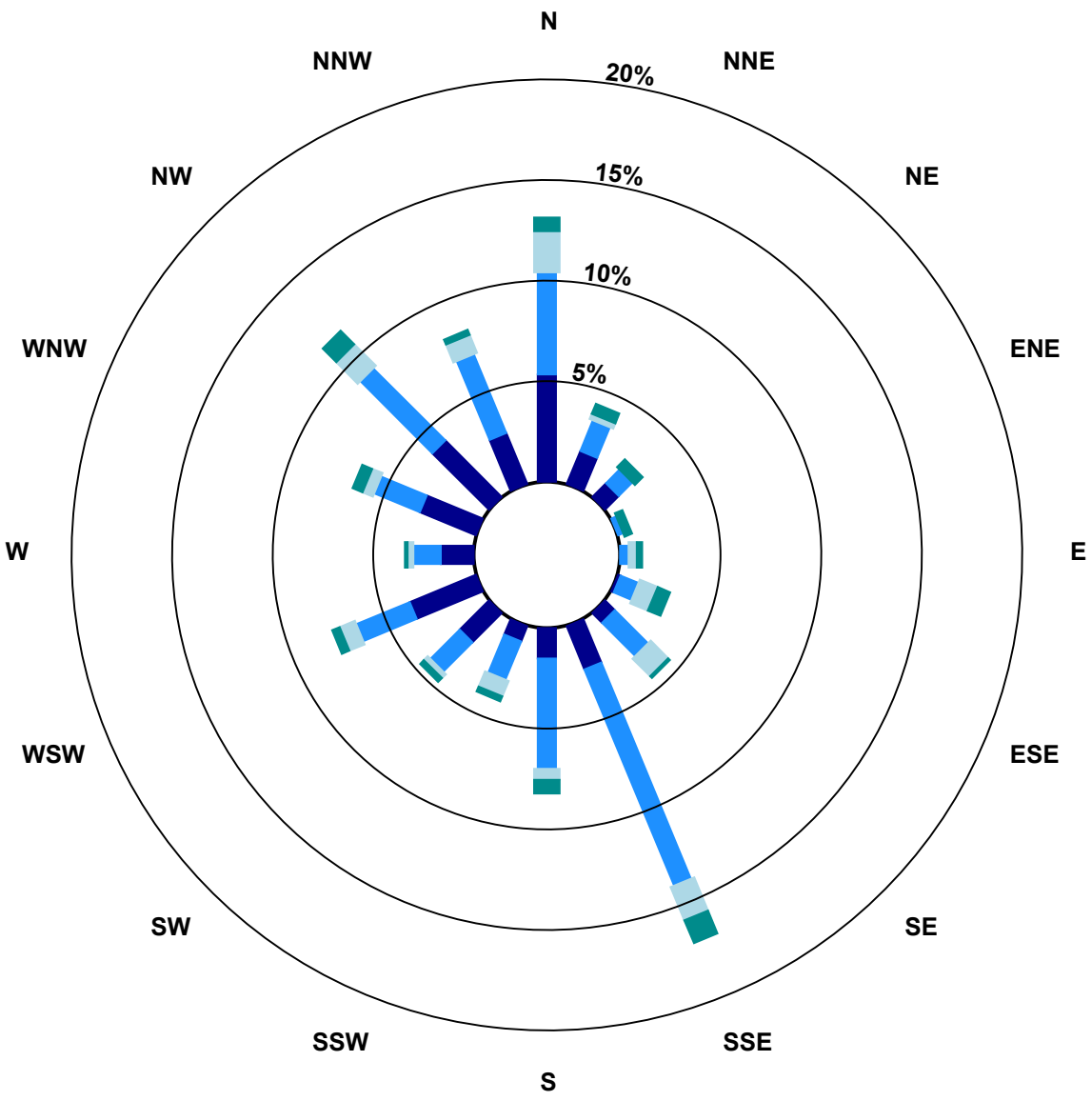
Total Number of Hours: 744

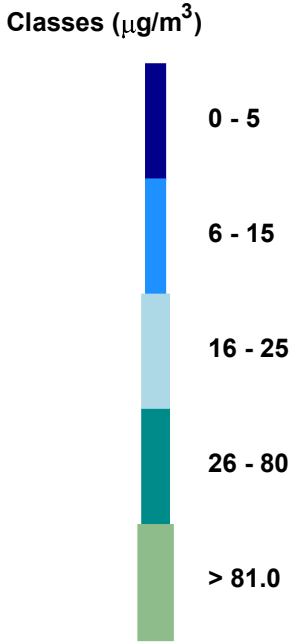
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Buffalo Viewpoint




Total Number of Valid Hours: 730

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ambient Temperature 2m (AT2) - C

## Buffalo Viewpoint - August 2026

Maximum Value: 29.4 C on Aug 26 17:00

Maximum Daily Average: 21.0 C on Aug 27

Minimum Value: 6.3 C on Aug 17 06:00

Minimum Daily Average: 13.6 C on Aug 12

Maximum Diurnal Average: 22.6 C at hour 15

Minimum Diurnal Average: 12.1 C at hour 6

Monthly Average: 17.10 C

Percentiles: $P_1$ = 8.0 $P_{10}$ = 11.4 $Q_1$ = 13.4 Median = 16.5 $Q_3$ = 20.5 $P_{90}$ = 23.8 $P_{99}$ = 28.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.6 | 15.3 | 14.8 | 13.9 | 14.0 | 14.2 | 15.2 | 15.3 | 15.9 | 17.7 | 18.5 | 21.7 | 24.1 | 25.8 | 27.0 | 27.7 | 28.2 | 27.8 | 25.7 | 23.1 | PF | 18.5 | 17.3 | 16.4 | 19.7 | 28.2 |
| 2-Aug | 16.2 | 16.1 | 15.7 | 15.6 | 15.6 | 15.5 | 15.4 | 15.4 | 15.5 | 15.8 | 14.8 | 14.5 | 14.4 | 15.1 | 16.3 | 16.9 | 17.6 | 16.4 | 15.8 | 15.1 | 14.3 | 12.9 | 12.0 | 11.8 | 15.2 | 17.6 |
| 3-Aug | 12.0 | 11.5 | 11.1 | 10.5 | 10.1 | 10.3 | 10.8 | 11.2 | 12.7 | 14.4 | 15.5 | 15.3 | 16.9 | 18.3 | 18.9 | 19.3 | 19.4 | 19.1 | 18.1 | 16.8 | 15.3 | 13.0 | 11.4 | 10.1 | 14.2 | 19.4 |
| 4-Aug | 9.4 | 8.6 | 7.8 | 7.9 | 8.2 | 8.5 | 10.4 | 13.0 | 16.0 | 18.4 | 20.0 | 20.6 | 22.2 | 23.4 | 23.7 | 23.2 | 19.9 | 16.6 | 16.1 | 16.1 | 16.0 | 15.3 | 15.2 | 14.7 | 15.5 | 23.7 |
| 5-Aug | 14.3 | 14.5 | 14.2 | 14.2 | 14.4 | 14.6 | 15.1 | 15.7 | 16.8 | 17.1 | 18.0 | 19.2 | 19.2 | 18.5 | 18.9 | 19.0 | 15.9 | 12.2 | 11.4 | 11.1 | 10.8 | 11.0 | 10.8 | 10.6 | 14.9 | 19.2 |
| 6-Aug | 10.3 | 10.2 | 10.4 | 10.5 | 10.7 | 10.8 | 11.0 | 11.7 | 12.5 | 13.5 | 14.6 | 15.4 | 17.3 | 17.2 | 17.2 | 16.2 | 16.2 | 16.6 | 15.1 | 15.0 | 14.2 | 14.0 | 14.1 | 13.8 | 13.7 | 17.3 |
| 7-Aug | 13.5 | 12.9 | 12.0 | 12.5 | 12.4 | 12.5 | 12.8 | 13.3 | 14.1 | 15.8 | 17.3 | 17.6 | 19.1 | 19.1 | 19.5 | 18.9 | 19.0 | 17.6 | 16.5 | 15.7 | 14.8 | 14.2 | 13.8 | 13.9 | 15.4 | 19.5 |
| 8-Aug | 13.5 | 13.0 | 12.1 | 11.5 | 11.1 | 11.8 | 12.9 | 14.9 | 16.6 | 17.5 | 18.3 | 18.9 | 19.2 | 18.9 | 20.1 | 18.6 | 18.4 | 19.2 | 19.5 | 17.4 | 16.3 | 16.0 | 14.7 | 13.3 | 16.0 | 20.1 |
| 9-Aug | 13.5 | 12.7 | 13.0 | 13.1 | 13.0 | 13.1 | 14.0 | 14.9 | 16.0 | 17.1 | 19.0 | 20.4 | 20.4 | 21.4 | 21.7 | 21.1 | 21.8 | 22.1 | 20.1 | 18.7 | 17.5 | 16.4 | 14.8 | 12.8 | 17.0 | 22.1 |
| 10-Aug | 11.2 | 10.1 | 9.8 | 10.3 | 10.3 | 10.0 | 11.0 | 13.3 | 14.2 | 17.1 | 18.9 | 20.6 | 22.0 | 22.8 | 22.4 | 22.3 | 22.2 | 21.8 | 20.9 | 18.8 | 16.5 | 15.7 | 15.0 | 13.6 | 16.3 | 22.8 |
| 11-Aug | 12.2 | 11.2 | 11.5 | 10.4 | 9.7 | 9.3 | 10.4 | 11.8 | 16.0 | 18.6 | 20.2 | 21.0 | 21.0 | 21.5 | 21.2 | 21.4 | 21.2 | 20.4 | 19.5 | 17.7 | 16.1 | 15.0 | 14.2 | 13.3 | 16.0 | 21.5 |
| 12-Aug | 12.8 | 12.4 | 11.7 | 11.6 | 12.2 | 12.5 | 13.0 | 12.6 | 12.3 | 12.6 | 13.9 | 14.7 | 14.7 | 15.9 | 17.6 | 15.5 | 14.3 | 15.0 | 14.9 | 14.1 | 13.4 | 13.1 | 12.6 | 12.4 | 13.6 | 17.6 |
| 13-Aug | 12.4 | 12.1 | 12.0 | 11.9 | 11.6 | 11.6 | 11.9 | 12.6 | 14.5 | 15.7 | 17.2 | 18.6 | 18.4 | 20.3 | 19.2 | 19.4 | 18.3 | 17.9 | 18.0 | 16.7 | 15.6 | 15.0 | 14.9 | 14.9 | 15.4 | 20.3 |
| 14-Aug | 14.5 | 14.2 | 14.2 | 13.7 | 13.4 | 13.2 | 13.4 | 14.9 | 16.6 | 17.8 | 19.5 | 20.5 | 21.2 | 22.3 | 22.6 | 18.4 | 16.9 | 17.9 | 17.9 | 17.0 | 15.6 | 14.0 | 12.5 | 11.8 | 16.4 | 22.6 |
| 15-Aug | 11.0 | 10.0 | 9.8 | 8.8 | 7.9 | 7.8 | 8.7 | 11.7 | 15.5 | 18.4 | 20.9 | 22.1 | 23.0 | 23.4 | 24.0 | 23.8 | 24.0 | 23.5 | 22.8 | 20.2 | 18.3 | 17.8 | 18.2 | 18.6 | 17.1 | 24.0 |
| 16-Aug | 17.6 | 16.7 | 15.9 | 14.8 | 13.8 | 13.7 | 14.4 | 14.4 | 14.0 | 14.2 | 15.6 | 16.6 | 17.6 | 18.4 | 18.9 | 19.7 | 19.5 | 17.8 | 16.6 | 14.9 | 13.7 | 12.4 | 11.0 | 10.5 | 15.5 | 19.7 |
| 17-Aug | 10.1 | 9.0 | 8.1 | 7.2 | 7.1 | 6.3 | 7.4 | 9.7 | 13.0 | 16.2 | 17.4 | 18.8 | 19.6 | 20.8 | 21.2 | 21.6 | 21.9 | 21.8 | 21.0 | 18.8 | 16.5 | 14.9 | 13.7 | 13.1 | 14.8 | 21.9 |
| 18-Aug | 13.2 | 12.4 | 12.0 | 11.9 | 11.5 | 11.8 | 13.2 | 15.3 | 17.6 | 19.3 | 22.0 | 23.8 | 25.2 | 26.1 | 26.8 | 26.1 | 25.8 | 25.2 | 24.0 | 21.6 | 20.4 | 19.3 | 17.7 | 17.5 | 19.1 | 26.8 |
| 19-Aug | 16.4 | 14.5 | 13.3 | 12.8 | 12.5 | 12.2 | 13.1 | 14.1 | 16.0 | 18.7 | 21.9 | 23.4 | 23.8 | 25.1 | 25.8 | 23.2 | 22.1 | 22.0 | 21.5 | 19.5 | 17.9 | 16.7 | 16.0 | 17.0 | 18.3 | 25.8 |
| 20-Aug | 14.5 | 13.6 | 13.5 | 12.9 | 12.5 | 11.4 | 11.9 | 13.8 | 15.1 | 16.9 | 19.7 | 20.8 | 22.0 | 22.8 | 23.2 | 23.0 | 23.2 | 22.0 | 21.0 | 19.1 | 17.3 | 15.3 | 13.3 | 12.3 | 17.1 | 23.2 |
| 21-Aug | 11.2 | 10.2 | 9.4 | 8.5 | 8.4 | 8.6 | 9.4 | 12.4 | 16.0 | 19.2 | 22.1 | 23.5 | 24.8 | 25.2 | 26.2 | 26.1 | 25.6 | 24.6 | 23.2 | 21.4 | 19.6 | 17.8 | 16.5 | 16.1 | 17.8 | 26.2 |
| 22-Aug | 15.9 | 15.8 | 15.5 | 15.2 | 14.7 | 13.3 | 14.0 | 15.7 | 18.4 | 19.1 | 20.5 | 22.2 | 24.3 | 26.2 | 27.2 | 28.0 | 28.1 | 27.7 | 26.3 | 23.9 | 22.6 | 21.9 | 20.2 | 19.3 | 20.7 | 28.1 |
| 23-Aug | 18.7 | 17.7 | 16.5 | 15.9 | 15.6 | 15.5 | 15.7 | 16.7 | 18.3 | 19.9 | 20.6 | 22.8 | 24.9 | 24.8 | 25.8 | 25.6 | 25.6 | 24.8 | 23.3 | 22.4 | 22.0 | 21.1 | 20.2 | 20.3 | 20.6 | 25.8 |
| 24-Aug | 20.0 | 19.4 | 18.8 | 18.5 | 18.1 | 17.8 | 17.9 | 18.3 | 19.5 | 20.9 | 22.6 | 23.5 | 24.6 | 25.3 | 25.2 | 25.5 | 25.6 | 25.0 | 23.4 | 20.7 | 19.3 | 16.6 | 14.3 | 14.4 | 20.6 | 25.6 |
| 25-Aug | 14.1 | 13.0 | 12.7 | 12.6 | 12.1 | 11.7 | 12.3 | 14.6 | 16.4 | 17.8 | 19.6 | 21.0 | 22.2 | 23.9 | 25.0 | 25.8 | 26.6 | 25.3 | 23.2 | 20.5 | 19.2 | 18.1 | 17.4 | 16.4 | 18.4 | 26.6 |
| 26-Aug | 15.1 | 13.9 | 12.1 | 11.5 | 11.2 | 11.0 | 12.1 | 14.6 | 17.8 | 20.5 | 23.4 | 26.0 | 28.0 | 28.9 | 29.0 | 28.9 | 29.4 | 28.8 | 26.4 | 24.2 | 22.4 | 20.2 | 19.1 | 18.6 | 20.5 | 29.4 |
| 27-Aug | 17.7 | 17.0 | 16.0 | 15.0 | 14.0 | 13.4 | 14.5 | 17.1 | 19.5 | 21.6 | 23.5 | 24.6 | 24.8 | 25.8 | 25.4 | 24.1 | 24.0 | 25.8 | 26.2 | 25.2 | 24.0 | 22.9 | 21.5 | 20.6 | 21.0 | 26.2 |
| 28-Aug | 19.7 | 19.1 | 18.0 | 16.3 | 17.4 | 17.1 | 16.6 | 15.5 | 15.9 | 18.0 | 19.5 | 20.8 | 20.7 | 20.8 | 19.1 | 19.1 | 18.2 | 17.2 | 16.0 | 14.6 | 13.6 | 13.2 | 12.6 | 11.8 | 17.1 | 20.8 |
| 29-Aug | 11.5 | 11.3 | 11.2 | 11.2 | 11.1 | 10.5 | 10.2 | 11.2 | 12.6 | 14.1 | 16.7 | 18.3 | 19.7 | 21.0 | 21.7 | 22.2 | 22.6 | 22.3 | 21.8 | 19.2 | 17.3 | 15.8 | 14.8 | 13.8 | 15.9 | 22.6 |
| 30-Aug | 13.1 | 12.7 | 12.5 | 12.2 | 12.0 | 11.8 | 12.4 | 13.8 | 14.6 | 17.6 | 20.5 | 22.2 | 23.1 | 24.7 | 24.6 | 25.4 | 25.3 | 25.0 | 23.4 | 20.9 | 18.9 | 18.1 | 17.4 | 16.4 | 18.3 | 25.4 |
| 31-Aug | 15.6 | 16.1 | 15.9 | 14.6 | 13.0 | 12.9 | 12.8 | 15.1 | 16.2 | 18.4 | 20.6 | 21.6 | 22.2 | 23.0 | 23.9 | 23.6 | 23.2 | 22.6 | 21.5 | 19.1 | 16.1 | 15.2 | 13.2 | 12.5 | 17.9 | 23.9 |
| | 14.1 | 13.5 | 13.0 | 12.5 | 12.2 | 12.1 | 12.7 | 14.0 | 15.7 | 17.4 | 19.1 | 20.4 | 21.3 | 22.1 | 22.6 | 22.2 | 21.9 | 21.4 | 20.4 | 18.7 | 17.2 | 16.2 | 15.2 | 14.6 | Diurnal Average | |
| | 20.0 | 19.4 | 18.8 | 18.5 | 18.1 | 17.8 | 17.9 | 18.3 | 19.5 | 21.6 | 23.5 | 26.0 | 28.0 | 28.9 | 29.0 | 28.9 | 29.4 | 28.8 | 26.4 | 25.2 | 24.0 | 22.9 | 21.5 | 20.6 | Diurnal Maximum | |

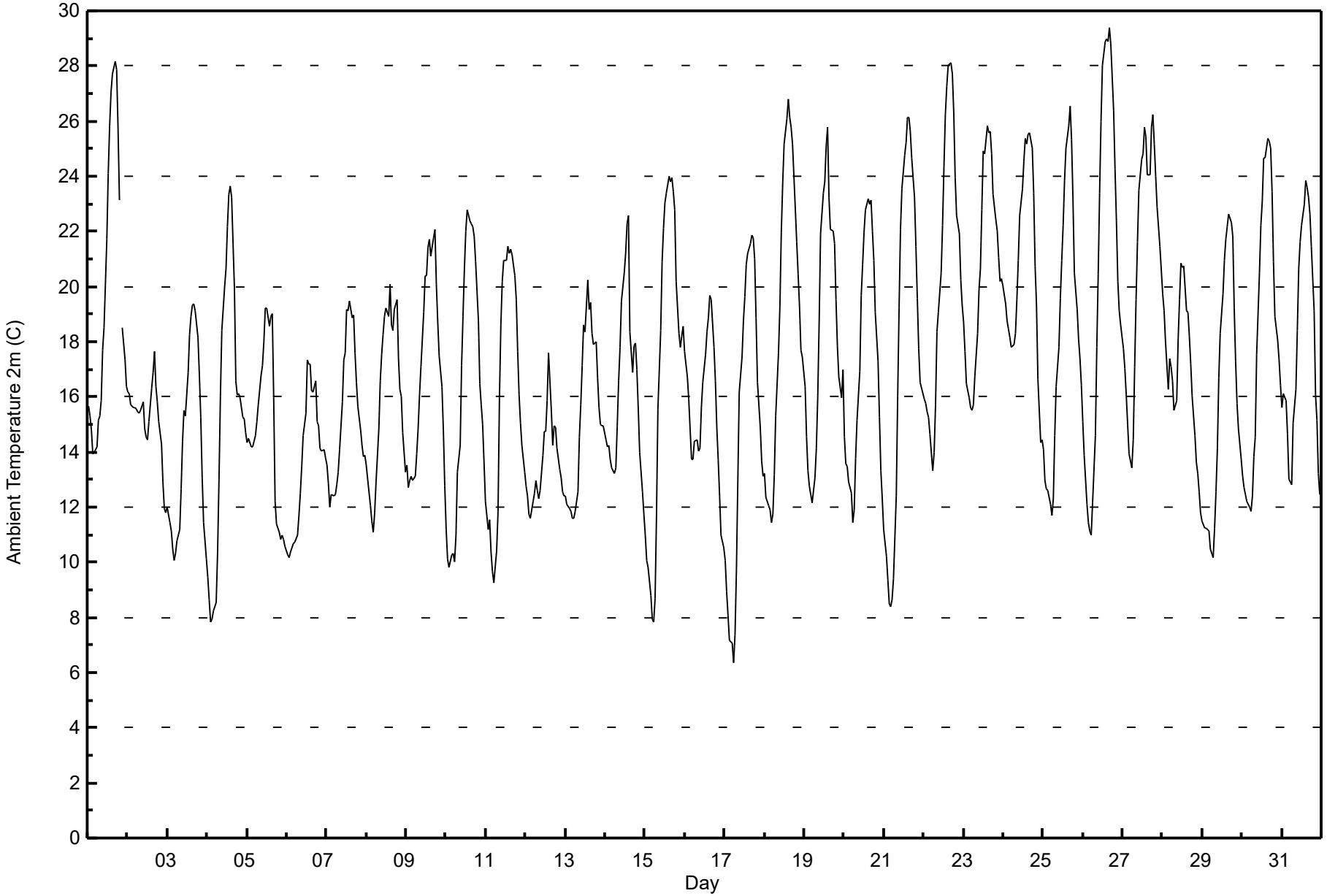
PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Buffalo Viewpoint - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 26 | 3.50 | 3.50 |
| 10 - 20 | 515 | 69.31 | 72.81 |
| > 20 | 202 | 27.19 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Buffalo Viewpoint - August 2026

Maximum Value: 97.5 % on Aug 2 04:00

Maximum Daily Average: 85.4 % on Aug 12

Minimum Value: 29.0 % on Aug 24 14:00

Minimum Daily Average: 49.8 % on Aug 24

Maximum Diurnal Average: 88.1 % at hour 6

Minimum Diurnal Average: 47.7 % at hour 15

Monthly Average: 69.72 %

Percentiles: $P_1$ = 33.6 $P_{10}$ = 44.7 $Q_1$ = 55.0 Median = 70.7 $Q_3$ = 86.4 $P_{90}$ = 93.1 $P_{99}$ = 96.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 90.4 | 91.9 | 94.8 | 95.8 | 96.6 | 96.4 | 94.2 | 94.1 | 95.8 | 91.6 | 87.6 | 73.3 | 62.7 | 59.1 | 55.0 | 54.4 | 53.2 | 50.7 | 59.6 | 75.2 | PF | 93.2 | 94.2 | 94.6 | 80.6 | 96.6 |
| 2-Aug | 96.1 | 97.3 | 97.5 | 97.5 | 97.1 | 96.2 | 95.5 | 96.2 | 95.4 | 92.1 | 92.7 | 84.5 | 78.4 | 73.3 | 66.7 | 60.3 | 55.1 | 52.9 | 53.9 | 57.2 | 59.0 | 60.6 | 63.6 | 65.9 | 78.5 | 97.5 |
| 3-Aug | 65.8 | 68.8 | 70.4 | 73.8 | 74.8 | 75.0 | 73.9 | 72.2 | 69.0 | 63.3 | 56.2 | 54.0 | 47.1 | 43.6 | 42.4 | 44.5 | 46.5 | 48.2 | 49.9 | 53.5 | 56.4 | 75.3 | 84.1 | 88.0 | 62.4 | 88.0 |
| 4-Aug | 88.1 | 87.5 | 91.9 | 93.9 | 93.7 | 93.1 | 85.5 | 75.2 | 65.6 | 61.7 | 57.5 | 56.6 | 51.0 | 46.7 | 46.0 | 50.3 | 63.4 | 85.3 | 93.6 | 92.4 | 92.5 | 94.1 | 92.3 | 90.6 | 77.0 | 94.1 |
| 5-Aug | 89.8 | 86.8 | 88.5 | 89.6 | 88.6 | 84.6 | 79.1 | 75.2 | 67.5 | 60.8 | 54.2 | 47.5 | 47.6 | 52.7 | 54.5 | 55.2 | 66.2 | 90.2 | 95.5 | 96.0 | 96.1 | 95.5 | 93.0 | 91.0 | 76.9 | 96.1 |
| 6-Aug | 91.2 | 92.2 | 90.1 | 88.4 | 86.7 | 85.9 | 84.8 | 82.6 | 80.4 | 78.5 | 74.6 | 70.2 | 63.2 | 65.3 | 68.6 | 79.2 | 78.6 | 76.4 | 83.2 | 82.5 | 83.1 | 87.0 | 86.5 | 85.6 | 81.0 | 92.2 |
| 7-Aug | 83.2 | 85.0 | 89.0 | 86.5 | 86.9 | 87.3 | 85.1 | 84.3 | 80.9 | 73.7 | 65.1 | 63.3 | 55.2 | 55.6 | 55.8 | 57.6 | 56.8 | 63.6 | 71.8 | 76.9 | 81.2 | 83.7 | 88.6 | 87.7 | 75.2 | 89.0 |
| 8-Aug | 89.3 | 92.1 | 94.1 | 92.2 | 92.3 | 92.1 | 88.1 | 79.6 | 71.7 | 66.3 | 61.0 | 57.1 | 55.8 | 59.4 | 52.3 | 61.6 | 61.3 | 56.6 | 56.2 | 70.5 | 73.0 | 69.4 | 73.9 | 81.5 | 72.8 | 94.1 |
| 9-Aug | 79.2 | 90.3 | 88.3 | 86.8 | 87.3 | 87.8 | 86.7 | 81.9 | 74.5 | 69.6 | 56.9 | 53.9 | 50.1 | 48.6 | 45.4 | 48.5 | 44.2 | 43.8 | 52.1 | 57.8 | 58.6 | 60.0 | 67.1 | 84.4 | 66.8 | 90.3 |
| 10-Aug | 91.6 | 93.4 | 95.3 | 94.8 | 93.6 | 94.7 | 91.3 | 83.2 | 83.4 | 75.3 | 66.9 | 55.3 | 45.9 | 44.5 | 46.8 | 44.0 | 42.4 | 42.5 | 47.6 | 54.9 | 61.2 | 62.9 | 68.7 | 77.9 | 69.1 | 95.3 |
| 11-Aug | 86.4 | 92.8 | 90.0 | 93.5 | 96.1 | 96.7 | 95.9 | 92.6 | 69.0 | 59.6 | 55.2 | 47.3 | 46.3 | 45.9 | 45.7 | 44.3 | 43.2 | 43.9 | 46.8 | 54.8 | 63.6 | 70.6 | 74.6 | 79.0 | 68.1 | 96.7 |
| 12-Aug | 80.5 | 81.8 | 85.7 | 86.0 | 84.0 | 82.4 | 80.9 | 88.7 | 93.8 | 95.9 | 94.2 | 88.4 | 86.6 | 77.1 | 67.2 | 78.6 | 87.6 | 86.4 | 84.0 | 86.1 | 86.0 | 86.8 | 89.7 | 91.5 | 85.4 | 95.9 |
| 13-Aug | 92.5 | 93.2 | 93.4 | 93.3 | 94.4 | 94.4 | 93.5 | 90.5 | 82.1 | 78.4 | 70.2 | 61.4 | 60.3 | 53.3 | 55.5 | 54.2 | 58.3 | 57.0 | 62.9 | 67.4 | 74.0 | 79.0 | 81.8 | 82.3 | 76.0 | 94.4 |
| 14-Aug | 85.6 | 86.8 | 86.3 | 87.4 | 87.8 | 88.8 | 90.6 | 81.7 | 73.5 | 68.7 | 62.1 | 54.4 | 48.8 | 44.8 | 43.8 | 60.5 | 72.3 | 65.1 | 66.3 | 72.3 | 79.6 | 88.7 | 91.5 | 92.7 | 74.2 | 92.7 |
| 15-Aug | 93.9 | 94.7 | 95.2 | 96.0 | 96.7 | 97.2 | 96.4 | 87.6 | 74.2 | 66.8 | 53.5 | 44.3 | 40.8 | 39.2 | 37.9 | 39.1 | 38.7 | 40.0 | 44.9 | 55.3 | 63.4 | 62.7 | 55.8 | 52.0 | 65.3 | 97.2 |
| 16-Aug | 53.7 | 58.0 | 63.9 | 70.7 | 77.4 | 80.9 | 81.1 | 83.6 | 84.7 | 78.8 | 68.3 | 59.7 | 51.5 | 48.3 | 46.0 | 43.3 | 41.0 | 48.9 | 58.4 | 64.9 | 69.3 | 87.7 | 92.4 | 91.5 | 66.8 | 92.4 |
| 17-Aug | 92.3 | 92.9 | 94.2 | 95.2 | 94.9 | 96.0 | 94.1 | 86.8 | 76.0 | 65.6 | 63.0 | 56.4 | 52.7 | 47.8 | 46.3 | 47.2 | 48.0 | 48.0 | 51.6 | 59.8 | 69.3 | 66.7 | 67.0 | 69.2 | 70.0 | 96.0 |
| 18-Aug | 70.2 | 74.4 | 77.8 | 81.1 | 83.3 | 82.1 | 77.1 | 72.3 | 69.3 | 66.8 | 61.4 | 52.2 | 43.5 | 38.2 | 36.4 | 36.6 | 40.1 | 43.2 | 48.0 | 55.5 | 58.8 | 62.3 | 70.5 | 70.5 | 61.3 | 83.3 |
| 19-Aug | 76.6 | 86.4 | 93.1 | 92.8 | 92.9 | 91.9 | 89.5 | 88.5 | 81.5 | 67.6 | 52.0 | 46.9 | 44.4 | 40.7 | 39.3 | 50.6 | 60.9 | 62.0 | 60.5 | 66.0 | 74.2 | 80.8 | 86.7 | 74.4 | 70.8 | 93.1 |
| 20-Aug | 90.6 | 94.5 | 93.9 | 96.1 | 95.8 | 97.0 | 96.0 | 92.2 | 84.4 | 76.1 | 65.6 | 59.5 | 53.3 | 48.7 | 47.4 | 48.2 | 45.1 | 46.8 | 48.1 | 53.1 | 56.8 | 69.0 | 90.3 | 94.2 | 72.6 | 97.0 |
| 21-Aug | 95.2 | 95.9 | 95.8 | 94.3 | 92.3 | 95.2 | 94.8 | 83.9 | 73.2 | 58.7 | 51.2 | 49.1 | 38.7 | 36.6 | 34.4 | 34.6 | 36.7 | 41.6 | 46.9 | 53.1 | 59.2 | 66.3 | 72.0 | 73.5 | 65.6 | 95.9 |
| 22-Aug | 74.7 | 75.4 | 76.3 | 76.5 | 77.6 | 83.2 | 80.1 | 73.5 | 64.5 | 63.5 | 61.1 | 58.9 | 55.1 | 51.2 | 48.5 | 47.3 | 48.6 | 50.6 | 57.3 | 66.3 | 68.3 | 66.5 | 72.9 | 76.3 | 65.6 | 83.2 |
| 23-Aug | 78.5 | 82.9 | 88.0 | 90.7 | 92.6 | 93.5 | 93.4 | 90.0 | 85.9 | 80.9 | 81.9 | 74.5 | 68.7 | 71.8 | 69.3 | 73.5 | 73.6 | 66.1 | 67.8 | 68.7 | 69.4 | 72.7 | 76.0 | 68.7 | 78.3 | 93.5 |
| 24-Aug | 60.5 | 60.7 | 62.9 | 60.6 | 61.1 | 64.2 | 61.2 | 61.0 | 48.5 | 42.3 | 36.4 | 33.8 | 31.7 | 29.0 | 29.5 | 29.5 | 31.6 | 31.4 | 36.5 | 44.7 | 48.7 | 65.8 | 83.1 | 79.8 | 49.8 | 83.1 |
| 25-Aug | 81.8 | 87.8 | 89.1 | 86.4 | 85.3 | 86.7 | 86.4 | 75.4 | 69.9 | 66.0 | 60.1 | 53.5 | 48.6 | 43.4 | 42.5 | 39.9 | 38.2 | 43.4 | 53.1 | 60.3 | 63.1 | 67.0 | 68.5 | 74.4 | 65.5 | 89.1 |
| 26-Aug | 82.9 | 92.2 | 93.0 | 92.9 | 92.6 | 93.1 | 88.5 | 79.2 | 68.8 | 62.1 | 55.3 | 45.8 | 38.9 | 34.6 | 33.6 | 34.4 | 33.1 | 35.5 | 45.1 | 50.3 | 55.3 | 63.2 | 67.9 | 68.3 | 62.8 | 93.1 |
| 27-Aug | 70.3 | 72.1 | 76.4 | 81.1 | 84.2 | 86.2 | 82.6 | 74.6 | 65.8 | 59.5 | 52.1 | 48.0 | 48.2 | 46.4 | 48.3 | 54.9 | 55.8 | 47.0 | 46.8 | 48.9 | 51.9 | 54.4 | 59.2 | 62.0 | 61.5 | 86.2 |
| 28-Aug | 65.4 | 67.7 | 70.2 | 78.1 | 77.6 | 78.1 | 81.0 | 90.4 | 91.7 | 77.3 | 64.9 | 55.0 | 53.7 | 51.0 | 56.8 | 58.4 | 65.5 | 71.1 | 70.7 | 71.1 | 71.2 | 73.8 | 72.7 | 72.7 | 70.3 | 91.7 |
| 29-Aug | 74.5 | 76.6 | 74.3 | 75.4 | 75.2 | 77.7 | 76.9 | 72.3 | 67.1 | 62.5 | 55.0 | 49.2 | 44.5 | 40.4 | 38.9 | 39.8 | 40.1 | 41.1 | 45.5 | 55.3 | 64.6 | 75.8 | 71.1 | 75.4 | 61.2 | 77.7 |
| 30-Aug | 77.8 | 81.7 | 84.2 | 87.0 | 87.9 | 89.4 | 87.3 | 82.4 | 81.1 | 69.6 | 61.0 | 55.5 | 49.4 | 42.3 | 39.7 | 37.5 | 38.0 | 39.5 | 49.0 | 60.5 | 68.2 | 70.9 | 70.8 | 75.5 | 66.1 | 89.4 |
| 31-Aug | 78.6 | 77.2 | 75.8 | 77.6 | 83.2 | 83.3 | 83.7 | 74.3 | 67.9 | 59.7 | 51.4 | 48.9 | 47.5 | 45.2 | 39.7 | 37.1 | 39.5 | 40.8 | 44.6 | 54.1 | 70.9 | 77.3 | 92.0 | 92.9 | 64.3 | 92.9 |
| | 81.5 | 84.2 | 85.8 | 86.8 | 87.4 | 88.1 | 86.3 | 82.1 | 76.0 | 69.7 | 62.9 | 56.7 | 51.9 | 49.2 | 47.7 | 49.8 | 51.7 | 53.5 | 58.0 | 64.0 | 68.2 | 73.9 | 78.0 | 79.5 | Diurnal Average | |
| | 96.1 | 97.3 | 97.5 | 97.5 | 97.1 | 97.2 | 96.4 | 96.2 | 95.8 | 95.9 | 94.2 | 88.4 | 86.6 | 77.1 | 69.3 | 79.2 | 87.6 | 90.2 | 95.5 | 96.0 | 96.1 | 95.5 | 94.2 | 94.6 | Diurnal Maximum | |

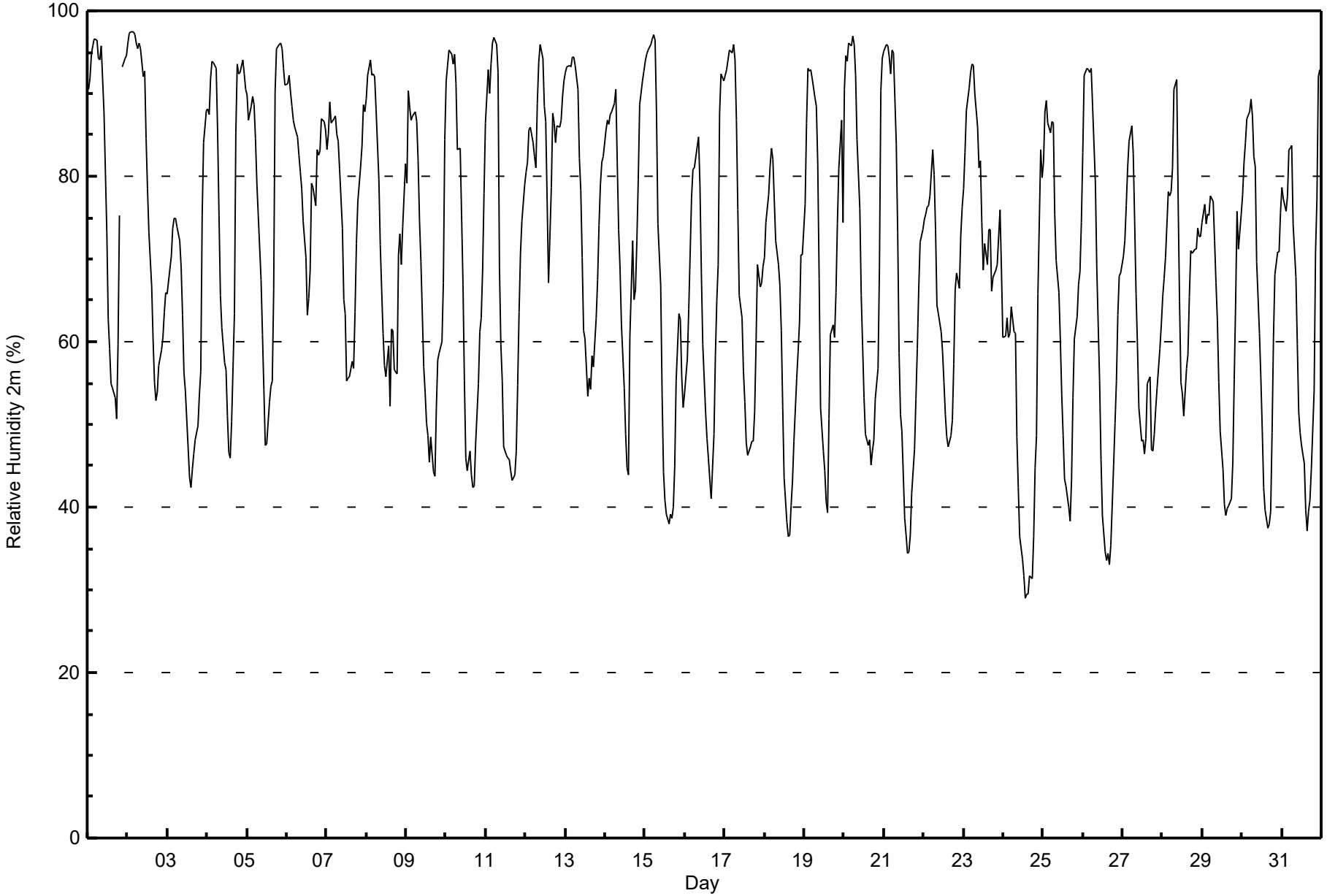
PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Buffalo Viewpoint - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Buffalo Viewpoint - August 2026

Maximum Speed: 29 km/h on Aug 2 11:00

Maximum Daily Speed Average: 20.2 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 14 06:00

Minimum Daily Speed Average: 0.8 km/h on Aug 14

Maximum Diurnal Speed Average: 4.9 km/h at hour 12

Minimum Diurnal Speed Average: 0.8 km/h at hour 22

Monthly Average Velocity: 2.2 km/h 303.1 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 3 $Q_1$ = 5 Median = 7 $Q_3$ = 10 $P_{90}$ = 14 $P_{99}$ = 24

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | S5 | SE5 | SSE7 | SSE6 | SE7 | S6 | SSE5 | SSW4 | ENE4 | SSE4 | SE4 | E7 | E9 | ESE10 | ESE10 | ESE10 | ESE8 | SE8 | E1 | N7 | PF | NW7 | NNW11 | NNW7 | ESE3.4 | NNW11 |
| 2-Aug | NNW9 | NNW13 | N16 | N16 | N15 | N15 | N17 | N15 | N20 | N24 | N29 | N26 | N27 | NNW25 | NNW24 | NNW26 | NNW24 | NNW27 | NNW23 | NNW22 | NNW22 | NNW20 | NNW19 | NNW17 | NNW20.2 | N29 |
| 3-Aug | NNW16 | NW13 | NW13 | NW11 | NW12 | NW10 | NW10 | NW11 | NW10 | NNW13 | NNW14 | NW14 | NW11 | NW11 | NW7 | NNE8 | N10 | N9 | NE7 | ENE6 | ESE5 | SSE5 | SSE5 | SSE6 | NNW7.3 | NNW16 |
| 4-Aug | SE6 | SE6 | S6 | SSE7 | S6 | SSE6 | S6 | SSE5 | S6 | SSW5 | WSW10 | WSW13 | W14 | WSW12 | WSW10 | SW10 | NNW9 | NE5 | NW7 | NW9 | WNW12 | NW13 | NW11 | NW14 | WSW4.1 | W14 |
| 5-Aug | NW11 | W10 | W10 | WNW11 | WNW11 | NW14 | NW16 | NW14 | NW15 | NW17 | NW17 | NW19 | NW20 | NNW15 | NW12 | NNW12 | N14 | N13 | NNW11 | NNW14 | NW10 | WNW12 | WNW14 | NW17 | NW12.9 | NW20 |
| 6-Aug | NW15 | WNW16 | WNW18 | WNW20 | NW19 | NW16 | WNW15 | WNW17 | NW17 | NW15 | NW12 | NW10 | NW10 | NNW8 | NNW9 | N2 | WSW7 | WNW11 | WNW11 | NW11 | NW7 | NW11 | NW8 | WNW8 | NW11.9 | WNW20 |
| 7-Aug | WNW9 | W5 | SW6 | W10 | WSW7 | WSW7 | W10 | WSW7 | W10 | WNW11 | WNW12 | WNW12 | WNW13 | NNW9 | N11 | NNW8 | NNW9 | N8 | NNE7 | NNE7 | NE3 | N0 | WNW3 | WSW4 | WNW5.8 | WNW13 |
| 8-Aug | WNW3 | WNW3 | W3 | W5 | WNW4 | NW6 | NW6 | NNW6 | NNE9 | NNE10 | NNE9 | NE9 | NNW4 | N8 | NNW6 | NNW7 | NNW5 | N4 | NNE1 | NNW3 | N4 | NE6 | NNE3 | NNE5 | N4.4 | NNE10 |
| 9-Aug | E3 | W1 | W1 | WSW2 | N4 | NNW3 | NNE4 | N3 | N1 | W3 | SW3 | NNW5 | NW5 | N3 | NW5 | N7 | N7 | NNW5 | NE6 | NE6 | NE7 | NE6 | NE3 | SSE3 | N2.7 | N7 |
| 10-Aug | S4 | S4 | SSE4 | SE5 | SSE5 | SE6 | SE3 | SSE3 | S1 | N6 | N7 | N7 | N6 | N9 | N12 | N11 | N11 | N9 | N7 | N5 | N6 | NNE5 | NW4 | W4 | N3.0 | N12 |
| 11-Aug | SW4 | SW4 | WSW5 | SSW4 | SSE4 | S4 | SSW3 | S3 | WNW5 | NW6 | N11 | N14 | N14 | N16 | N16 | N16 | N14 | N13 | N12 | N13 | NNE10 | N7 | N7 | N10 | N6.4 | N16 |
| 12-Aug | NNW9 | NNW6 | NW4 | NW9 | NW8 | WNW7 | NW7 | NNW7 | NNW9 | NNW9 | N11 | N13 | N13 | N13 | N14 | NNE12 | N11 | N9 | N6 | N6 | N10 | NNW8 | N8 | N7 | N8.6 | N14 |
| 13-Aug | N7 | N7 | N7 | N7 | N6 | N9 | N8 | N8 | N8 | N9 | N11 | N9 | NNE7 | N10 | NNE12 | NNE11 | NE6 | NE7 | NNE8 | NNE6 | NNE3 | N3 | WNW2 | WNW4 | N6.9 | NNE12 |
| 14-Aug | WNW3 | WNW3 | WNW4 | WNW4 | NW4 | E0 | NW1 | NW1 | NW5 | NW6 | NNE5 | N5 | NNE6 | NW7 | NNE5 | NNW7 | SSW6 | S5 | SSW4 | SSE5 | SSE6 | SSE7 | SSE7 | SSE7 | WNW0.8 | SSE7 |
| 15-Aug | SSE6 | SSE7 | S7 | S8 | SSE7 | S7 | S6 | S6 | S5 | S7 | SW6 | WSW9 | WSW10 | WSW9 | WSW10 | SSW9 | WSW11 | WSW9 | SW7 | SSW6 | SSW7 | SSW8 | SW7 | WSW9 | SSW6.5 | WSW11 |
| 16-Aug | WSW11 | WSW11 | W8 | WNW8 | W3 | WNW6 | NNW7 | N10 | N18 | N18 | N14 | N13 | N15 | N12 | N9 | NNW8 | NW10 | N10 | NE8 | E3 | ESE3 | SSW5 | S5 | S6 | NNW5.6 | N18 |
| 17-Aug | SSE6 | S5 | SSE5 | SSE5 | SSW4 | SSE5 | SSE5 | SSE5 | SSW5 | WSW5 | WNW5 | W5 | ENE1 | ESE4 | ESE6 | ESE5 | ESE8 | SE7 | SE5 | SSE4 | SSE7 | SSE7 | SSE7 | SSE8 | SSE4.1 | ESE8 |
| 18-Aug | SSE8 | SSE7 | SSE6 | SSE7 | SSE6 | SSE8 | SSE10 | SSE6 | SSE5 | ESE7 | SSE2 | WSW8 | WSW9 | WSW10 | SSW10 | SW12 | W17 | W14 | W11 | WSW8 | SW8 | SSW7 | WSW2 | W6 | SW5.5 | W17 |
| 19-Aug | SW5 | S4 | SSE5 | S5 | SSE6 | S6 | SSE7 | S6 | WSW6 | WNW9 | WNW9 | WNW8 | NW9 | NW9 | NNW7 | NNW10 | NW6 | NNW7 | N9 | NNE8 | NE5 | SW4 | WSW2 | NW12 | WNW2.8 | NW12 |
| 20-Aug | SSW6 | WSW2 | NNW2 | NNW3 | SSW3 | SSE7 | S4 | SW2 | WNW4 | NW5 | NNW7 | N12 | N10 | N10 | N8 | N9 | N11 | NNE12 | NNE9 | NE5 | NE2 | ESE1 | SSW3 | S4 | N3.0 | N12 |
| 21-Aug | S5 | S5 | SSE6 | SSE7 | S6 | S6 | S6 | SSE4 | S4 | S5 | SE6 | SSE6 | SW7 | SSW5 | S6 | S8 | SSE8 | SSE7 | SSE7 | SSE7 | SSE7 | S6 | SSE7 | SSE8 | SSE5.9 | SSE8 |
| 22-Aug | SE9 | SE11 | SE10 | SE10 | SSE5 | SSW3 | SSE4 | SSE7 | SSE6 | SSE7 | SSE7 | SSE9 | SSE8 | SSE8 | SSE9 | SSE9 | SE9 | SSE8 | SE5 | SE4 | SSE7 | SSE7 | SSE7 | SSE9 | SSE7.2 | SE11 |
| 23-Aug | SSE7 | SSE5 | SSE5 | S6 | S6 | S4 | SSE5 | S6 | SSE7 | S8 | SSE6 | SSW4 | SSE7 | SE6 | SE2 | SSE3 | SSW4 | WSW9 | W9 | NNW11 | NW7 | WNW5 | NW8 | NW10 | SSW2.5 | NNW11 |
| 24-Aug | NW9 | NW6 | NW9 | NNW9 | NW7 | NW7 | NW8 | NW7 | NW11 | NW12 | NW15 | NW13 | NW15 | NNW17 | NNW16 | NNW15 | N11 | NNE12 | NNE7 | N4 | NW3 | SW3 | SSW4 | N3 | NNW8.3 | NNW17 |
| 25-Aug | NW4 | NNW3 | NW6 | WNW6 | WNW6 | WNW4 | NW4 | NW4 | N6 | NNE5 | N5 | WNW6 | W5 | NW4 | N1 | ENE3 | NNE2 | ENE5 | NNE8 | NNE8 | NE8 | NE6 | E3 | SE4 | N3.0 | NNE8 |
| 26-Aug | S3 | S4 | SSE4 | SSE5 | SSE6 | SSE6 | SSE7 | SSE7 | SSE8 | SE8 | SE9 | SSE10 | S11 | SSE11 | S12 | SSE10 | SSE11 | SSE9 | SE8 | SSE8 | SSE7 | SSE7 | SSE8 | SSE8 | SSE7.5 | S12 |
| 27-Aug | SSE8 | SSE6 | S5 | S6 | S7 | S6 | S5 | S6 | SSE7 | ESE9 | SE10 | SSE10 | SSE10 | SE9 | SSE7 | ESE3 | ESE11 | ESE11 | ESE13 | ESE14 | ESE14 | SE10 | SSE7 | SSE7 | SE7.7 | ESE14 |
| 28-Aug | SE8 | SE8 | S8 | S9 | WSW8 | SSW2 | SSE10 | S9 | S9 | SW13 | SW15 | WSW16 | SW19 | WSW17 | WSW20 | WSW20 | WSW16 | SW19 | WSW18 | WSW16 | WSW13 | WSW11 | WSW12 | WSW11 | SW10.9 | WSW20 |
| 29-Aug | SW9 | SW10 | SW11 | SW10 | SW11 | SW11 | SW11 | SW11 | WSW14 | WSW12 | WSW12 | WSW14 | WSW15 | WSW17 | WSW17 | WSW15 | SW11 | SW10 | SSW4 | S4 | SSE5 | SSE8 | SSE6 | SSE7 | SW9.6 | WSW17 |
| 30-Aug | SSE8 | SSE7 | SSE8 | SSE6 | SSE5 | SSE5 | SSW3 | S2 | SE4 | SE5 | ESE3 | SW3 | SSE3 | SW4 | S2 | SW3 | SW3 | S3 | SSW3 | SSW5 | S5 | SSE5 | SW5 | NW7 | S3.4 | SSE8 |
| 31-Aug | NNW6 | NNW6 | NW7 | NW9 | WNW7 | W5 | W4 | WNW4 | WNW6 | W7 | WNW5 | WNW6 | WNW3 | NNW6 | WSW9 | WSW9 | WSW9 | WSW10 | WSW8 | WSW6 | NNW2 | E2 | SE2 | S3 | W4.4 | WSW10 |
| | WSW1.6 | WSW1.7 | WSW2.1 | WSW2.4 | WSW2.3 | WSW1.9 | WSW2.0 | W1.6 | WNW2.7 | NW3.4 | NW4.1 | NW4.9 | NW4.6 | NW4.4 | NW3.6 | NW3.2 | NW2.9 | NNW2.8 | NNW2.5 | N2.5 | NNW0.9 | W0.8 | W1.6 | WNW1.9 | Diurnal Average | |
| | NNW16 | WNW16 | WNW18 | WNW20 | NW19 | NW16 | N17 | WNW17 | N20 | N24 | N29 | N26 | N27 | NNW25 | NNW24 | NNW26 | NNW24 | NNW27 | NNW23 | NNW22 | NNW22 | NNW20 | NNW19 | NW17 | Diurnal Maximum | |

PF - Power Failure

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Aug 2 11:00

Minimum Value: 0 km/h on Aug 14 21:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | PF | 5 | 4 | 3 | 5 |
| 2-Aug | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 6 | 8 | 8 | 8 | 7 | 7 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 8 |
| 3-Aug | 5 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 4 | 2 | 5 | 4 | 3 | 4 | 5 |
| 5-Aug | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 5 | 4 | 4 | 4 | 6 | 3 | 4 | 3 | 3 | 4 | 5 | 6 |
| 6-Aug | 4 | 4 | 5 | 6 | 5 | 5 | 5 | 5 | 4 | 5 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 4 | 2 | 3 | 2 | 2 | 6 |
| 7-Aug | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 4 |
| 8-Aug | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 9-Aug | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 |
| 10-Aug | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 5 |
| 12-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 3 | 2 | 2 | 2 | 4 |
| 13-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 4 | 4 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 5 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 5 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 4 |
| 16-Aug | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 4 | 5 | 6 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 6 |
| 17-Aug | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 18-Aug | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 5 |
| 19-Aug | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 5 | 2 | 4 | 2 | 2 | 2 | 1 | 4 | 5 | 5 |
| 20-Aug | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 4 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| 22-Aug | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 3 | 2 | 2 | 2 | 3 |
| 23-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 3 |
| 24-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 2 | 1 | 1 | 1 | 1 | 2 | 5 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 4 |
| 27-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 4 |
| 28-Aug | 2 | 2 | 2 | 3 | 5 | 2 | 4 | 3 | 3 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 3 | 7 |
| 29-Aug | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 30-Aug | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 |
| 31-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 3 |
| | 5 | 4 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 8 | 8 | 8 | 7 | 7 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

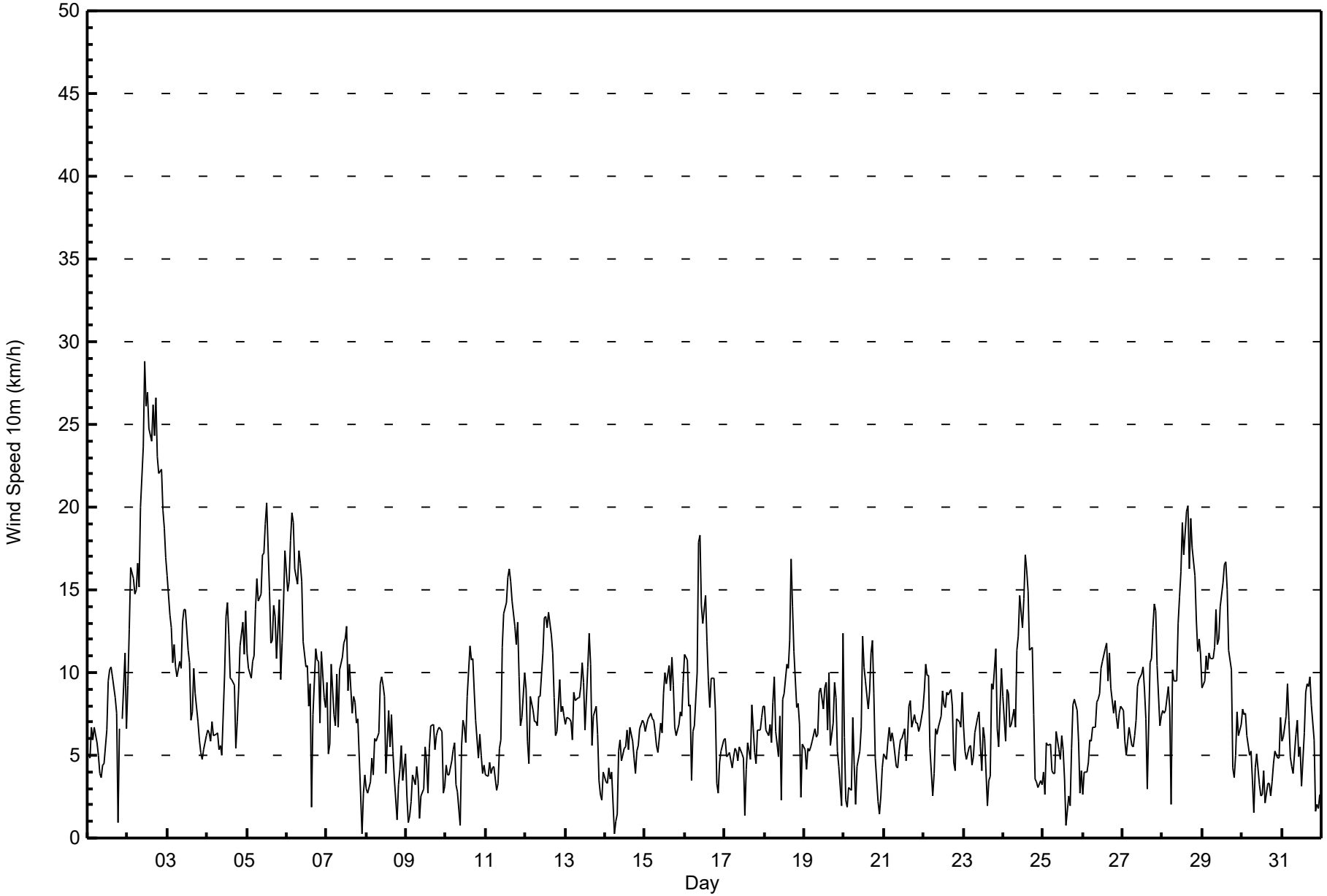
PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Buffalo Viewpoint - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Buffalo Viewpoint - August 2026**

| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 216 | 29.07 | 29.07 |
| 6 - 11 | 399 | 53.70 | 82.77 |
| 12 - 19 | 110 | 14.80 | 97.58 |
| 20 - 28 | 17 | 2.29 | 99.87 |
| 29 - 38 | 1 | 0.13 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Buffalo Viewpoint - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 15 | 10 | 6 | 4 | 6 | 7 | 12 | 34 | 29 | 20 | 12 | 7 | 12 | 18 | 13 | 11 | 216 |
| 6 - 11 | 54 | 17 | 12 | 1 | 2 | 10 | 20 | 90 | 30 | 9 | 17 | 30 | 10 | 19 | 46 | 32 | 399 |
| 12 - 19 | 29 | 4 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 5 | 17 | 3 | 10 | 26 | 12 | 110 |
| 20 - 28 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 9 | 17 |
| 29 - 38 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 103 | 31 | 18 | 5 | 8 | 20 | 32 | 124 | 60 | 29 | 34 | 56 | 25 | 48 | 86 | 64 | 743 |

Total Number of Valid Hours: 743

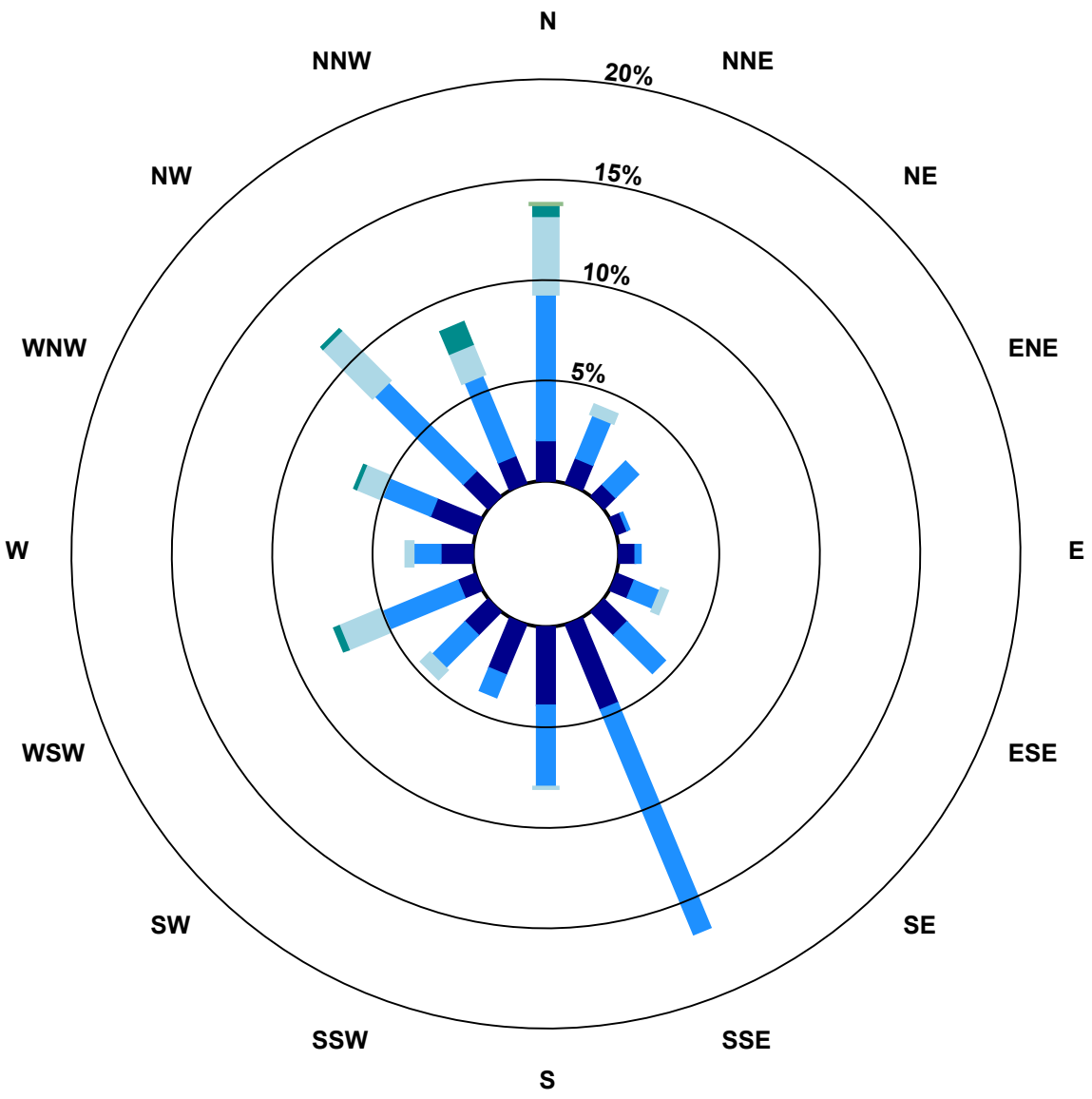
Total Number of Hours: 744

Wood Buffalo Environmental Association

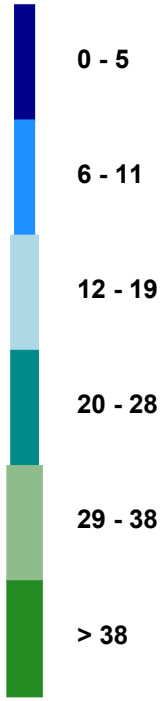
Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint




Classes (km/h)




Total Number of Valid Hours: 743

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Buffalo Viewpoint - August 2026

Direction of Maximum Speed: 352 deg on Aug 2 11:00
Direction of Maximum Daily Speed Average: 346.5 deg on Aug 2

Direction of Minimum Speed: 81 deg on Aug 14 06:00

Direction of Minimum Daily Speed Average: 0.8 deg on Aug 14

Monthly Average Direction: 303.1 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 174 | 132 | 148 | 151 | 138 | 172 | 168 | 193 | 70 | 163 | 144 | 80 | 82 | 111 | 122 | 109 | 108 | 127 | 91 | 350 | PF | 324 | 346 | 345 | 114.5 |
| 2-Aug | 334 | 342 | 355 | 354 | 353 | 351 | 355 | 355 | 355 | 356 | 352 | 353 | 354 | 347 | 347 | 348 | 341 | 338 | 344 | 341 | 336 | 334 | 333 | 330 | 346.5 |
| 3-Aug | 328 | 319 | 321 | 321 | 317 | 313 | 312 | 314 | 323 | 333 | 338 | 326 | 316 | 321 | 306 | 16 | 9 | 7 | 41 | 63 | 106 | 151 | 165 | 152 | 332.2 |
| 4-Aug | 143 | 144 | 169 | 166 | 177 | 168 | 176 | 164 | 186 | 197 | 245 | 252 | 263 | 243 | 239 | 233 | 332 | 37 | 318 | 317 | 301 | 325 | 313 | 322 | 255.9 |
| 5-Aug | 321 | 276 | 273 | 290 | 291 | 306 | 311 | 319 | 316 | 318 | 319 | 321 | 324 | 328 | 316 | 331 | 356 | 1 | 336 | 331 | 320 | 295 | 299 | 307 | 316.6 |
| 6-Aug | 307 | 298 | 302 | 303 | 307 | 308 | 297 | 303 | 305 | 320 | 315 | 304 | 309 | 337 | 347 | 3 | 252 | 302 | 286 | 315 | 305 | 312 | 305 | 293 | 306.2 |
| 7-Aug | 303 | 281 | 233 | 265 | 258 | 256 | 270 | 253 | 271 | 282 | 299 | 299 | 296 | 336 | 7 | 341 | 337 | 349 | 18 | 27 | 51 | 352 | 286 | 249 | 301.1 |
| 8-Aug | 283 | 298 | 268 | 269 | 296 | 310 | 325 | 334 | 12 | 13 | 18 | 37 | 331 | 357 | 338 | 337 | 344 | 351 | 30 | 334 | 355 | 46 | 28 | 16 | 349.5 |
| 9-Aug | 88 | 267 | 265 | 255 | 4 | 344 | 18 | 8 | 355 | 277 | 217 | 347 | 304 | 2 | 321 | 9 | 3 | 340 | 35 | 45 | 39 | 55 | 48 | 155 | 6.2 |
| 10-Aug | 180 | 173 | 166 | 146 | 163 | 145 | 145 | 147 | 177 | 2 | 8 | 6 | 351 | 358 | 2 | 1 | 359 | 356 | 2 | 0 | 11 | 23 | 323 | 273 | 7.6 |
| 11-Aug | 231 | 234 | 248 | 208 | 150 | 171 | 200 | 170 | 290 | 315 | 2 | 5 | 360 | 0 | 359 | 5 | 2 | 9 | 9 | 9 | 12 | 359 | 1 | 353 | 356.6 |
| 12-Aug | 348 | 330 | 317 | 325 | 325 | 297 | 318 | 340 | 335 | 344 | 358 | 356 | 358 | 356 | 359 | 14 | 2 | 3 | 356 | 356 | 350 | 346 | 358 | 5 | 348.8 |
| 13-Aug | 4 | 358 | 352 | 356 | 0 | 6 | 4 | 359 | 359 | 1 | 4 | 11 | 32 | 6 | 23 | 28 | 51 | 55 | 28 | 19 | 20 | 1 | 286 | 294 | 9.9 |
| 14-Aug | 290 | 293 | 296 | 286 | 314 | 81 | 318 | 326 | 312 | 311 | 15 | 354 | 21 | 322 | 25 | 331 | 200 | 176 | 199 | 162 | 168 | 148 | 149 | 152 | 288.6 |
| 15-Aug | 155 | 153 | 187 | 178 | 167 | 173 | 183 | 178 | 175 | 190 | 218 | 247 | 248 | 252 | 248 | 212 | 240 | 248 | 219 | 212 | 194 | 209 | 233 | 237 | 211.7 |
| 16-Aug | 243 | 244 | 268 | 297 | 279 | 297 | 328 | 356 | 4 | 3 | 354 | 356 | 0 | 1 | 353 | 335 | 313 | 0 | 45 | 86 | 120 | 197 | 179 | 177 | 338.3 |
| 17-Aug | 165 | 172 | 163 | 160 | 198 | 156 | 160 | 166 | 200 | 258 | 286 | 266 | 70 | 120 | 118 | 116 | 120 | 135 | 142 | 158 | 151 | 157 | 154 | 149 | 158.4 |
| 18-Aug | 153 | 159 | 157 | 148 | 157 | 150 | 159 | 168 | 153 | 118 | 163 | 251 | 256 | 240 | 213 | 233 | 260 | 265 | 259 | 243 | 228 | 213 | 239 | 280 | 213.9 |
| 19-Aug | 231 | 190 | 161 | 190 | 164 | 171 | 167 | 169 | 246 | 282 | 298 | 296 | 306 | 322 | 336 | 332 | 305 | 344 | 7 | 20 | 43 | 215 | 252 | 322 | 296.8 |
| 20-Aug | 200 | 246 | 346 | 339 | 200 | 157 | 177 | 224 | 300 | 312 | 345 | 1 | 358 | 0 | 354 | 4 | 358 | 13 | 25 | 53 | 53 | 119 | 206 | 174 | 358.3 |
| 21-Aug | 182 | 174 | 163 | 157 | 171 | 179 | 185 | 161 | 183 | 182 | 140 | 162 | 214 | 209 | 188 | 172 | 166 | 154 | 151 | 150 | 159 | 169 | 158 | 147 | 168.4 |
| 22-Aug | 138 | 137 | 138 | 139 | 148 | 197 | 147 | 148 | 147 | 154 | 149 | 154 | 167 | 164 | 162 | 155 | 139 | 148 | 137 | 143 | 166 | 165 | 155 | 148 | 150.4 |
| 23-Aug | 153 | 168 | 168 | 175 | 182 | 173 | 166 | 173 | 167 | 191 | 154 | 197 | 162 | 125 | 132 | 162 | 197 | 258 | 277 | 329 | 317 | 298 | 316 | 324 | 206.9 |
| 24-Aug | 313 | 315 | 326 | 329 | 324 | 316 | 321 | 310 | 309 | 316 | 317 | 325 | 324 | 338 | 336 | 341 | 354 | 19 | 25 | 355 | 307 | 227 | 211 | 356 | 329.5 |
| 25-Aug | 326 | 332 | 307 | 295 | 295 | 301 | 307 | 324 | 8 | 16 | 4 | 289 | 278 | 323 | 354 | 63 | 15 | 58 | 30 | 29 | 45 | 37 | 97 | 140 | 353.5 |
| 26-Aug | 171 | 190 | 160 | 165 | 165 | 149 | 162 | 164 | 163 | 127 | 144 | 165 | 176 | 168 | 176 | 163 | 165 | 166 | 135 | 147 | 163 | 165 | 161 | 158 | 161.0 |
| 27-Aug | 153 | 149 | 169 | 171 | 181 | 171 | 186 | 179 | 150 | 123 | 124 | 156 | 161 | 146 | 165 | 106 | 121 | 105 | 110 | 118 | 122 | 132 | 147 | 147 | 140.8 |
| 28-Aug | 134 | 135 | 170 | 181 | 255 | 197 | 158 | 174 | 175 | 220 | 232 | 252 | 226 | 243 | 248 | 248 | 242 | 232 | 244 | 250 | 243 | 238 | 252 | 241 | 228.3 |
| 29-Aug | 234 | 223 | 232 | 229 | 226 | 224 | 225 | 220 | 243 | 241 | 242 | 243 | 243 | 254 | 249 | 242 | 232 | 229 | 213 | 189 | 165 | 150 | 157 | 155 | 229.0 |
| 30-Aug | 151 | 151 | 152 | 162 | 161 | 153 | 209 | 175 | 144 | 145 | 122 | 220 | 155 | 217 | 176 | 217 | 226 | 176 | 192 | 210 | 175 | 161 | 226 | 315 | 175.1 |
| 31-Aug | 337 | 342 | 326 | 310 | 299 | 279 | 267 | 295 | 291 | 276 | 298 | 303 | 296 | 344 | 248 | 239 | 237 | 252 | 254 | 237 | 335 | 99 | 127 | 173 | 281.1 |
| | 249.1 | 239.2 | 248.6 | 254.2 | 255.8 | 248.0 | 254.4 | 267.6 | 303.0 | 313.6 | 325.5 | 315.4 | 308.9 | 322.1 | 317.6 | 325.7 | 320.2 | 336.8 | 348.3 | 350.6 | 344.1 | 271.4 | 273.6 | 283.6 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

PF - Power Failure
All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Buffalo Viewpoint - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Aug 25 15:00

Minimum Value: 8 deg on Aug 17 01:00

Percentiles: $P_1$ = 11 $P_{10}$ = 17 $Q_1$ = 21 Median = 26 $Q_3$ = 34 $P_{90}$ = 47 $P_{99}$ = 82

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 18 | 42 | 16 | 22 | 9 | 22 | 24 | 66 | 50 | 33 | 37 | 33 | 24 | 29 | 30 | 28 | 26 | 31 | 96 | 22 | PF | 71 | 27 | 59 | 96 |
| 2-Aug | 27 | 20 | 21 | 21 | 23 | 21 | 22 | 21 | 21 | 24 | 23 | 23 | 25 | 22 | 23 | 24 | 23 | 21 | 24 | 21 | 20 | 20 | 21 | 21 | 27 |
| 3-Aug | 21 | 23 | 20 | 22 | 22 | 25 | 25 | 22 | 24 | 25 | 24 | 24 | 29 | 30 | 44 | 40 | 26 | 25 | 26 | 16 | 22 | 23 | 11 | 12 | 44 |
| 4-Aug | 12 | 18 | 20 | 21 | 16 | 33 | 24 | 37 | 39 | 38 | 29 | 23 | 22 | 27 | 27 | 23 | 55 | 45 | 33 | 20 | 25 | 20 | 22 | 19 | 55 |
| 5-Aug | 20 | 19 | 18 | 24 | 22 | 23 | 23 | 23 | 26 | 24 | 26 | 25 | 24 | 22 | 25 | 26 | 26 | 23 | 20 | 20 | 21 | 23 | 23 | 23 | 26 |
| 6-Aug | 23 | 24 | 24 | 23 | 24 | 25 | 24 | 25 | 24 | 22 | 25 | 24 | 28 | 36 | 29 | 82 | 32 | 24 | 22 | 22 | 24 | 22 | 21 | 19 | 82 |
| 7-Aug | 24 | 32 | 25 | 15 | 20 | 21 | 13 | 22 | 22 | 22 | 25 | 24 | 26 | 41 | 24 | 28 | 24 | 22 | 23 | 19 | 35 | 80 | 31 | 17 | 80 |
| 8-Aug | 24 | 29 | 37 | 24 | 21 | 21 | 21 | 33 | 25 | 30 | 32 | 32 | 61 | 21 | 43 | 33 | 27 | 31 | 63 | 41 | 21 | 13 | 30 | 20 | 63 |
| 9-Aug | 50 | 83 | 64 | 49 | 26 | 45 | 24 | 42 | 73 | 52 | 70 | 47 | 49 | 87 | 41 | 24 | 31 | 27 | 21 | 16 | 13 | 24 | 43 | 68 | 87 |
| 10-Aug | 17 | 35 | 52 | 15 | 29 | 29 | 31 | 34 | 91 | 30 | 25 | 34 | 53 | 30 | 24 | 24 | 26 | 25 | 21 | 13 | 13 | 16 | 27 | 30 | 91 |
| 11-Aug | 35 | 36 | 28 | 26 | 20 | 37 | 64 | 34 | 34 | 39 | 22 | 23 | 26 | 24 | 24 | 27 | 26 | 24 | 24 | 22 | 20 | 22 | 17 | 17 | 64 |
| 12-Aug | 18 | 21 | 38 | 19 | 19 | 26 | 23 | 20 | 20 | 22 | 23 | 23 | 22 | 21 | 25 | 30 | 23 | 24 | 21 | 17 | 18 | 18 | 17 | 17 | 38 |
| 13-Aug | 18 | 17 | 17 | 18 | 18 | 17 | 18 | 19 | 22 | 22 | 25 | 29 | 36 | 28 | 29 | 32 | 23 | 21 | 24 | 16 | 17 | 40 | 34 | 17 | 40 |
| 14-Aug | 18 | 12 | 17 | 39 | 44 | 87 | 69 | 59 | 30 | 33 | 48 | 48 | 47 | 41 | 60 | 74 | 41 | 28 | 24 | 20 | 11 | 12 | 12 | 10 | 87 |
| 15-Aug | 19 | 16 | 13 | 15 | 14 | 23 | 14 | 23 | 29 | 29 | 36 | 31 | 28 | 33 | 26 | 30 | 27 | 25 | 18 | 15 | 13 | 17 | 17 | 18 | 36 |
| 16-Aug | 19 | 19 | 35 | 35 | 75 | 29 | 19 | 25 | 22 | 25 | 25 | 27 | 24 | 27 | 29 | 35 | 26 | 30 | 20 | 34 | 40 | 15 | 11 | 9 | 75 |
| 17-Aug | 8 | 14 | 18 | 18 | 37 | 46 | 14 | 26 | 33 | 43 | 30 | 51 | 91 | 56 | 29 | 43 | 29 | 30 | 27 | 31 | 14 | 15 | 17 | 19 | 91 |
| 18-Aug | 23 | 22 | 22 | 30 | 42 | 33 | 29 | 35 | 46 | 28 | 81 | 27 | 27 | 29 | 31 | 21 | 19 | 17 | 18 | 24 | 16 | 29 | 73 | 30 | 81 |
| 19-Aug | 29 | 42 | 32 | 28 | 29 | 32 | 30 | 28 | 44 | 21 | 26 | 31 | 27 | 35 | 39 | 26 | 24 | 40 | 21 | 20 | 20 | 26 | 68 | 31 | 68 |
| 20-Aug | 40 | 67 | 80 | 45 | 49 | 11 | 19 | 56 | 35 | 28 | 37 | 24 | 26 | 29 | 33 | 28 | 30 | 23 | 21 | 20 | 30 | 63 | 55 | 14 | 80 |
| 21-Aug | 9 | 8 | 14 | 8 | 20 | 13 | 16 | 28 | 47 | 36 | 42 | 52 | 41 | 55 | 56 | 41 | 39 | 33 | 32 | 32 | 35 | 30 | 34 | 31 | 56 |
| 22-Aug | 29 | 25 | 29 | 29 | 33 | 35 | 29 | 35 | 39 | 36 | 34 | 35 | 41 | 42 | 39 | 39 | 36 | 35 | 33 | 31 | 40 | 33 | 31 | 27 | 42 |
| 23-Aug | 37 | 24 | 27 | 21 | 30 | 30 | 19 | 32 | 28 | 29 | 39 | 51 | 46 | 31 | 78 | 33 | 42 | 18 | 27 | 21 | 23 | 29 | 18 | 18 | 78 |
| 24-Aug | 21 | 19 | 16 | 19 | 19 | 17 | 19 | 21 | 23 | 23 | 24 | 23 | 23 | 26 | 21 | 27 | 26 | 24 | 21 | 24 | 13 | 48 | 23 | 28 | 48 |
| 25-Aug | 29 | 44 | 13 | 11 | 13 | 13 | 22 | 32 | 23 | 31 | 38 | 34 | 46 | 68 | 100 | 69 | 70 | 27 | 22 | 17 | 15 | 11 | 50 | 13 | 100 |
| 26-Aug | 38 | 21 | 23 | 21 | 23 | 19 | 22 | 31 | 29 | 32 | 34 | 38 | 38 | 37 | 35 | 38 | 34 | 31 | 28 | 33 | 33 | 29 | 33 | 30 | 38 |
| 27-Aug | 35 | 38 | 32 | 28 | 28 | 36 | 31 | 30 | 35 | 28 | 32 | 41 | 36 | 38 | 41 | 74 | 59 | 28 | 27 | 27 | 29 | 35 | 36 | 40 | 74 |
| 28-Aug | 32 | 32 | 33 | 30 | 59 | 77 | 36 | 40 | 34 | 24 | 24 | 23 | 22 | 25 | 22 | 22 | 24 | 23 | 21 | 22 | 23 | 23 | 21 | 21 | 77 |
| 29-Aug | 21 | 22 | 24 | 21 | 22 | 20 | 24 | 22 | 25 | 24 | 26 | 24 | 24 | 23 | 24 | 25 | 24 | 20 | 31 | 28 | 29 | 12 | 17 | 18 | 31 |
| 30-Aug | 17 | 18 | 19 | 35 | 32 | 28 | 40 | 67 | 28 | 42 | 65 | 91 | 77 | 56 | 82 | 57 | 55 | 40 | 29 | 14 | 34 | 46 | 47 | 32 | 91 |
| 31-Aug | 19 | 20 | 25 | 23 | 22 | 29 | 28 | 47 | 40 | 29 | 63 | 55 | 79 | 39 | 37 | 28 | 26 | 20 | 18 | 16 | 81 | 49 | 47 | 44 | 81 |
| | 50 | 83 | 80 | 49 | 75 | 87 | 69 | 67 | 91 | 52 | 81 | 91 | 91 | 87 | 100 | 82 | 70 | 45 | 96 | 41 | 81 | 80 | 73 | 68 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

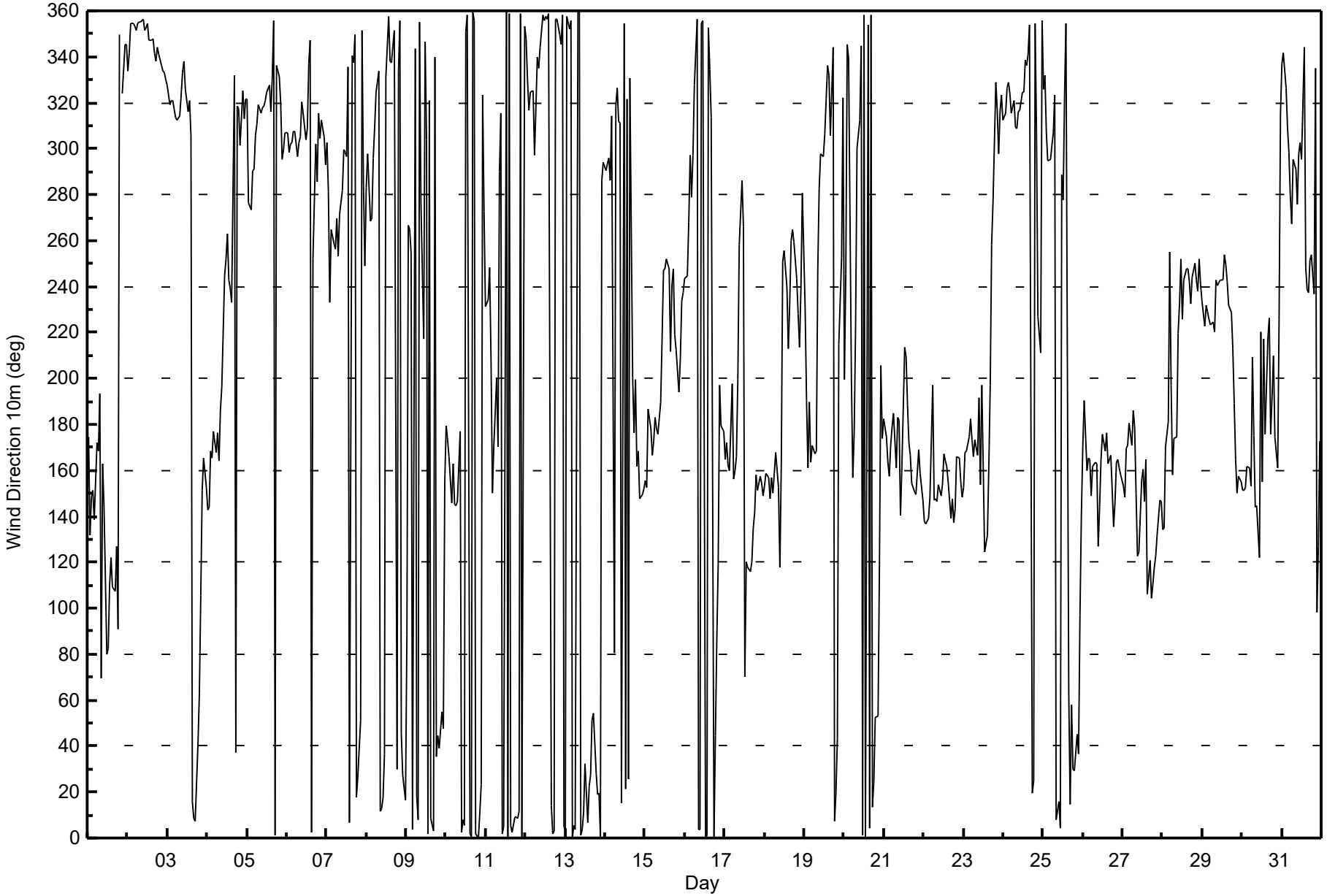
PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Buffalo Viewpoint - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS05
## MANNIX
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)

AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 708 | 35 | 36 | 99.87 | 32.6 | 0 | 4.3 | 0 |
| H2S (ppb) Average | 708 | 36 | 36 | 100 | 32 | 1 | 2.2 | 0 |
| THC (ppm) Average | 708 | 35 | 36 | 99.87 | 3.2 | - | 2.4 | - |
| NMHC(ppm) Average | 708 | 35 | 36 | 99.87 | 0.356 | - | 0.034 | - |
| CH4(ppm) Average | 708 | 35 | 36 | 99.87 | 3.2 | - | 2.4 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 28.9 | - | 21.4 | - |
| Temperature 20 m (C) Average | 744 | 0 | 0 | 100 | 28.9 | - | 22.3 | - |
| Temperature 45 m (C) Average | 744 | 0 | 0 | 100 | 28.7 | - | 22.3 | - |
| Temperature 75 m (C) Average | 744 | 0 | 0 | 100 | 28.3 | - | 22.3 | - |
| Temperature 90 m (C) Average | 744 | 0 | 0 | 100 | 28.3 | - | 22.4 | - |
| Relative Humidity 2 m (%) Average | 744 | 0 | 0 | 100 | 100 | - | 91 | - |
| Relative Humidity 20 m (%) Average | 744 | 0 | 0 | 100 | 98 | - | 81 | - |
| Relative Humidity 45 m (%) Average | 744 | 0 | 0 | 100 | 95 | - | 80 | - |
| Relative Humidity 75 m (%) Average | 744 | 0 | 0 | 100 | 97 | - | 81 | - |
| Relative Humidity 90 m (%) Average | 744 | 0 | 0 | 100 | 98 | - | 81 | - |
| Wind Speed 20 m (km/h) Average | 744 | 0 | 0 | 100 | 28 | - | 20 | - |
| Wind Speed 45 m (km/h) Average | 744 | 0 | 0 | 100 | 40 | - | 30 | - |
| Wind Speed 75 m (km/h) Average | 744 | 0 | 0 | 100 | 46 | - | 35 | - |
| Wind Speed 90 m (km/h) Average | 743 | 0 | 1 | 99.87 | 49 | - | 38 | - |
| Wind Direction 20 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - |
| Wind Direction 45 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - |
| Wind Direction 75 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - |
| Wind Direction 90 m (deg) Average | 743 | 0 | 1 | 99.87 | - | - | - | - |
| Vertical Wind Speed 20 m (km/h) Average | 744 | 0 | 0 | 100 | 0.8 | - | 0.3 | - |
| Vertical Wind Speed 45 m (km/h) Average | 744 | 0 | 0 | 100 | 2.3 | - | 1.6 | - |
| Vertical Wind Speed 75 m (km/h) Average | 744 | 0 | 0 | 100 | 2.5 | - | 1.4 | - |
| Vertical Wind Speed 90 m (km/h) Average | 743 | 0 | 1 | 99.87 | 1.6 | - | 0.9 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 708 | 0.62 | 2.4 | - | 0 | 0 | 0 | 0.1 | 0.3 | 1 | 32.6 |
| H2S (ppb) Average | 708 | 0.6 | 1.5 | - | 0 | 0.1 | 0.2 | 0.3 | 0.5 | 1.2 | 32.2 |
| THC (ppm) Average | 708 | 2.17 | 0.2 | - | 1.9 | 2 | 2.1 | 2.1 | 2.2 | 2.4 | 3.2 |
| NMHC(ppm) Average | 708 | 0.009 | 0.022 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.356 |
| CH4(ppm) Average | 708 | 2.16 | 0.2 | - | 1.9 | 2 | 2.1 | 2.1 | 2.2 | 2.4 | 3.2 |
| Temperature 2 m (C) Average | 744 | 16.9 | 4.8 | - | 6.1 | 10.8 | 13.1 | 16.2 | 20.5 | 23.9 | 28.9 |
| Temperature 20 m (C) Average | 744 | 17.38 | 4.3 | - | 7.8 | 11.9 | 14.2 | 17 | 20.4 | 23.4 | 28.9 |
| Temperature 45 m (C) Average | 744 | 17.42 | 4.2 | - | 8.3 | 12.2 | 14.3 | 17 | 20.3 | 23.2 | 28.7 |
| Temperature 75 m (C) Average | 744 | 17.46 | 4 | - | 8.8 | 12.6 | 14.6 | 17.2 | 20.3 | 23.1 | 28.3 |
| Temperature 90 m (C) Average | 744 | 17.52 | 4 | - | 9 | 12.7 | 14.6 | 17.2 | 20.3 | 23.1 | 28.3 |
| Relative Humidity 2 m (%) Average | 744 | 73.6 | 19 | - | 33 | 47 | 58 | 76 | 90 | 97 | 100 |
| Relative Humidity 20 m (%) Average | 744 | 66.1 | 17 | - | 27 | 43 | 52 | 67 | 81 | 87 | 98 |
| Relative Humidity 45 m (%) Average | 744 | 64.4 | 16 | - | 27 | 43 | 51 | 66 | 78 | 86 | 95 |
| Relative Humidity 75 m (%) Average | 744 | 64.1 | 16 | - | 27 | 43 | 51 | 65 | 77 | 85 | 97 |
| Relative Humidity 90 m (%) Average | 744 | 63.8 | 16 | - | 28 | 43 | 51 | 64 | 76 | 84 | 98 |
| Wind Speed 20 m (km/h) Average | 744 | 9.8 | 5 | - | 0 | 4 | 6 | 9 | 13 | 17 | 28 |
| Wind Speed 45 m (km/h) Average | 744 | 14.2 | 7 | - | 0 | 5 | 9 | 14 | 19 | 23 | 40 |
| Wind Speed 75 m (km/h) Average | 744 | 16.3 | 8 | - | 1 | 6 | 10 | 16 | 22 | 27 | 46 |
| Wind Speed 90 m (km/h) Average | 743 | 17.3 | 9 | - | 0 | 6 | 10 | 17 | 23 | 29 | 49 |
| Wind Direction 20 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |
| Wind Direction 45 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |
| Wind Direction 75 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |
| Wind Direction 90 m (deg) Average | 743 | - | - | - | - | - | - | - | - | - | - |
| Vertical Wind Speed 20 m (km/h) Average | 744 | -0.29 | 0.4 | - | -1.8 | -0.8 | -0.6 | -0.3 | 0 | 0.3 | 0.8 |
| Vertical Wind Speed 45 m (km/h) Average | 744 | 0.16 | 0.9 | - | -2.7 | -0.9 | -0.4 | 0.1 | 0.8 | 1.5 | 2.3 |
| Vertical Wind Speed 75 m (km/h) Average | 744 | 0.25 | 0.8 | - | -2.3 | -0.8 | -0.3 | 0.2 | 0.8 | 1.3 | 2.5 |
| Vertical Wind Speed 90 m (km/h) Average | 743 | 0.12 | 0.5 | - | -1.6 | -0.4 | -0.1 | 0.1 | 0.4 | 0.8 | 1.6 |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)

AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| SO2, THC/NMHC/CH4 | 21 Aug 2026 13:00 | 21 Aug 2026 13:00 | 1 | Maintenance - sample manifold cleaned |
| Vertical Wind Speed, Wind Speed, Wind Direction 90m | 02 Aug 2026 01:00 | 02 Aug 2026 01:00 | 1 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 32.6 ppb on Aug 25 13:00
Maximum Daily Average: 4.3 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 1 01:00
Minimum Daily Average: 0.0 ppb on Aug 23
Maximum Diurnal Average: 2.3 ppb at hour 13
Minimum Diurnal Average: 0.1 ppb at hour 5
Monthly Average: 0.62 ppb
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 1.0 $P_{99}$ = 9.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3-Aug | Z | 0.3 | 1.8 | 0.3 | 0.3 | 0.3 | 0.5 | 1.5 | 3.5 | 1.3 | 0.6 | 0.4 | 3.4 | 1.1 | 3.6 | 2.1 | 0.7 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 1.0 | 3.6 |
| 4-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 5-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 3.0 | 1.5 | 1.2 | 0.5 | 2.8 | 2.1 | 1.2 | 1.0 | 0.6 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.7 | 3.0 |
| 6-Aug | 0.1 | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 0.2 | 0.4 | 1.1 | 1.0 | 0.5 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.1 |
| 7-Aug | 0.1 | 0.3 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.3 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.5 | 0.6 | 0.3 | 0.3 | 0.2 | 0.6 | 1.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 1.3 |
| 9-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.6 | 1.6 | 4.7 | 2.3 | 2.3 | 1.4 | 0.5 | 0.5 | 1.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 4.7 |
| 10-Aug | 0.1 | Z | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 11.6 | 20.5 | 5.3 | 2.4 | 0.7 | 0.9 | 0.4 | 0.5 | 0.5 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 1.9 | 20.5 |
| 11-Aug | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 1.0 | 0.8 | 0.2 | 0.7 | 0.9 | 0.9 | 0.5 | 1.7 | 2.4 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 2.4 |
| 12-Aug | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.2 | 1.1 | 0.2 | 1.1 |
| 13-Aug | 1.8 | 3.5 | 2.3 | 1.0 | Z | 1.1 | 1.0 | 1.4 | 1.2 | 1.7 | 0.9 | 0.3 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.8 | 3.5 |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.4 | 6.3 | 8.4 | 7.2 | 4.2 | 2.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 1.4 | 8.4 |
| 15-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 0.4 | 0.7 | 0.5 | 1.2 | 0.1 | 0.1 | 3.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 3.6 |
| 17-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 15.6 | 9.7 | 7.6 | 6.2 | 3.0 | 1.6 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 2.0 | 15.6 |
| 18-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 |
| 19-Aug | 0.2 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | C | C | C | C | 0.2 | 0.5 | 0.9 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.9 |
| 20-Aug | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.9 | 2.5 | 0.9 | 0.5 | 0.4 | 0.3 | 0.7 | 0.7 | 0.8 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 2.5 |
| 21-Aug | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | M | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 22-Aug | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.5 |
| 23-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 24-Aug | 0.4 | 0.7 | 0.3 | Z | 0.2 | 0.2 | 0.1 | 0.3 | 0.7 | 12.7 | 6.7 | 4.5 | 1.7 | 0.3 | 0.3 | 0.8 | 0.8 | 0.7 | 0.1 | 0.2 | 0.7 | 0.3 | 0.2 | 0.2 | 1.4 | 12.7 |
| 25-Aug | 0.2 | 0.1 | 0.0 | 0.1 | Z | 0.2 | 0.3 | 0.5 | 2.3 | 0.9 | 2.0 | 4.5 | 32.6 | 31.7 | 6.5 | 1.8 | 6.8 | 4.1 | 1.4 | 0.6 | 0.4 | 0.4 | 0.3 | 0.2 | 4.3 | 32.6 |
| 26-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.4 | 0.5 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.6 |
| 27-Aug | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.6 |
| 28-Aug | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 29-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 30-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 |
| 31-Aug | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.5 | 6.5 | 17.5 | 1.0 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 1.1 | 17.5 |
| | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 1.4 | 2.2 | 1.7 | 2.3 | 1.9 | 0.9 | 0.5 | 0.7 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 1.8 | 3.5 | 2.3 | 1.0 | 0.3 | 1.1 | 1.0 | 1.5 | 3.5 | 12.7 | 20.5 | 15.6 | 32.6 | 31.7 | 6.5 | 3.0 | 6.8 | 4.1 | 1.4 | 0.6 | 0.7 | 0.4 | 0.3 | 1.1 | Diurnal Maximum | |

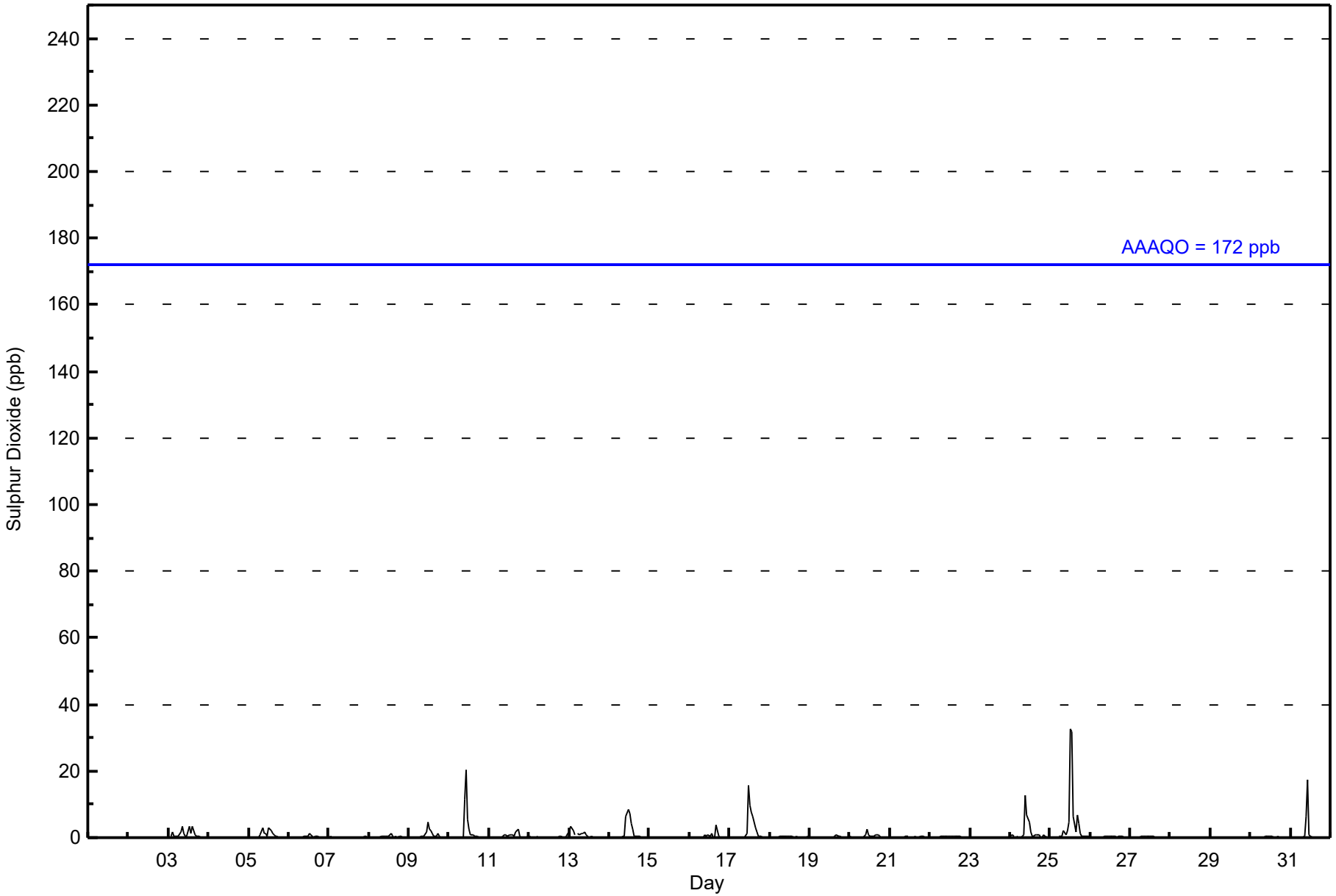
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mannix - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb

## Mannix - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 701 | 99.01 | 99.01 |
| 11 - 20 | 4 | 0.56 | 99.58 |
| 21 - 60 | 3 | 0.42 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mannix - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 72 | 39 | 27 | 7 | 5 | 12 | 18 | 111 | 59 | 38 | 38 | 52 | 42 | 66 | 51 | 64 | 701 |
| 11 - 20 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 4 |
| 21 - 60 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 72 | 41 | 27 | 7 | 5 | 12 | 18 | 111 | 59 | 38 | 38 | 52 | 44 | 69 | 51 | 64 | 708 |

Total Number of Valid Hours: 708

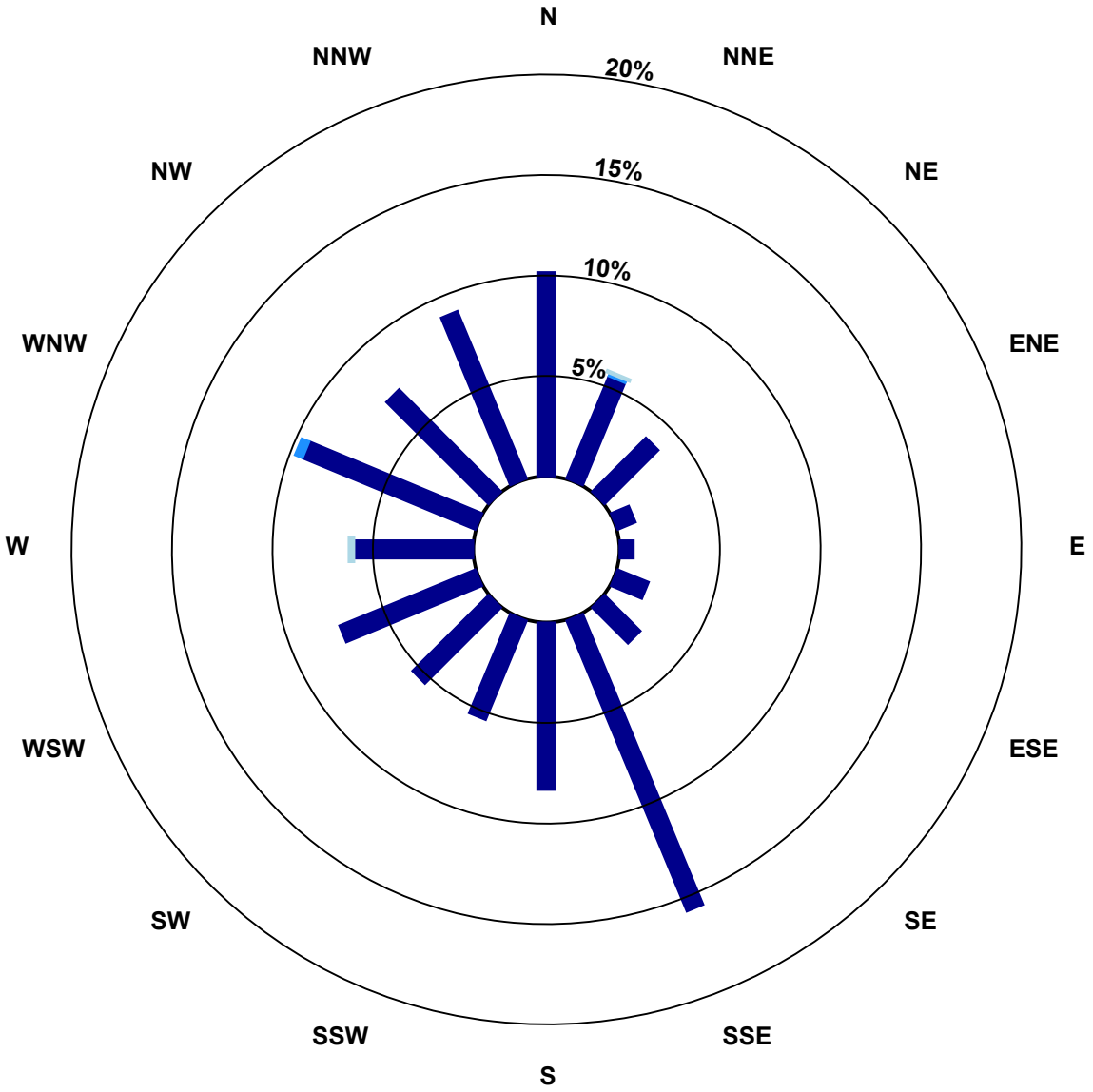
Total Number of Hours: 744

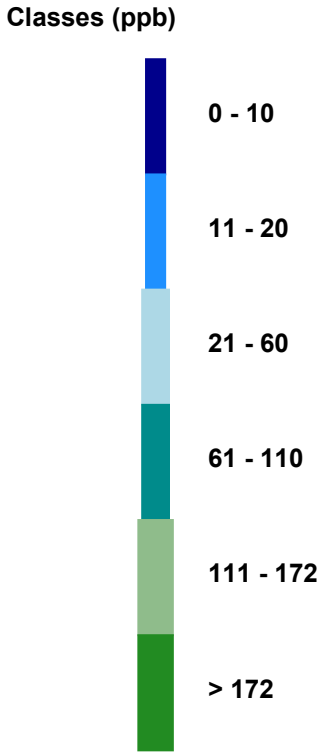
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Sulphur Dioxide ($SO_2$) - ppb

## Mannix



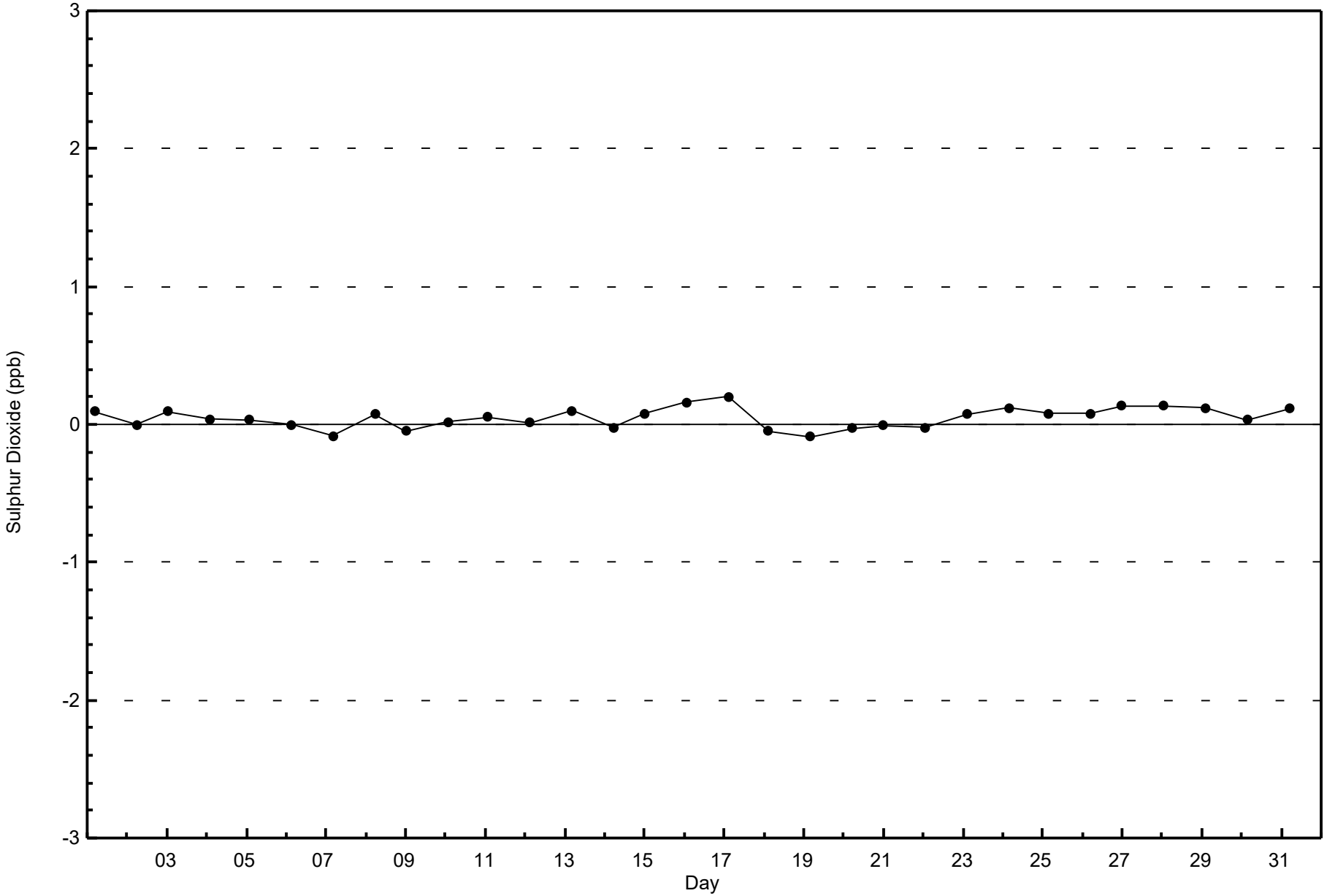

**Total Number of Valid Hours: 708**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mannix - August 2026**

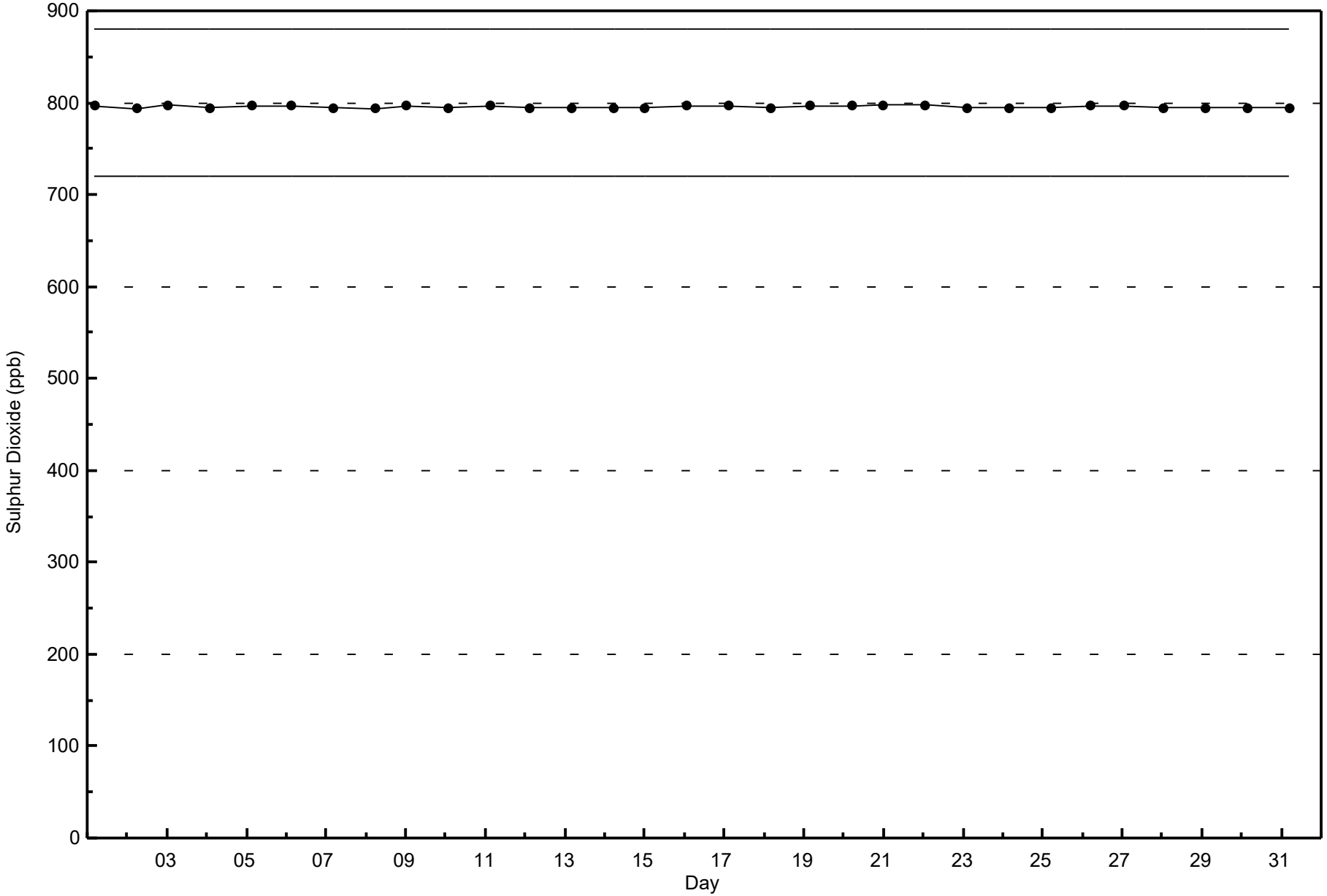


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mannix - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 0
Maximum Value: 32.2 ppb on Aug 1 10:00 Maximum Daily Average: 2.2 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 24 14:00
Maximum Diurnal Average: 1.7 ppb at hour 10
Monthly Average: 0.60 ppb

Minimum Daily Average: 0.2 ppb on Aug 18
Minimum Diurnal Average: 0.2 ppb at hour 14
Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.3 $Q_3$ = 0.5 $P_{90}$ = 1.2 $P_{99}$ = 4.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | Z | 0.3 | 0.3 | 0.9 | 32.2 | 2.1 | 4.3 | 3.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 1.7 | 1.3 | 1.2 | 0.7 | 2.2 | 32.2 |
| 2-Aug | Z | 0.6 | 0.4 | 0.4 | 0.5 | 0.3 | 0.7 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.2 | 0.3 | 0.7 |
| 3-Aug | 0.2 | Z | 1.5 | 1.4 | 1.3 | 0.4 | 0.4 | 0.5 | 1.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 0.8 | 2.3 | 0.8 | 0.4 | 0.4 | 0.6 | 2.3 |
| 4-Aug | 0.3 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 2.4 | 0.9 | 0.4 | 0.2 | 0.7 | 1.1 | 1.6 | 0.5 | 2.4 |
| 5-Aug | 0.5 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.5 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.5 | 0.4 | 0.4 | 0.7 | 0.3 | 0.1 | 0.1 | 0.3 | 0.7 |
| 6-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| 7-Aug | 0.2 | 0.8 | 0.3 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.8 |
| 8-Aug | Z | 0.5 | 0.6 | 0.4 | 0.5 | 0.8 | 1.3 | 1.8 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 1.8 |
| 9-Aug | 0.9 | Z | 0.4 | 0.7 | 0.9 | 2.0 | 2.3 | 4.4 | 4.9 | 2.1 | 1.0 | 0.9 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 1.6 | 8.9 | 1.4 | 1.5 | 8.9 |
| 10-Aug | 0.7 | 0.4 | Z | 0.7 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 3.1 | 5.2 | 1.8 | 1.2 | 0.2 | 0.7 | 0.1 | 0.3 | 0.5 | 0.5 | 1.1 | 0.5 | 0.7 | 0.4 | 1.4 | 0.9 | 5.2 |
| 11-Aug | 1.1 | 0.7 | 0.6 | Z | 0.4 | 0.6 | 0.4 | 0.3 | 0.5 | 2.3 | 0.4 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.5 | 0.4 | 2.3 |
| 12-Aug | 0.4 | 0.4 | 0.7 | 1.7 | Z | 1.5 | 1.2 | 1.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.6 | 0.5 | 0.3 | 0.4 | 1.4 | 1.1 | 0.6 | 1.7 |
| 13-Aug | 1.8 | 3.4 | 3.9 | 1.5 | 3.0 | Z | 1.4 | 0.7 | 0.4 | 1.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.5 | 2.0 | 1.1 | 0.5 | 0.5 | 0.3 | 0.3 | 0.2 | 0.4 | 0.4 | 1.0 | 3.9 |
| 14-Aug | Z | 0.7 | 0.7 | 0.8 | 1.2 | 1.0 | 0.9 | 1.1 | 0.7 | 0.7 | 1.9 | 2.2 | 0.8 | 0.6 | 4.9 | 5.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 1.1 | 5.6 |
| 15-Aug | 0.3 | Z | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 16-Aug | 0.3 | 0.3 | Z | 0.7 | 0.4 | 0.4 | 0.9 | 0.7 | 0.4 | 0.6 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.3 | 1.9 | 2.2 | 2.2 | 1.3 | 0.9 | 1.4 | 0.7 | 2.2 |
| 17-Aug | 1.0 | 0.8 | 0.8 | Z | 0.6 | 0.6 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.5 | 1.0 | 0.6 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 1.0 |
| 18-Aug | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 19-Aug | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | Z | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.4 | 0.3 | 0.5 | 0.7 | 0.6 | 0.5 | 2.6 | 0.4 | 2.6 |
| 20-Aug | Z | 0.2 | 0.4 | 1.8 | 3.2 | 1.5 | 0.5 | 0.2 | 0.5 | 1.9 | 2.6 | 0.7 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 1.4 | 0.5 | 0.6 | 0.5 | 0.8 | 3.2 |
| 21-Aug | 0.5 | Z | 0.5 | 0.8 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | C | C | C | C | C | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.8 |
| 22-Aug | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 23-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.4 | 1.4 | 1.1 | 0.6 | 2.8 | 0.5 | 2.8 |
| 24-Aug | 1.1 | 2.9 | 2.2 | 0.8 | Z | 0.7 | 1.0 | 1.7 | 1.2 | 0.4 | 0.6 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.2 | 0.7 | 0.3 | 3.5 | 0.8 | 3.5 |
| 25-Aug | 5.6 | 1.1 | 1.0 | 3.0 | 3.2 | Z | 2.4 | 2.3 | 4.0 | 0.8 | 0.7 | 0.3 | 1.1 | 1.0 | 0.3 | 0.2 | 0.7 | 0.4 | 0.3 | 0.4 | 1.2 | 7.4 | 1.4 | 0.5 | 1.7 | 7.4 |
| 26-Aug | Z | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 27-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 28-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 |
| 29-Aug | 0.2 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 |
| 30-Aug | 0.2 | 0.3 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.2 | 0.5 |
| 31-Aug | 1.3 | 0.9 | 0.6 | 0.5 | 0.4 | Z | 0.3 | 0.5 | 1.0 | 1.0 | 0.7 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1.1 | 5.6 | 4.7 | 0.9 | 5.6 |
| | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 1.7 | 0.6 | 0.5 | 0.4 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | Diurnal Average | |
| | 5.6 | 3.4 | 3.9 | 3.0 | 3.2 | 2.0 | 2.4 | 4.4 | 4.9 | 32.2 | 5.2 | 4.3 | 3.3 | 1.0 | 4.9 | 5.6 | 1.1 | 2.4 | 1.9 | 2.2 | 2.3 | 7.4 | 8.9 | 4.7 | Diurnal Maximum | |

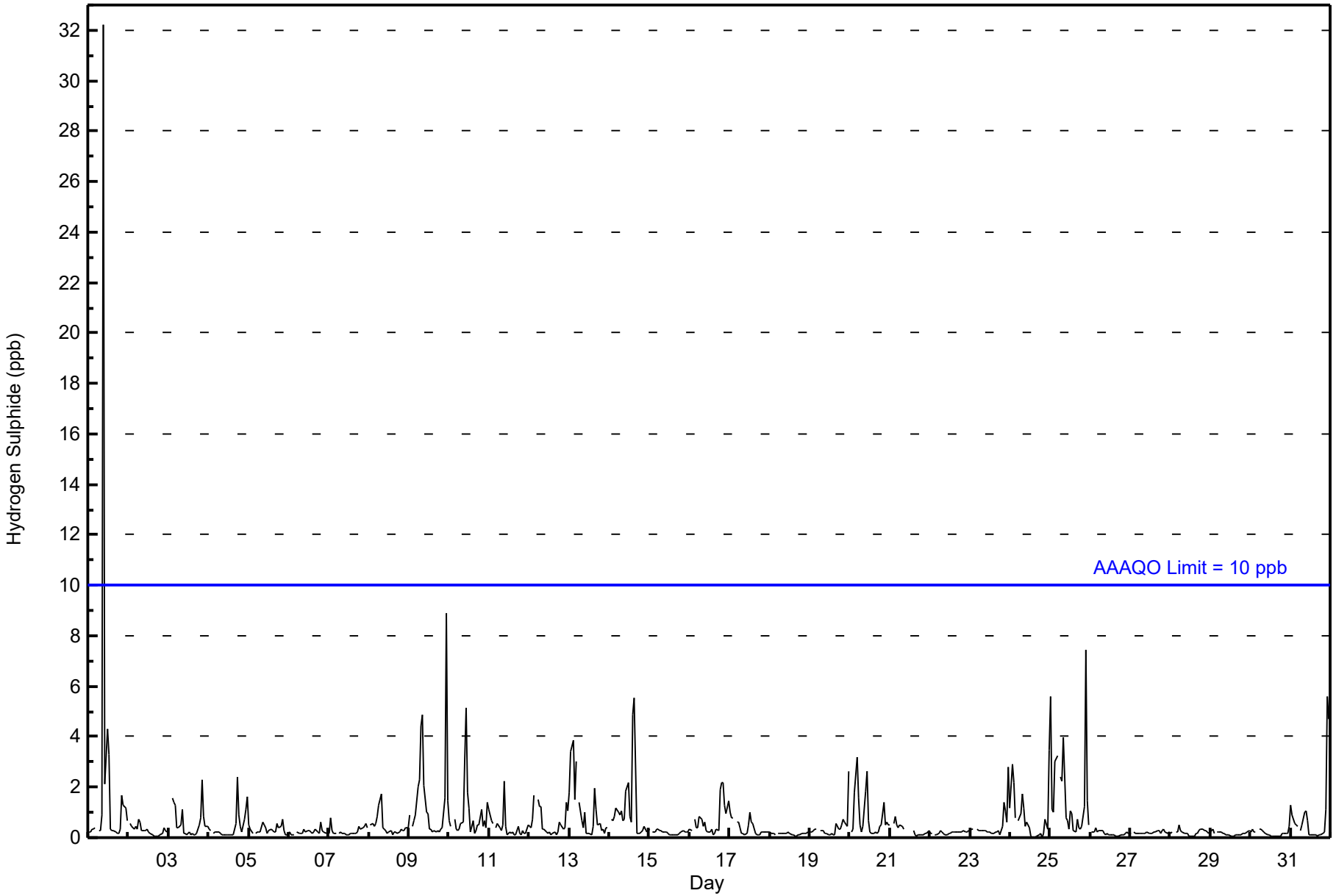
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mannix - August 2026**



# Hydrogen Sulphide ($H_2S$) - ppb

## Mannix - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 682 | 96.33 | 96.33 |
| 3 - 4 | 16 | 2.26 | 98.59 |
| 5 - 7 | 8 | 1.13 | 99.72 |
| 8 - 11 | 1 | 0.14 | 99.86 |
| > 11 | 1 | 0.14 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mannix - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 70 | 35 | 27 | 2 | 4 | 11 | 16 | 105 | 62 | 34 | 38 | 54 | 45 | 71 | 43 | 65 | 682 |
| 3 - 4 | 2 | 6 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 16 |
| 5 - 7 | 0 | 1 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 8 |
| 8 - 11 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 72 | 42 | 27 | 7 | 5 | 12 | 18 | 105 | 63 | 34 | 39 | 54 | 46 | 71 | 47 | 66 | 708 |

Total Number of Valid Hours: 708

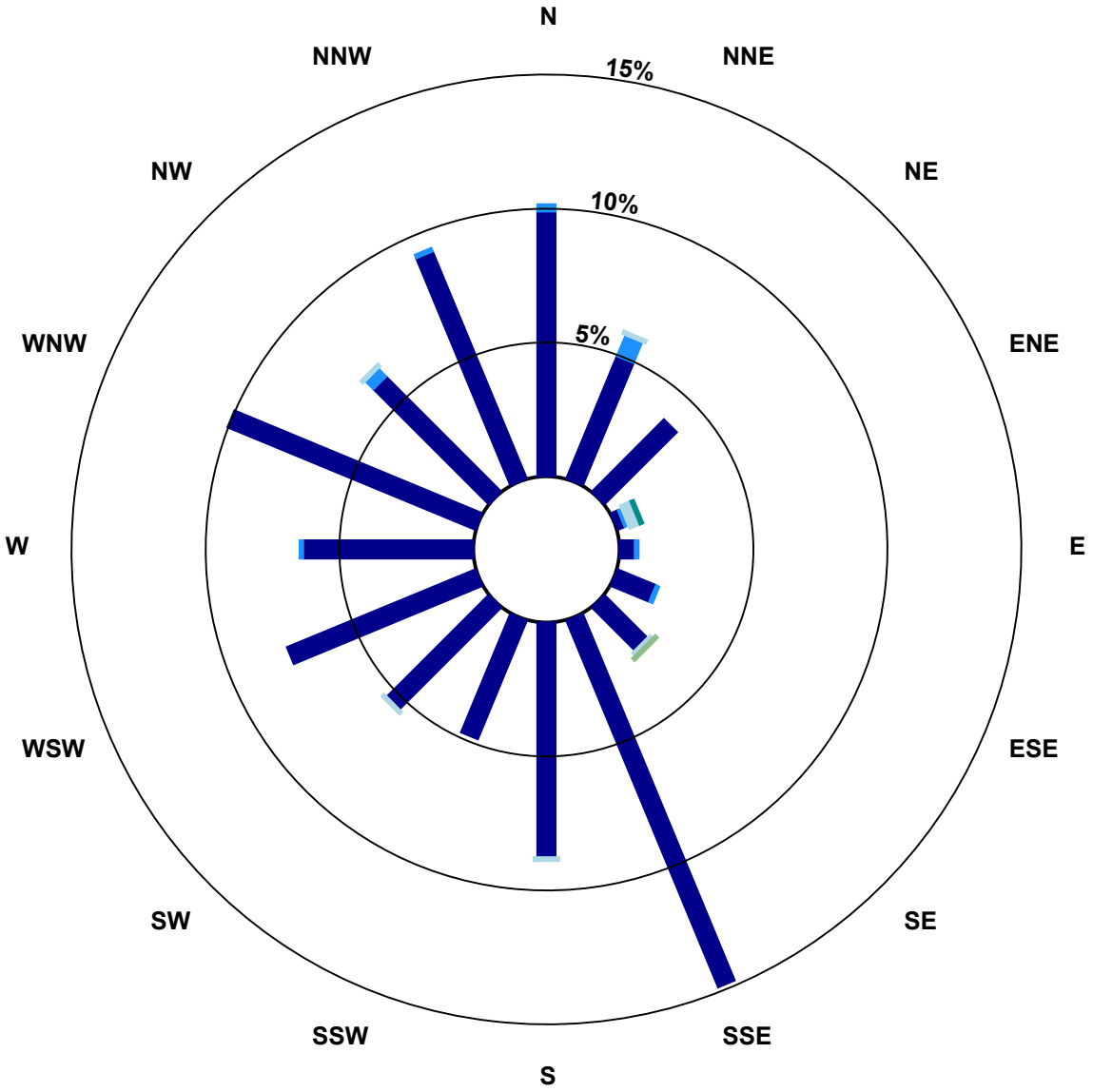
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mannix**




**Classes (ppb)**

- 0 - 2
- 3 - 4
- 5 - 7
- 8 - 11
- > 11

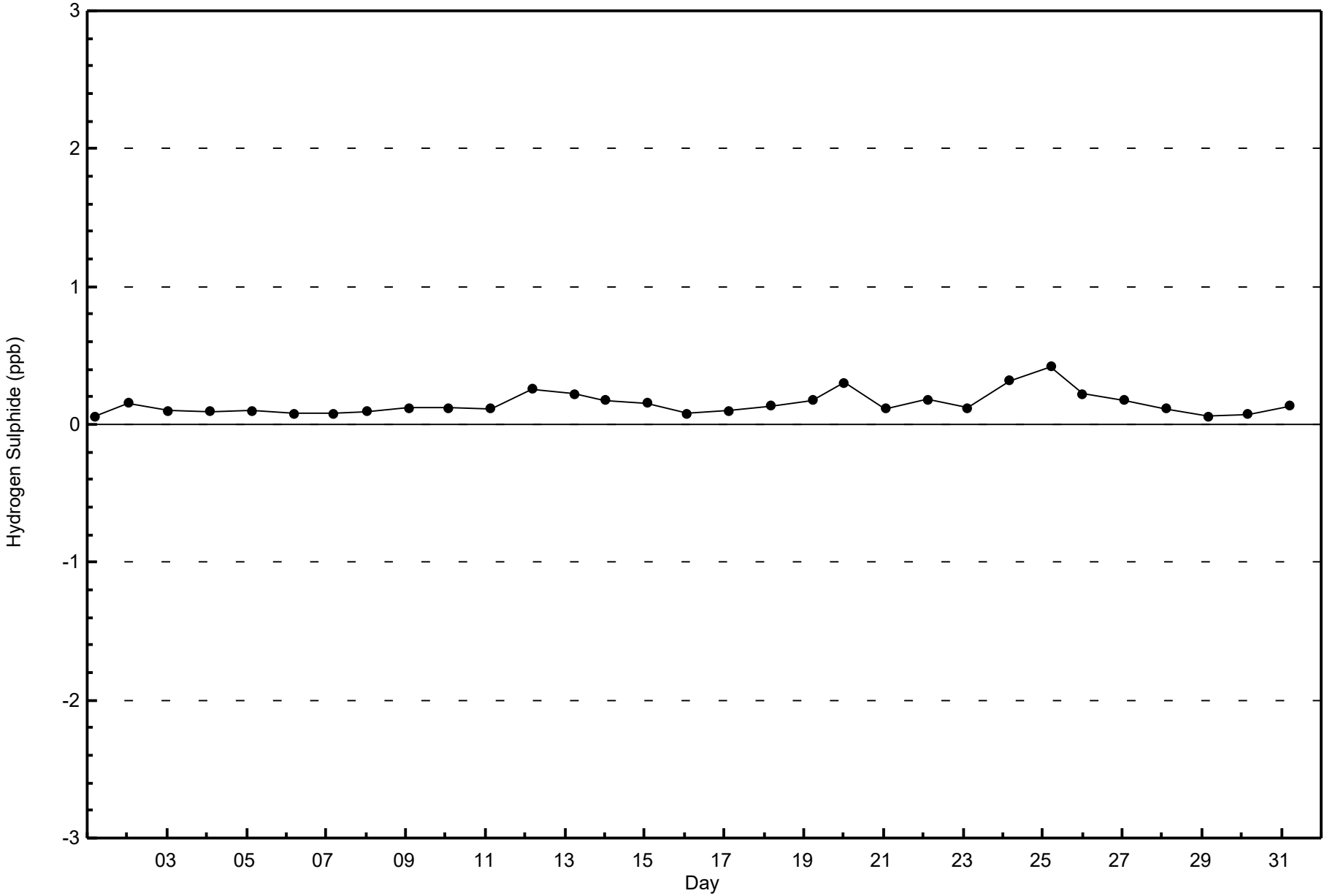
**Total Number of Valid Hours: 708**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mannix - August 2026**

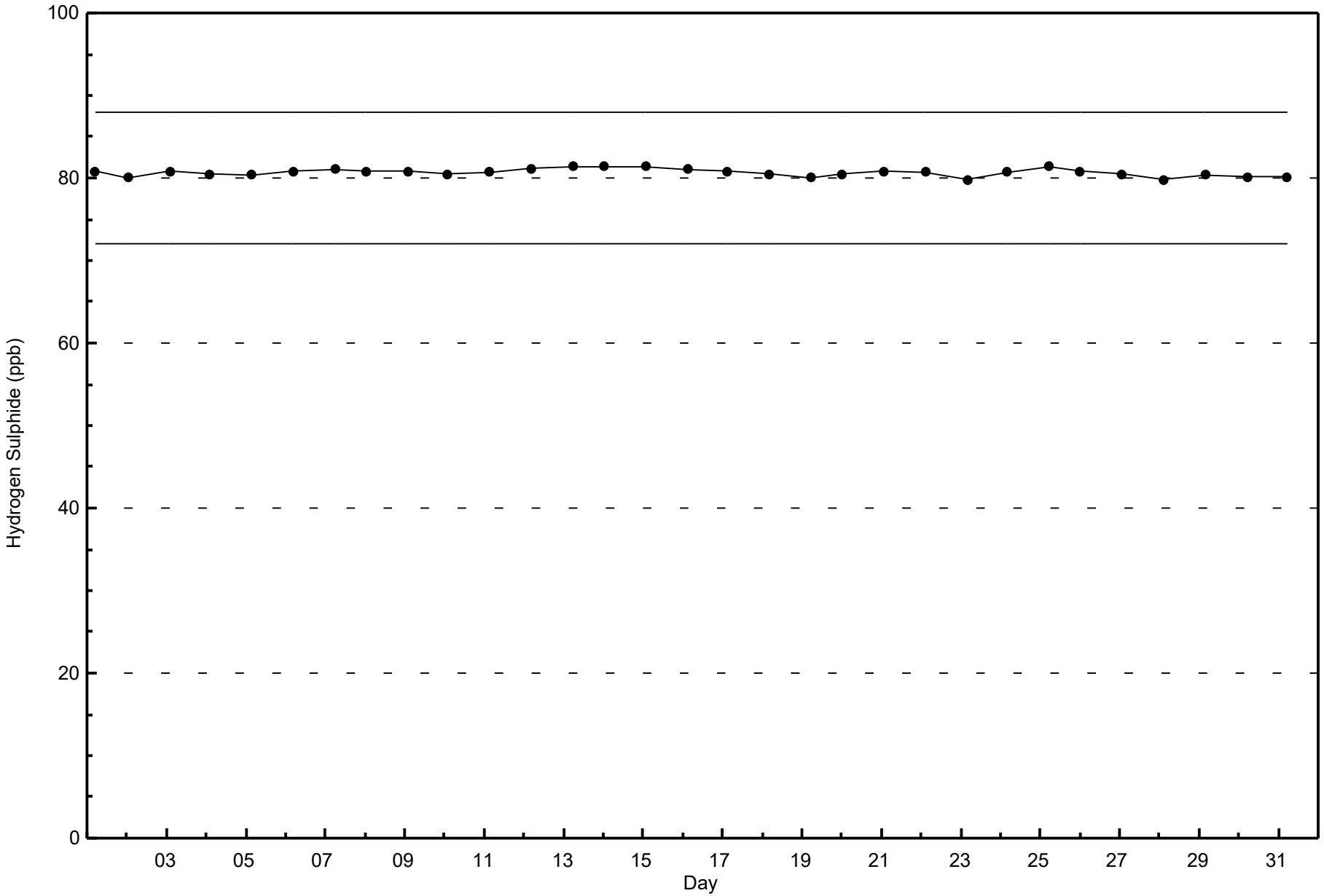


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mannix - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Hydrocarbons (THC) - ppm

## Mannix - August 2026

Maximum Value: 3.2 ppm on Aug 24 03:00

Maximum Daily Average: 2.4 ppm on Aug 24

Minimum Value: 1.9 ppm on Aug 28 13:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.3 ppm at hour 5

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.17 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.4 $P_{99}$ = 2.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | 2.2 | 2.2 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.4 | 3.0 | 2.6 | 2.6 | 2.3 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.4 | 2.9 | 2.2 | 2.3 | 2.2 | 2.3 | 3.0 |
| 2-Aug | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.4 |
| 3-Aug | Z | 2.2 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 |
| 4-Aug | 2.2 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.3 | 2.4 | 2.4 | 2.1 | 2.4 |
| 5-Aug | 2.2 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.3 |
| 6-Aug | 2.1 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 |
| 7-Aug | 2.1 | 2.6 | 2.0 | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.6 |
| 8-Aug | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | Z | 2.6 | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.6 |
| 9-Aug | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.6 | 2.6 | 2.6 | 2.6 | 2.5 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 | 2.4 | 2.3 | 2.6 |
| 10-Aug | 2.2 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.3 | 2.4 | 2.6 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.2 | 2.6 |
| 11-Aug | 2.4 | 2.4 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.6 |
| 12-Aug | 2.5 | 2.3 | 2.7 | Z | 3.0 | 2.5 | 2.6 | 2.5 | 2.2 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 3.0 |
| 13-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 14-Aug | 2.2 | 2.3 | 2.3 | 2.5 | 2.5 | Z | 2.4 | 2.5 | 2.6 | 2.7 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.7 |
| 15-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 16-Aug | 2.1 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 17-Aug | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 18-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 19-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | C | C | C | C | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.5 | 2.2 | 2.5 |
| 20-Aug | 2.2 | 2.2 | 2.2 | 2.3 | 2.5 | Z | 2.2 | 2.2 | 2.3 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 | 2.1 | 2.2 | 2.2 | 2.6 |
| 21-Aug | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 22-Aug | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 23-Aug | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.3 | 2.5 | 2.7 | 2.3 | 2.5 | 2.3 | 2.7 |
| 24-Aug | 2.4 | 3.2 | 3.2 | Z | 2.6 | 2.9 | 3.2 | 2.8 | 2.3 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 | 2.2 | 2.9 | 2.4 | 3.2 |
| 25-Aug | 2.5 | 2.5 | 2.5 | 2.7 | Z | 2.4 | 2.4 | 2.6 | 2.5 | 2.6 | 2.5 | 2.2 | 2.3 | 2.3 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 2.3 | 2.2 | 2.4 | 2.7 |
| 26-Aug | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 27-Aug | Z | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 28-Aug | 2.0 | Z | 2.0 | 2.2 | 2.3 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 30-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 | 2.3 |
| 31-Aug | 2.5 | 2.4 | 2.4 | 2.5 | Z | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.6 | 2.4 | 2.2 | 2.6 |
| | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | Diurnal Average | |
| | 2.5 | 3.2 | 3.2 | 2.7 | 3.0 | 2.9 | 3.2 | 2.8 | 2.6 | 3.0 | 2.6 | 2.6 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.4 | 2.9 | 2.7 | 2.6 | 2.9 | Diurnal Maximum | |

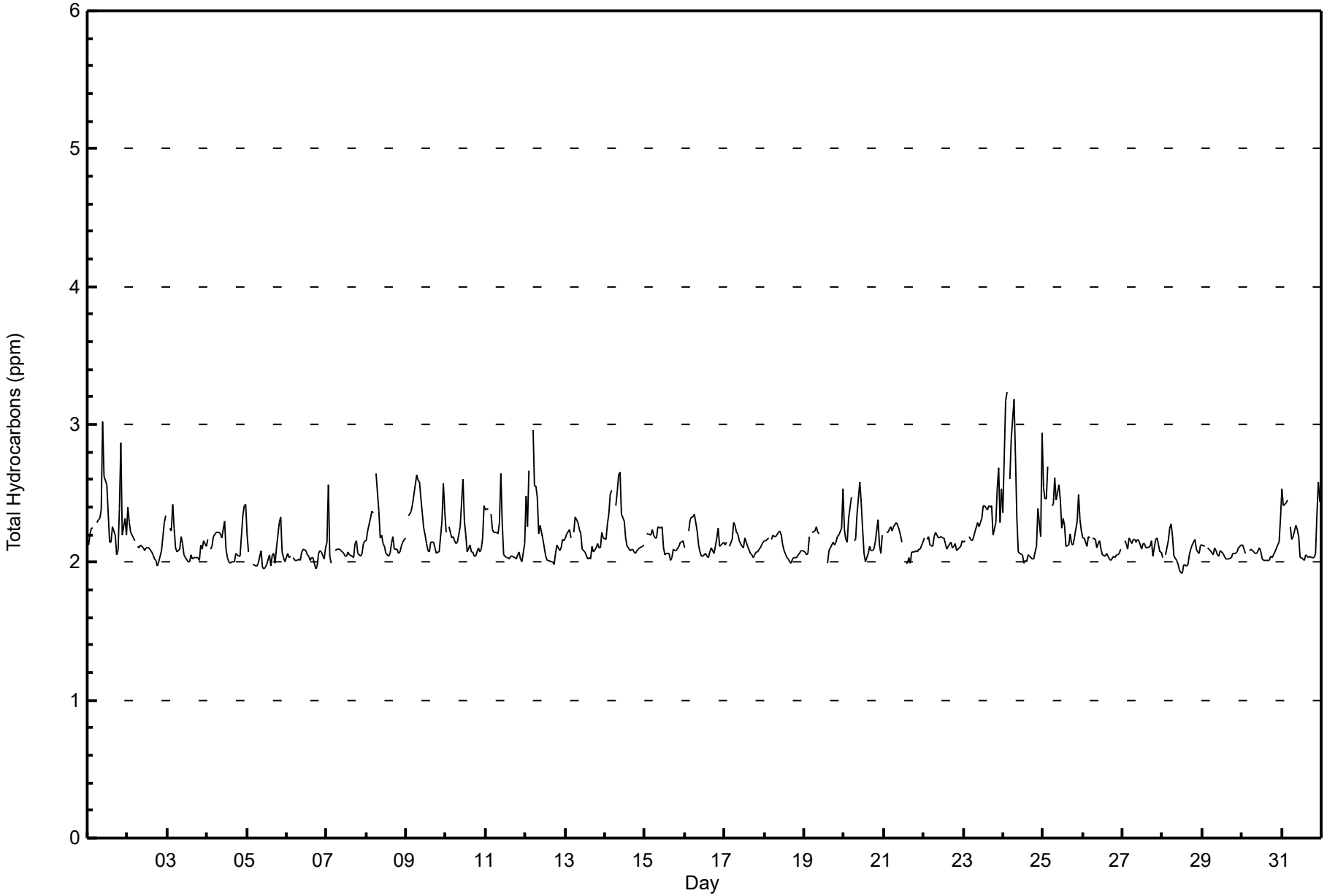
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**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Mannix - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 146 | 20.62 | 20.62 |
| 2.1 - 3.0 | 559 | 78.95 | 99.58 |
| 3.1 - 10.0 | 3 | 0.42 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Mannix - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 22 | 9 | 5 | 1 | 0 | 2 | 1 | 11 | 6 | 3 | 12 | 20 | 10 | 23 | 5 | 16 | 146 |
| 2.1 - 3.0 | 50 | 32 | 22 | 6 | 5 | 10 | 17 | 100 | 53 | 35 | 26 | 32 | 34 | 46 | 43 | 48 | 559 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 72 | 41 | 27 | 7 | 5 | 12 | 18 | 111 | 59 | 38 | 38 | 52 | 44 | 69 | 51 | 64 | 708 |

Total Number of Valid Hours: 708

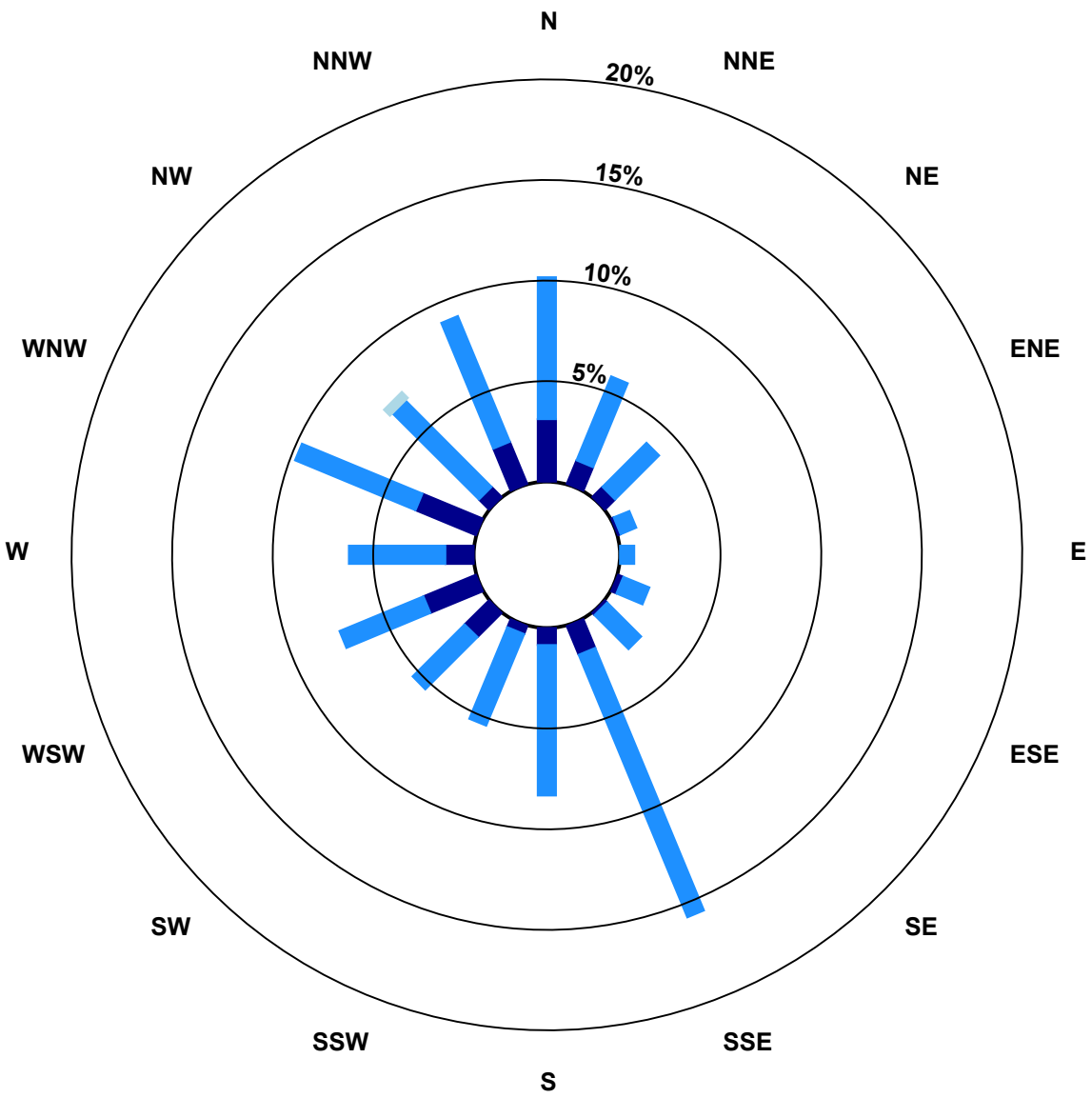
Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Total Hydrocarbons (THC) - ppm

## Mannix




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

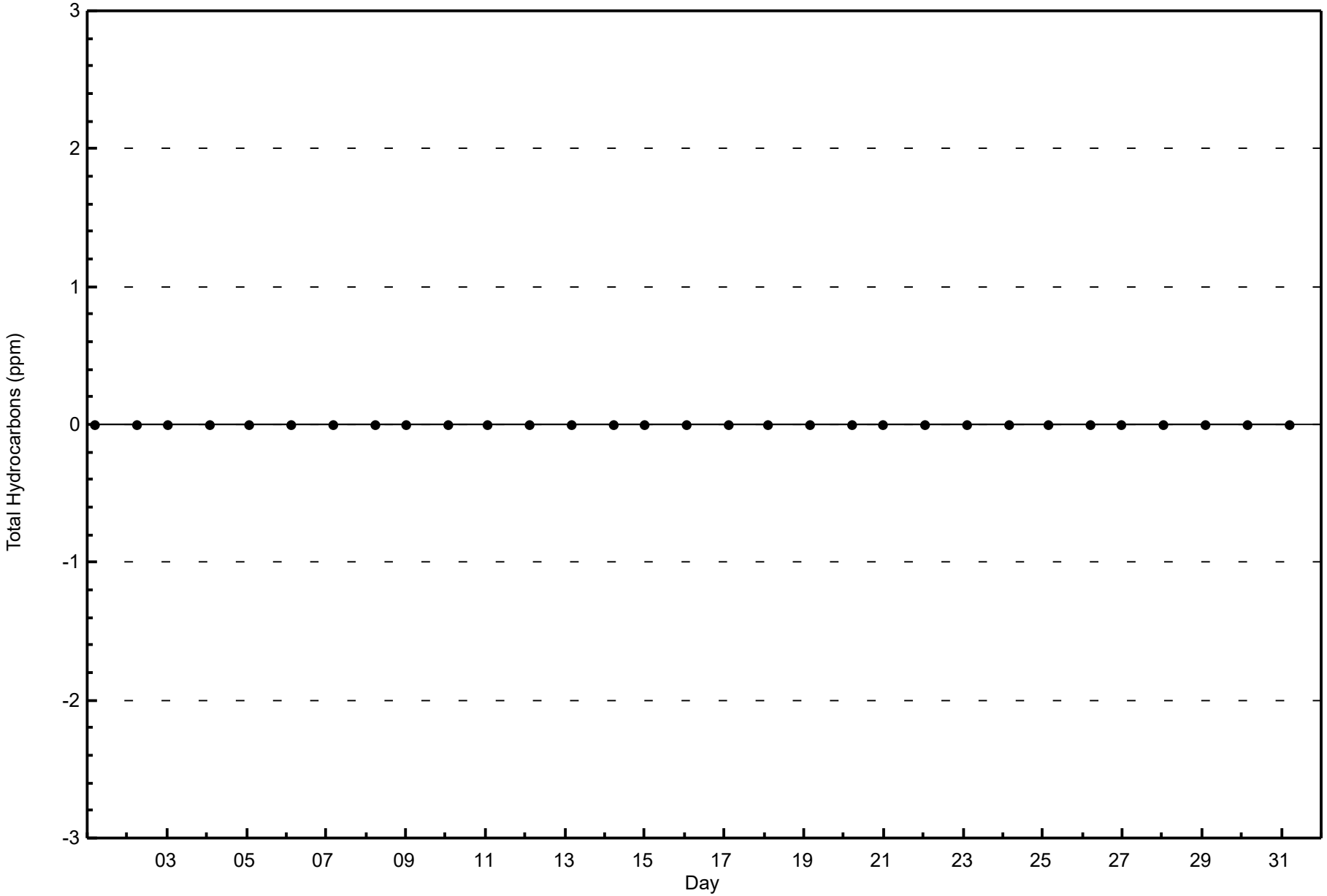
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Mannix - August 2026**

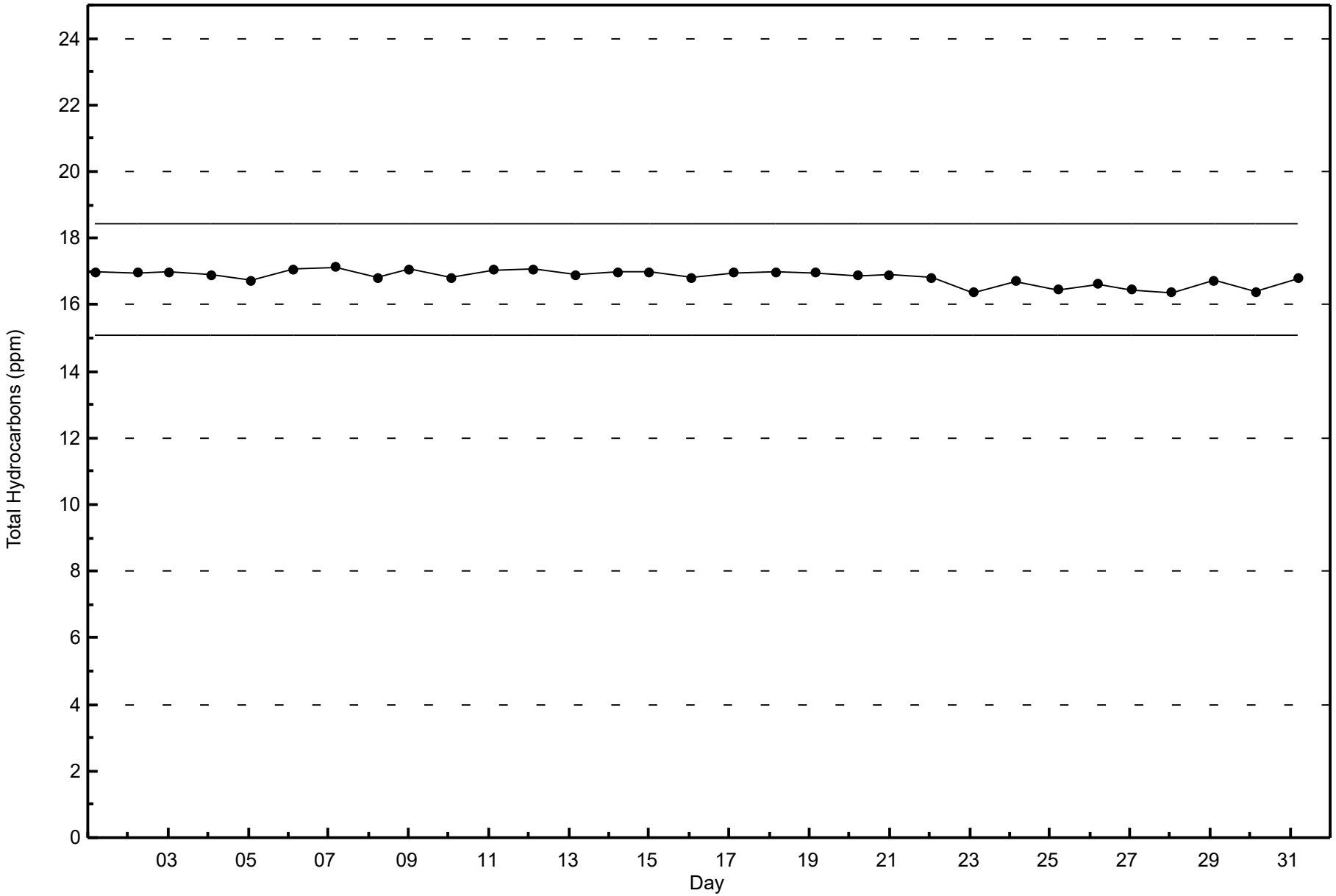


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Mannix - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Non Methane Hydrocarbons (NMHC) - ppm

## Mannix - August 2026

Maximum Value: 0.356 ppm on Aug 25 00:00

Maximum Daily Average: 0.034 ppm on Aug 25

Minimum Value: 0.000 ppm on Aug 2 23:00

Minimum Daily Average: 0.001 ppm on Aug 6

Maximum Diurnal Average: 0.019 ppm at hour 24

Minimum Diurnal Average: 0.002 ppm at hour 5

Monthly Average: 0.009 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.003 | 0.006 | 0.005 | 0.008 | Z | 0.006 | 0.005 | 0.008 | 0.045 | 0.077 | 0.013 | 0.033 | 0.072 | 0.011 | 0.027 | 0.101 | 0.089 | 0.013 | 0.013 | 0.014 | 0.017 | 0.032 | 0.009 | 0.021 | 0.027 | 0.101 |
| 2-Aug | 0.005 | 0.008 | 0.005 | 0.001 | 0.007 | Z | 0.003 | 0.003 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.008 |
| 3-Aug | Z | 0.001 | 0.003 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.003 | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 | 0.001 | 0.003 | 0.001 | 0.010 | 0.003 | 0.018 | 0.002 | 0.001 | 0.000 | 0.002 | 0.018 |
| 4-Aug | 0.002 | Z | 0.001 | 0.001 | 0.002 | 0.003 | 0.002 | 0.002 | 0.002 | 0.001 | 0.004 | 0.000 | 0.002 | 0.000 | 0.002 | 0.002 | 0.011 | 0.043 | 0.004 | 0.002 | 0.001 | 0.004 | 0.002 | 0.004 | 0.004 | 0.043 |
| 5-Aug | 0.002 | 0.002 | Z | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.002 | 0.004 | 0.003 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.005 | 0.003 | 0.001 | 0.004 | 0.002 | 0.001 | 0.000 | 0.001 | 0.002 | 0.005 |
| 6-Aug | 0.000 | 0.001 | 0.000 | Z | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 | 0.003 | 0.000 | 0.000 | 0.002 | 0.002 | 0.000 | 0.001 | 0.001 | 0.001 | 0.003 |
| 7-Aug | 0.001 | 0.002 | 0.000 | 0.000 | Z | 0.002 | 0.001 | 0.001 | 0.000 | 0.001 | 0.001 | 0.001 | 0.000 | 0.018 | 0.007 | 0.001 | 0.001 | 0.002 | 0.017 | 0.011 | 0.008 | 0.003 | 0.006 | 0.002 | 0.004 | 0.018 |
| 8-Aug | 0.003 | 0.001 | 0.004 | 0.001 | 0.002 | Z | 0.003 | 0.084 | 0.007 | 0.015 | 0.006 | 0.004 | 0.002 | 0.002 | 0.002 | 0.005 | 0.002 | 0.002 | 0.003 | 0.005 | 0.003 | 0.007 | 0.025 | 0.056 | 0.011 | 0.084 |
| 9-Aug | Z | 0.031 | 0.001 | 0.011 | 0.007 | 0.038 | 0.066 | 0.129 | 0.128 | 0.027 | 0.006 | 0.003 | 0.004 | 0.006 | 0.002 | 0.038 | 0.011 | 0.004 | 0.024 | 0.015 | 0.005 | 0.072 | 0.046 | 0.005 | 0.029 | 0.129 |
| 10-Aug | 0.002 | Z | 0.002 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.005 | 0.062 | 0.110 | 0.014 | 0.010 | 0.001 | 0.032 | 0.002 | 0.010 | 0.017 | 0.024 | 0.071 | 0.017 | 0.035 | 0.002 | 0.001 | 0.019 | 0.110 |
| 11-Aug | 0.001 | 0.002 | Z | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.006 | 0.011 | 0.001 | 0.007 | 0.004 | 0.002 | 0.002 | 0.005 | 0.003 | 0.007 | 0.031 | 0.042 | 0.024 | 0.001 | 0.010 | 0.007 | 0.042 |
| 12-Aug | 0.006 | 0.001 | 0.001 | Z | 0.002 | 0.005 | 0.000 | 0.001 | 0.000 | 0.002 | 0.003 | 0.001 | 0.012 | 0.000 | 0.005 | 0.018 | 0.004 | 0.004 | 0.005 | 0.007 | 0.007 | 0.002 | 0.012 | 0.004 | 0.004 | 0.018 |
| 13-Aug | 0.016 | 0.023 | 0.103 | 0.055 | Z | 0.037 | 0.072 | 0.006 | 0.000 | 0.006 | 0.011 | 0.007 | 0.008 | 0.008 | 0.014 | 0.008 | 0.111 | 0.006 | 0.026 | 0.065 | 0.048 | 0.006 | 0.001 | 0.001 | 0.028 | 0.111 |
| 14-Aug | 0.001 | 0.001 | 0.001 | 0.002 | 0.014 | Z | 0.023 | 0.071 | 0.003 | 0.010 | 0.019 | 0.013 | 0.005 | 0.002 | 0.015 | 0.002 | 0.001 | 0.000 | 0.000 | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 | 0.008 | 0.071 |
| 15-Aug | Z | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | 0.003 | 0.002 | 0.001 | 0.001 | 0.002 | 0.001 | 0.003 | 0.002 | 0.002 | 0.002 | 0.001 | 0.003 | 0.001 | 0.000 | 0.001 | 0.003 |
| 16-Aug | 0.000 | Z | 0.001 | 0.003 | 0.001 | 0.001 | 0.004 | 0.007 | 0.001 | 0.002 | 0.001 | 0.005 | 0.003 | 0.002 | 0.000 | 0.001 | 0.001 | 0.003 | 0.008 | 0.010 | 0.018 | 0.003 | 0.001 | 0.001 | 0.003 | 0.018 |
| 17-Aug | 0.001 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 | 0.004 | 0.007 | 0.012 | 0.002 | 0.001 | 0.003 | 0.002 | 0.001 | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 | 0.002 | 0.012 |
| 18-Aug | 0.002 | 0.000 | 0.001 | Z | 0.002 | 0.001 | 0.001 | 0.001 | 0.003 | 0.006 | 0.003 | 0.006 | 0.003 | 0.001 | 0.002 | 0.001 | 0.000 | 0.001 | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 | 0.002 | 0.002 | 0.006 |
| 19-Aug | 0.001 | 0.002 | 0.001 | 0.001 | Z | 0.002 | 0.001 | 0.002 | 0.002 | 0.001 | C | C | C | C | 0.002 | 0.003 | 0.003 | 0.002 | 0.008 | 0.047 | 0.054 | 0.021 | 0.006 | 0.034 | 0.010 | 0.054 |
| 20-Aug | 0.042 | 0.003 | 0.006 | 0.052 | 0.008 | Z | 0.001 | 0.001 | 0.002 | 0.014 | 0.063 | 0.009 | 0.004 | 0.001 | 0.004 | 0.006 | 0.003 | 0.010 | 0.020 | 0.010 | 0.021 | 0.002 | 0.024 | 0.003 | 0.013 | 0.063 |
| 21-Aug | Z | 0.002 | 0.002 | 0.002 | 0.002 | 0.001 | 0.002 | 0.002 | 0.003 | 0.007 | 0.002 | 0.002 | M | 0.000 | 0.001 | 0.004 | 0.001 | 0.001 | 0.002 | 0.005 | 0.004 | 0.003 | 0.001 | 0.001 | 0.002 | 0.007 |
| 22-Aug | 0.001 | Z | 0.001 | 0.002 | 0.001 | 0.001 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 | 0.002 | 0.003 | 0.003 | 0.005 | 0.008 | 0.008 | 0.010 | 0.011 | 0.009 | 0.004 | 0.002 | 0.002 | 0.004 | 0.011 |
| 23-Aug | 0.002 | 0.003 | Z | 0.002 | 0.002 | 0.001 | 0.001 | 0.007 | 0.004 | 0.005 | 0.010 | 0.007 | 0.020 | 0.017 | 0.023 | 0.025 | 0.030 | 0.036 | 0.013 | 0.009 | 0.007 | 0.009 | 0.005 | 0.023 | 0.011 | 0.036 |
| 24-Aug | 0.004 | 0.007 | 0.004 | Z | 0.002 | 0.004 | 0.001 | 0.001 | 0.003 | 0.002 | 0.006 | 0.003 | 0.000 | 0.001 | 0.000 | 0.011 | 0.008 | 0.017 | 0.017 | 0.013 | 0.008 | 0.002 | 0.003 | 0.356 | 0.021 | 0.356 |
| 25-Aug | 0.097 | 0.008 | 0.008 | 0.143 | Z | 0.091 | 0.070 | 0.056 | 0.079 | 0.023 | 0.003 | 0.004 | 0.017 | 0.013 | 0.007 | 0.004 | 0.003 | 0.003 | 0.012 | 0.040 | 0.059 | 0.046 | 0.003 | 0.002 | 0.034 | 0.143 |
| 26-Aug | 0.002 | 0.001 | 0.000 | 0.001 | 0.001 | Z | 0.001 | 0.001 | 0.002 | 0.002 | 0.001 | 0.003 | 0.003 | 0.002 | 0.002 | 0.003 | 0.002 | 0.003 | 0.004 | 0.003 | 0.004 | 0.003 | 0.003 | 0.002 | 0.002 | 0.004 |
| 27-Aug | Z | 0.004 | 0.002 | 0.002 | 0.003 | 0.002 | 0.001 | 0.003 | 0.002 | 0.001 | 0.001 | 0.002 | 0.002 | 0.014 | 0.003 | 0.009 | 0.018 | 0.056 | 0.002 | 0.008 | 0.004 | 0.002 | 0.003 | 0.001 | 0.006 | 0.056 |
| 28-Aug | 0.001 | Z | 0.001 | 0.002 | 0.001 | 0.013 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.002 | 0.013 | 0.020 | 0.014 | 0.009 | 0.005 | 0.003 | 0.002 | 0.004 | 0.020 |
| 29-Aug | 0.001 | 0.001 | Z | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | 0.001 | 0.001 | 0.001 | 0.003 | 0.001 | 0.002 | 0.003 | 0.004 | 0.001 | 0.004 |
| 30-Aug | 0.002 | 0.001 | 0.001 | Z | 0.001 | 0.001 | 0.003 | 0.001 | 0.003 | 0.001 | 0.003 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.000 | 0.001 | 0.002 | 0.002 | 0.006 | 0.006 | 0.015 | 0.002 | 0.015 |
| 31-Aug | 0.006 | 0.025 | 0.008 | 0.004 | Z | 0.001 | 0.001 | 0.001 | 0.012 | 0.008 | 0.005 | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 | 0.000 | 0.001 | 0.001 | 0.003 | 0.001 | 0.053 | 0.073 | 0.029 | 0.010 | 0.073 |
| | 0.008 | 0.005 | 0.006 | 0.011 | 0.002 | 0.008 | 0.009 | 0.013 | 0.010 | 0.009 | 0.010 | 0.004 | 0.007 | 0.004 | 0.005 | 0.008 | 0.011 | 0.008 | 0.008 | 0.013 | 0.012 | 0.011 | 0.008 | 0.019 | Diurnal Average | |
| | 0.097 | 0.031 | 0.103 | 0.143 | 0.014 | 0.091 | 0.072 | 0.129 | 0.128 | 0.077 | 0.110 | 0.033 | 0.072 | 0.018 | 0.032 | 0.101 | 0.111 | 0.056 | 0.026 | 0.071 | 0.059 | 0.072 | 0.073 | 0.356 | Diurnal Maximum | |

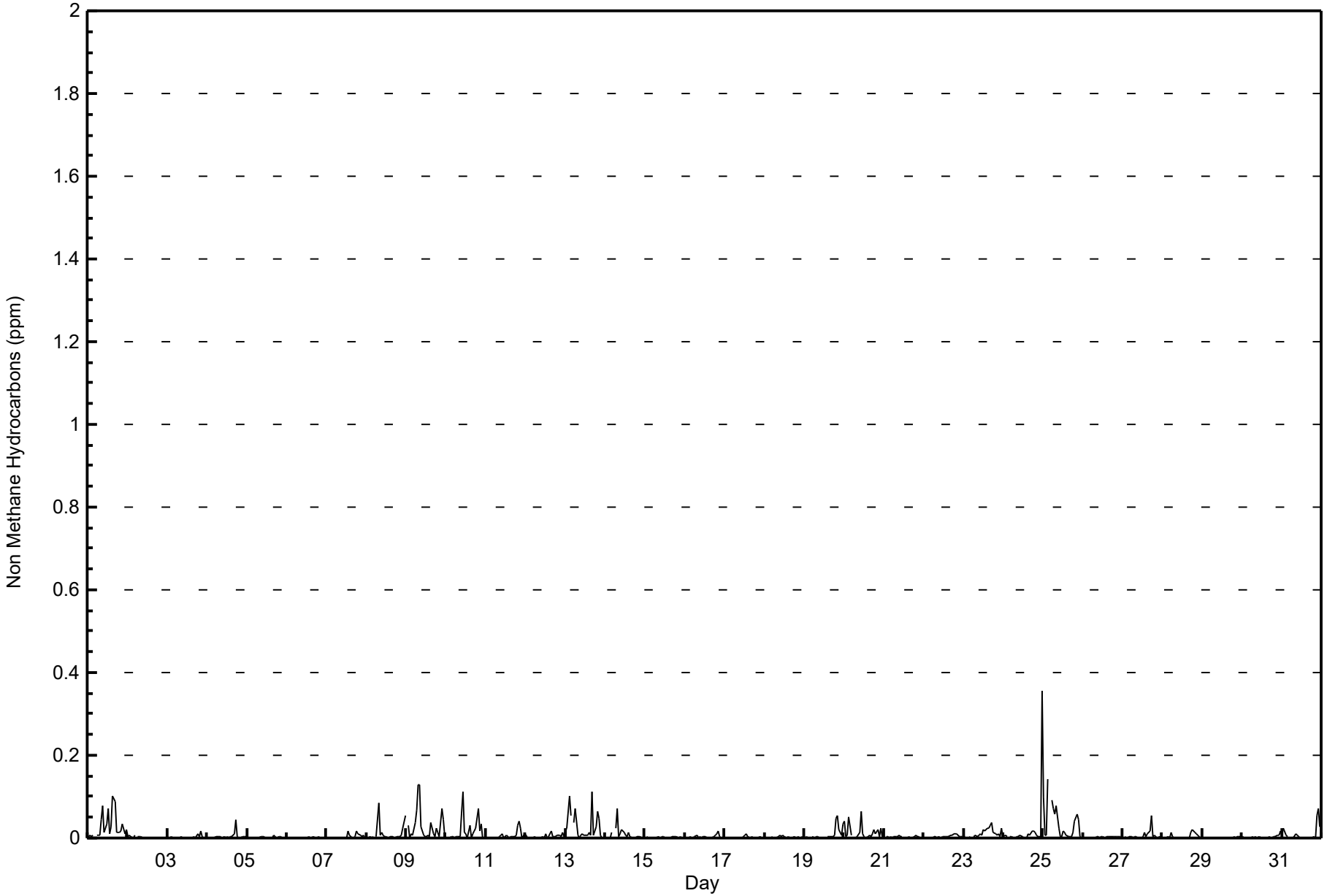
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Mannix - August 2026**



# Non Methane Hydrocarbons (NMHC) - ppm

## Mannix - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 512 | 72.32 | 72.32 |
| 0.006 - 0.05 | 167 | 23.59 | 95.90 |
| 0.06 - 0.1 | 28 | 3.95 | 99.86 |
| > 0.1 | 1 | 0.14 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Mannix - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 44 | 4 | 5 | 0 | 0 | 6 | 9 | 101 | 51 | 33 | 35 | 45 | 31 | 66 | 36 | 46 | 512 |
| 0.006 - 0.05 | 26 | 29 | 16 | 5 | 4 | 3 | 7 | 10 | 8 | 5 | 2 | 6 | 12 | 3 | 14 | 17 | 167 |
| 0.06 - 0.1 | 2 | 7 | 6 | 2 | 1 | 3 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 28 |
| > 0.1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 72 | 41 | 27 | 7 | 5 | 12 | 18 | 111 | 59 | 38 | 38 | 52 | 44 | 69 | 51 | 64 | 708 |

Total Number of Valid Hours: 708

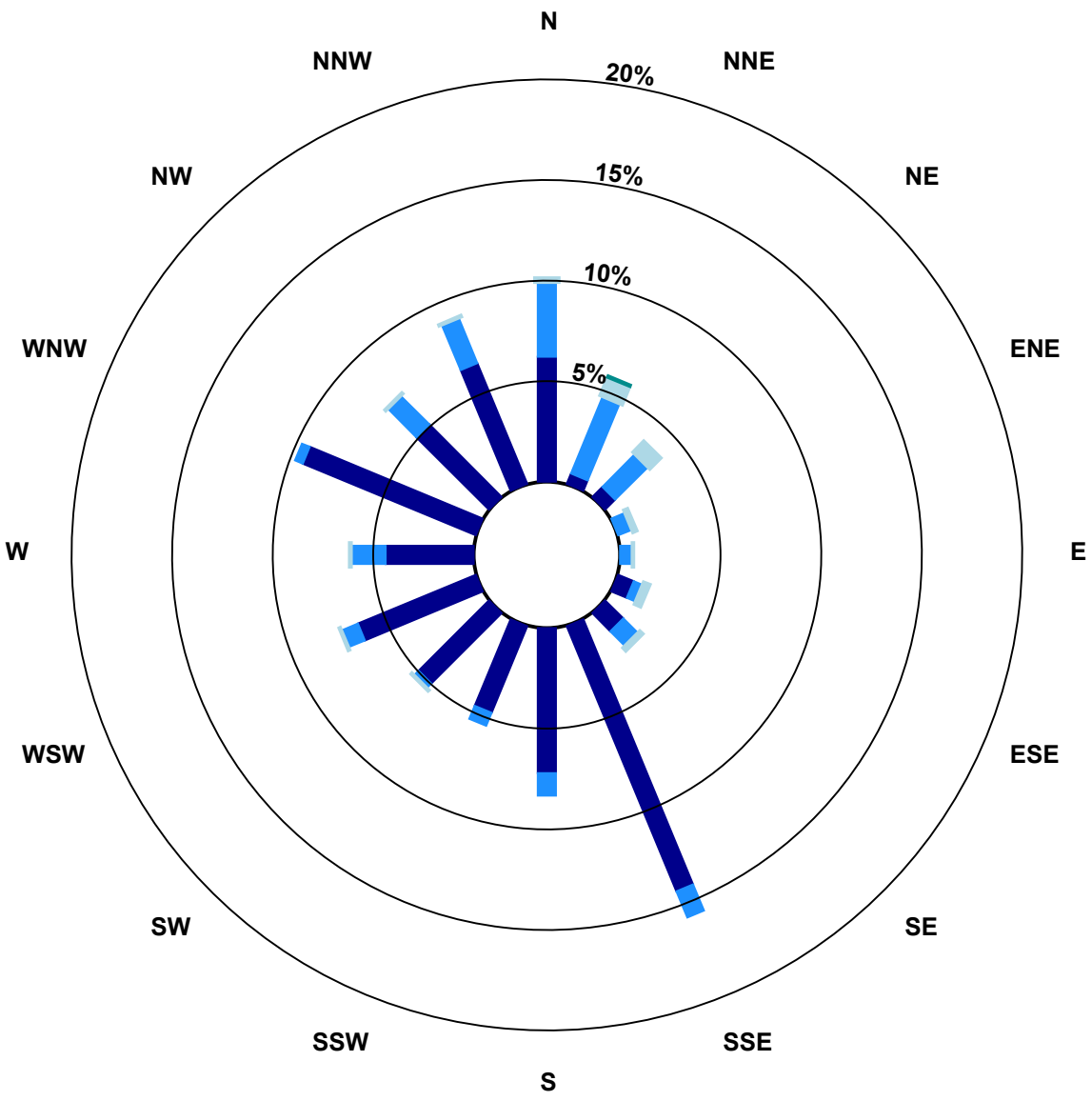
Total Number of Hours: 744

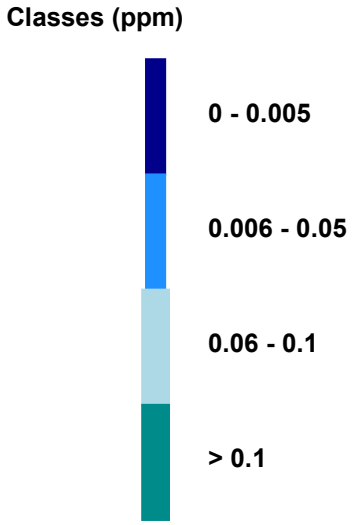
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Mannix



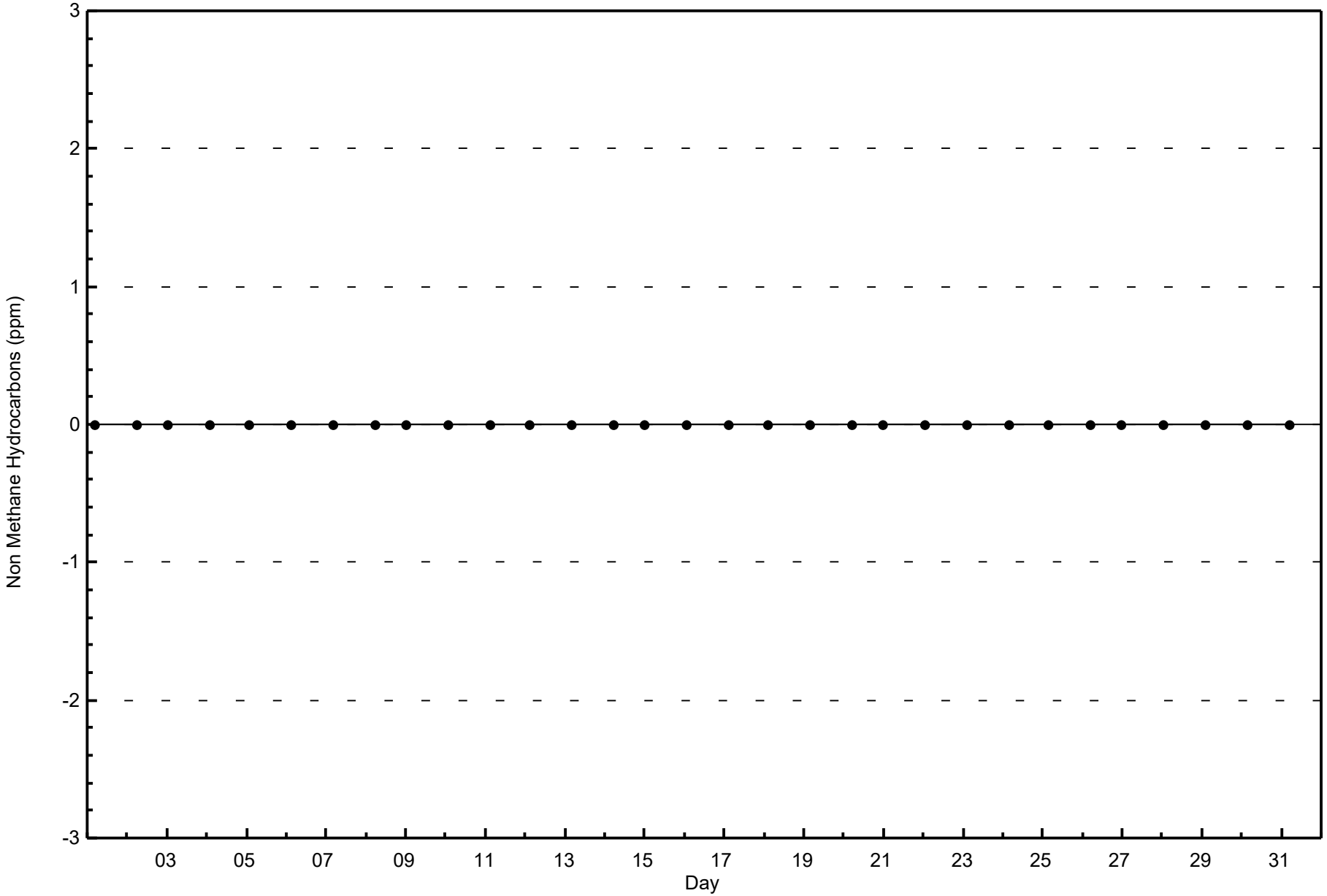

Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Mannix - August 2026**

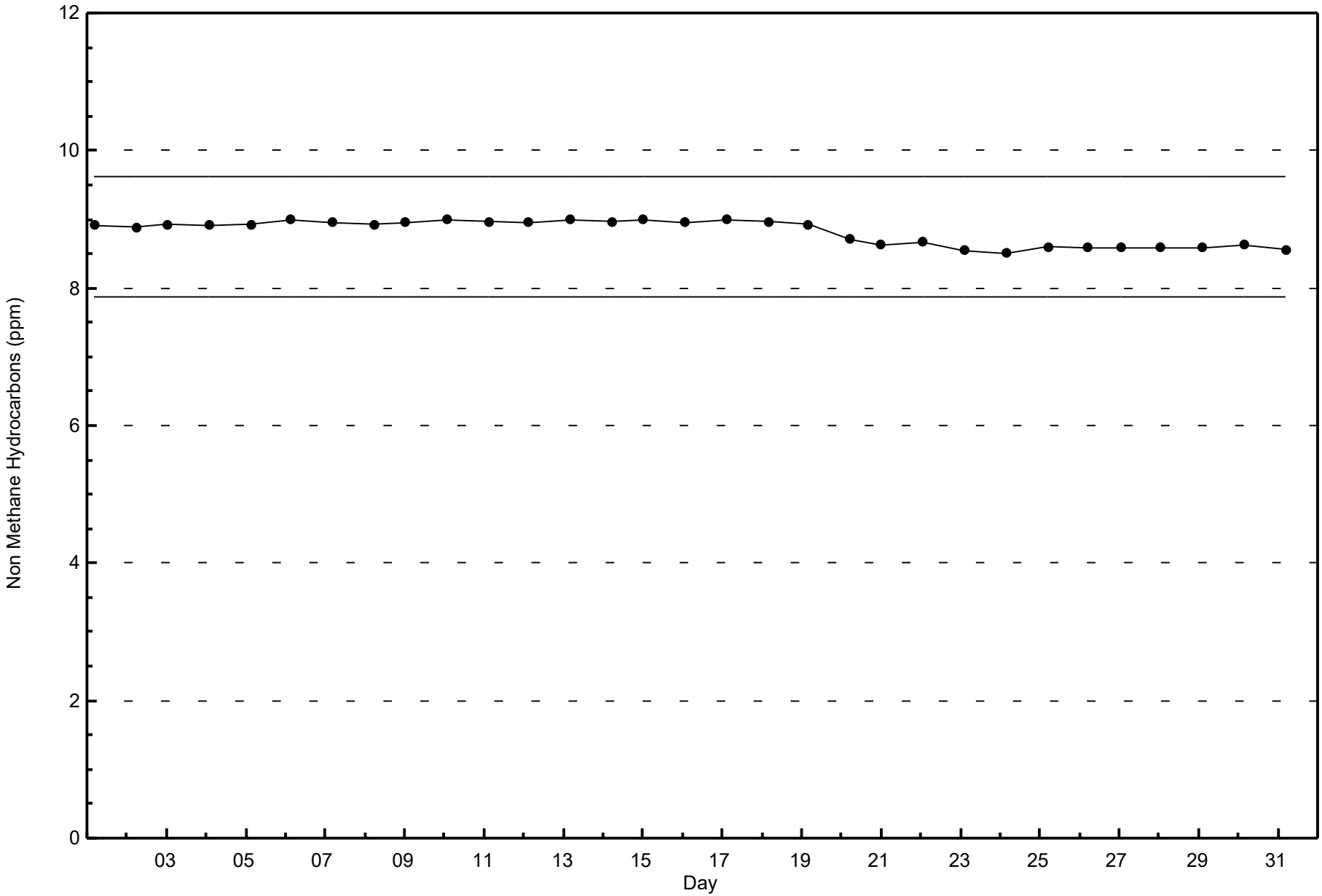


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Mannix - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.2 ppm on Aug 24 03:00
Maximum Daily Average: 2.4 ppm on Aug 24

Minimum Value: 1.9 ppm on Aug 28 13:00
Minimum Daily Average: 2.0 ppm on Aug 6
Maximum Diurnal Average: 2.3 ppm at hour 5
Minimum Diurnal Average: 2.1 ppm at hour 15
Monthly Average: 2.16 ppm
Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.4 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.9 | 2.6 | 2.5 | 2.3 | 2.1 | 2.1 | 2.2 | 2.1 | 2.0 | 2.1 | 2.4 | 2.9 | 2.2 | 2.3 | 2.2 | 2.3 | 2.9 |
| 2-Aug | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.4 |
| 3-Aug | Z | 2.2 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 |
| 4-Aug | 2.2 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.4 | 2.4 | 2.1 | 2.4 |
| 5-Aug | 2.2 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.3 |
| 6-Aug | 2.1 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 |
| 7-Aug | 2.1 | 2.6 | 2.0 | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.6 |
| 8-Aug | 2.1 | 2.2 | 2.3 | 2.4 | 2.4 | Z | 2.6 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.6 |
| 9-Aug | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | 2.5 | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.5 | 2.4 | 2.3 | 2.6 |
| 10-Aug | 2.2 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.3 | 2.4 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.4 | 2.2 | 2.5 |
| 11-Aug | 2.4 | 2.4 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.6 |
| 12-Aug | 2.5 | 2.3 | 2.7 | Z | 3.0 | 2.5 | 2.6 | 2.5 | 2.2 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 3.0 |
| 13-Aug | 2.2 | 2.2 | 2.1 | 2.1 | Z | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 14-Aug | 2.2 | 2.3 | 2.3 | 2.5 | 2.5 | Z | 2.4 | 2.4 | 2.6 | 2.6 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.6 |
| 15-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 16-Aug | 2.1 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 17-Aug | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 18-Aug | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 19-Aug | 2.1 | 2.0 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | C | C | C | C | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.5 | 2.2 | 2.5 |
| 20-Aug | 2.2 | 2.2 | 2.1 | 2.3 | 2.5 | Z | 2.2 | 2.2 | 2.3 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 | 2.0 | 2.2 | 2.2 | 2.6 |
| 21-Aug | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 22-Aug | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 23-Aug | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.3 | 2.5 | 2.7 | 2.3 | 2.5 | 2.3 | 2.7 |
| 24-Aug | 2.4 | 3.2 | 3.2 | Z | 2.6 | 2.9 | 3.2 | 2.8 | 2.3 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 | 2.2 | 2.6 | 2.4 | 3.2 |
| 25-Aug | 2.4 | 2.5 | 2.5 | 2.5 | Z | 2.3 | 2.3 | 2.6 | 2.4 | 2.5 | 2.4 | 2.2 | 2.3 | 2.3 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.3 | 2.2 | 2.3 | 2.6 |
| 26-Aug | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 27-Aug | Z | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 28-Aug | 2.0 | Z | 2.0 | 2.2 | 2.3 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 30-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 | 2.3 |
| 31-Aug | 2.5 | 2.4 | 2.4 | 2.5 | Z | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.5 | 2.4 | 2.2 | 2.5 |
| | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | Diurnal Average | |
| | 2.5 | 3.2 | 3.2 | 2.5 | 3.0 | 2.9 | 3.2 | 2.8 | 2.6 | 2.9 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.4 | 2.9 | 2.7 | 2.5 | 2.6 | Diurnal Maximum | |

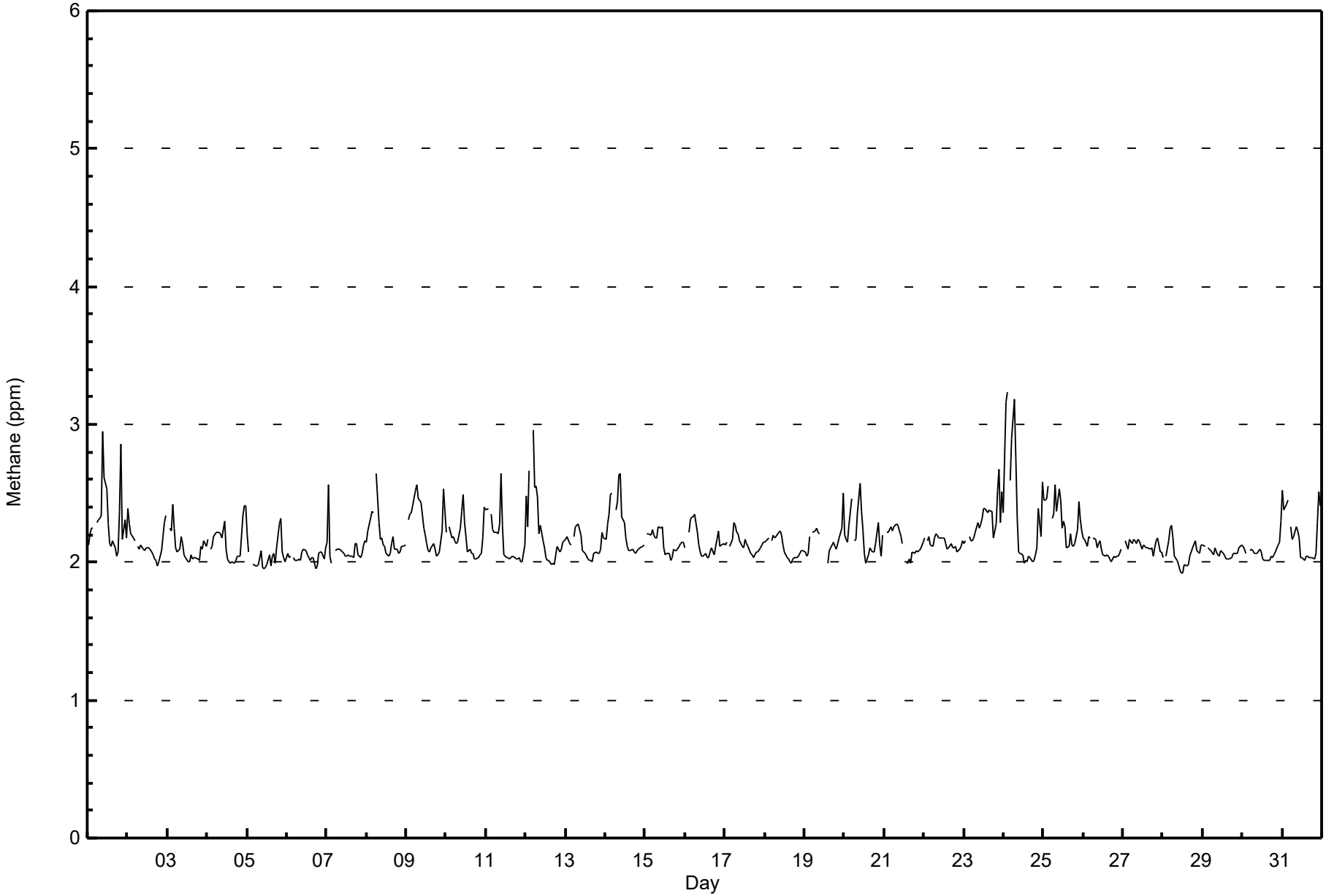
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Mannix - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 162 | 22.88 | 22.88 |
| 2.1 - 3.0 | 543 | 76.69 | 99.58 |
| 3.1 - 10.0 | 3 | 0.42 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Mannix - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 23 | 13 | 7 | 2 | 0 | 2 | 1 | 14 | 6 | 4 | 12 | 20 | 10 | 24 | 5 | 19 | 162 |
| 2.1 - 3.0 | 49 | 28 | 20 | 5 | 5 | 10 | 17 | 97 | 53 | 34 | 26 | 32 | 34 | 45 | 43 | 45 | 543 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 72 | 41 | 27 | 7 | 5 | 12 | 18 | 111 | 59 | 38 | 38 | 52 | 44 | 69 | 51 | 64 | 708 |

Total Number of Valid Hours: 708

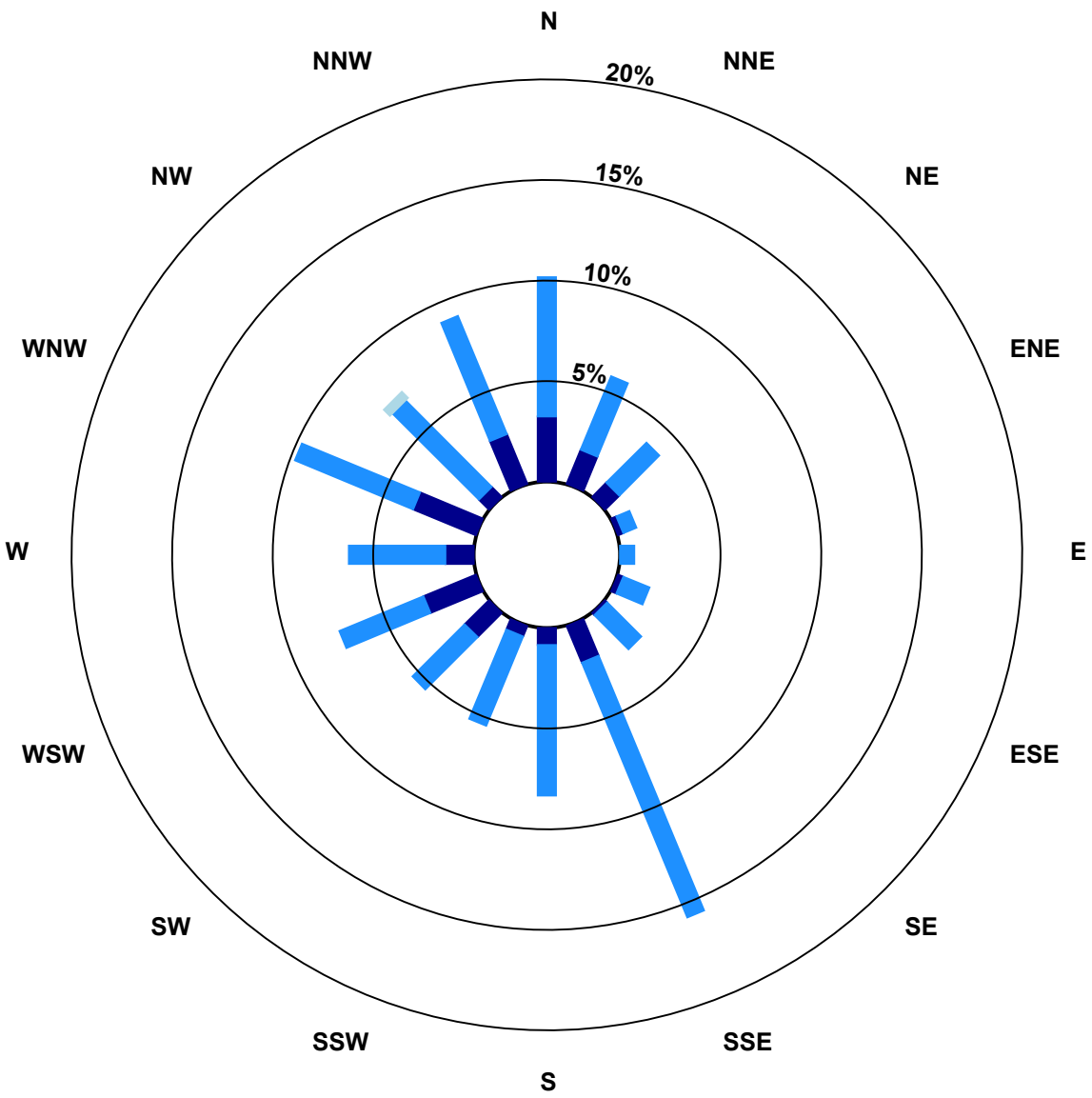
Total Number of Hours: 744

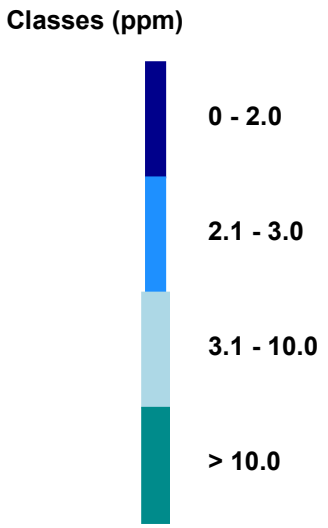
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Mannix



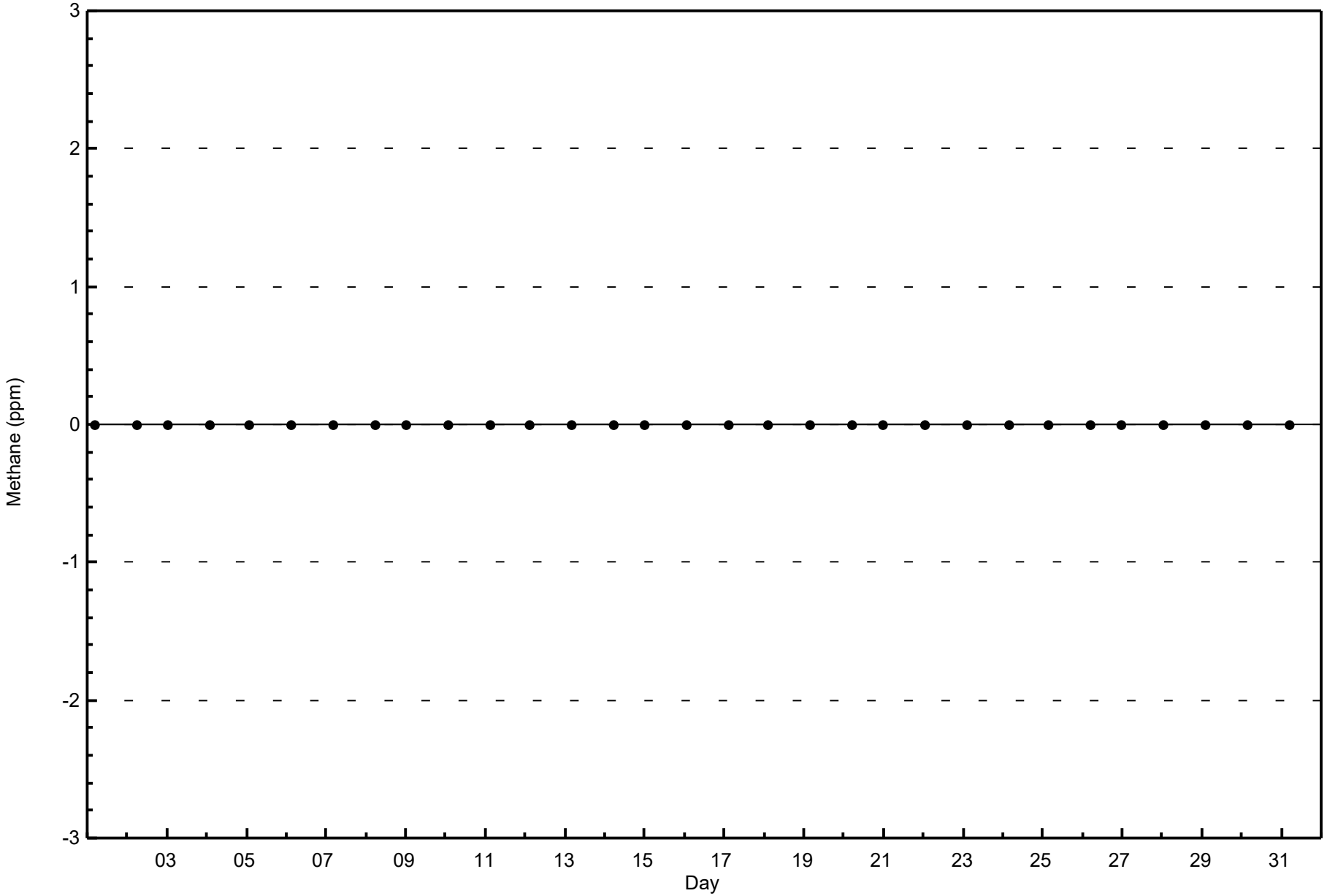

Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Mannix - August 2026**

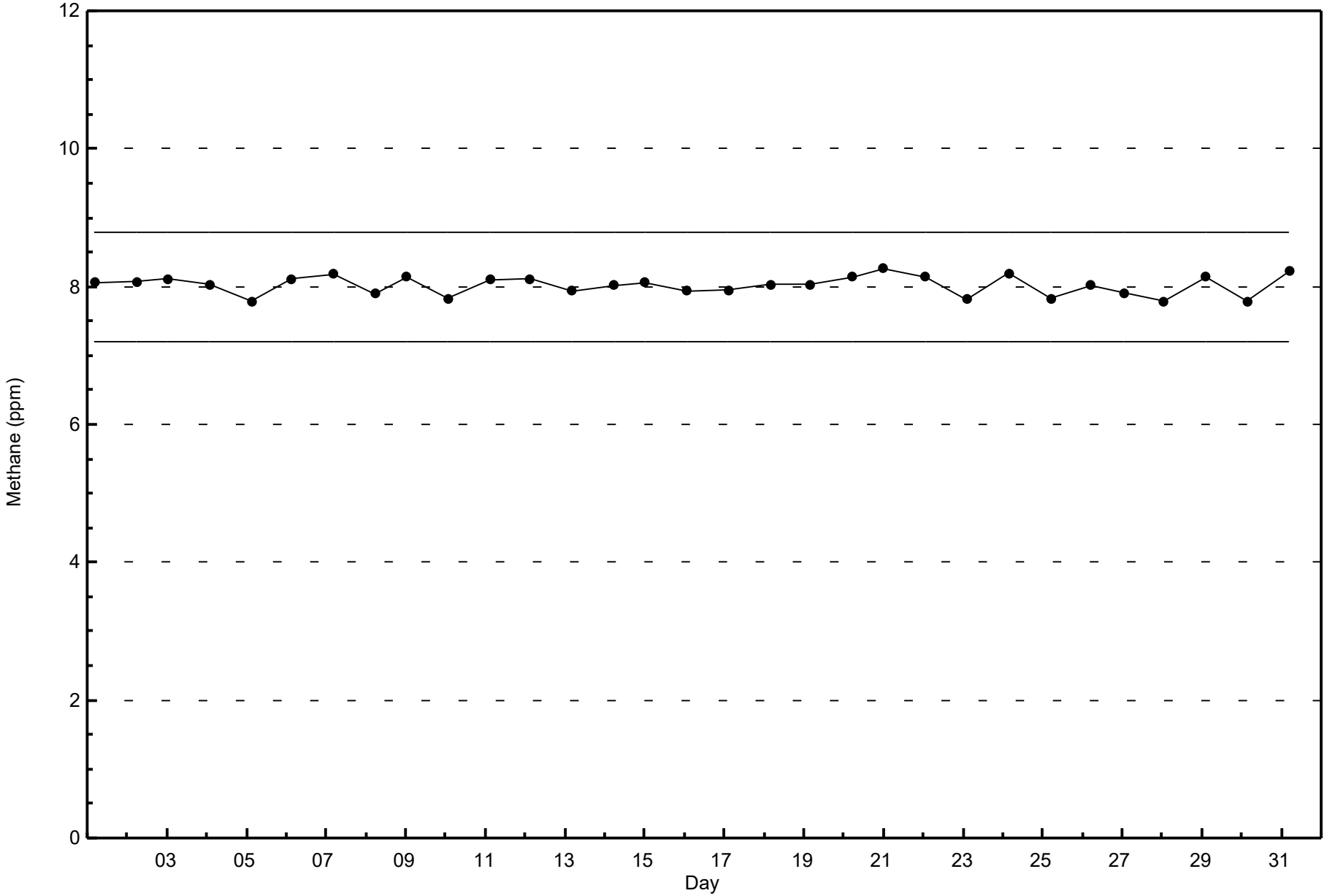


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Mannix - August 2026**



Maximum Value: 28.9 C on Aug 26 15:00

Maximum Daily Average: 21.4 C on Aug 27

Minimum Value: 6.1 C on Aug 17 06:00

Minimum Daily Average: 13.0 C on Aug 12

Maximum Diurnal Average: 22.4 C at hour 15

Minimum Diurnal Average: 11.8 C at hour 5

Monthly Average: 16.90 C

Percentiles: $P_1$ = 8.0 $P_{10}$ = 10.8 $Q_1$ = 13.1 Median = 16.2 $Q_3$ = 20.5 $P_{90}$ = 23.9 $P_{99}$ = 27.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

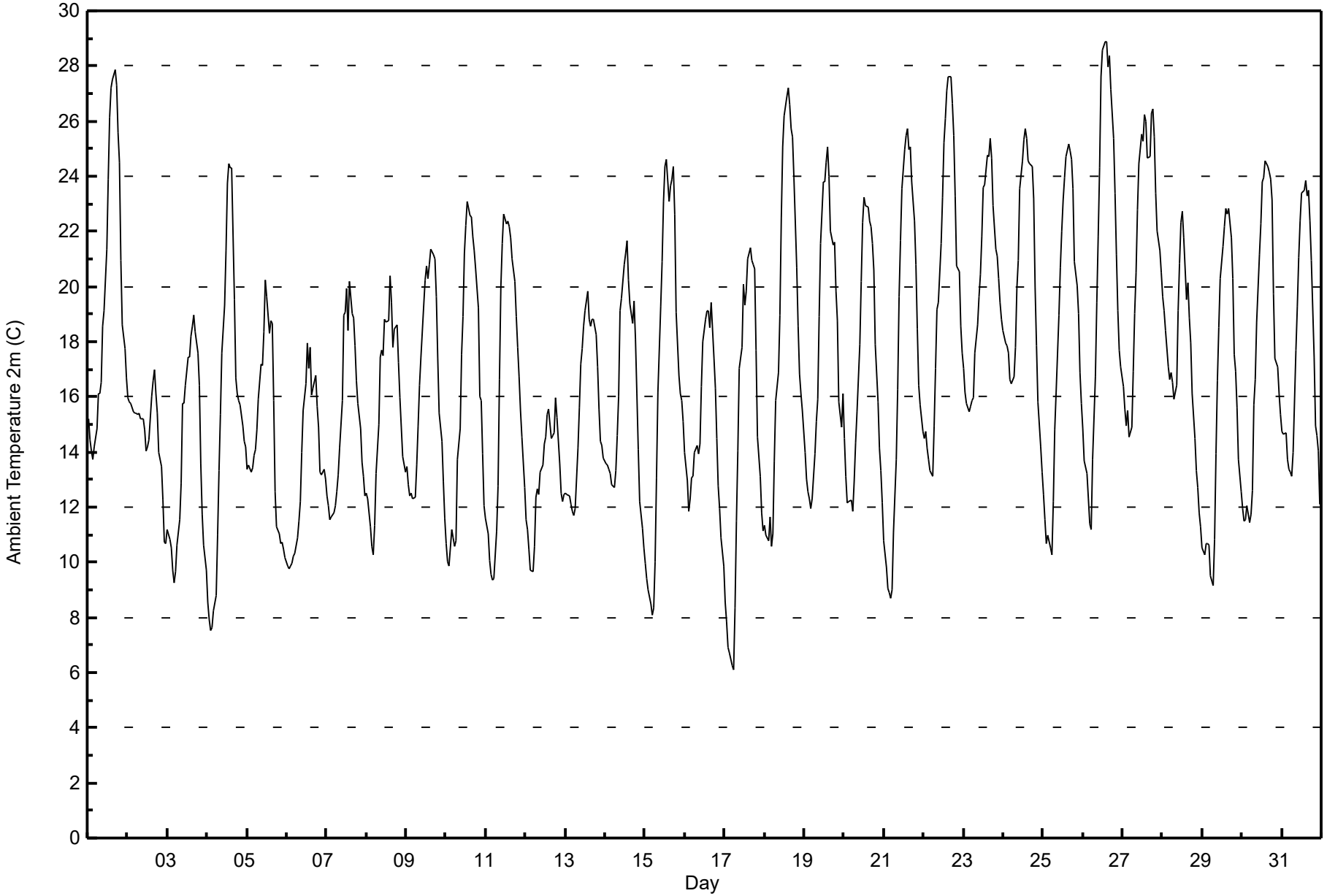
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.2 | 14.4 | 14.0 | 13.7 | 14.2 | 14.8 | 16.1 | 16.1 | 16.5 | 18.5 | 19.1 | 21.3 | 23.9 | 26.1 | 27.2 | 27.5 | 27.8 | 27.3 | 25.6 | 24.5 | 20.9 | 18.6 | 17.7 | 16.7 | 19.9 | 27.8 |
| 2-Aug | 16.0 | 15.8 | 15.8 | 15.5 | 15.4 | 15.4 | 15.3 | 15.4 | 15.2 | 15.2 | 14.8 | 14.1 | 14.2 | 14.4 | 16.0 | 16.6 | 17.0 | 16.1 | 15.4 | 14.0 | 13.5 | 12.3 | 10.7 | 10.7 | 14.8 | 17.0 |
| 3-Aug | 11.2 | 10.8 | 10.5 | 9.7 | 9.3 | 9.7 | 10.6 | 11.5 | 12.9 | 15.8 | 15.8 | 16.4 | 17.5 | 17.5 | 18.2 | 18.5 | 18.9 | 18.3 | 17.6 | 16.4 | 13.6 | 11.7 | 10.6 | 9.7 | 13.9 | 18.9 |
| 4-Aug | 8.6 | 7.9 | 7.5 | 7.6 | 8.2 | 8.8 | 11.0 | 13.3 | 15.4 | 17.6 | 19.3 | 21.3 | 23.7 | 24.5 | 24.3 | 24.3 | 19.5 | 16.7 | 16.1 | 15.9 | 15.7 | 14.9 | 14.4 | 14.2 | 15.5 | 24.5 |
| 5-Aug | 13.4 | 13.5 | 13.3 | 13.4 | 13.9 | 14.1 | 14.8 | 15.9 | 17.2 | 17.2 | 18.3 | 20.2 | 19.6 | 18.3 | 18.8 | 18.7 | 15.9 | 12.5 | 11.3 | 11.0 | 10.7 | 10.7 | 10.5 | 10.2 | 14.7 | 20.2 |
| 6-Aug | 9.8 | 9.8 | 9.9 | 10.0 | 10.2 | 10.3 | 10.9 | 11.5 | 12.2 | 14.0 | 15.5 | 16.5 | 18.0 | 17.0 | 17.8 | 16.1 | 16.3 | 16.8 | 15.7 | 14.9 | 13.3 | 13.2 | 13.4 | 13.0 | 13.6 | 18.0 |
| 7-Aug | 12.4 | 12.1 | 11.5 | 11.6 | 11.8 | 12.0 | 12.6 | 13.2 | 14.1 | 15.9 | 19.0 | 19.1 | 19.9 | 18.4 | 20.2 | 19.0 | 18.8 | 17.9 | 16.6 | 15.8 | 14.8 | 13.7 | 13.1 | 12.4 | 15.2 | 20.2 |
| 8-Aug | 12.5 | 12.3 | 11.3 | 10.6 | 10.3 | 11.3 | 13.2 | 15.0 | 17.5 | 17.7 | 17.5 | 18.8 | 18.7 | 18.8 | 20.4 | 19.4 | 17.8 | 18.5 | 18.6 | 17.2 | 16.0 | 14.9 | 13.8 | 13.3 | 15.6 | 20.4 |
| 9-Aug | 13.5 | 12.8 | 12.4 | 12.5 | 12.3 | 12.4 | 13.5 | 15.0 | 16.4 | 17.4 | 19.3 | 20.2 | 20.8 | 20.3 | 20.8 | 21.4 | 21.2 | 21.0 | 19.6 | 17.4 | 15.4 | 14.4 | 12.9 | 11.6 | 16.4 | 21.4 |
| 10-Aug | 10.7 | 10.0 | 9.9 | 11.2 | 10.9 | 10.6 | 10.8 | 13.7 | 14.8 | 17.6 | 18.9 | 21.2 | 22.2 | 23.1 | 22.6 | 22.5 | 21.8 | 21.3 | 20.6 | 19.2 | 16.0 | 15.9 | 13.9 | 12.1 | 16.3 | 23.1 |
| 11-Aug | 11.6 | 11.0 | 10.1 | 9.6 | 9.3 | 9.4 | 11.1 | 12.8 | 16.7 | 20.0 | 21.6 | 22.6 | 22.3 | 22.4 | 22.2 | 21.8 | 21.0 | 20.2 | 18.9 | 17.8 | 16.7 | 15.5 | 14.5 | 12.7 | 16.3 | 22.6 |
| 12-Aug | 11.5 | 11.2 | 10.5 | 9.7 | 9.7 | 10.6 | 12.4 | 12.6 | 12.5 | 13.3 | 13.5 | 14.3 | 14.6 | 15.4 | 15.6 | 14.5 | 14.6 | 14.7 | 16.0 | 15.3 | 13.6 | 12.5 | 12.2 | 12.4 | 13.0 | 16.0 |
| 13-Aug | 12.5 | 12.5 | 12.4 | 12.1 | 11.8 | 11.7 | 12.0 | 14.1 | 15.6 | 17.2 | 17.8 | 18.5 | 19.1 | 19.8 | 18.8 | 18.6 | 18.8 | 18.8 | 18.2 | 17.1 | 15.5 | 14.4 | 14.2 | 13.8 | 15.6 | 19.8 |
| 14-Aug | 13.6 | 13.5 | 13.4 | 13.2 | 12.8 | 12.7 | 13.3 | 14.6 | 16.0 | 19.1 | 19.6 | 20.8 | 21.2 | 21.7 | 20.2 | 19.4 | 18.6 | 19.5 | 18.1 | 16.1 | 14.1 | 12.2 | 11.2 | 10.5 | 16.1 | 21.7 |
| 15-Aug | 10.0 | 9.4 | 9.0 | 8.5 | 8.1 | 8.3 | 10.0 | 13.0 | 16.2 | 19.3 | 20.9 | 23.1 | 24.4 | 24.6 | 23.1 | 23.7 | 23.9 | 24.4 | 22.6 | 19.0 | 16.8 | 16.1 | 15.9 | 15.1 | 16.9 | 24.6 |
| 16-Aug | 14.0 | 12.9 | 11.8 | 12.3 | 13.1 | 13.1 | 14.0 | 14.2 | 13.9 | 14.3 | 16.4 | 18.0 | 18.8 | 19.1 | 19.1 | 18.5 | 19.4 | 17.4 | 16.3 | 14.5 | 12.7 | 12.0 | 10.9 | 9.9 | 14.9 | 19.4 |
| 17-Aug | 8.5 | 7.8 | 6.9 | 6.7 | 6.3 | 6.1 | 8.3 | 11.5 | 14.0 | 17.0 | 17.8 | 20.1 | 19.3 | 19.8 | 21.0 | 21.4 | 21.0 | 20.8 | 20.6 | 17.7 | 14.5 | 13.1 | 11.8 | 11.1 | 14.3 | 21.4 |
| 18-Aug | 11.4 | 11.0 | 10.8 | 11.6 | 10.6 | 11.0 | 13.7 | 15.8 | 16.9 | 19.0 | 22.5 | 25.1 | 26.2 | 26.9 | 27.2 | 26.6 | 25.7 | 25.4 | 24.0 | 20.7 | 18.6 | 16.8 | 16.1 | 15.5 | 18.7 | 27.2 |
| 19-Aug | 14.0 | 13.0 | 12.5 | 12.3 | 12.0 | 12.3 | 13.9 | 15.1 | 15.9 | 18.9 | 21.6 | 23.8 | 23.8 | 24.5 | 25.1 | 24.0 | 22.0 | 21.5 | 21.6 | 19.8 | 18.7 | 15.8 | 14.9 | 16.1 | 18.1 | 25.1 |
| 20-Aug | 14.5 | 13.1 | 12.2 | 12.2 | 12.2 | 11.9 | 13.0 | 14.3 | 15.4 | 17.9 | 20.2 | 22.3 | 23.2 | 22.9 | 22.9 | 22.4 | 22.2 | 21.5 | 20.6 | 17.9 | 15.8 | 14.2 | 13.3 | 12.2 | 17.0 | 23.2 |
| 21-Aug | 10.8 | 9.8 | 9.1 | 8.9 | 8.7 | 9.0 | 11.1 | 13.7 | 16.3 | 19.6 | 21.7 | 23.5 | 25.0 | 25.5 | 25.7 | 25.0 | 25.1 | 23.8 | 22.4 | 20.8 | 18.4 | 16.4 | 15.7 | 14.7 | 17.5 | 25.7 |
| 22-Aug | 14.5 | 14.8 | 14.1 | 13.7 | 13.3 | 13.1 | 14.9 | 17.0 | 19.2 | 19.4 | 21.6 | 23.2 | 25.2 | 26.1 | 27.1 | 27.6 | 27.6 | 26.6 | 25.5 | 23.3 | 20.8 | 20.5 | 18.6 | 17.6 | 20.2 | 27.6 |
| 23-Aug | 17.0 | 16.1 | 15.7 | 15.5 | 15.7 | 15.9 | 16.0 | 17.6 | 18.6 | 19.6 | 20.4 | 21.8 | 23.6 | 23.7 | 24.8 | 24.7 | 25.4 | 24.7 | 22.9 | 21.4 | 21.1 | 20.3 | 19.4 | 18.8 | 20.0 | 25.4 |
| 24-Aug | 18.4 | 18.0 | 17.8 | 17.6 | 16.6 | 16.5 | 16.7 | 17.8 | 19.9 | 21.0 | 23.6 | 24.6 | 25.3 | 25.7 | 25.4 | 24.5 | 24.5 | 24.4 | 23.2 | 20.0 | 17.9 | 15.8 | 14.2 | 13.3 | 20.1 | 25.7 |
| 25-Aug | 12.5 | 11.6 | 10.7 | 11.0 | 10.5 | 10.2 | 12.2 | 14.8 | 16.2 | 19.0 | 20.7 | 22.0 | 23.1 | 24.0 | 24.7 | 25.1 | 24.9 | 24.6 | 23.6 | 20.9 | 20.0 | 19.0 | 16.9 | 15.8 | 18.1 | 25.1 |
| 26-Aug | 14.8 | 13.7 | 13.2 | 12.3 | 11.4 | 11.2 | 13.7 | 16.7 | 19.4 | 21.8 | 24.3 | 27.6 | 28.6 | 28.9 | 28.9 | 28.0 | 28.4 | 27.2 | 25.4 | 23.4 | 21.2 | 19.1 | 17.7 | 17.1 | 20.6 | 28.9 |
| 27-Aug | 16.4 | 15.5 | 14.9 | 15.5 | 14.6 | 14.9 | 16.9 | 19.0 | 20.5 | 22.8 | 24.5 | 25.5 | 25.3 | 26.2 | 26.0 | 24.6 | 24.7 | 26.3 | 26.5 | 25.4 | 23.4 | 22.0 | 21.3 | 20.5 | 21.4 | 26.5 |
| 28-Aug | 19.6 | 19.1 | 18.4 | 17.1 | 16.6 | 16.9 | 16.5 | 15.9 | 16.4 | 19.1 | 20.8 | 22.3 | 22.7 | 21.8 | 19.5 | 20.1 | 18.9 | 17.9 | 16.1 | 14.5 | 13.3 | 12.7 | 11.8 | 11.3 | 17.5 | 22.7 |
| 29-Aug | 10.5 | 10.3 | 10.7 | 10.7 | 10.6 | 9.5 | 9.1 | 10.8 | 13.9 | 16.6 | 18.5 | 20.3 | 21.4 | 22.2 | 22.8 | 22.6 | 22.9 | 21.8 | 20.3 | 17.5 | 16.9 | 15.6 | 13.8 | 12.6 | 15.9 | 22.9 |
| 30-Aug | 11.9 | 11.5 | 11.6 | 12.0 | 11.4 | 11.7 | 12.6 | 15.7 | 16.6 | 18.7 | 21.2 | 22.3 | 23.8 | 23.9 | 24.6 | 24.4 | 24.2 | 23.9 | 23.1 | 19.7 | 17.4 | 17.1 | 16.1 | 15.3 | 18.0 | 24.6 |
| 31-Aug | 14.8 | 14.7 | 14.7 | 13.8 | 13.4 | 13.3 | 13.1 | 14.0 | 17.7 | 19.3 | 21.1 | 22.4 | 23.4 | 23.5 | 23.8 | 23.3 | 23.5 | 22.4 | 21.0 | 17.4 | 15.0 | 14.6 | 14.0 | 12.1 | 17.8 | 23.8 |
| | 13.1 | 12.6 | 12.1 | 12.0 | 11.8 | 11.9 | 13.0 | 14.6 | 16.1 | 18.1 | 19.6 | 21.1 | 21.9 | 22.2 | 22.4 | 22.1 | 21.7 | 21.1 | 20.1 | 18.3 | 16.5 | 15.4 | 14.4 | 13.6 | Diurnal Average | |
| | 19.6 | 19.1 | 18.4 | 17.6 | 16.6 | 16.9 | 16.9 | 19.0 | 20.5 | 22.8 | 24.5 | 27.6 | 28.6 | 28.9 | 28.9 | 28.0 | 28.4 | 27.3 | 26.5 | 25.4 | 23.4 | 22.0 | 21.3 | 20.5 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Mannix - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 42 | 5.65 | 5.65 |
| 10 - 20 | 500 | 67.20 | 72.85 |
| > 20 | 202 | 27.15 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 28.9 C on Aug 26 17:00

Maximum Daily Average: 22.3 C on Aug 27

Minimum Value: 7.8 C on Aug 17 06:00

Minimum Daily Average: 13.6 C on Aug 6

Maximum Diurnal Average: 21.8 C at hour 16

Minimum Diurnal Average: 12.9 C at hour 6

Monthly Average: 17.38 C

Percentiles: $P_1$ = 9.2 $P_{10}$ = 11.9 $Q_1$ = 14.2 Median = 17.0 $Q_3$ = 20.4 $P_{90}$ = 23.4 $P_{99}$ = 27.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

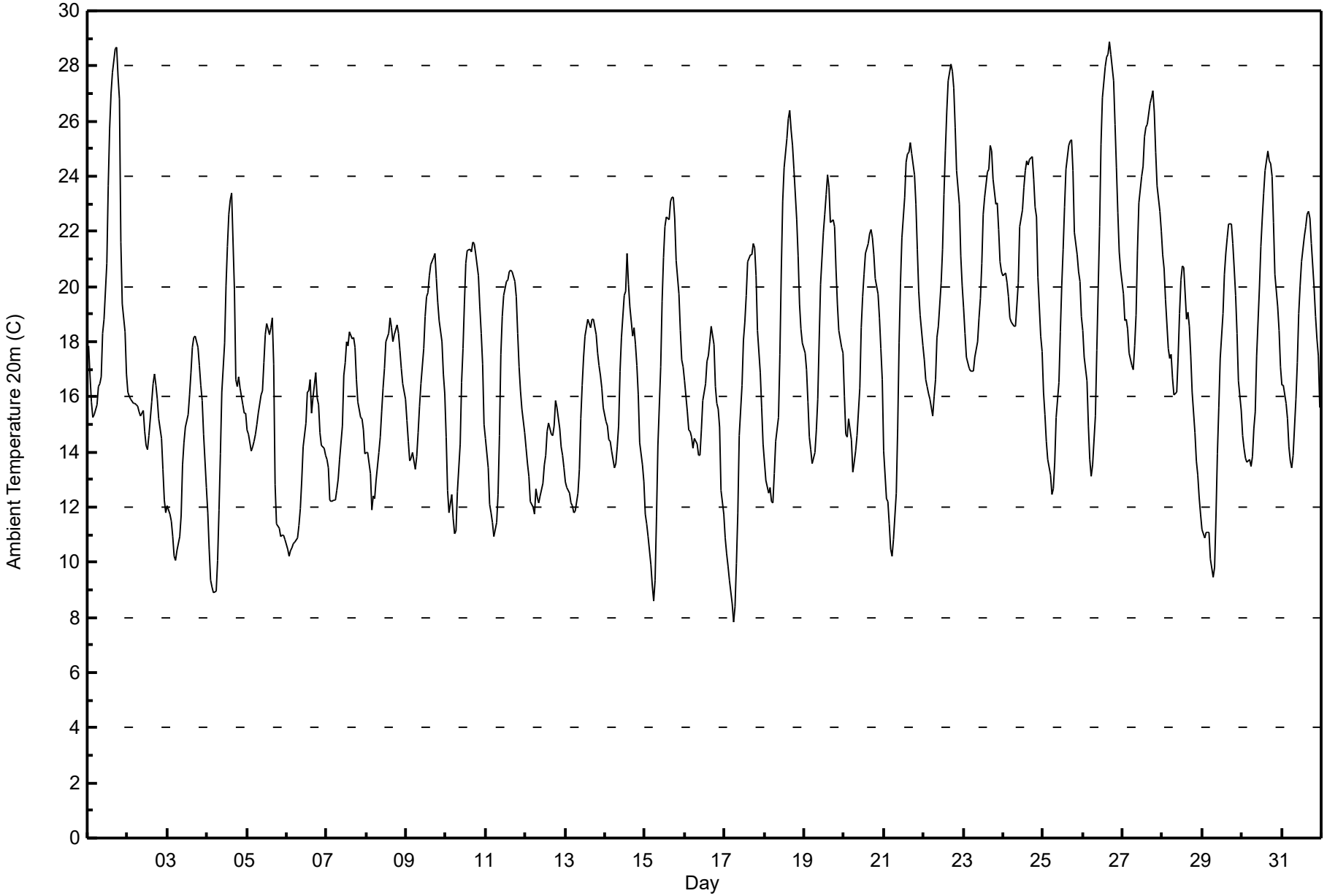
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.9 | 16.8 | 15.8 | 15.3 | 15.4 | 15.7 | 16.4 | 16.5 | 16.7 | 18.3 | 18.8 | 20.9 | 23.7 | 25.7 | 27.0 | 27.7 | 28.6 | 28.7 | 27.6 | 26.8 | 21.6 | 19.4 | 18.4 | 16.8 | 20.7 | 28.7 |
| 2-Aug | 16.2 | 16.0 | 15.9 | 15.8 | 15.8 | 15.7 | 15.7 | 15.4 | 15.3 | 15.5 | 14.7 | 14.3 | 14.1 | 14.6 | 15.8 | 16.5 | 16.8 | 16.4 | 15.9 | 15.2 | 14.5 | 13.4 | 12.3 | 11.8 | 15.1 | 16.8 |
| 3-Aug | 12.0 | 11.8 | 11.5 | 10.9 | 10.2 | 10.1 | 10.4 | 10.9 | 11.7 | 13.5 | 14.3 | 14.9 | 15.3 | 16.1 | 16.9 | 17.8 | 18.1 | 18.2 | 17.8 | 17.1 | 16.4 | 15.9 | 14.7 | 12.7 | 14.1 | 18.2 |
| 4-Aug | 11.8 | 10.5 | 9.4 | 9.1 | 8.9 | 8.9 | 10.1 | 11.9 | 13.9 | 16.2 | 17.9 | 20.0 | 21.5 | 22.6 | 23.1 | 23.4 | 19.9 | 16.6 | 16.4 | 16.7 | 16.3 | 15.7 | 15.4 | 15.4 | 15.5 | 23.4 |
| 5-Aug | 14.8 | 14.6 | 14.0 | 14.2 | 14.4 | 14.6 | 15.0 | 15.4 | 16.1 | 16.2 | 17.2 | 18.2 | 18.6 | 18.2 | 18.5 | 18.8 | 17.2 | 12.8 | 11.4 | 11.3 | 10.9 | 11.0 | 11.0 | 10.8 | 14.8 | 18.8 |
| 6-Aug | 10.5 | 10.2 | 10.4 | 10.5 | 10.7 | 10.7 | 10.9 | 11.3 | 12.0 | 13.0 | 14.2 | 15.1 | 16.2 | 16.2 | 16.6 | 15.4 | 16.0 | 16.9 | 15.9 | 15.7 | 14.7 | 14.3 | 14.1 | 13.9 | 13.6 | 16.9 |
| 7-Aug | 13.7 | 13.4 | 12.2 | 12.2 | 12.3 | 12.3 | 12.6 | 13.0 | 13.7 | 15.0 | 16.8 | 17.2 | 18.0 | 17.9 | 18.4 | 18.1 | 18.2 | 17.8 | 16.6 | 15.8 | 15.3 | 15.2 | 14.8 | 13.9 | 15.2 | 18.4 |
| 8-Aug | 14.0 | 14.0 | 13.2 | 11.9 | 12.4 | 12.3 | 13.0 | 14.0 | 14.5 | 15.5 | 16.3 | 17.0 | 18.0 | 18.3 | 18.9 | 18.5 | 18.0 | 18.3 | 18.6 | 18.3 | 17.7 | 17.0 | 16.5 | 15.9 | 15.9 | 18.9 |
| 9-Aug | 15.1 | 14.4 | 13.7 | 13.8 | 14.0 | 13.4 | 13.8 | 14.7 | 15.7 | 16.5 | 17.7 | 18.9 | 19.6 | 19.8 | 20.4 | 20.8 | 21.1 | 21.2 | 20.3 | 19.4 | 18.7 | 18.0 | 16.8 | 16.1 | 17.3 | 21.2 |
| 10-Aug | 14.5 | 12.6 | 11.8 | 12.5 | 11.6 | 11.0 | 11.1 | 12.6 | 14.3 | 16.5 | 17.7 | 19.4 | 20.8 | 21.3 | 21.3 | 21.3 | 21.6 | 21.5 | 21.2 | 20.4 | 19.3 | 18.3 | 17.2 | 15.0 | 16.9 | 21.6 |
| 11-Aug | 14.5 | 13.4 | 12.1 | 11.8 | 11.5 | 10.9 | 11.4 | 12.5 | 14.6 | 17.5 | 18.9 | 19.7 | 20.2 | 20.2 | 20.6 | 20.6 | 20.5 | 20.2 | 19.6 | 18.3 | 17.1 | 16.2 | 15.5 | 14.7 | 16.4 | 20.6 |
| 12-Aug | 14.1 | 13.6 | 13.1 | 12.2 | 12.0 | 11.7 | 12.6 | 12.4 | 12.1 | 12.4 | 12.9 | 13.5 | 13.9 | 14.7 | 15.1 | 14.6 | 14.6 | 15.0 | 15.9 | 15.6 | 14.9 | 14.2 | 13.9 | 13.4 | 13.7 | 15.9 |
| 13-Aug | 12.9 | 12.7 | 12.5 | 12.1 | 12.0 | 11.8 | 11.8 | 12.5 | 13.4 | 15.2 | 16.4 | 17.4 | 18.2 | 18.8 | 18.6 | 18.5 | 18.8 | 18.8 | 18.3 | 17.6 | 17.1 | 16.8 | 16.3 | 15.6 | 15.6 | 18.8 |
| 14-Aug | 15.1 | 14.9 | 14.5 | 14.4 | 14.1 | 13.4 | 13.6 | 14.2 | 14.9 | 16.9 | 18.2 | 19.7 | 19.8 | 21.2 | 20.1 | 19.3 | 18.2 | 18.5 | 17.9 | 17.1 | 16.1 | 14.4 | 13.5 | 12.9 | 16.4 | 21.2 |
| 15-Aug | 11.8 | 11.4 | 10.9 | 9.9 | 9.2 | 8.6 | 9.3 | 11.7 | 14.3 | 17.1 | 19.5 | 21.0 | 22.2 | 22.6 | 22.4 | 23.1 | 23.2 | 23.2 | 22.5 | 20.9 | 19.7 | 18.4 | 17.4 | 17.1 | 17.0 | 23.2 |
| 16-Aug | 16.6 | 15.5 | 14.8 | 14.7 | 14.5 | 14.2 | 14.5 | 14.3 | 13.9 | 13.9 | 14.8 | 15.9 | 16.5 | 17.3 | 17.5 | 18.0 | 18.6 | 17.9 | 16.4 | 15.8 | 15.6 | 14.9 | 12.6 | 11.8 | 15.4 | 18.6 |
| 17-Aug | 10.9 | 10.3 | 9.9 | 9.4 | 8.5 | 7.8 | 8.4 | 10.0 | 11.8 | 14.6 | 16.4 | 18.0 | 18.7 | 19.7 | 20.9 | 21.1 | 21.1 | 21.6 | 21.4 | 20.4 | 18.4 | 16.9 | 15.6 | 14.3 | 15.2 | 21.6 |
| 18-Aug | 13.6 | 12.9 | 12.5 | 12.7 | 12.2 | 12.2 | 13.2 | 14.4 | 15.2 | 17.5 | 20.6 | 23.1 | 24.3 | 25.4 | 26.1 | 26.4 | 25.7 | 25.1 | 24.3 | 22.4 | 21.1 | 19.4 | 18.5 | 18.0 | 19.0 | 26.4 |
| 19-Aug | 17.6 | 17.0 | 15.8 | 14.5 | 14.1 | 13.6 | 14.0 | 14.8 | 15.9 | 18.0 | 20.1 | 21.9 | 22.7 | 23.3 | 24.1 | 23.6 | 22.3 | 22.4 | 22.2 | 20.7 | 19.4 | 18.4 | 17.8 | 17.6 | 18.8 | 24.1 |
| 20-Aug | 16.0 | 14.7 | 14.6 | 15.2 | 14.5 | 13.3 | 13.6 | 14.0 | 14.6 | 16.3 | 18.5 | 19.6 | 20.4 | 21.2 | 21.6 | 21.9 | 22.1 | 21.8 | 21.2 | 20.3 | 19.7 | 18.9 | 17.8 | 16.6 | 17.8 | 22.1 |
| 21-Aug | 14.1 | 12.3 | 12.2 | 11.4 | 10.5 | 10.2 | 10.8 | 12.5 | 14.9 | 18.0 | 20.2 | 21.8 | 23.2 | 24.5 | 24.8 | 24.9 | 25.2 | 24.8 | 24.0 | 23.0 | 21.4 | 19.8 | 18.9 | 17.8 | 18.4 | 25.2 |
| 22-Aug | 17.3 | 16.6 | 16.4 | 16.1 | 15.9 | 15.3 | 16.0 | 16.6 | 18.1 | 18.6 | 20.1 | 21.4 | 23.3 | 24.9 | 26.3 | 27.5 | 28.1 | 27.8 | 27.2 | 25.8 | 24.2 | 23.0 | 21.1 | 20.0 | 21.2 | 28.1 |
| 23-Aug | 19.2 | 18.3 | 17.4 | 17.0 | 16.9 | 16.9 | 16.9 | 17.4 | 18.0 | 18.8 | 19.6 | 20.8 | 22.6 | 23.2 | 24.2 | 24.3 | 25.1 | 24.9 | 23.9 | 23.0 | 23.0 | 22.1 | 20.9 | 20.6 | 20.6 | 25.1 |
| 24-Aug | 20.4 | 20.5 | 20.1 | 19.6 | 18.8 | 18.7 | 18.6 | 18.6 | 19.3 | 20.1 | 22.2 | 22.8 | 23.6 | 24.2 | 24.6 | 24.4 | 24.6 | 24.7 | 23.9 | 22.9 | 22.5 | 20.4 | 18.2 | 17.6 | 21.3 | 24.7 |
| 25-Aug | 16.2 | 15.3 | 14.4 | 13.7 | 13.2 | 12.4 | 12.7 | 13.6 | 15.3 | 16.5 | 18.3 | 20.0 | 21.3 | 22.9 | 24.3 | 25.1 | 25.3 | 25.3 | 24.2 | 22.0 | 21.1 | 20.5 | 20.2 | 18.9 | 18.9 | 25.3 |
| 26-Aug | 18.4 | 17.4 | 16.6 | 14.9 | 13.7 | 13.1 | 13.5 | 15.3 | 17.7 | 19.9 | 22.2 | 25.2 | 26.9 | 28.0 | 28.3 | 28.4 | 28.9 | 28.4 | 27.4 | 25.9 | 24.3 | 22.7 | 21.3 | 20.6 | 21.6 | 28.9 |
| 27-Aug | 19.7 | 18.7 | 18.8 | 18.4 | 17.6 | 17.1 | 17.0 | 17.8 | 19.0 | 21.3 | 23.0 | 24.0 | 24.4 | 25.4 | 25.8 | 25.9 | 26.6 | 26.9 | 27.1 | 26.3 | 24.9 | 23.6 | 22.7 | 22.0 | 22.3 | 27.1 |
| 28-Aug | 21.2 | 20.7 | 19.5 | 17.7 | 17.4 | 17.5 | 16.7 | 16.1 | 16.2 | 17.4 | 19.0 | 20.2 | 20.8 | 20.7 | 18.8 | 19.1 | 18.5 | 17.5 | 16.2 | 14.7 | 13.7 | 13.2 | 12.4 | 11.7 | 17.4 | 21.2 |
| 29-Aug | 11.2 | 10.9 | 11.1 | 11.1 | 11.1 | 10.1 | 9.5 | 9.8 | 11.7 | 13.9 | 15.6 | 17.4 | 19.0 | 20.4 | 21.2 | 21.8 | 22.3 | 22.2 | 21.6 | 20.7 | 19.7 | 18.3 | 16.6 | 15.5 | 15.9 | 22.3 |
| 30-Aug | 14.6 | 14.1 | 13.8 | 13.6 | 13.7 | 13.5 | 13.8 | 14.9 | 15.4 | 17.5 | 20.0 | 21.5 | 22.5 | 23.4 | 24.2 | 24.9 | 24.6 | 24.5 | 24.0 | 22.3 | 20.4 | 19.3 | 18.4 | 17.1 | 18.8 | 24.9 |
| 31-Aug | 16.4 | 16.4 | 15.8 | 15.2 | 14.2 | 13.7 | 13.4 | 13.9 | 15.9 | 17.2 | 19.0 | 20.0 | 20.9 | 21.8 | 22.2 | 22.6 | 22.7 | 22.5 | 21.6 | 19.9 | 18.9 | 18.1 | 17.5 | 15.6 | 18.1 | 22.7 |
| | 15.2 | 14.6 | 14.0 | 13.6 | 13.3 | 12.9 | 13.2 | 14.0 | 15.0 | 16.6 | 18.1 | 19.4 | 20.4 | 21.1 | 21.6 | 21.8 | 21.7 | 21.4 | 20.7 | 19.8 | 18.7 | 17.7 | 16.7 | 15.9 | Diurnal Average | |
| | 21.2 | 20.7 | 20.1 | 19.6 | 18.8 | 18.7 | 18.6 | 18.6 | 19.3 | 21.3 | 23.0 | 25.2 | 26.9 | 28.0 | 28.3 | 28.4 | 28.9 | 28.7 | 27.6 | 26.8 | 24.9 | 23.6 | 22.7 | 22.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 20m (AT20) - C**

**Mannix - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 16 | 2.15 | 2.15 |
| 10 - 20 | 522 | 70.16 | 72.31 |
| > 20 | 206 | 27.69 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 28.7 C on Aug 26 17:00

Maximum Daily Average: 22.3 C on Aug 27

Minimum Value: 8.3 C on Aug 17 07:00

Minimum Daily Average: 13.3 C on Aug 6

Maximum Diurnal Average: 21.5 C at hour 17

Minimum Diurnal Average: 13.2 C at hour 7

Monthly Average: 17.42 C

Percentiles: $P_1$ = 9.4 $P_{10}$ = 12.2 $Q_1$ = 14.3 Median = 17.0 $Q_3$ = 20.3 $P_{90}$ = 23.2 $P_{99}$ = 27.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

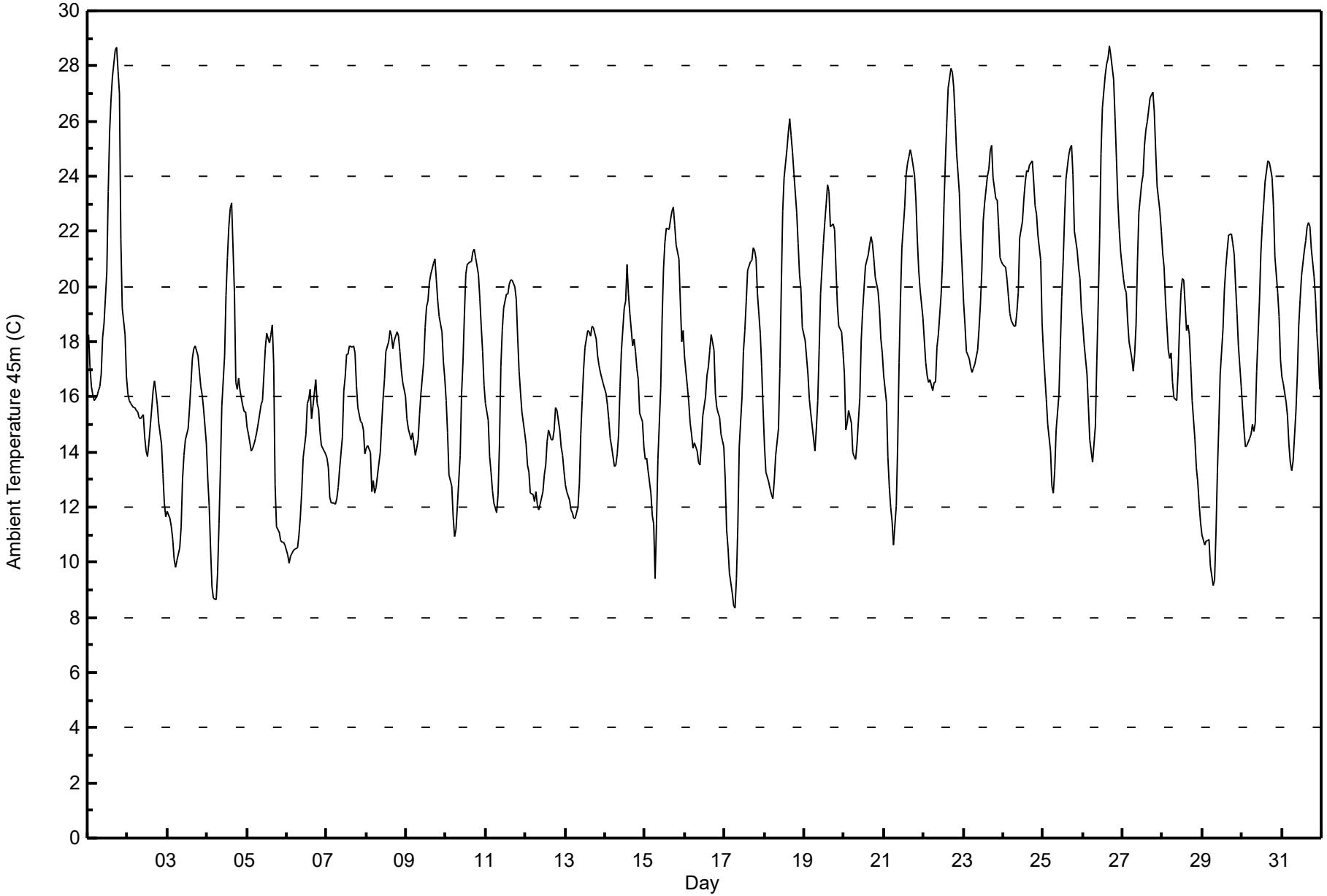
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 18.3 | 17.1 | 16.4 | 16.1 | 15.8 | 16.0 | 16.2 | 16.4 | 16.8 | 18.1 | 18.7 | 20.6 | 23.4 | 25.6 | 26.8 | 27.6 | 28.6 | 28.7 | 27.8 | 27.0 | 21.7 | 19.2 | 18.3 | 16.7 | 20.7 | 28.7 |
| 2-Aug | 16.1 | 15.9 | 15.7 | 15.6 | 15.6 | 15.5 | 15.5 | 15.3 | 15.2 | 15.3 | 14.5 | 14.0 | 13.8 | 14.3 | 15.6 | 16.2 | 16.6 | 16.2 | 15.7 | 15.0 | 14.3 | 13.2 | 12.2 | 11.7 | 15.0 | 16.6 |
| 3-Aug | 11.8 | 11.6 | 11.3 | 10.8 | 10.1 | 9.8 | 10.1 | 10.5 | 11.3 | 13.0 | 13.9 | 14.4 | 14.9 | 15.6 | 16.5 | 17.4 | 17.7 | 17.9 | 17.5 | 16.9 | 16.4 | 16.1 | 15.6 | 14.3 | 14.0 | 17.9 |
| 4-Aug | 13.0 | 12.1 | 10.5 | 9.1 | 8.7 | 8.6 | 9.6 | 11.4 | 13.4 | 15.7 | 17.5 | 19.7 | 21.0 | 22.2 | 22.8 | 23.1 | 19.8 | 16.5 | 16.3 | 16.7 | 16.2 | 15.7 | 15.5 | 15.5 | 15.4 | 23.1 |
| 5-Aug | 14.9 | 14.6 | 14.0 | 14.1 | 14.3 | 14.5 | 14.7 | 15.1 | 15.7 | 15.9 | 16.8 | 17.8 | 18.3 | 18.0 | 18.2 | 18.6 | 17.2 | 12.8 | 11.3 | 11.1 | 10.8 | 10.7 | 10.8 | 10.6 | 14.6 | 18.6 |
| 6-Aug | 10.3 | 10.0 | 10.2 | 10.3 | 10.4 | 10.5 | 10.5 | 11.0 | 11.6 | 12.6 | 13.8 | 14.6 | 15.8 | 15.9 | 16.3 | 15.2 | 15.7 | 16.6 | 15.7 | 15.6 | 14.8 | 14.2 | 14.1 | 13.9 | 13.3 | 16.6 |
| 7-Aug | 13.8 | 13.4 | 12.3 | 12.2 | 12.2 | 12.1 | 12.3 | 12.7 | 13.4 | 14.6 | 16.2 | 16.7 | 17.5 | 17.5 | 17.8 | 17.8 | 17.9 | 17.6 | 16.4 | 15.6 | 15.1 | 15.1 | 14.8 | 13.9 | 15.0 | 17.9 |
| 8-Aug | 14.1 | 14.2 | 14.0 | 12.6 | 13.0 | 12.5 | 12.7 | 13.6 | 14.0 | 15.0 | 15.9 | 16.6 | 17.6 | 18.0 | 18.4 | 18.2 | 17.8 | 18.0 | 18.3 | 18.2 | 17.6 | 17.0 | 16.5 | 16.0 | 15.8 | 18.4 |
| 9-Aug | 15.2 | 14.9 | 14.6 | 14.5 | 14.7 | 13.9 | 14.1 | 14.4 | 15.3 | 16.1 | 17.3 | 18.5 | 19.3 | 19.5 | 20.1 | 20.4 | 20.8 | 21.0 | 20.2 | 19.5 | 18.9 | 18.4 | 17.3 | 16.7 | 17.3 | 21.0 |
| 10-Aug | 15.9 | 14.7 | 13.2 | 12.8 | 11.6 | 10.9 | 11.2 | 12.1 | 13.9 | 16.1 | 17.3 | 19.0 | 20.5 | 20.8 | 20.9 | 20.9 | 21.3 | 21.3 | 21.1 | 20.4 | 19.6 | 18.6 | 17.6 | 16.4 | 17.0 | 21.3 |
| 11-Aug | 15.8 | 15.1 | 13.8 | 13.3 | 12.6 | 12.2 | 11.8 | 12.4 | 14.2 | 17.1 | 18.4 | 19.2 | 19.7 | 19.8 | 20.1 | 20.2 | 20.2 | 20.0 | 19.5 | 18.2 | 17.0 | 16.2 | 15.5 | 14.7 | 16.5 | 20.2 |
| 12-Aug | 14.3 | 13.5 | 13.3 | 12.5 | 12.5 | 12.2 | 12.6 | 12.1 | 11.9 | 12.1 | 12.6 | 13.2 | 13.5 | 14.4 | 14.8 | 14.4 | 14.4 | 14.8 | 15.6 | 15.5 | 14.8 | 14.2 | 13.9 | 13.3 | 13.6 | 15.6 |
| 13-Aug | 12.8 | 12.6 | 12.3 | 11.9 | 11.8 | 11.6 | 11.6 | 12.0 | 12.9 | 14.7 | 15.9 | 17.0 | 17.8 | 18.4 | 18.4 | 18.2 | 18.6 | 18.5 | 18.1 | 17.5 | 17.2 | 16.9 | 16.7 | 16.5 | 15.4 | 18.6 |
| 14-Aug | 16.1 | 15.7 | 15.2 | 14.5 | 14.2 | 13.5 | 13.5 | 13.9 | 14.6 | 16.4 | 17.7 | 19.2 | 19.5 | 20.8 | 19.7 | 19.0 | 17.9 | 18.1 | 17.6 | 17.0 | 16.6 | 15.4 | 15.1 | 14.2 | 16.5 | 20.8 |
| 15-Aug | 13.7 | 13.8 | 13.3 | 12.5 | 11.7 | 11.4 | 9.4 | 11.4 | 13.7 | 16.3 | 18.8 | 20.7 | 21.6 | 22.1 | 22.1 | 22.4 | 22.7 | 22.9 | 22.2 | 21.5 | 21.0 | 19.4 | 18.0 | 18.4 | 17.5 | 22.9 |
| 16-Aug | 17.4 | 16.4 | 15.8 | 15.1 | 14.7 | 14.1 | 14.3 | 14.0 | 13.6 | 13.5 | 14.4 | 15.3 | 16.0 | 16.8 | 17.1 | 17.7 | 18.2 | 17.7 | 16.1 | 15.6 | 15.4 | 15.3 | 14.6 | 14.2 | 15.6 | 18.2 |
| 17-Aug | 13.0 | 11.2 | 10.5 | 9.6 | 8.9 | 8.5 | 8.3 | 9.4 | 11.3 | 14.2 | 16.0 | 17.6 | 18.4 | 19.5 | 20.6 | 20.9 | 20.9 | 21.4 | 21.3 | 21.0 | 19.7 | 18.3 | 17.1 | 15.5 | 15.6 | 21.4 |
| 18-Aug | 14.2 | 13.3 | 12.9 | 12.7 | 12.4 | 12.3 | 13.0 | 13.9 | 14.8 | 17.0 | 20.0 | 22.7 | 24.0 | 25.0 | 25.6 | 26.1 | 25.5 | 24.9 | 24.1 | 22.7 | 21.6 | 20.5 | 19.9 | 18.5 | 19.1 | 26.1 |
| 19-Aug | 18.1 | 17.4 | 16.9 | 15.9 | 15.4 | 14.9 | 14.0 | 14.9 | 15.8 | 17.7 | 19.7 | 21.6 | 22.3 | 23.0 | 23.7 | 23.4 | 22.2 | 22.3 | 22.1 | 20.7 | 19.3 | 18.5 | 18.4 | 17.6 | 19.0 | 23.7 |
| 20-Aug | 16.8 | 14.8 | 15.0 | 15.5 | 15.0 | 14.0 | 13.8 | 13.7 | 14.3 | 16.0 | 18.0 | 19.1 | 20.0 | 20.7 | 21.2 | 21.5 | 21.8 | 21.6 | 21.0 | 20.3 | 19.8 | 19.1 | 18.1 | 17.6 | 17.9 | 21.8 |
| 21-Aug | 16.8 | 15.8 | 13.9 | 12.8 | 12.0 | 11.5 | 10.6 | 12.1 | 14.2 | 17.2 | 19.6 | 21.4 | 22.9 | 24.0 | 24.5 | 24.7 | 25.0 | 24.7 | 24.0 | 23.1 | 21.7 | 20.6 | 19.9 | 18.9 | 18.8 | 25.0 |
| 22-Aug | 18.1 | 17.3 | 16.8 | 16.5 | 16.6 | 16.2 | 16.5 | 16.5 | 17.8 | 18.2 | 19.7 | 21.0 | 22.9 | 24.5 | 26.0 | 27.2 | 27.9 | 27.8 | 27.2 | 26.1 | 24.9 | 23.4 | 21.8 | 20.7 | 21.3 | 27.9 |
| 23-Aug | 19.4 | 18.6 | 17.7 | 17.4 | 17.1 | 16.9 | 17.0 | 17.2 | 17.7 | 18.5 | 19.4 | 20.5 | 22.3 | 23.1 | 24.0 | 24.3 | 24.9 | 25.1 | 23.9 | 23.2 | 23.2 | 22.2 | 21.1 | 20.9 | 20.6 | 25.1 |
| 24-Aug | 20.8 | 20.7 | 20.2 | 19.6 | 19.0 | 18.8 | 18.6 | 18.5 | 19.1 | 19.8 | 21.8 | 22.4 | 23.2 | 23.8 | 24.2 | 24.2 | 24.4 | 24.6 | 23.8 | 23.0 | 22.6 | 21.8 | 21.0 | 18.6 | 21.4 | 24.6 |
| 25-Aug | 17.6 | 16.7 | 15.9 | 15.0 | 14.0 | 12.7 | 12.5 | 13.3 | 14.8 | 16.1 | 17.8 | 19.6 | 20.9 | 22.5 | 23.9 | 24.8 | 25.0 | 25.1 | 24.0 | 22.0 | 21.3 | 20.7 | 20.3 | 19.1 | 19.0 | 25.1 |
| 26-Aug | 18.6 | 17.9 | 16.8 | 15.7 | 14.4 | 14.0 | 13.6 | 15.0 | 17.3 | 19.4 | 21.7 | 24.8 | 26.5 | 27.6 | 28.1 | 28.3 | 28.7 | 28.4 | 27.5 | 26.1 | 24.7 | 23.1 | 22.1 | 21.2 | 21.7 | 28.7 |
| 27-Aug | 20.3 | 19.9 | 19.8 | 18.8 | 18.0 | 17.4 | 16.9 | 17.6 | 18.6 | 20.9 | 22.7 | 23.7 | 24.1 | 25.1 | 25.7 | 26.0 | 26.8 | 27.0 | 27.1 | 26.3 | 24.9 | 23.7 | 22.7 | 22.0 | 22.3 | 27.1 |
| 28-Aug | 21.2 | 20.7 | 19.5 | 17.7 | 17.4 | 17.6 | 16.5 | 15.9 | 15.8 | 16.9 | 18.6 | 19.8 | 20.3 | 20.3 | 18.4 | 18.6 | 18.2 | 17.1 | 15.9 | 14.4 | 13.4 | 12.9 | 12.1 | 11.5 | 17.1 | 21.2 |
| 29-Aug | 11.0 | 10.6 | 10.8 | 10.8 | 10.8 | 9.9 | 9.2 | 9.4 | 11.1 | 13.3 | 14.9 | 16.8 | 18.4 | 19.9 | 20.7 | 21.3 | 21.9 | 21.9 | 21.5 | 21.2 | 20.0 | 19.0 | 17.8 | 16.3 | 15.8 | 21.9 |
| 30-Aug | 15.6 | 14.8 | 14.2 | 14.3 | 14.5 | 14.6 | 15.0 | 14.8 | 15.0 | 16.9 | 19.5 | 21.2 | 22.2 | 23.0 | 23.8 | 24.6 | 24.5 | 24.3 | 23.9 | 22.9 | 21.1 | 19.8 | 18.9 | 17.3 | 19.0 | 24.6 |
| 31-Aug | 16.7 | 16.5 | 15.8 | 15.3 | 14.3 | 13.6 | 13.3 | 13.7 | 15.5 | 16.8 | 18.6 | 19.5 | 20.4 | 21.3 | 21.7 | 22.2 | 22.3 | 22.1 | 21.4 | 20.3 | 19.5 | 18.3 | 17.5 | 16.3 | 18.0 | 22.3 |
| | 15.9 | 15.2 | 14.6 | 14.0 | 13.7 | 13.3 | 13.2 | 13.7 | 14.7 | 16.2 | 17.7 | 19.0 | 20.0 | 20.7 | 21.2 | 21.5 | 21.5 | 21.2 | 20.6 | 19.8 | 18.9 | 18.0 | 17.3 | 16.4 | Diurnal Average | |
| | 21.2 | 20.7 | 20.2 | 19.6 | 19.0 | 18.8 | 18.6 | 18.5 | 19.1 | 20.9 | 22.7 | 24.8 | 26.5 | 27.6 | 28.1 | 28.3 | 28.7 | 28.7 | 27.8 | 27.0 | 24.9 | 23.7 | 22.7 | 22.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 45m (AT45) - C**

**Mannix - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 15 | 2.02 | 2.02 |
| 10 - 20 | 531 | 71.37 | 73.39 |
| > 20 | 198 | 26.61 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 28.3 C on Aug 26 17:00

Maximum Daily Average: 22.3 C on Aug 27

Minimum Value: 8.8 C on Aug 17 07:00

Minimum Daily Average: 13.2 C on Aug 6

Maximum Diurnal Average: 21.1 C at hour 17

Minimum Diurnal Average: 13.7 C at hour 7

Monthly Average: 17.46 C

Percentiles: $P_1$ = 9.9 $P_{10}$ = 12.6 $Q_1$ = 14.6 Median = 17.2 $Q_3$ = 20.3 $P_{90}$ = 23.1 $P_{99}$ = 27.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

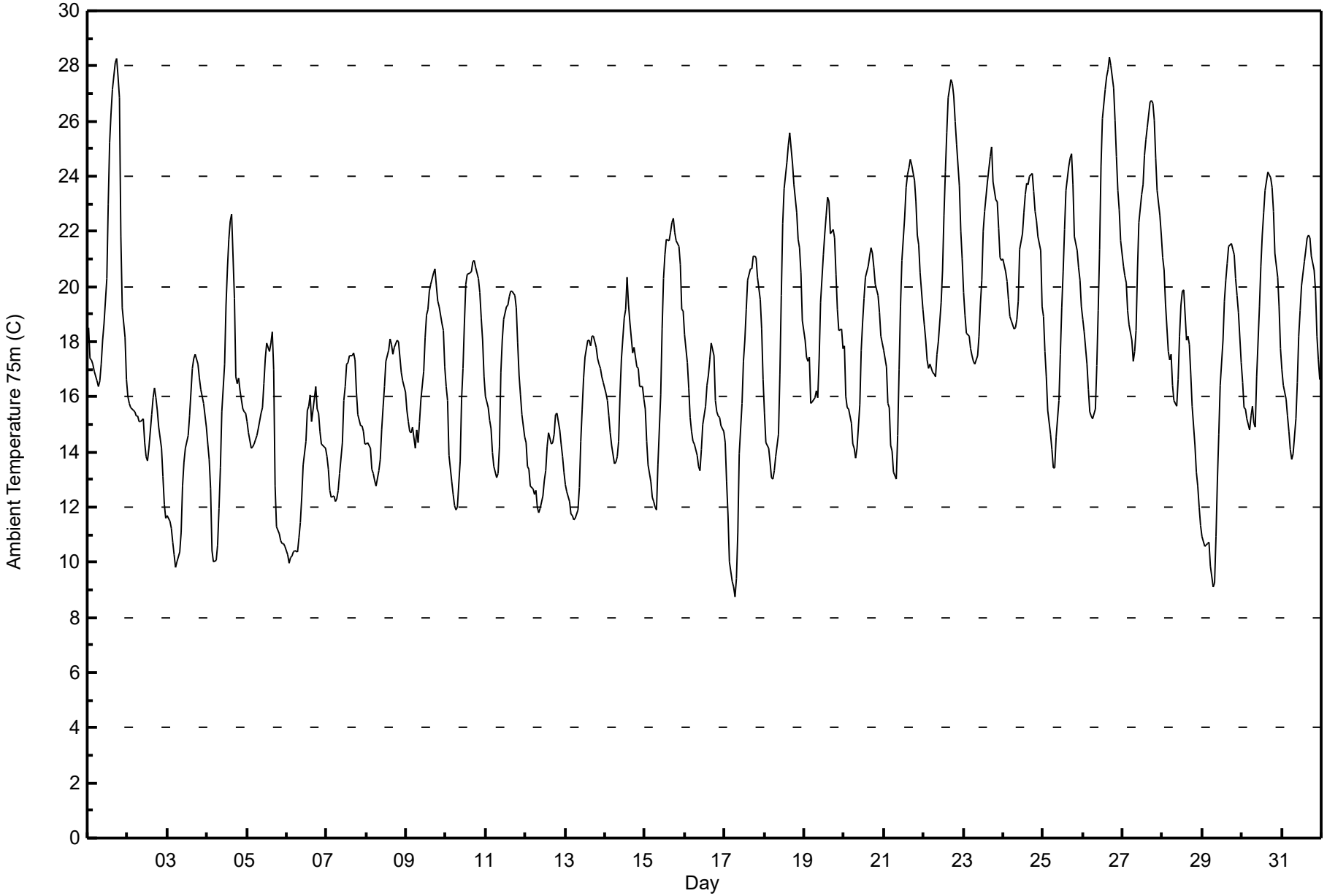
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 18.5 | 17.4 | 17.4 | 17.2 | 16.9 | 16.6 | 16.4 | 16.6 | 17.2 | 18.0 | 18.7 | 20.3 | 23.0 | 25.2 | 26.3 | 27.1 | 28.1 | 28.3 | 27.6 | 26.8 | 21.8 | 19.2 | 18.1 | 16.6 | 20.8 | 28.3 |
| 2-Aug | 16.0 | 15.8 | 15.6 | 15.5 | 15.5 | 15.3 | 15.3 | 15.1 | 15.1 | 15.2 | 14.4 | 13.8 | 13.7 | 14.1 | 15.3 | 16.0 | 16.3 | 16.0 | 15.5 | 14.9 | 14.1 | 13.1 | 12.1 | 11.6 | 14.8 | 16.3 |
| 3-Aug | 11.7 | 11.5 | 11.2 | 10.7 | 10.3 | 9.8 | 10.0 | 10.4 | 11.1 | 12.8 | 13.6 | 14.1 | 14.6 | 15.3 | 16.2 | 17.0 | 17.4 | 17.5 | 17.2 | 16.7 | 16.2 | 16.0 | 15.7 | 14.9 | 13.8 | 17.5 |
| 4-Aug | 14.3 | 13.7 | 12.6 | 10.4 | 10.0 | 10.1 | 10.6 | 12.0 | 13.4 | 15.5 | 17.2 | 19.3 | 20.6 | 21.7 | 22.4 | 22.6 | 19.6 | 16.7 | 16.5 | 16.7 | 16.2 | 15.6 | 15.4 | 15.4 | 15.8 | 22.6 |
| 5-Aug | 15.1 | 14.7 | 14.1 | 14.2 | 14.3 | 14.4 | 14.6 | 14.9 | 15.4 | 15.6 | 16.5 | 17.4 | 18.0 | 17.7 | 17.9 | 18.3 | 17.0 | 12.8 | 11.3 | 11.0 | 10.8 | 10.7 | 10.7 | 10.6 | 14.5 | 18.3 |
| 6-Aug | 10.2 | 10.0 | 10.2 | 10.2 | 10.4 | 10.4 | 10.4 | 10.9 | 11.5 | 12.4 | 13.5 | 14.4 | 15.5 | 15.7 | 16.0 | 15.1 | 15.5 | 16.4 | 15.6 | 15.4 | 14.8 | 14.3 | 14.2 | 14.1 | 13.2 | 16.4 |
| 7-Aug | 13.8 | 13.3 | 12.6 | 12.4 | 12.4 | 12.2 | 12.3 | 12.6 | 13.2 | 14.3 | 15.9 | 16.4 | 17.2 | 17.2 | 17.5 | 17.5 | 17.6 | 17.4 | 16.2 | 15.4 | 15.0 | 14.9 | 14.7 | 14.3 | 14.9 | 17.6 |
| 8-Aug | 14.3 | 14.3 | 14.1 | 13.4 | 13.2 | 13.0 | 12.8 | 13.3 | 13.7 | 14.8 | 15.6 | 16.4 | 17.3 | 17.7 | 18.1 | 17.9 | 17.5 | 17.8 | 18.1 | 18.0 | 17.4 | 16.9 | 16.6 | 16.2 | 15.8 | 18.1 |
| 9-Aug | 15.5 | 15.1 | 14.7 | 14.7 | 14.9 | 14.1 | 14.8 | 14.3 | 15.1 | 15.9 | 16.9 | 18.2 | 18.9 | 19.1 | 19.8 | 20.1 | 20.5 | 20.7 | 20.0 | 19.5 | 19.3 | 18.6 | 18.4 | 17.1 | 17.4 | 20.7 |
| 10-Aug | 16.4 | 15.9 | 13.9 | 12.9 | 12.4 | 12.0 | 11.9 | 12.0 | 13.7 | 15.9 | 17.0 | 18.6 | 20.1 | 20.5 | 20.5 | 20.5 | 20.9 | 21.0 | 20.7 | 20.3 | 19.8 | 18.9 | 18.1 | 16.7 | 17.1 | 21.0 |
| 11-Aug | 16.0 | 15.6 | 15.2 | 14.8 | 14.0 | 13.5 | 13.1 | 13.2 | 14.2 | 16.9 | 18.0 | 18.8 | 19.3 | 19.3 | 19.6 | 19.8 | 19.8 | 19.7 | 19.2 | 17.9 | 16.8 | 16.1 | 15.3 | 14.6 | 16.7 | 19.8 |
| 12-Aug | 14.3 | 13.5 | 13.4 | 12.7 | 12.6 | 12.5 | 12.6 | 12.0 | 11.8 | 11.9 | 12.4 | 13.0 | 13.3 | 14.2 | 14.7 | 14.3 | 14.3 | 14.7 | 15.4 | 15.4 | 14.8 | 14.3 | 13.8 | 13.3 | 13.5 | 15.4 |
| 13-Aug | 12.8 | 12.5 | 12.2 | 11.8 | 11.7 | 11.5 | 11.6 | 11.9 | 12.7 | 14.4 | 15.6 | 16.7 | 17.5 | 18.0 | 18.1 | 17.9 | 18.2 | 18.2 | 17.8 | 17.4 | 17.2 | 17.1 | 16.7 | 16.5 | 15.2 | 18.2 |
| 14-Aug | 16.1 | 15.9 | 15.3 | 14.7 | 14.3 | 13.6 | 13.6 | 13.8 | 14.4 | 16.1 | 17.4 | 18.9 | 19.2 | 20.4 | 19.4 | 18.7 | 17.6 | 17.8 | 17.4 | 17.1 | 17.0 | 16.4 | 16.4 | 15.9 | 16.5 | 20.4 |
| 15-Aug | 15.6 | 14.4 | 13.5 | 12.9 | 12.3 | 12.2 | 12.0 | 11.9 | 13.5 | 16.1 | 18.5 | 20.3 | 21.2 | 21.7 | 21.7 | 22.0 | 22.3 | 22.5 | 22.0 | 21.6 | 21.5 | 20.8 | 19.2 | 19.1 | 17.9 | 22.5 |
| 16-Aug | 18.2 | 17.2 | 16.3 | 15.2 | 14.8 | 14.4 | 14.3 | 13.9 | 13.5 | 13.3 | 14.1 | 15.0 | 15.7 | 16.4 | 16.8 | 17.4 | 17.9 | 17.5 | 15.8 | 15.5 | 15.3 | 15.3 | 15.0 | 14.8 | 15.6 | 18.2 |
| 17-Aug | 14.3 | 12.9 | 11.7 | 10.0 | 9.3 | 9.1 | 8.8 | 9.4 | 11.1 | 13.9 | 15.8 | 17.3 | 18.1 | 19.2 | 20.2 | 20.6 | 20.7 | 21.1 | 21.1 | 21.0 | 20.3 | 19.5 | 18.4 | 16.7 | 15.9 | 21.1 |
| 18-Aug | 15.4 | 14.3 | 14.2 | 13.6 | 13.1 | 13.0 | 13.3 | 13.8 | 14.6 | 16.8 | 19.7 | 22.3 | 23.5 | 24.5 | 25.1 | 25.6 | 25.0 | 24.4 | 23.7 | 22.7 | 21.7 | 21.4 | 20.5 | 18.7 | 19.2 | 25.6 |
| 19-Aug | 18.1 | 17.4 | 17.3 | 17.4 | 15.8 | 15.8 | 16.0 | 16.2 | 16.0 | 17.4 | 19.4 | 21.1 | 21.9 | 22.6 | 23.2 | 23.1 | 21.9 | 22.1 | 21.8 | 20.5 | 19.2 | 18.4 | 18.4 | 17.8 | 19.1 | 23.2 |
| 20-Aug | 17.9 | 16.0 | 15.6 | 15.6 | 15.0 | 14.3 | 14.1 | 13.8 | 14.1 | 15.7 | 17.7 | 18.7 | 19.6 | 20.3 | 20.7 | 21.1 | 21.4 | 21.2 | 20.7 | 20.1 | 19.7 | 19.1 | 18.2 | 17.9 | 17.9 | 21.4 |
| 21-Aug | 17.7 | 17.1 | 15.8 | 15.6 | 14.2 | 14.1 | 13.3 | 13.0 | 14.6 | 17.0 | 19.3 | 21.0 | 22.5 | 23.6 | 24.1 | 24.3 | 24.6 | 24.4 | 23.9 | 23.1 | 21.9 | 21.5 | 20.5 | 19.2 | 19.4 | 24.6 |
| 22-Aug | 18.6 | 18.0 | 17.3 | 17.0 | 17.2 | 16.9 | 16.8 | 16.7 | 17.5 | 18.0 | 19.4 | 20.6 | 22.6 | 24.1 | 25.6 | 26.8 | 27.5 | 27.3 | 26.9 | 26.0 | 25.2 | 23.6 | 22.0 | 21.0 | 21.4 | 27.5 |
| 23-Aug | 19.8 | 19.0 | 18.3 | 18.2 | 17.7 | 17.5 | 17.3 | 17.2 | 17.5 | 18.2 | 19.4 | 20.3 | 22.0 | 22.7 | 23.8 | 24.2 | 24.7 | 25.0 | 23.8 | 23.1 | 23.1 | 22.1 | 21.1 | 20.9 | 20.7 | 25.0 |
| 24-Aug | 21.0 | 20.6 | 20.2 | 19.5 | 18.9 | 18.8 | 18.5 | 18.5 | 18.8 | 19.5 | 21.4 | 21.9 | 22.7 | 23.3 | 23.7 | 23.7 | 24.0 | 24.1 | 23.4 | 22.7 | 22.4 | 21.8 | 21.3 | 19.3 | 21.2 | 24.1 |
| 25-Aug | 18.9 | 17.6 | 16.7 | 15.5 | 14.6 | 14.1 | 13.4 | 13.4 | 14.5 | 15.8 | 17.6 | 19.2 | 20.5 | 22.1 | 23.5 | 24.4 | 24.7 | 24.8 | 23.7 | 21.8 | 21.3 | 20.7 | 20.2 | 19.3 | 19.1 | 24.8 |
| 26-Aug | 18.8 | 18.3 | 17.2 | 16.3 | 15.5 | 15.3 | 15.2 | 15.6 | 17.1 | 19.1 | 21.3 | 24.4 | 26.1 | 27.2 | 27.6 | 27.9 | 28.3 | 28.0 | 27.2 | 26.1 | 24.7 | 23.5 | 22.8 | 21.6 | 21.9 | 28.3 |
| 27-Aug | 20.8 | 20.4 | 20.1 | 19.1 | 18.6 | 18.0 | 17.3 | 17.6 | 18.4 | 20.6 | 22.3 | 23.3 | 23.7 | 24.8 | 25.3 | 25.8 | 26.7 | 26.7 | 26.7 | 26.0 | 24.7 | 23.5 | 22.6 | 21.9 | 22.3 | 26.7 |
| 28-Aug | 21.1 | 20.6 | 19.4 | 17.6 | 17.3 | 17.5 | 16.4 | 15.8 | 15.7 | 16.6 | 18.2 | 19.3 | 19.8 | 19.9 | 18.1 | 18.2 | 17.9 | 16.8 | 15.6 | 14.2 | 13.3 | 12.8 | 12.0 | 11.3 | 16.9 | 21.1 |
| 29-Aug | 10.9 | 10.6 | 10.7 | 10.7 | 10.7 | 9.9 | 9.1 | 9.3 | 10.9 | 13.0 | 14.6 | 16.4 | 18.0 | 19.5 | 20.2 | 20.8 | 21.4 | 21.6 | 21.4 | 21.2 | 20.3 | 19.7 | 19.1 | 17.2 | 15.7 | 21.6 |
| 30-Aug | 16.5 | 15.6 | 15.5 | 15.2 | 14.8 | 15.3 | 15.6 | 15.0 | 14.9 | 16.7 | 19.3 | 20.8 | 21.8 | 22.7 | 23.5 | 24.2 | 24.1 | 23.9 | 23.6 | 22.7 | 21.2 | 20.4 | 19.3 | 17.8 | 19.2 | 24.2 |
| 31-Aug | 17.0 | 16.4 | 15.9 | 15.3 | 14.8 | 14.1 | 13.7 | 13.9 | 15.2 | 16.5 | 18.2 | 19.1 | 20.0 | 20.9 | 21.3 | 21.8 | 21.9 | 21.7 | 21.1 | 20.6 | 19.9 | 18.2 | 17.4 | 16.6 | 18.0 | 21.9 |
| | 16.3 | 15.7 | 15.1 | 14.5 | 14.1 | 13.8 | 13.7 | 13.8 | 14.5 | 15.9 | 17.4 | 18.6 | 19.6 | 20.4 | 20.8 | 21.1 | 21.1 | 20.9 | 20.4 | 19.7 | 18.9 | 18.2 | 17.6 | 16.7 | Diurnal Average | |
| | 21.1 | 20.6 | 20.2 | 19.5 | 18.9 | 18.8 | 18.5 | 18.5 | 18.8 | 20.6 | 22.3 | 24.4 | 26.1 | 27.2 | 27.6 | 27.9 | 28.3 | 28.3 | 27.6 | 26.8 | 25.2 | 23.6 | 22.8 | 21.9 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 75m (AT75) - C**

**Mannix - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 11 | 1.48 | 1.48 |
| 10 - 20 | 535 | 71.91 | 73.39 |
| > 20 | 198 | 26.61 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 28.3 C on Aug 1 18:00
Maximum Daily Average: 22.4 C on Aug 27

Minimum Value: 9.0 C on Aug 17 07:00
Minimum Daily Average: 13.2 C on Aug 6
Maximum Diurnal Average: 21.1 C at hour 17
Minimum Diurnal Average: 13.9 C at hour 7
Monthly Average: 17.52 C
Percentiles: $P_1$ = 9.9 $P_{10}$ = 12.7 $Q_1$ = 14.6 Median = 17.2 $Q_3$ = 20.3 $P_{90}$ = 23.1 $P_{99}$ = 27.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

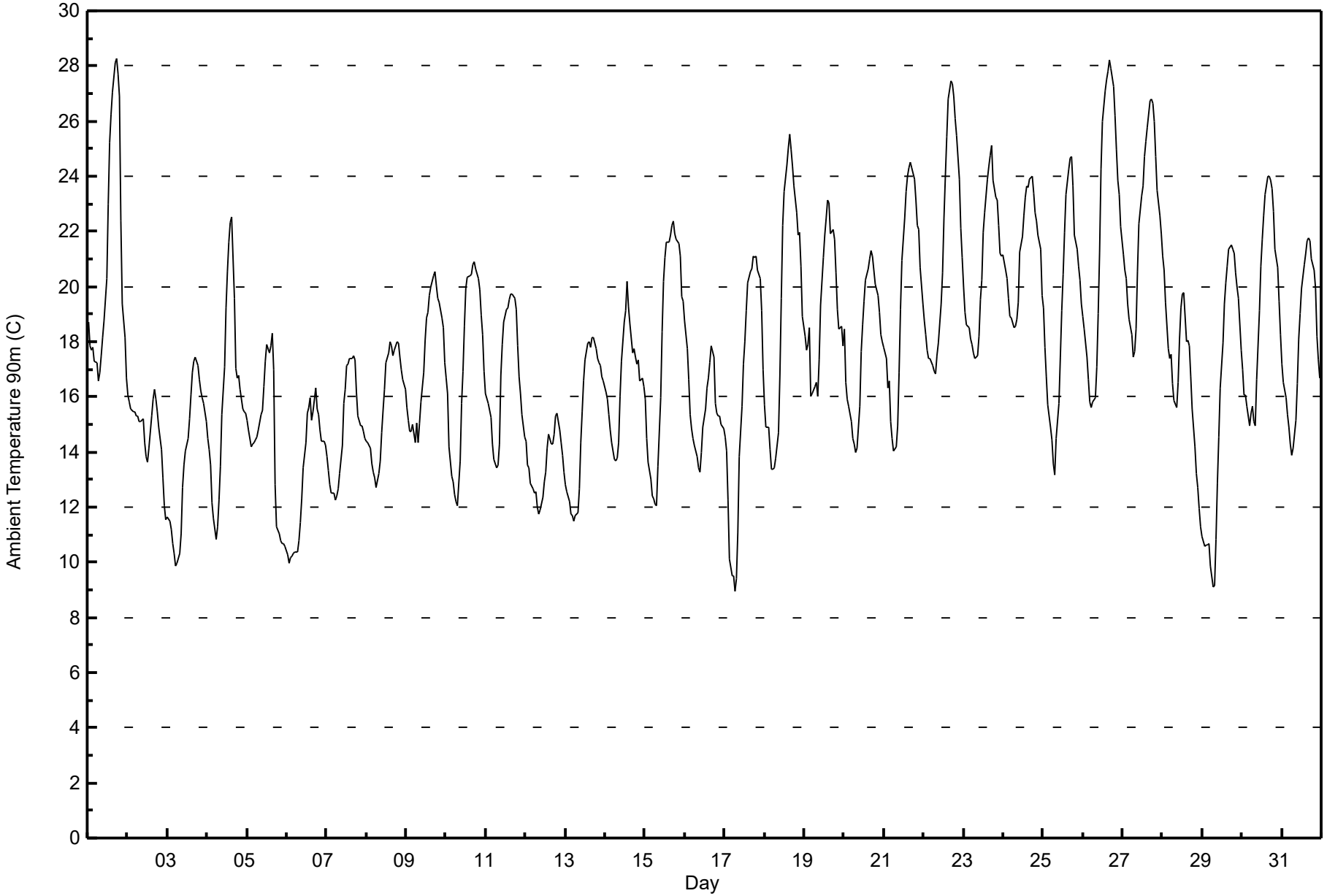
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 18.7 | 17.9 | 17.7 | 17.8 | 17.3 | 17.3 | 16.6 | 16.9 | 17.5 | 18.1 | 18.8 | 20.3 | 23.0 | 25.2 | 26.3 | 27.1 | 28.1 | 28.3 | 27.7 | 26.9 | 22.4 | 19.4 | 18.2 | 16.7 | 21.0 | 28.3 |
| 2-Aug | 16.1 | 15.8 | 15.6 | 15.5 | 15.4 | 15.3 | 15.3 | 15.1 | 15.1 | 15.2 | 14.3 | 13.8 | 13.6 | 14.1 | 15.3 | 15.9 | 16.3 | 15.9 | 15.5 | 14.9 | 14.1 | 13.1 | 12.1 | 11.6 | 14.8 | 16.3 |
| 3-Aug | 11.7 | 11.5 | 11.2 | 10.7 | 10.3 | 9.9 | 10.0 | 10.3 | 11.0 | 12.7 | 13.5 | 14.0 | 14.5 | 15.2 | 16.1 | 16.9 | 17.3 | 17.4 | 17.1 | 16.6 | 16.2 | 16.0 | 15.8 | 15.1 | 13.8 | 17.4 |
| 4-Aug | 14.5 | 14.1 | 13.5 | 12.2 | 11.6 | 10.9 | 11.3 | 12.2 | 13.5 | 15.4 | 17.1 | 19.2 | 20.5 | 21.6 | 22.3 | 22.5 | 19.6 | 17.1 | 16.7 | 16.8 | 16.3 | 15.6 | 15.5 | 15.4 | 16.1 | 22.5 |
| 5-Aug | 15.2 | 14.8 | 14.2 | 14.3 | 14.3 | 14.5 | 14.6 | 14.8 | 15.3 | 15.5 | 16.4 | 17.3 | 17.9 | 17.6 | 17.9 | 18.3 | 17.0 | 12.8 | 11.3 | 11.0 | 10.8 | 10.7 | 10.7 | 10.6 | 14.5 | 18.3 |
| 6-Aug | 10.3 | 9.9 | 10.2 | 10.2 | 10.3 | 10.4 | 10.4 | 10.8 | 11.4 | 12.3 | 13.4 | 14.3 | 15.4 | 15.6 | 16.0 | 15.1 | 15.5 | 16.3 | 15.6 | 15.4 | 14.8 | 14.4 | 14.4 | 14.2 | 13.2 | 16.3 |
| 7-Aug | 13.8 | 13.3 | 12.8 | 12.5 | 12.5 | 12.3 | 12.4 | 12.7 | 13.2 | 14.3 | 15.8 | 16.3 | 17.1 | 17.2 | 17.4 | 17.4 | 17.5 | 17.3 | 16.2 | 15.3 | 15.0 | 14.9 | 14.7 | 14.5 | 14.8 | 17.5 |
| 8-Aug | 14.4 | 14.3 | 14.1 | 13.6 | 13.3 | 13.1 | 12.7 | 13.2 | 13.7 | 14.7 | 15.5 | 16.3 | 17.2 | 17.6 | 18.0 | 17.8 | 17.5 | 17.7 | 18.0 | 17.9 | 17.4 | 17.0 | 16.6 | 16.3 | 15.7 | 18.0 |
| 9-Aug | 15.6 | 15.2 | 14.8 | 14.7 | 15.0 | 14.3 | 15.1 | 14.4 | 15.1 | 15.8 | 16.9 | 18.0 | 18.9 | 19.1 | 19.7 | 20.0 | 20.4 | 20.6 | 20.0 | 19.6 | 19.4 | 18.8 | 18.5 | 17.2 | 17.4 | 20.6 |
| 10-Aug | 16.7 | 16.1 | 14.2 | 13.1 | 12.9 | 12.4 | 12.2 | 12.0 | 13.7 | 15.8 | 16.9 | 18.5 | 20.0 | 20.3 | 20.4 | 20.4 | 20.8 | 20.9 | 20.6 | 20.3 | 19.9 | 19.0 | 18.2 | 16.9 | 17.2 | 20.9 |
| 11-Aug | 16.1 | 15.8 | 15.5 | 15.3 | 14.3 | 13.7 | 13.4 | 13.5 | 14.3 | 16.8 | 17.9 | 18.7 | 19.2 | 19.2 | 19.5 | 19.7 | 19.7 | 19.6 | 19.2 | 17.9 | 16.7 | 16.1 | 15.3 | 14.6 | 16.8 | 19.7 |
| 12-Aug | 14.4 | 13.5 | 13.4 | 12.8 | 12.7 | 12.5 | 12.6 | 12.0 | 11.7 | 11.9 | 12.3 | 12.9 | 13.2 | 14.1 | 14.7 | 14.3 | 14.3 | 14.6 | 15.3 | 15.4 | 14.8 | 14.3 | 13.9 | 13.3 | 13.5 | 15.4 |
| 13-Aug | 12.8 | 12.5 | 12.2 | 11.8 | 11.7 | 11.5 | 11.7 | 11.8 | 12.7 | 14.3 | 15.5 | 16.6 | 17.4 | 17.9 | 18.0 | 17.8 | 18.1 | 18.1 | 17.8 | 17.4 | 17.2 | 17.1 | 16.7 | 16.6 | 15.2 | 18.1 |
| 14-Aug | 16.2 | 15.9 | 15.3 | 14.8 | 14.4 | 13.7 | 13.7 | 13.8 | 14.4 | 16.0 | 17.3 | 18.7 | 19.1 | 20.2 | 19.3 | 18.6 | 17.6 | 17.7 | 17.4 | 17.2 | 17.4 | 16.6 | 16.7 | 16.4 | 16.6 | 20.2 |
| 15-Aug | 15.9 | 14.5 | 13.6 | 13.0 | 12.4 | 12.3 | 12.1 | 12.1 | 13.5 | 15.9 | 18.4 | 20.2 | 21.1 | 21.6 | 21.6 | 21.9 | 22.2 | 22.3 | 21.9 | 21.7 | 21.5 | 21.1 | 19.6 | 19.5 | 17.9 | 22.3 |
| 16-Aug | 18.7 | 17.8 | 16.6 | 15.4 | 14.9 | 14.5 | 14.3 | 13.8 | 13.4 | 13.3 | 14.0 | 14.9 | 15.6 | 16.3 | 16.7 | 17.3 | 17.8 | 17.4 | 15.8 | 15.4 | 15.3 | 15.3 | 15.0 | 14.8 | 15.6 | 18.7 |
| 17-Aug | 14.5 | 14.0 | 12.3 | 10.1 | 9.5 | 9.5 | 9.0 | 9.4 | 11.1 | 13.8 | 15.7 | 17.2 | 18.0 | 19.1 | 20.1 | 20.5 | 20.6 | 21.1 | 21.1 | 21.1 | 20.6 | 20.3 | 19.1 | 17.0 | 16.0 | 21.1 |
| 18-Aug | 15.7 | 14.9 | 14.9 | 14.1 | 13.4 | 13.4 | 13.4 | 13.8 | 14.7 | 16.8 | 19.6 | 22.2 | 23.5 | 24.4 | 25.0 | 25.5 | 25.0 | 24.4 | 23.6 | 22.7 | 21.8 | 22.0 | 20.8 | 18.9 | 19.3 | 25.5 |
| 19-Aug | 18.2 | 17.7 | 17.9 | 18.5 | 16.0 | 16.1 | 16.4 | 16.5 | 16.0 | 17.3 | 19.3 | 21.1 | 21.8 | 22.5 | 23.1 | 23.0 | 21.9 | 22.1 | 21.7 | 20.5 | 19.2 | 18.5 | 18.5 | 17.8 | 19.2 | 23.1 |
| 20-Aug | 18.5 | 16.5 | 15.9 | 15.7 | 15.1 | 14.5 | 14.3 | 14.0 | 14.1 | 15.7 | 17.6 | 18.6 | 19.5 | 20.2 | 20.6 | 21.0 | 21.3 | 21.1 | 20.6 | 20.1 | 19.7 | 19.1 | 18.3 | 18.0 | 17.9 | 21.3 |
| 21-Aug | 17.8 | 17.4 | 16.3 | 16.6 | 15.1 | 14.5 | 14.0 | 14.2 | 15.0 | 16.9 | 19.2 | 20.9 | 22.5 | 23.5 | 24.0 | 24.3 | 24.5 | 24.3 | 23.9 | 23.1 | 22.2 | 22.1 | 20.7 | 19.4 | 19.7 | 24.5 |
| 22-Aug | 18.8 | 18.2 | 17.7 | 17.4 | 17.4 | 17.1 | 16.9 | 16.8 | 17.5 | 17.9 | 19.4 | 20.5 | 22.5 | 24.0 | 25.4 | 26.8 | 27.5 | 27.4 | 26.9 | 26.1 | 25.5 | 23.9 | 22.1 | 21.0 | 21.4 | 27.5 |
| 23-Aug | 20.0 | 19.1 | 18.6 | 18.5 | 18.1 | 17.9 | 17.6 | 17.4 | 17.5 | 18.2 | 19.5 | 20.3 | 22.0 | 22.7 | 23.9 | 24.4 | 24.8 | 25.1 | 23.9 | 23.2 | 23.2 | 22.2 | 21.2 | 21.1 | 20.8 | 25.1 |
| 24-Aug | 21.2 | 20.6 | 20.3 | 19.6 | 18.9 | 18.8 | 18.5 | 18.6 | 18.8 | 19.4 | 21.3 | 21.8 | 22.6 | 23.2 | 23.6 | 23.6 | 23.9 | 24.0 | 23.4 | 22.7 | 22.4 | 21.8 | 21.4 | 19.7 | 21.3 | 24.0 |
| 25-Aug | 19.2 | 17.8 | 16.7 | 15.7 | 14.9 | 14.4 | 13.6 | 13.2 | 14.5 | 15.7 | 17.4 | 19.1 | 20.4 | 22.0 | 23.3 | 24.3 | 24.6 | 24.7 | 23.6 | 21.9 | 21.4 | 20.7 | 20.2 | 19.4 | 19.1 | 24.7 |
| 26-Aug | 18.9 | 18.5 | 17.4 | 16.6 | 15.8 | 15.6 | 15.8 | 16.0 | 17.1 | 19.0 | 21.2 | 24.3 | 26.0 | 27.1 | 27.5 | 27.8 | 28.2 | 27.9 | 27.2 | 26.2 | 25.0 | 23.9 | 23.4 | 22.1 | 22.0 | 28.2 |
| 27-Aug | 21.1 | 20.6 | 20.3 | 19.4 | 18.8 | 18.2 | 17.5 | 17.7 | 18.5 | 20.5 | 22.3 | 23.3 | 23.6 | 24.7 | 25.3 | 25.8 | 26.7 | 26.8 | 26.7 | 26.0 | 24.7 | 23.5 | 22.6 | 21.9 | 22.4 | 26.8 |
| 28-Aug | 21.1 | 20.6 | 19.4 | 17.7 | 17.4 | 17.5 | 16.5 | 15.8 | 15.6 | 16.5 | 18.1 | 19.2 | 19.7 | 19.8 | 18.0 | 18.1 | 17.9 | 16.8 | 15.6 | 14.2 | 13.2 | 12.7 | 11.9 | 11.3 | 16.9 | 21.1 |
| 29-Aug | 10.9 | 10.6 | 10.6 | 10.6 | 10.7 | 9.8 | 9.1 | 9.2 | 10.8 | 12.9 | 14.5 | 16.3 | 17.9 | 19.4 | 20.1 | 20.7 | 21.4 | 21.5 | 21.4 | 21.2 | 20.5 | 20.0 | 19.6 | 17.7 | 15.7 | 21.5 |
| 30-Aug | 17.0 | 16.1 | 16.1 | 15.7 | 15.0 | 15.4 | 15.7 | 15.1 | 14.9 | 16.6 | 19.1 | 20.7 | 21.7 | 22.6 | 23.4 | 24.0 | 24.0 | 23.8 | 23.5 | 22.7 | 21.3 | 20.7 | 19.5 | 18.2 | 19.3 | 24.0 |
| 31-Aug | 17.2 | 16.5 | 16.0 | 15.4 | 14.9 | 14.3 | 13.9 | 14.1 | 15.1 | 16.5 | 18.1 | 19.0 | 19.9 | 20.8 | 21.2 | 21.7 | 21.8 | 21.6 | 21.0 | 20.6 | 19.9 | 18.2 | 17.3 | 16.7 | 18.0 | 21.8 |
| | 16.5 | 15.9 | 15.3 | 14.8 | 14.3 | 14.1 | 13.9 | 13.9 | 14.5 | 15.9 | 17.3 | 18.5 | 19.5 | 20.3 | 20.8 | 21.0 | 21.1 | 20.9 | 20.3 | 19.7 | 19.0 | 18.4 | 17.7 | 16.9 | Diurnal Average | |
| | 21.2 | 20.6 | 20.3 | 19.6 | 18.9 | 18.8 | 18.5 | 18.6 | 18.8 | 20.5 | 22.3 | 24.3 | 26.0 | 27.1 | 27.5 | 27.8 | 28.2 | 28.3 | 27.7 | 26.9 | 25.5 | 23.9 | 23.4 | 22.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 90m (AT90) - C**

**Mannix - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 10 | 1.34 | 1.34 |
| 10 - 20 | 538 | 72.31 | 73.66 |
| > 20 | 196 | 26.34 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 100 % on Aug 15 06:00

Maximum Daily Average: 90.8 % on Aug 12

Minimum Value: 33 % on Aug 24 14:00

Minimum Daily Average: 55.2 % on Aug 24

Maximum Diurnal Average: 93.2 % at hour 5

Minimum Diurnal Average: 51.3 % at hour 15

Monthly Average: 73.6 %

Percentiles: $P_1$ = 37 $P_{10}$ = 47 $Q_1$ = 58 Median = 76 $Q_3$ = 90 $P_{90}$ = 97 $P_{99}$ = 99

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

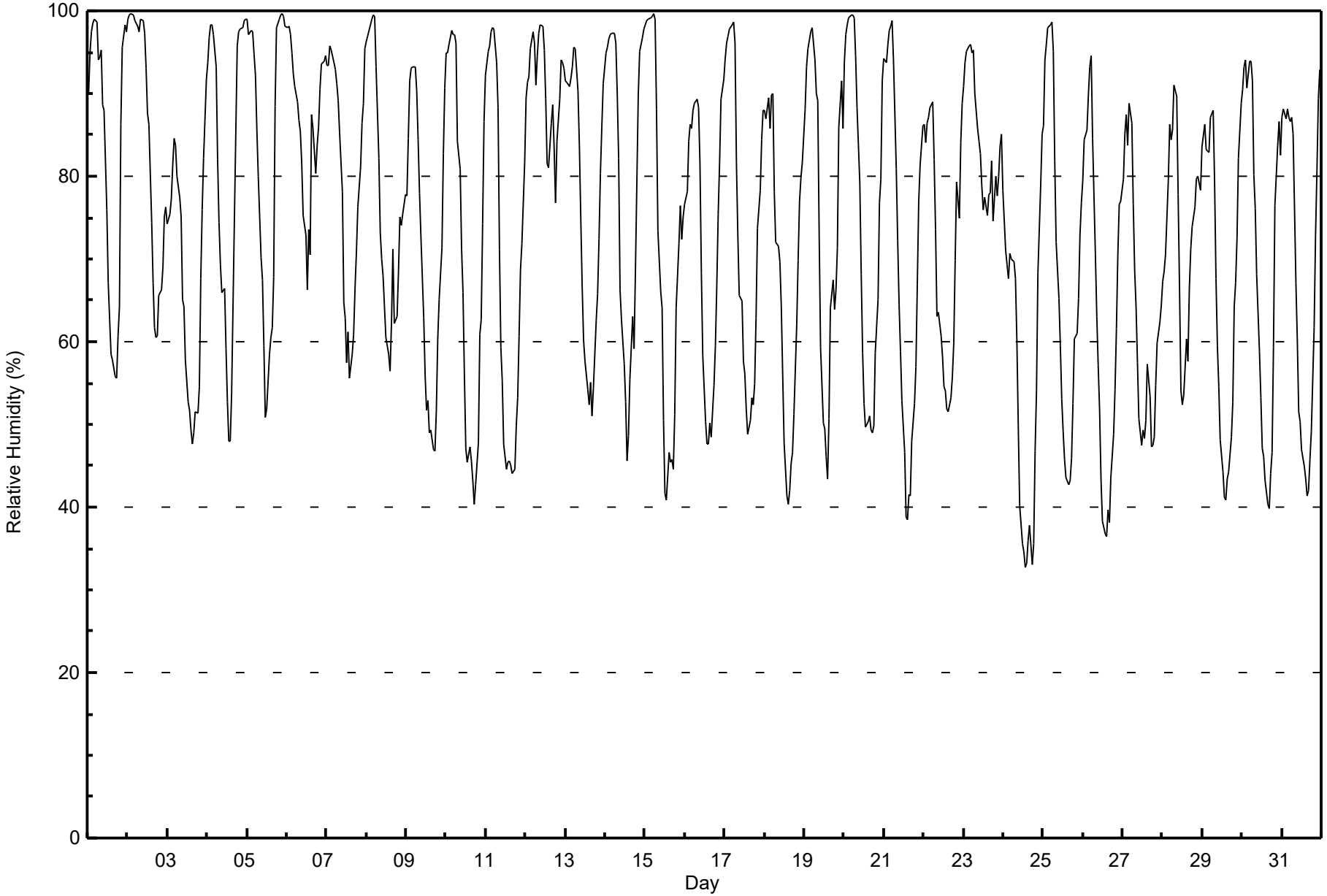
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 90 | 95 | 97 | 98 | 99 | 99 | 94 | 94 | 95 | 89 | 88 | 76 | 67 | 63 | 58 | 58 | 56 | 56 | 61 | 64 | 86 | 96 | 98 | 97 | 82.3 | 99 |
| 2-Aug | 99 | 99 | 100 | 99 | 99 | 99 | 98 | 97 | 99 | 99 | 97 | 93 | 88 | 86 | 74 | 67 | 62 | 60 | 61 | 66 | 66 | 69 | 75 | 76 | 84.6 | 100 |
| 3-Aug | 74 | 75 | 77 | 81 | 85 | 84 | 80 | 78 | 75 | 65 | 64 | 58 | 53 | 52 | 49 | 48 | 49 | 52 | 51 | 55 | 68 | 76 | 82 | 92 | 67.6 | 92 |
| 4-Aug | 94 | 97 | 98 | 98 | 97 | 93 | 82 | 74 | 69 | 66 | 66 | 59 | 53 | 48 | 48 | 54 | 75 | 85 | 96 | 98 | 98 | 98 | 99 | 99 | 81.0 | 99 |
| 5-Aug | 99 | 97 | 98 | 97 | 95 | 92 | 86 | 80 | 70 | 67 | 60 | 51 | 52 | 58 | 61 | 62 | 68 | 89 | 98 | 99 | 99 | 100 | 99 | 98 | 82.3 | 100 |
| 6-Aug | 98 | 98 | 97 | 95 | 92 | 91 | 89 | 87 | 85 | 81 | 75 | 73 | 66 | 74 | 71 | 87 | 86 | 80 | 84 | 86 | 91 | 94 | 94 | 95 | 86.2 | 98 |
| 7-Aug | 93 | 93 | 96 | 95 | 94 | 93 | 91 | 89 | 85 | 78 | 65 | 63 | 58 | 61 | 56 | 58 | 61 | 66 | 71 | 76 | 81 | 86 | 89 | 95 | 79.0 | 96 |
| 8-Aug | 96 | 97 | 98 | 99 | 99 | 99 | 93 | 82 | 73 | 70 | 68 | 64 | 61 | 59 | 56 | 62 | 71 | 62 | 63 | 68 | 75 | 74 | 75 | 78 | 76.9 | 99 |
| 9-Aug | 78 | 85 | 92 | 93 | 93 | 93 | 90 | 84 | 78 | 73 | 63 | 56 | 52 | 53 | 49 | 49 | 47 | 47 | 52 | 60 | 65 | 71 | 83 | 91 | 70.7 | 93 |
| 10-Aug | 95 | 95 | 96 | 98 | 97 | 97 | 96 | 84 | 81 | 71 | 66 | 56 | 47 | 45 | 47 | 46 | 43 | 40 | 43 | 48 | 61 | 63 | 74 | 87 | 69.8 | 98 |
| 11-Aug | 92 | 95 | 96 | 98 | 98 | 98 | 94 | 88 | 71 | 59 | 55 | 48 | 45 | 45 | 46 | 45 | 44 | 45 | 50 | 53 | 61 | 69 | 72 | 82 | 68.6 | 98 |
| 12-Aug | 89 | 91 | 92 | 95 | 97 | 96 | 91 | 95 | 97 | 98 | 98 | 95 | 89 | 82 | 81 | 86 | 89 | 83 | 77 | 84 | 89 | 94 | 94 | 93 | 90.8 | 98 |
| 13-Aug | 92 | 91 | 91 | 92 | 93 | 96 | 95 | 90 | 84 | 75 | 67 | 60 | 58 | 54 | 52 | 55 | 51 | 54 | 63 | 66 | 72 | 80 | 86 | 91 | 75.4 | 96 |
| 14-Aug | 95 | 96 | 97 | 97 | 97 | 97 | 96 | 90 | 82 | 66 | 63 | 57 | 53 | 46 | 49 | 55 | 63 | 59 | 69 | 79 | 90 | 95 | 97 | 98 | 78.6 | 98 |
| 15-Aug | 98 | 99 | 99 | 99 | 99 | 100 | 99 | 88 | 73 | 66 | 64 | 51 | 42 | 41 | 47 | 45 | 46 | 45 | 51 | 64 | 72 | 76 | 72 | 75 | 71.3 | 100 |
| 16-Aug | 77 | 78 | 84 | 86 | 86 | 88 | 89 | 89 | 88 | 82 | 68 | 58 | 50 | 48 | 48 | 50 | 48 | 55 | 60 | 67 | 75 | 82 | 89 | 92 | 72.4 | 92 |
| 17-Aug | 94 | 96 | 97 | 98 | 98 | 99 | 96 | 82 | 73 | 66 | 65 | 58 | 56 | 52 | 49 | 51 | 53 | 52 | 55 | 63 | 74 | 78 | 84 | 88 | 74.0 | 99 |
| 18-Aug | 88 | 87 | 89 | 86 | 90 | 90 | 78 | 72 | 72 | 70 | 64 | 56 | 48 | 41 | 40 | 42 | 45 | 47 | 51 | 62 | 70 | 77 | 80 | 82 | 67.8 | 90 |
| 19-Aug | 88 | 93 | 95 | 96 | 97 | 98 | 94 | 90 | 89 | 73 | 59 | 50 | 50 | 46 | 43 | 51 | 64 | 67 | 64 | 66 | 71 | 86 | 92 | 86 | 75.4 | 98 |
| 20-Aug | 94 | 97 | 98 | 99 | 99 | 100 | 99 | 95 | 88 | 79 | 68 | 59 | 53 | 50 | 50 | 51 | 49 | 49 | 50 | 59 | 65 | 77 | 80 | 92 | 74.9 | 100 |
| 21-Aug | 94 | 94 | 96 | 98 | 98 | 99 | 94 | 81 | 72 | 65 | 59 | 53 | 47 | 39 | 38 | 42 | 41 | 48 | 53 | 57 | 67 | 77 | 81 | 86 | 69.9 | 99 |
| 22-Aug | 86 | 84 | 86 | 87 | 88 | 89 | 82 | 74 | 63 | 63 | 61 | 58 | 55 | 54 | 52 | 51 | 53 | 56 | 60 | 70 | 79 | 75 | 84 | 89 | 70.8 | 89 |
| 23-Aug | 91 | 94 | 95 | 96 | 96 | 95 | 95 | 90 | 86 | 84 | 83 | 79 | 76 | 77 | 75 | 78 | 78 | 82 | 75 | 80 | 78 | 80 | 83 | 85 | 84.6 | 96 |
| 24-Aug | 78 | 71 | 69 | 68 | 71 | 70 | 70 | 68 | 60 | 50 | 40 | 36 | 35 | 33 | 33 | 36 | 38 | 33 | 36 | 47 | 54 | 68 | 79 | 85 | 55.2 | 85 |
| 25-Aug | 86 | 94 | 96 | 98 | 98 | 99 | 95 | 82 | 72 | 65 | 60 | 53 | 49 | 46 | 43 | 43 | 43 | 46 | 53 | 60 | 61 | 65 | 73 | 77 | 69.0 | 99 |
| 26-Aug | 80 | 84 | 86 | 90 | 93 | 95 | 85 | 71 | 63 | 57 | 52 | 43 | 38 | 37 | 36 | 40 | 38 | 44 | 49 | 54 | 62 | 70 | 77 | 77 | 63.3 | 95 |
| 27-Aug | 80 | 85 | 87 | 84 | 89 | 86 | 77 | 69 | 64 | 57 | 51 | 47 | 49 | 48 | 51 | 57 | 53 | 47 | 47 | 48 | 55 | 60 | 62 | 64 | 63.3 | 89 |
| 28-Aug | 67 | 68 | 70 | 79 | 86 | 84 | 86 | 91 | 90 | 78 | 66 | 54 | 52 | 54 | 60 | 58 | 66 | 71 | 74 | 76 | 80 | 80 | 79 | 78 | 72.9 | 91 |
| 29-Aug | 84 | 86 | 83 | 83 | 83 | 87 | 88 | 79 | 68 | 60 | 55 | 48 | 44 | 41 | 41 | 43 | 44 | 48 | 53 | 64 | 67 | 73 | 82 | 89 | 66.4 | 89 |
| 30-Aug | 90 | 93 | 94 | 91 | 94 | 94 | 92 | 80 | 76 | 68 | 59 | 53 | 47 | 46 | 43 | 40 | 40 | 44 | 47 | 59 | 77 | 84 | 87 | 82 | 70.0 | 94 |
| 31-Aug | 87 | 88 | 87 | 88 | 87 | 87 | 87 | 85 | 67 | 60 | 51 | 50 | 47 | 45 | 43 | 41 | 42 | 46 | 49 | 62 | 73 | 81 | 89 | 93 | 68.2 | 93 |
| | 88.6 | 90.2 | 91.5 | 92.4 | 93.2 | 93.1 | 89.7 | 83.8 | 77.8 | 71.0 | 65.2 | 58.6 | 54.1 | 52.4 | 51.3 | 53.3 | 55.1 | 56.7 | 60.0 | 66.5 | 73.6 | 79.1 | 83.6 | 86.8 | Diurnal Average | |
| | 99 | 99 | 100 | 99 | 99 | 100 | 99 | 97 | 99 | 99 | 98 | 95 | 89 | 86 | 81 | 87 | 89 | 89 | 98 | 99 | 99 | 100 | 99 | 99 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity (RH) - %**

**Mannix - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 16 | 2.15 | 2.15 |
| 40 - 60 | 194 | 26.08 | 28.23 |
| 60 - 80 | 207 | 27.82 | 56.05 |
| 80 - 100 | 327 | 43.95 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 20m (RH20) - %

## Mannix - August 2026

Maximum Value: 98 % on Aug 15 07:00

Maximum Daily Average: 81.2 % on Aug 12

Minimum Value: 27 % on Aug 24 15:00

Minimum Daily Average: 43.6 % on Aug 24

Maximum Diurnal Average: 83.9 % at hour 6

Minimum Diurnal Average: 47.6 % at hour 15

Monthly Average: 66.1 %

Percentiles: $P_1$ = 32 $P_{10}$ = 43 $Q_1$ = 52 Median = 67 $Q_3$ = 81 $P_{90}$ = 87 $P_{99}$ = 94

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

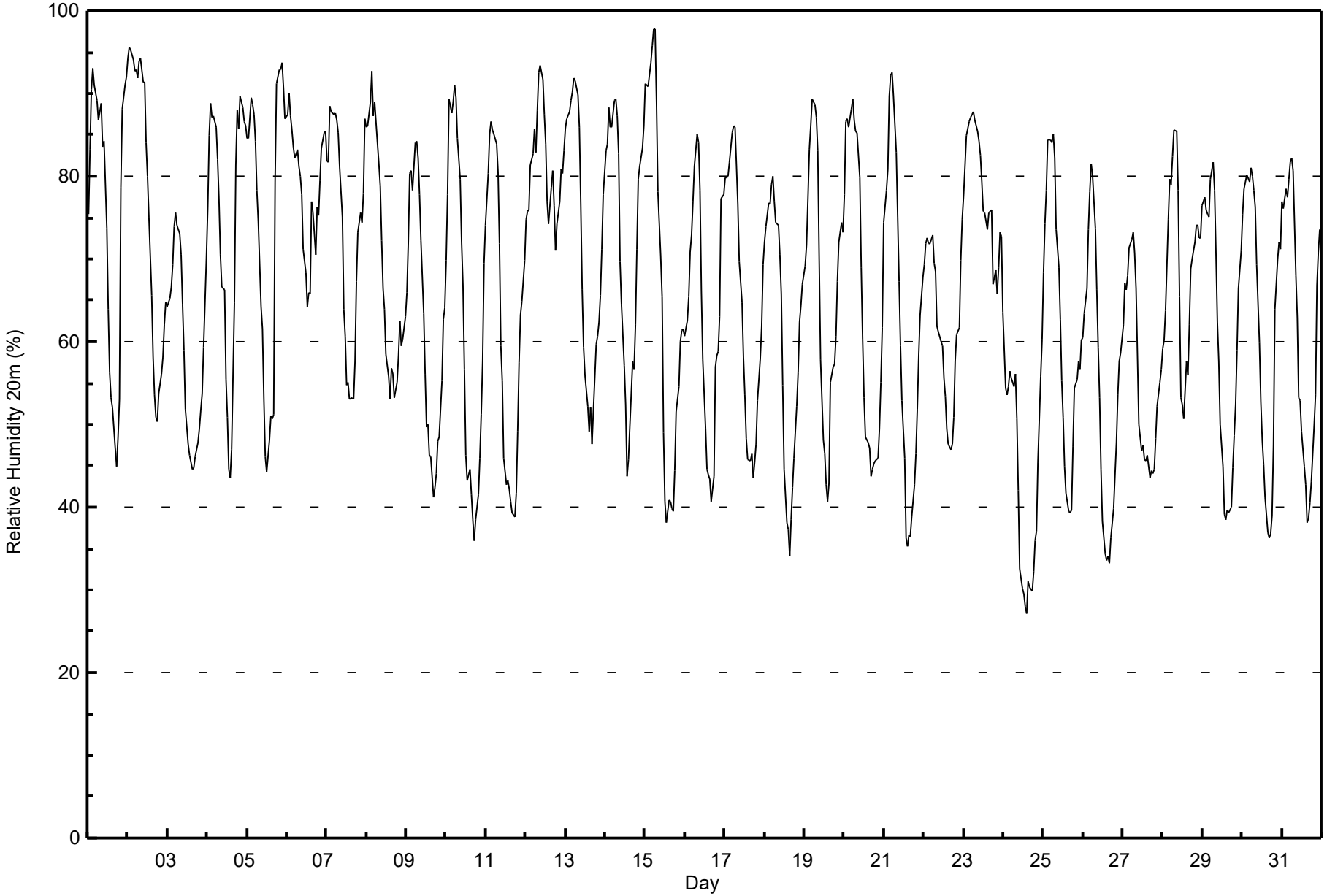
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 75 | 83 | 90 | 93 | 91 | 89 | 87 | 88 | 89 | 84 | 84 | 74 | 64 | 56 | 53 | 52 | 47 | 45 | 48 | 53 | 79 | 88 | 91 | 92 | 74.8 | 93 |
| 2-Aug | 94 | 96 | 95 | 94 | 93 | 93 | 92 | 94 | 94 | 91 | 91 | 84 | 80 | 75 | 66 | 58 | 54 | 51 | 50 | 54 | 56 | 58 | 62 | 65 | 76.7 | 96 |
| 3-Aug | 64 | 65 | 67 | 69 | 74 | 76 | 74 | 73 | 70 | 65 | 59 | 52 | 48 | 46 | 45 | 45 | 45 | 46 | 48 | 49 | 52 | 54 | 59 | 70 | 58.9 | 76 |
| 4-Aug | 76 | 85 | 89 | 87 | 87 | 86 | 82 | 77 | 71 | 67 | 66 | 55 | 51 | 45 | 44 | 47 | 65 | 81 | 88 | 86 | 90 | 88 | 87 | 86 | 74.4 | 90 |
| 5-Aug | 85 | 85 | 89 | 89 | 87 | 84 | 78 | 75 | 64 | 62 | 53 | 46 | 44 | 48 | 51 | 51 | 51 | 79 | 91 | 93 | 93 | 94 | 91 | 87 | 73.7 | 94 |
| 6-Aug | 87 | 90 | 87 | 86 | 84 | 82 | 83 | 81 | 80 | 78 | 71 | 68 | 64 | 66 | 66 | 77 | 76 | 70 | 76 | 75 | 79 | 83 | 85 | 85 | 78.4 | 90 |
| 7-Aug | 82 | 82 | 88 | 88 | 87 | 88 | 87 | 85 | 81 | 75 | 64 | 61 | 55 | 55 | 53 | 53 | 53 | 58 | 67 | 73 | 76 | 74 | 78 | 87 | 72.9 | 88 |
| 8-Aug | 86 | 86 | 89 | 93 | 87 | 89 | 86 | 81 | 79 | 72 | 66 | 64 | 59 | 56 | 53 | 57 | 56 | 53 | 55 | 58 | 62 | 59 | 60 | 63 | 69.6 | 93 |
| 9-Aug | 66 | 72 | 80 | 81 | 78 | 84 | 84 | 82 | 78 | 72 | 63 | 56 | 50 | 50 | 46 | 46 | 41 | 42 | 44 | 48 | 48 | 55 | 63 | 64 | 62.3 | 84 |
| 10-Aug | 70 | 78 | 89 | 88 | 89 | 91 | 89 | 85 | 80 | 72 | 67 | 57 | 46 | 43 | 45 | 42 | 38 | 36 | 38 | 41 | 46 | 51 | 58 | 69 | 62.8 | 91 |
| 11-Aug | 74 | 80 | 85 | 87 | 86 | 85 | 84 | 80 | 72 | 60 | 55 | 46 | 43 | 43 | 42 | 41 | 39 | 39 | 42 | 49 | 57 | 63 | 65 | 70 | 62.0 | 87 |
| 12-Aug | 75 | 76 | 76 | 81 | 83 | 86 | 83 | 88 | 93 | 93 | 92 | 87 | 84 | 77 | 74 | 79 | 81 | 76 | 71 | 74 | 77 | 81 | 80 | 83 | 81.2 | 93 |
| 13-Aug | 86 | 87 | 88 | 89 | 90 | 92 | 92 | 90 | 86 | 77 | 66 | 59 | 56 | 52 | 49 | 52 | 48 | 52 | 60 | 61 | 62 | 66 | 71 | 78 | 71.1 | 92 |
| 14-Aug | 83 | 84 | 88 | 86 | 86 | 89 | 89 | 87 | 83 | 70 | 65 | 57 | 52 | 44 | 46 | 50 | 58 | 57 | 62 | 71 | 80 | 81 | 83 | 86 | 72.4 | 89 |
| 15-Aug | 91 | 91 | 91 | 94 | 96 | 98 | 98 | 89 | 78 | 70 | 65 | 49 | 41 | 38 | 41 | 41 | 40 | 39 | 44 | 51 | 55 | 60 | 61 | 61 | 66.0 | 98 |
| 16-Aug | 61 | 62 | 65 | 71 | 73 | 77 | 81 | 85 | 84 | 78 | 66 | 58 | 49 | 45 | 44 | 43 | 41 | 44 | 57 | 58 | 59 | 63 | 77 | 78 | 63.3 | 85 |
| 17-Aug | 80 | 80 | 80 | 82 | 85 | 86 | 86 | 81 | 77 | 70 | 65 | 58 | 54 | 48 | 46 | 46 | 46 | 44 | 45 | 48 | 53 | 58 | 62 | 69 | 64.5 | 86 |
| 18-Aug | 72 | 74 | 77 | 77 | 79 | 80 | 77 | 74 | 74 | 71 | 66 | 55 | 45 | 38 | 37 | 34 | 39 | 42 | 46 | 52 | 56 | 62 | 64 | 67 | 60.7 | 80 |
| 19-Aug | 69 | 72 | 77 | 83 | 86 | 89 | 89 | 87 | 83 | 70 | 58 | 48 | 46 | 43 | 41 | 43 | 55 | 57 | 57 | 61 | 67 | 72 | 74 | 73 | 66.7 | 89 |
| 20-Aug | 78 | 87 | 87 | 86 | 88 | 89 | 87 | 85 | 85 | 80 | 69 | 60 | 53 | 48 | 48 | 47 | 44 | 45 | 45 | 46 | 46 | 49 | 55 | 62 | 65.4 | 89 |
| 21-Aug | 74 | 78 | 81 | 90 | 92 | 93 | 90 | 83 | 75 | 67 | 60 | 53 | 46 | 36 | 35 | 37 | 36 | 39 | 43 | 46 | 52 | 58 | 63 | 68 | 62.3 | 93 |
| 22-Aug | 69 | 72 | 72 | 72 | 72 | 73 | 69 | 68 | 62 | 61 | 60 | 59 | 56 | 53 | 49 | 48 | 47 | 48 | 51 | 58 | 61 | 62 | 70 | 75 | 62.0 | 75 |
| 23-Aug | 78 | 81 | 85 | 87 | 87 | 87 | 88 | 87 | 85 | 84 | 83 | 79 | 76 | 76 | 74 | 76 | 76 | 76 | 67 | 69 | 66 | 69 | 73 | 73 | 78.3 | 88 |
| 24-Aug | 64 | 54 | 54 | 54 | 56 | 56 | 55 | 56 | 51 | 42 | 33 | 30 | 30 | 28 | 27 | 31 | 30 | 30 | 32 | 36 | 37 | 45 | 56 | 60 | 43.6 | 64 |
| 25-Aug | 68 | 74 | 78 | 84 | 84 | 84 | 85 | 82 | 74 | 69 | 63 | 55 | 51 | 45 | 42 | 40 | 39 | 40 | 47 | 54 | 55 | 58 | 57 | 60 | 62.0 | 85 |
| 26-Aug | 61 | 63 | 66 | 74 | 78 | 81 | 80 | 74 | 66 | 59 | 53 | 45 | 38 | 34 | 34 | 34 | 33 | 36 | 40 | 44 | 48 | 53 | 58 | 59 | 54.7 | 81 |
| 27-Aug | 62 | 67 | 66 | 68 | 71 | 72 | 73 | 71 | 66 | 58 | 50 | 47 | 47 | 46 | 46 | 46 | 44 | 44 | 44 | 45 | 48 | 52 | 55 | 57 | 56.1 | 73 |
| 28-Aug | 59 | 60 | 64 | 75 | 80 | 79 | 82 | 86 | 85 | 78 | 65 | 53 | 52 | 51 | 58 | 56 | 62 | 69 | 70 | 72 | 74 | 74 | 73 | 73 | 68.7 | 86 |
| 29-Aug | 76 | 78 | 76 | 75 | 75 | 80 | 82 | 78 | 71 | 62 | 58 | 50 | 45 | 39 | 38 | 40 | 39 | 40 | 45 | 49 | 52 | 59 | 66 | 71 | 60.2 | 82 |
| 30-Aug | 75 | 78 | 79 | 80 | 79 | 81 | 80 | 78 | 76 | 69 | 60 | 53 | 48 | 45 | 41 | 37 | 36 | 37 | 39 | 47 | 64 | 70 | 72 | 71 | 62.4 | 81 |
| 31-Aug | 77 | 76 | 78 | 77 | 80 | 82 | 82 | 81 | 68 | 63 | 53 | 53 | 49 | 45 | 43 | 38 | 39 | 41 | 43 | 50 | 54 | 67 | 71 | 74 | 61.7 | 82 |
| | 74.8 | 77.3 | 80.0 | 81.9 | 82.7 | 83.9 | 83.0 | 81.1 | 76.8 | 70.6 | 64.2 | 57.2 | 52.3 | 48.9 | 47.6 | 47.9 | 48.3 | 50.2 | 53.5 | 57.1 | 61.4 | 65.4 | 69.1 | 72.1 | Diurnal Average | |
| | 94 | 96 | 95 | 94 | 96 | 98 | 98 | 94 | 94 | 93 | 92 | 87 | 84 | 77 | 74 | 79 | 81 | 81 | 91 | 93 | 93 | 94 | 91 | 92 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 20m (RH20) - %**

**Mannix - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 48 | 6.45 | 6.45 |
| 40 - 60 | 242 | 32.53 | 38.98 |
| 60 - 80 | 257 | 34.54 | 73.52 |
| 80 - 100 | 197 | 26.48 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 45m (RH45) - %

## Mannix - August 2026

Maximum Value: 95 % on Aug 2 03:00

Maximum Daily Average: 80.1 % on Aug 12

Minimum Value: 27 % on Aug 24 15:00

Minimum Daily Average: 41.7 % on Aug 24

Maximum Diurnal Average: 81.7 % at hour 7

Minimum Diurnal Average: 47.4 % at hour 15

Monthly Average: 64.4 %

Percentiles: $P_1$ = 32 $P_{10}$ = 43 $Q_1$ = 51 Median = 66 $Q_3$ = 78 $P_{90}$ = 86 $P_{99}$ = 93

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

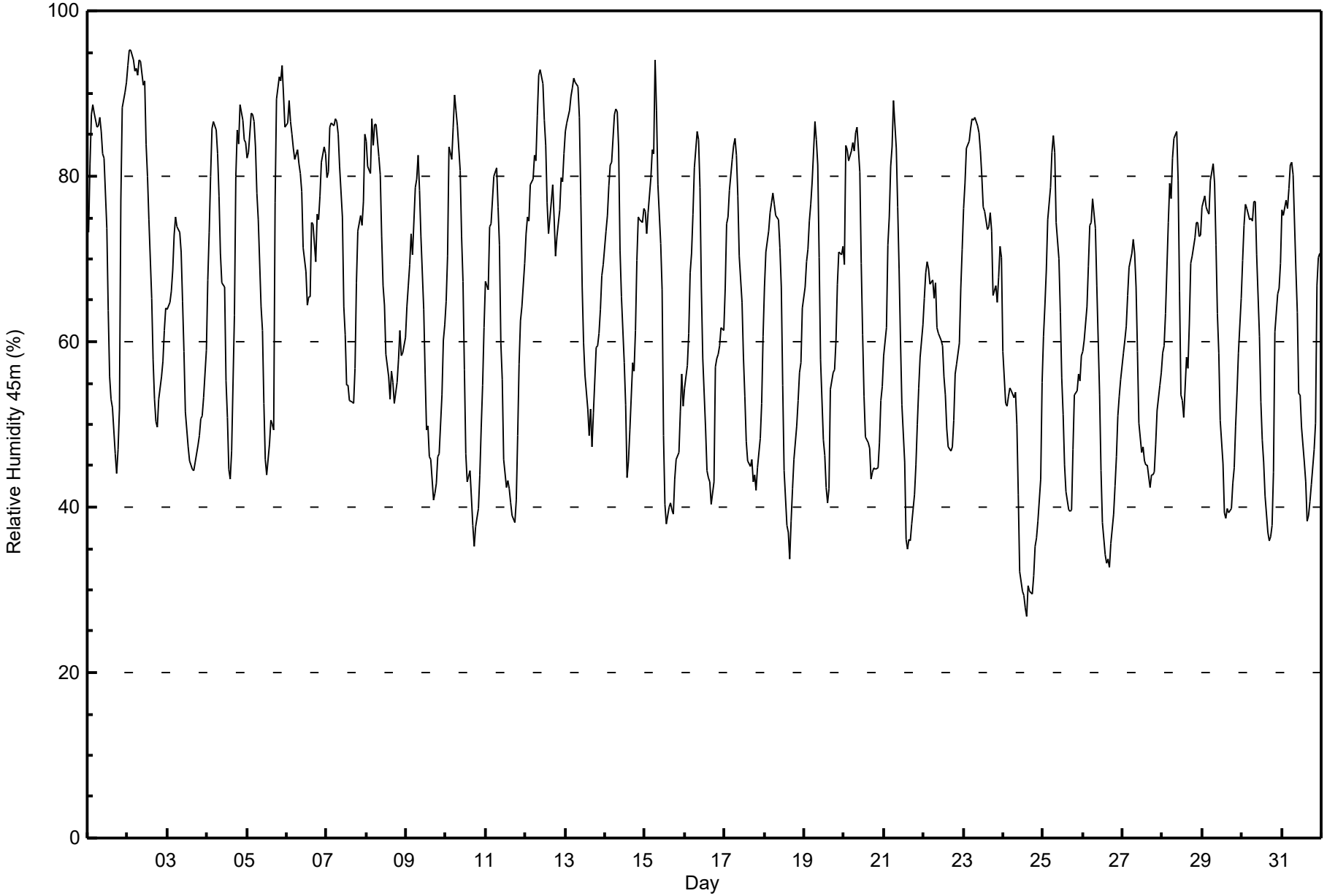
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 73 | 82 | 87 | 89 | 88 | 86 | 86 | 87 | 85 | 83 | 82 | 74 | 64 | 56 | 53 | 52 | 46 | 44 | 47 | 52 | 77 | 88 | 90 | 91 | 73.4 | 91 |
| 2-Aug | 93 | 95 | 95 | 94 | 93 | 93 | 92 | 94 | 94 | 91 | 92 | 84 | 80 | 75 | 65 | 58 | 53 | 50 | 50 | 53 | 56 | 58 | 61 | 64 | 76.4 | 95 |
| 3-Aug | 64 | 65 | 66 | 69 | 73 | 75 | 74 | 73 | 71 | 65 | 59 | 51 | 47 | 46 | 45 | 45 | 44 | 45 | 48 | 49 | 51 | 51 | 53 | 59 | 57.8 | 75 |
| 4-Aug | 67 | 73 | 80 | 86 | 87 | 86 | 83 | 78 | 71 | 67 | 67 | 55 | 51 | 45 | 43 | 47 | 63 | 80 | 86 | 84 | 89 | 87 | 84 | 84 | 72.5 | 89 |
| 5-Aug | 82 | 83 | 88 | 88 | 87 | 84 | 78 | 75 | 64 | 61 | 53 | 46 | 44 | 48 | 51 | 50 | 49 | 77 | 89 | 92 | 92 | 93 | 90 | 86 | 72.8 | 93 |
| 6-Aug | 87 | 89 | 87 | 85 | 83 | 82 | 83 | 81 | 80 | 78 | 71 | 69 | 64 | 65 | 65 | 74 | 74 | 70 | 75 | 75 | 78 | 82 | 84 | 83 | 77.7 | 89 |
| 7-Aug | 80 | 80 | 86 | 86 | 86 | 87 | 87 | 85 | 81 | 75 | 64 | 61 | 55 | 55 | 53 | 53 | 52 | 57 | 67 | 73 | 75 | 74 | 77 | 85 | 72.3 | 87 |
| 8-Aug | 84 | 81 | 80 | 87 | 84 | 86 | 86 | 82 | 80 | 73 | 67 | 64 | 59 | 56 | 53 | 56 | 55 | 53 | 55 | 58 | 61 | 58 | 59 | 60 | 68.3 | 87 |
| 9-Aug | 64 | 67 | 69 | 73 | 70 | 79 | 80 | 83 | 78 | 73 | 64 | 56 | 49 | 50 | 46 | 46 | 41 | 42 | 43 | 46 | 46 | 53 | 60 | 62 | 60.0 | 83 |
| 10-Aug | 65 | 70 | 84 | 82 | 86 | 90 | 88 | 86 | 81 | 73 | 67 | 57 | 46 | 43 | 44 | 41 | 38 | 35 | 38 | 40 | 44 | 50 | 55 | 62 | 61.0 | 90 |
| 11-Aug | 67 | 66 | 74 | 74 | 77 | 80 | 81 | 76 | 72 | 60 | 55 | 46 | 42 | 43 | 42 | 40 | 39 | 38 | 41 | 49 | 57 | 63 | 64 | 69 | 59.1 | 81 |
| 12-Aug | 73 | 75 | 75 | 79 | 80 | 83 | 82 | 87 | 92 | 93 | 91 | 87 | 84 | 77 | 73 | 77 | 79 | 75 | 70 | 73 | 76 | 80 | 79 | 83 | 80.1 | 93 |
| 13-Aug | 85 | 86 | 88 | 90 | 91 | 92 | 91 | 91 | 87 | 78 | 67 | 60 | 56 | 52 | 49 | 52 | 47 | 51 | 59 | 60 | 61 | 64 | 68 | 69 | 70.6 | 92 |
| 14-Aug | 73 | 75 | 79 | 81 | 82 | 88 | 88 | 88 | 83 | 71 | 65 | 57 | 52 | 44 | 46 | 49 | 57 | 57 | 61 | 70 | 75 | 75 | 74 | 76 | 69.5 | 88 |
| 15-Aug | 76 | 73 | 76 | 80 | 83 | 83 | 94 | 88 | 79 | 72 | 66 | 49 | 40 | 38 | 40 | 41 | 40 | 39 | 43 | 46 | 47 | 51 | 56 | 52 | 60.5 | 94 |
| 16-Aug | 54 | 57 | 61 | 68 | 71 | 75 | 81 | 86 | 84 | 79 | 66 | 58 | 49 | 44 | 44 | 43 | 40 | 43 | 57 | 58 | 58 | 59 | 62 | 61 | 60.9 | 86 |
| 17-Aug | 66 | 74 | 75 | 78 | 82 | 84 | 85 | 83 | 78 | 70 | 65 | 58 | 53 | 48 | 46 | 45 | 46 | 43 | 44 | 42 | 45 | 48 | 53 | 61 | 61.3 | 85 |
| 18-Aug | 67 | 71 | 73 | 76 | 77 | 78 | 77 | 75 | 75 | 71 | 67 | 55 | 44 | 38 | 37 | 34 | 38 | 42 | 46 | 50 | 53 | 56 | 58 | 64 | 59.2 | 78 |
| 19-Aug | 67 | 70 | 71 | 75 | 77 | 79 | 87 | 84 | 81 | 70 | 58 | 48 | 46 | 42 | 41 | 42 | 54 | 56 | 57 | 60 | 67 | 71 | 71 | 72 | 64.4 | 87 |
| 20-Aug | 69 | 84 | 83 | 82 | 83 | 84 | 83 | 85 | 86 | 81 | 70 | 61 | 53 | 49 | 48 | 47 | 43 | 44 | 45 | 45 | 45 | 48 | 53 | 55 | 63.5 | 86 |
| 21-Aug | 58 | 62 | 72 | 75 | 81 | 84 | 89 | 83 | 76 | 69 | 60 | 52 | 45 | 36 | 35 | 36 | 36 | 38 | 42 | 45 | 50 | 54 | 58 | 62 | 58.3 | 89 |
| 22-Aug | 65 | 68 | 70 | 69 | 67 | 67 | 65 | 67 | 62 | 61 | 60 | 60 | 56 | 54 | 50 | 47 | 47 | 47 | 50 | 56 | 57 | 60 | 66 | 71 | 60.1 | 71 |
| 23-Aug | 76 | 79 | 83 | 84 | 86 | 87 | 87 | 87 | 86 | 85 | 83 | 80 | 76 | 76 | 74 | 74 | 76 | 73 | 66 | 67 | 65 | 68 | 72 | 70 | 77.5 | 87 |
| 24-Aug | 59 | 53 | 52 | 53 | 54 | 54 | 53 | 54 | 50 | 41 | 32 | 30 | 29 | 28 | 27 | 31 | 30 | 29 | 32 | 35 | 36 | 38 | 43 | 55 | 41.7 | 59 |
| 25-Aug | 61 | 64 | 69 | 75 | 79 | 83 | 85 | 83 | 74 | 70 | 64 | 56 | 51 | 45 | 42 | 40 | 39 | 40 | 47 | 54 | 54 | 56 | 55 | 58 | 60.1 | 85 |
| 26-Aug | 59 | 60 | 64 | 69 | 74 | 74 | 77 | 74 | 67 | 60 | 54 | 44 | 38 | 34 | 33 | 34 | 33 | 36 | 39 | 43 | 46 | 51 | 53 | 55 | 53.0 | 77 |
| 27-Aug | 59 | 60 | 62 | 66 | 69 | 71 | 72 | 71 | 67 | 59 | 50 | 47 | 47 | 46 | 45 | 45 | 42 | 44 | 44 | 44 | 48 | 52 | 55 | 56 | 55.0 | 72 |
| 28-Aug | 59 | 59 | 63 | 74 | 79 | 77 | 82 | 85 | 86 | 79 | 66 | 54 | 53 | 51 | 58 | 57 | 62 | 69 | 70 | 73 | 74 | 74 | 73 | 73 | 68.8 | 86 |
| 29-Aug | 76 | 78 | 76 | 76 | 75 | 80 | 82 | 79 | 72 | 63 | 59 | 51 | 45 | 39 | 39 | 40 | 39 | 40 | 43 | 45 | 50 | 54 | 59 | 65 | 59.3 | 82 |
| 30-Aug | 70 | 74 | 77 | 76 | 75 | 75 | 75 | 77 | 77 | 71 | 61 | 53 | 48 | 45 | 41 | 37 | 36 | 36 | 38 | 44 | 61 | 66 | 66 | 70 | 60.3 | 77 |
| 31-Aug | 76 | 75 | 77 | 76 | 79 | 81 | 82 | 80 | 69 | 64 | 54 | 54 | 50 | 45 | 43 | 38 | 39 | 41 | 43 | 47 | 50 | 67 | 70 | 71 | 61.2 | 82 |
| | 70.2 | 72.6 | 75.5 | 77.9 | 79.2 | 80.8 | 81.7 | 80.9 | 77.0 | 71.1 | 64.4 | 57.2 | 52.3 | 48.7 | 47.4 | 47.4 | 47.7 | 49.5 | 52.7 | 55.6 | 59.5 | 62.9 | 65.2 | 67.9 | Diurnal Average | |
| | 93 | 95 | 95 | 94 | 93 | 93 | 94 | 94 | 94 | 93 | 92 | 87 | 84 | 77 | 74 | 77 | 79 | 80 | 89 | 92 | 92 | 93 | 90 | 91 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 45m (RH45) - %**

**Mannix - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 51 | 6.85 | 6.85 |
| 40 - 60 | 259 | 34.81 | 41.67 |
| 60 - 80 | 274 | 36.83 | 78.49 |
| 80 - 100 | 160 | 21.51 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 97 % on Aug 2 03:00

Maximum Daily Average: 80.8 % on Aug 12

Minimum Value: 27 % on Aug 24 15:00

Minimum Daily Average: 41.7 % on Aug 24

Maximum Diurnal Average: 80.3 % at hour 8

Minimum Diurnal Average: 48.3 % at hour 16

Monthly Average: 64.1 %

Percentiles: $P_1$ = 33 $P_{10}$ = 43 $Q_1$ = 51 Median = 65 $Q_3$ = 77 $P_{90}$ = 85 $P_{99}$ = 94

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

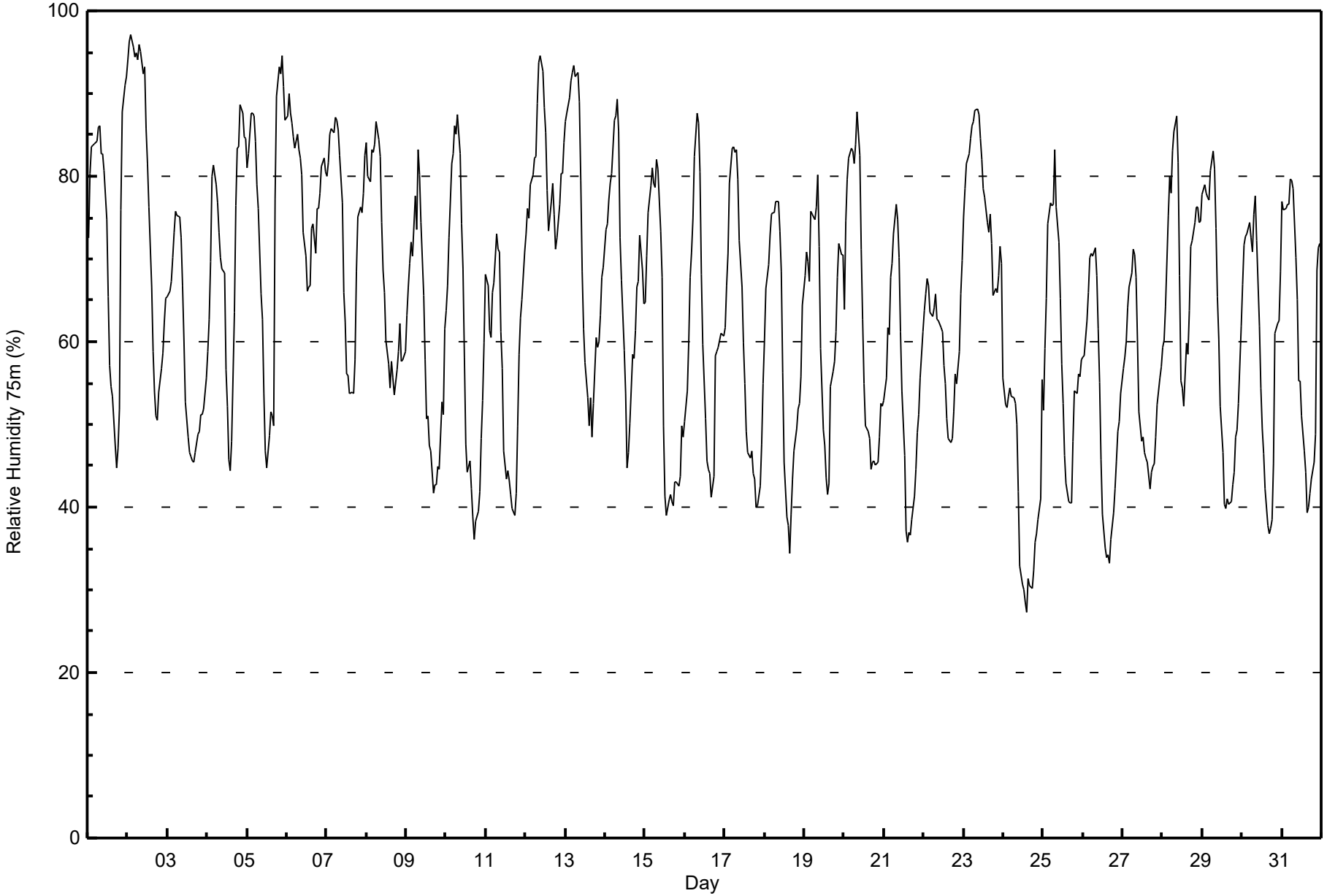
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 73 | 80 | 84 | 84 | 84 | 84 | 86 | 86 | 83 | 83 | 81 | 75 | 65 | 57 | 55 | 53 | 48 | 45 | 47 | 52 | 76 | 88 | 91 | 92 | 72.9 | 92 |
| 2-Aug | 94 | 96 | 97 | 96 | 94 | 95 | 94 | 96 | 95 | 92 | 93 | 86 | 82 | 76 | 67 | 59 | 54 | 51 | 51 | 54 | 57 | 59 | 62 | 65 | 77.7 | 97 |
| 3-Aug | 65 | 66 | 67 | 70 | 73 | 76 | 75 | 75 | 73 | 67 | 60 | 53 | 48 | 47 | 46 | 46 | 45 | 47 | 49 | 49 | 51 | 51 | 52 | 56 | 58.6 | 76 |
| 4-Aug | 59 | 63 | 70 | 80 | 81 | 79 | 77 | 73 | 70 | 69 | 68 | 57 | 52 | 46 | 44 | 48 | 64 | 77 | 83 | 84 | 89 | 88 | 85 | 85 | 70.3 | 89 |
| 5-Aug | 81 | 83 | 88 | 88 | 87 | 84 | 79 | 76 | 66 | 63 | 54 | 47 | 45 | 49 | 52 | 51 | 50 | 77 | 90 | 93 | 92 | 95 | 91 | 87 | 73.5 | 95 |
| 6-Aug | 87 | 90 | 88 | 87 | 85 | 83 | 85 | 83 | 82 | 80 | 73 | 70 | 66 | 67 | 67 | 74 | 74 | 71 | 76 | 76 | 78 | 81 | 82 | 80 | 78.6 | 90 |
| 7-Aug | 80 | 82 | 85 | 86 | 85 | 87 | 87 | 86 | 82 | 77 | 66 | 62 | 56 | 56 | 54 | 54 | 54 | 58 | 69 | 75 | 76 | 76 | 78 | 83 | 73.0 | 87 |
| 8-Aug | 84 | 80 | 79 | 83 | 83 | 84 | 87 | 84 | 82 | 74 | 69 | 66 | 60 | 57 | 54 | 58 | 56 | 54 | 57 | 59 | 62 | 58 | 58 | 59 | 68.6 | 87 |
| 9-Aug | 63 | 67 | 70 | 72 | 70 | 78 | 73 | 83 | 80 | 74 | 66 | 58 | 51 | 51 | 47 | 47 | 42 | 43 | 43 | 45 | 45 | 53 | 51 | 61 | 59.7 | 83 |
| 10-Aug | 64 | 67 | 73 | 81 | 83 | 86 | 85 | 87 | 83 | 74 | 69 | 58 | 48 | 44 | 46 | 42 | 39 | 36 | 38 | 39 | 42 | 48 | 53 | 60 | 60.2 | 87 |
| 11-Aug | 68 | 67 | 61 | 61 | 66 | 67 | 73 | 71 | 71 | 61 | 57 | 47 | 43 | 44 | 43 | 41 | 40 | 39 | 42 | 50 | 58 | 63 | 65 | 71 | 57.1 | 73 |
| 12-Aug | 73 | 76 | 75 | 79 | 80 | 82 | 82 | 89 | 94 | 94 | 93 | 88 | 85 | 78 | 73 | 77 | 79 | 75 | 71 | 73 | 77 | 80 | 80 | 84 | 80.8 | 94 |
| 13-Aug | 87 | 88 | 89 | 92 | 93 | 93 | 92 | 93 | 89 | 79 | 68 | 62 | 58 | 53 | 50 | 53 | 48 | 53 | 60 | 59 | 60 | 63 | 68 | 69 | 71.6 | 93 |
| 14-Aug | 74 | 74 | 77 | 79 | 80 | 87 | 87 | 89 | 85 | 73 | 67 | 59 | 54 | 45 | 47 | 50 | 58 | 58 | 61 | 67 | 67 | 73 | 69 | 65 | 68.6 | 89 |
| 15-Aug | 65 | 70 | 76 | 79 | 81 | 79 | 79 | 82 | 81 | 73 | 68 | 50 | 41 | 39 | 41 | 42 | 41 | 40 | 43 | 43 | 43 | 44 | 50 | 49 | 58.2 | 82 |
| 16-Aug | 50 | 54 | 60 | 68 | 71 | 75 | 82 | 88 | 86 | 81 | 68 | 60 | 51 | 46 | 45 | 44 | 41 | 44 | 58 | 59 | 59 | 60 | 61 | 61 | 61.3 | 88 |
| 17-Aug | 62 | 67 | 71 | 79 | 83 | 83 | 83 | 83 | 80 | 72 | 67 | 60 | 55 | 49 | 47 | 46 | 47 | 44 | 43 | 40 | 40 | 43 | 48 | 55 | 60.2 | 83 |
| 18-Aug | 60 | 66 | 69 | 73 | 75 | 76 | 76 | 77 | 77 | 73 | 68 | 56 | 45 | 39 | 38 | 34 | 39 | 43 | 47 | 49 | 52 | 53 | 56 | 64 | 58.6 | 77 |
| 19-Aug | 68 | 71 | 70 | 67 | 76 | 75 | 75 | 76 | 80 | 72 | 59 | 49 | 48 | 43 | 42 | 43 | 54 | 57 | 58 | 61 | 68 | 72 | 70 | 71 | 63.5 | 80 |
| 20-Aug | 64 | 75 | 80 | 82 | 83 | 83 | 82 | 84 | 88 | 82 | 71 | 63 | 55 | 50 | 49 | 48 | 45 | 45 | 46 | 45 | 45 | 48 | 53 | 52 | 63.2 | 88 |
| 21-Aug | 53 | 56 | 62 | 61 | 68 | 69 | 73 | 77 | 75 | 70 | 61 | 54 | 46 | 37 | 36 | 37 | 37 | 38 | 41 | 45 | 49 | 51 | 56 | 61 | 54.7 | 77 |
| 22-Aug | 64 | 66 | 68 | 67 | 64 | 63 | 64 | 66 | 63 | 63 | 62 | 61 | 57 | 55 | 51 | 48 | 48 | 48 | 51 | 56 | 55 | 59 | 66 | 70 | 59.7 | 70 |
| 23-Aug | 75 | 78 | 81 | 83 | 85 | 86 | 87 | 88 | 88 | 87 | 85 | 82 | 78 | 78 | 74 | 73 | 75 | 72 | 66 | 66 | 66 | 68 | 72 | 69 | 77.6 | 88 |
| 24-Aug | 56 | 52 | 52 | 53 | 54 | 53 | 53 | 53 | 50 | 42 | 33 | 31 | 30 | 28 | 27 | 31 | 30 | 30 | 32 | 36 | 37 | 38 | 41 | 55 | 41.7 | 56 |
| 25-Aug | 52 | 59 | 65 | 74 | 77 | 76 | 77 | 83 | 76 | 72 | 65 | 57 | 53 | 46 | 43 | 41 | 40 | 40 | 48 | 54 | 54 | 56 | 56 | 58 | 59.3 | 83 |
| 26-Aug | 58 | 58 | 63 | 66 | 70 | 71 | 70 | 71 | 68 | 62 | 55 | 46 | 39 | 35 | 34 | 34 | 33 | 36 | 39 | 42 | 46 | 49 | 50 | 54 | 52.1 | 71 |
| 27-Aug | 57 | 58 | 60 | 64 | 67 | 68 | 71 | 70 | 68 | 60 | 52 | 48 | 48 | 47 | 46 | 45 | 42 | 44 | 45 | 45 | 48 | 52 | 56 | 57 | 55.0 | 71 |
| 28-Aug | 59 | 60 | 64 | 75 | 80 | 78 | 83 | 85 | 87 | 82 | 68 | 55 | 54 | 52 | 60 | 59 | 64 | 72 | 72 | 74 | 76 | 76 | 74 | 75 | 70.3 | 87 |
| 29-Aug | 78 | 79 | 78 | 77 | 77 | 81 | 83 | 81 | 74 | 65 | 60 | 52 | 47 | 40 | 40 | 41 | 40 | 41 | 43 | 44 | 48 | 49 | 52 | 62 | 59.7 | 83 |
| 30-Aug | 67 | 72 | 73 | 73 | 74 | 73 | 71 | 75 | 78 | 72 | 62 | 54 | 49 | 46 | 42 | 38 | 37 | 37 | 38 | 45 | 61 | 62 | 62 | 69 | 59.7 | 78 |
| 31-Aug | 77 | 76 | 76 | 77 | 77 | 80 | 80 | 78 | 70 | 65 | 55 | 55 | 51 | 47 | 44 | 39 | 40 | 42 | 43 | 45 | 49 | 69 | 71 | 72 | 61.6 | 80 |
| | 68.2 | 70.8 | 73.2 | 76.0 | 77.6 | 78.6 | 79.0 | 80.3 | 78.2 | 72.7 | 65.9 | 58.7 | 53.6 | 49.9 | 48.4 | 48.3 | 48.5 | 50.2 | 53.3 | 55.7 | 58.9 | 62.1 | 63.8 | 66.7 | Diurnal Average | |
| | 94 | 96 | 97 | 96 | 94 | 95 | 94 | 96 | 95 | 94 | 93 | 88 | 85 | 78 | 74 | 77 | 79 | 77 | 90 | 93 | 92 | 95 | 91 | 92 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 75m (RH75) - %**

**Mannix - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 42 | 5.65 | 5.65 |
| 40 - 60 | 270 | 36.29 | 41.94 |
| 60 - 80 | 285 | 38.31 | 80.24 |
| 80 - 100 | 147 | 19.76 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 90m (RH90) - %

## Mannix - August 2026

Maximum Value: 98 % on Aug 2 03:00

Maximum Daily Average: 80.8 % on Aug 12

Minimum Value: 28 % on Aug 24 15:00

Minimum Daily Average: 41.3 % on Aug 24

Maximum Diurnal Average: 79.8 % at hour 8

Minimum Diurnal Average: 48.4 % at hour 16

Monthly Average: 63.8 %

Percentiles: $P_1$ = 33 $P_{10}$ = 43 $Q_1$ = 51 Median = 64 $Q_3$ = 76 $P_{90}$ = 84 $P_{99}$ = 95

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

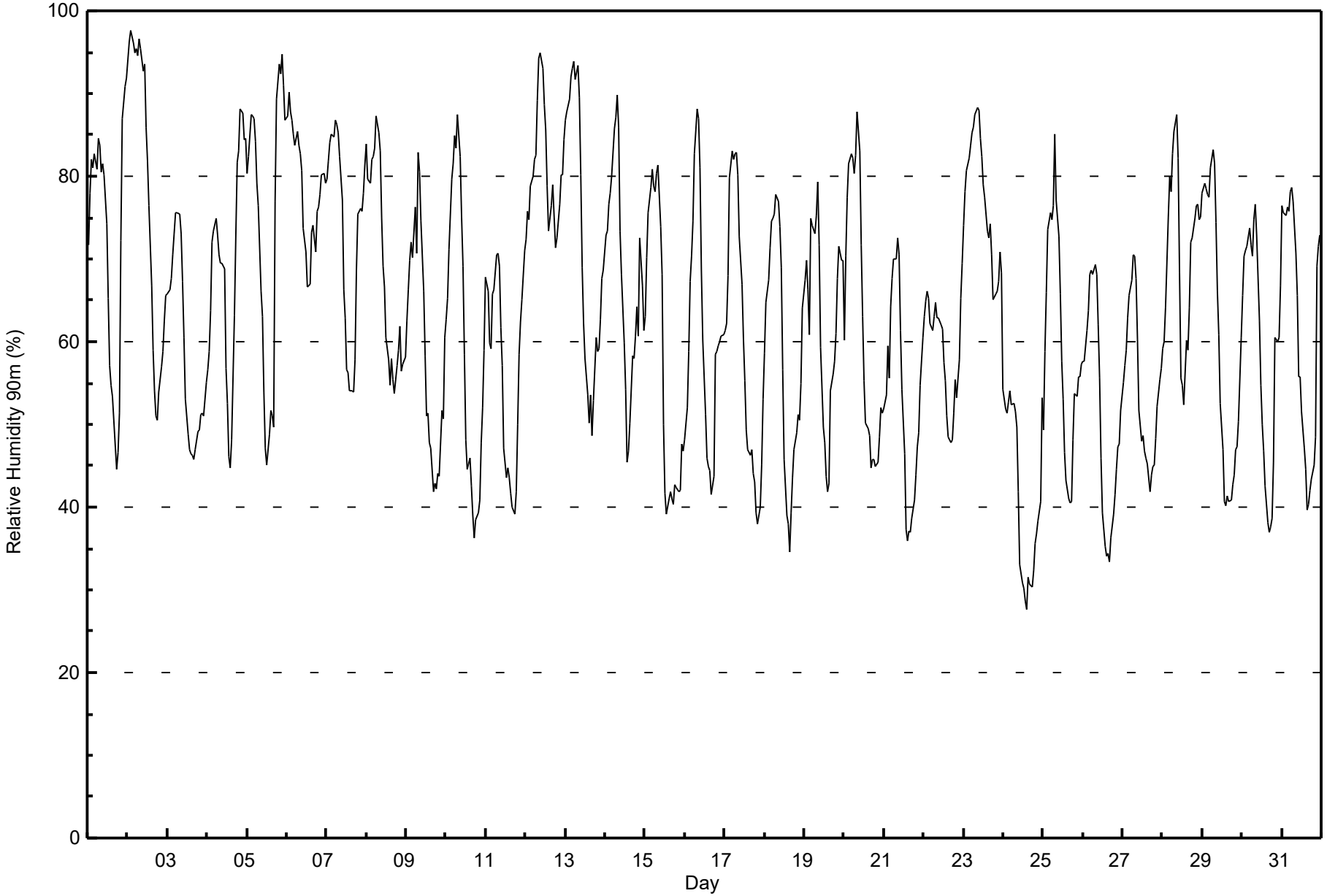
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 72 | 78 | 82 | 81 | 83 | 81 | 85 | 84 | 80 | 82 | 80 | 74 | 65 | 57 | 55 | 53 | 47 | 45 | 47 | 51 | 72 | 87 | 91 | 92 | 71.8 | 92 |
| 2-Aug | 94 | 96 | 98 | 96 | 95 | 96 | 95 | 97 | 95 | 93 | 94 | 86 | 82 | 76 | 67 | 59 | 54 | 51 | 51 | 54 | 57 | 59 | 62 | 66 | 78.0 | 98 |
| 3-Aug | 66 | 66 | 68 | 70 | 73 | 76 | 76 | 75 | 73 | 67 | 61 | 53 | 49 | 47 | 46 | 46 | 46 | 47 | 49 | 49 | 51 | 51 | 51 | 55 | 58.8 | 76 |
| 4-Aug | 57 | 59 | 64 | 72 | 73 | 75 | 73 | 70 | 69 | 69 | 69 | 57 | 53 | 46 | 45 | 48 | 63 | 73 | 82 | 83 | 88 | 88 | 84 | 85 | 68.5 | 88 |
| 5-Aug | 80 | 82 | 88 | 87 | 87 | 84 | 79 | 76 | 66 | 63 | 54 | 47 | 45 | 49 | 52 | 51 | 50 | 77 | 89 | 93 | 92 | 95 | 91 | 87 | 73.6 | 95 |
| 6-Aug | 87 | 90 | 88 | 87 | 85 | 84 | 86 | 84 | 83 | 81 | 74 | 71 | 67 | 67 | 67 | 73 | 74 | 71 | 76 | 76 | 78 | 80 | 80 | 79 | 78.6 | 90 |
| 7-Aug | 80 | 82 | 84 | 85 | 85 | 87 | 86 | 85 | 82 | 77 | 66 | 63 | 57 | 56 | 54 | 54 | 54 | 58 | 69 | 75 | 76 | 76 | 78 | 81 | 72.9 | 87 |
| 8-Aug | 84 | 80 | 79 | 82 | 82 | 83 | 87 | 85 | 83 | 75 | 69 | 67 | 61 | 58 | 55 | 58 | 55 | 54 | 57 | 59 | 62 | 56 | 57 | 58 | 68.6 | 87 |
| 9-Aug | 63 | 66 | 70 | 72 | 70 | 76 | 71 | 83 | 80 | 75 | 66 | 58 | 51 | 51 | 48 | 47 | 42 | 43 | 42 | 44 | 44 | 52 | 51 | 61 | 59.4 | 83 |
| 10-Aug | 63 | 65 | 71 | 80 | 82 | 85 | 83 | 87 | 82 | 75 | 69 | 59 | 48 | 45 | 46 | 43 | 39 | 36 | 38 | 39 | 41 | 48 | 52 | 59 | 59.8 | 87 |
| 11-Aug | 68 | 66 | 60 | 59 | 66 | 66 | 70 | 71 | 69 | 62 | 57 | 47 | 44 | 45 | 44 | 42 | 40 | 39 | 42 | 50 | 58 | 62 | 65 | 71 | 56.8 | 71 |
| 12-Aug | 72 | 76 | 75 | 79 | 80 | 82 | 83 | 89 | 94 | 95 | 93 | 89 | 86 | 79 | 73 | 76 | 79 | 75 | 71 | 73 | 77 | 80 | 80 | 84 | 80.8 | 95 |
| 13-Aug | 87 | 88 | 89 | 92 | 93 | 94 | 92 | 93 | 90 | 80 | 69 | 62 | 58 | 54 | 50 | 54 | 49 | 53 | 61 | 59 | 59 | 63 | 68 | 69 | 71.8 | 94 |
| 14-Aug | 73 | 73 | 77 | 78 | 80 | 86 | 87 | 90 | 86 | 73 | 68 | 60 | 54 | 45 | 47 | 50 | 58 | 58 | 61 | 64 | 61 | 73 | 67 | 61 | 67.9 | 90 |
| 15-Aug | 63 | 70 | 76 | 79 | 81 | 79 | 78 | 80 | 81 | 74 | 68 | 50 | 42 | 39 | 41 | 42 | 41 | 40 | 43 | 42 | 42 | 42 | 48 | 47 | 57.8 | 81 |
| 16-Aug | 48 | 52 | 59 | 67 | 70 | 75 | 83 | 88 | 87 | 81 | 69 | 60 | 51 | 46 | 45 | 44 | 41 | 44 | 58 | 59 | 59 | 60 | 61 | 61 | 61.2 | 88 |
| 17-Aug | 61 | 62 | 68 | 80 | 83 | 82 | 83 | 83 | 80 | 73 | 67 | 60 | 55 | 49 | 47 | 46 | 47 | 44 | 43 | 39 | 38 | 40 | 45 | 53 | 59.6 | 83 |
| 18-Aug | 59 | 65 | 68 | 71 | 75 | 75 | 75 | 78 | 77 | 74 | 69 | 57 | 46 | 39 | 38 | 35 | 39 | 44 | 47 | 49 | 51 | 51 | 55 | 64 | 58.3 | 78 |
| 19-Aug | 67 | 70 | 66 | 61 | 75 | 74 | 73 | 75 | 79 | 72 | 59 | 50 | 48 | 44 | 42 | 43 | 54 | 56 | 58 | 61 | 68 | 72 | 70 | 70 | 62.7 | 79 |
| 20-Aug | 60 | 70 | 77 | 82 | 83 | 82 | 80 | 82 | 88 | 83 | 72 | 63 | 55 | 50 | 50 | 49 | 45 | 46 | 46 | 45 | 45 | 48 | 52 | 51 | 62.7 | 88 |
| 21-Aug | 52 | 54 | 59 | 56 | 64 | 68 | 70 | 70 | 72 | 71 | 61 | 54 | 46 | 37 | 36 | 37 | 37 | 39 | 41 | 44 | 47 | 49 | 55 | 61 | 53.3 | 72 |
| 22-Aug | 63 | 65 | 66 | 65 | 62 | 61 | 63 | 65 | 63 | 63 | 62 | 62 | 58 | 55 | 51 | 49 | 48 | 48 | 51 | 55 | 53 | 58 | 65 | 70 | 59.2 | 70 |
| 23-Aug | 74 | 78 | 81 | 82 | 84 | 85 | 86 | 87 | 88 | 88 | 85 | 82 | 79 | 78 | 73 | 72 | 74 | 70 | 65 | 66 | 66 | 67 | 71 | 68 | 77.1 | 88 |
| 24-Aug | 54 | 52 | 51 | 53 | 54 | 52 | 53 | 52 | 50 | 42 | 33 | 31 | 30 | 29 | 28 | 32 | 31 | 30 | 32 | 36 | 37 | 38 | 41 | 53 | 41.3 | 54 |
| 25-Aug | 49 | 59 | 66 | 74 | 76 | 75 | 76 | 85 | 77 | 73 | 66 | 58 | 53 | 47 | 43 | 41 | 41 | 41 | 48 | 54 | 53 | 56 | 56 | 57 | 59.2 | 85 |
| 26-Aug | 58 | 58 | 61 | 64 | 68 | 69 | 68 | 69 | 68 | 62 | 56 | 46 | 39 | 35 | 34 | 34 | 33 | 36 | 39 | 42 | 45 | 47 | 48 | 52 | 51.3 | 69 |
| 27-Aug | 55 | 57 | 59 | 63 | 66 | 67 | 71 | 70 | 68 | 60 | 52 | 48 | 49 | 47 | 46 | 45 | 42 | 44 | 45 | 45 | 48 | 52 | 55 | 57 | 54.6 | 71 |
| 28-Aug | 59 | 60 | 64 | 75 | 80 | 78 | 83 | 85 | 88 | 82 | 68 | 56 | 55 | 52 | 60 | 59 | 64 | 72 | 73 | 75 | 77 | 77 | 75 | 75 | 70.5 | 88 |
| 29-Aug | 78 | 79 | 78 | 78 | 78 | 81 | 83 | 82 | 74 | 66 | 61 | 53 | 47 | 41 | 40 | 41 | 41 | 41 | 43 | 44 | 47 | 47 | 50 | 60 | 59.7 | 83 |
| 30-Aug | 66 | 70 | 71 | 71 | 74 | 72 | 70 | 75 | 77 | 73 | 62 | 55 | 50 | 47 | 43 | 38 | 37 | 38 | 39 | 45 | 61 | 60 | 61 | 67 | 59.2 | 77 |
| 31-Aug | 76 | 76 | 75 | 76 | 76 | 78 | 79 | 77 | 71 | 66 | 56 | 56 | 51 | 47 | 45 | 40 | 40 | 42 | 43 | 45 | 48 | 69 | 72 | 73 | 61.5 | 79 |
| | 67.3 | 69.8 | 72.2 | 74.7 | 76.8 | 77.6 | 78.2 | 79.8 | 78.1 | 73.2 | 66.3 | 59.0 | 53.9 | 50.2 | 48.7 | 48.4 | 48.6 | 50.1 | 53.1 | 55.4 | 58.1 | 61.4 | 63.1 | 66.0 | Diurnal Average | |
| | 94 | 96 | 98 | 96 | 95 | 96 | 95 | 97 | 95 | 95 | 94 | 89 | 86 | 79 | 73 | 76 | 79 | 77 | 89 | 93 | 92 | 95 | 91 | 92 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 90m (RH90) - %**

**Mannix - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 42 | 5.65 | 5.65 |
| 40 - 60 | 274 | 36.83 | 42.47 |
| 60 - 80 | 285 | 38.31 | 80.78 |
| 80 - 100 | 143 | 19.22 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 20m (WS20) - km/h

## Mannix - August 2026

Maximum Speed: 28 km/h on Aug 2 16:00

Maximum Daily Speed Average: 20.0 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 9 08:00

Minimum Daily Speed Average: 1.3 km/h on Aug 14

Maximum Diurnal Speed Average: 5.2 km/h at hour 12

Minimum Diurnal Speed Average: 1.6 km/h at hour 21

Monthly Average Velocity: 2.4 km/h 276.2 deg

Percentiles: $P_1 = 1$ $P_{10} = 4$ $Q_1 = 6$ Median = 9 $Q_3 = 13$ $P_{90} = 17$ $P_{99} = 26$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | S8 | SSE6 | SSE6 | SSW4 | S5 | SSE5 | SSE6 | S4 | E4 | SE2 | SE4 | ENE10 | E11 | SE15 | ESE13 | ESE13 | SE13 | SSE13 | SSE12 | SSE8 | NW19 | NNW8 | NNW9 | NW7 | SE4.2 | NW19 |
| 2-Aug | NW11 | NNW14 | NNW19 | N18 | N14 | NNW15 | N16 | N14 | NNW18 | N23 | NNW28 | N28 | N26 | NNW25 | NNW26 | NNW28 | N25 | NNW25 | NNW22 | NNW20 | NNW21 | NNW19 | NW16 | NW15 | NNW20.0 | NNW28 |
| 3-Aug | NW16 | NW15 | NW14 | NW13 | WNW10 | WNW10 | WNW11 | WNW12 | NW12 | NNW12 | NNW13 | NNW14 | NW13 | NNW9 | NNW8 | N6 | N11 | N10 | NE10 | NE7 | E4 | SE6 | S6 | SSW7 | NNW7.6 | NW16 |
| 4-Aug | S6 | S9 | S8 | SSE10 | SSE9 | SSE10 | SSE10 | SSE7 | SSE7 | SSE6 | S4 | W19 | WSW16 | WSW18 | WSW14 | WSW14 | NNW11 | NE8 | WNW10 | WNW13 | WNW15 | NW16 | NW10 | NW10 | WSW5.2 | W19 |
| 5-Aug | WNW12 | W12 | W11 | WNW15 | W18 | WNW15 | WNW16 | WNW17 | NW19 | WNW20 | WNW21 | NW22 | NW22 | NW17 | NW15 | NW14 | N16 | N17 | NNW11 | NNW14 | NW10 | WNW15 | WNW16 | WNW19 | NW14.8 | NW22 |
| 6-Aug | WNW18 | WNW18 | WNW21 | WNW23 | WNW23 | WNW21 | WNW19 | WNW21 | WNW19 | NW18 | NW14 | NW11 | WNW11 | NNW9 | NNW10 | NNW6 | W10 | WNW14 | WNW14 | NW13 | WNW7 | WNW12 | WNW13 | WNW11 | WNW14.4 | WNW23 |
| 7-Aug | WNW10 | NW8 | W10 | W10 | W12 | W10 | W9 | W10 | WNW14 | WNW15 | WNW18 | WNW18 | WNW17 | NW10 | N11 | N10 | NNW9 | N9 | NNE8 | NNE9 | NNE6 | N3 | NNW4 | SSW3 | WNW7.9 | WNW18 |
| 8-Aug | NW1 | WNW3 | W4 | W5 | NW3 | WNW3 | WNW3 | NNE9 | NNW8 | NNW7 | NNE7 | N6 | NE4 | NE5 | NW7 | NNW10 | NNW6 | N5 | NNW2 | SW1 | NNW2 | N3 | NNE6 | NNE9 | NNW4.1 | NNW10 |
| 9-Aug | NE6 | NW3 | WNW4 | W3 | NW2 | WSW3 | NE3 | ESE0 | SW2 | W3 | WSW3 | W1 | N5 | NE6 | NE6 | NNE8 | N5 | NNE5 | NNE7 | N6 | N7 | NE6 | ENE2 | SSW4 | N2.5 | NNE8 |
| 10-Aug | SSW5 | WSW6 | SSW7 | S5 | S4 | S5 | S4 | SSW4 | WSW1 | NNE4 | NNE5 | N5 | N3 | NNW8 | N12 | N11 | N10 | NNE10 | NNE9 | NE8 | N9 | NNE10 | N6 | W8 | N2.8 | N12 |
| 11-Aug | WNW8 | W7 | W6 | W5 | WSW3 | SSW3 | WSW3 | WSW5 | WNW6 | NW7 | NNW11 | NNW15 | N15 | N17 | N17 | N18 | N15 | N15 | N12 | NNE16 | NNE14 | NNE11 | N11 | N8 | NNW8.1 | N18 |
| 12-Aug | NNW7 | N7 | NNW5 | WNW2 | NW4 | W7 | WNW5 | NNW7 | NNW8 | NNW11 | NNW9 | NNW12 | N11 | N9 | N12 | NNE13 | N13 | NNE14 | N10 | N9 | NNW9 | N9 | N9 | N11 | N8.2 | NNE14 |
| 13-Aug | N13 | NNE16 | NNE10 | NNE10 | N6 | N7 | N6 | NNW6 | NNW8 | N8 | NNE12 | NE9 | NNE9 | NNE12 | NE13 | ENE13 | ENE10 | NE12 | NE9 | NNE9 | NE5 | NNE4 | WNW3 | WNW4 | NNE7.9 | NNE16 |
| 14-Aug | WNW5 | WNW5 | NW3 | NW2 | NE2 | S3 | NNW1 | WSW2 | W3 | NW4 | NNE4 | E1 | NW3 | NE4 | ENE15 | SE6 | W10 | SW6 | SSW4 | SSW5 | S7 | S8 | S8 | SSE6 | SSW1.3 | ENE15 |
| 15-Aug | S7 | SSE8 | S10 | S10 | S10 | S8 | S7 | S5 | S5 | S6 | SSE6 | SW8 | WSW10 | WSW12 | SSW8 | SW8 | SW11 | WSW14 | SW9 | SW8 | SW8 | SW10 | WSW9 | WSW9 | SSW7.4 | WSW14 |
| 16-Aug | WSW10 | WSW9 | WSW8 | WNW6 | WNW5 | W7 | NNW7 | N11 | N17 | N19 | N17 | N14 | N16 | NNW13 | NNW13 | NNW10 | NW9 | N11 | NE10 | NE4 | NNE2 | WSW3 | WSW7 | WSW7 | NNW7.0 | N19 |
| 17-Aug | SW4 | SW6 | SW6 | SSW7 | SW7 | SW6 | SSW5 | SSW3 | SW5 | WSW5 | W5 | WNW6 | NE3 | E3 | ESE4 | SSE5 | SSE9 | SSE9 | SSE8 | S8 | S11 | S10 | S11 | S12 | S4.9 | S12 |
| 18-Aug | SSE11 | SSE11 | SSE10 | SSE11 | SSE11 | SSE10 | SSE9 | SSE10 | SSE10 | SE9 | S8 | SW10 | SW11 | WSW12 | SSW11 | WSW18 | WSW17 | W17 | W15 | WSW11 | SW8 | WSW10 | SW8 | S5 | SSW8.0 | WSW18 |
| 19-Aug | SSW6 | SSW6 | SW6 | SSW6 | S7 | SSE8 | S8 | S5 | SSW6 | W9 | W10 | WNW12 | WNW11 | NW10 | N9 | N10 | WNW9 | NW9 | N10 | NNE11 | NE11 | W3 | W6 | NW13 | WNW3.6 | NW13 |
| 20-Aug | SSW5 | SW5 | W1 | N4 | W4 | SW8 | SSW4 | WSW5 | W4 | WNW5 | NNW5 | NNW13 | NNW12 | N12 | NNW10 | N10 | N14 | NNE11 | NNE10 | NNE5 | NE4 | N2 | NNE3 | WSW4 | NNW4.1 | N14 |
| 21-Aug | WSW7 | SW4 | SSW4 | SSE4 | SSE7 | SSE8 | SSE6 | SSE4 | SSE5 | SSE6 | SSE7 | SSE8 | SSE9 | SSW7 | SSE8 | SE11 | SSE13 | SSE12 | SSE13 | SSE13 | SSE12 | SSE14 | SSE13 | S12 | SSE8.2 | SSE14 |
| 22-Aug | SSE14 | SSE15 | SSE13 | SSE12 | SSE11 | SSE10 | SSE7 | SSE8 | SSE10 | SSE11 | SSE9 | SSE11 | SSE11 | SSE10 | SSE12 | SSE11 | SSE12 | SE15 | SE14 | SSE10 | S13 | S12 | S13 | S12 | SSE11.3 | SE15 |
| 23-Aug | SSE11 | SSE9 | SSE12 | SSE11 | SSE12 | SSE9 | SSE7 | S9 | S8 | SSW8 | S7 | SSW5 | SSE7 | SE6 | S3 | SSW5 | S3 | SW6 | W13 | NW11 | NNW10 | NW4 | WNW9 | NW8 | SSW4.3 | W13 |
| 24-Aug | NW8 | NW9 | NW10 | NNW9 | NW8 | NNW9 | NW9 | WNW7 | WNW10 | WNW14 | NW17 | NW16 | NNW16 | NNW17 | NNW16 | N12 | N11 | NNE13 | NE10 | N7 | N5 | W4 | WNW8 | NNE5 | NNW9.1 | NNW17 |
| 25-Aug | NW3 | NNW3 | NNW3 | N3 | NNE3 | NE4 | NE1 | W1 | NNE4 | WNW6 | WNW5 | W6 | W5 | W5 | W3 | WNW4 | ESE5 | SSE4 | NNE5 | NNE10 | NE9 | ENE7 | SSE8 | ESE4 | N1.5 | NNE10 |
| 26-Aug | SE4 | SSE7 | SSE9 | S9 | S10 | S9 | S8 | SSE8 | SSE11 | SSE11 | SSE11 | SSE13 | SSE18 | S14 | S16 | SSE15 | SSE17 | SSE14 | SSE12 | SSE14 | SSE13 | SSE12 | SSE14 | SSE11 | SSE11.5 | SSE18 |
| 27-Aug | SSE12 | SSE10 | SSE12 | SSE10 | SSE12 | SSE13 | SSE11 | SSE10 | SSE9 | SSE10 | SE13 | SSE15 | SSE16 | SSE14 | SSE12 | SSE10 | ESE6 | ESE16 | ESE16 | ESE16 | SE16 | SE16 | SE18 | SE17 | SSE12.3 | SE18 |
| 28-Aug | SSE14 | SE14 | SSE17 | S15 | WSW7 | SE6 | S16 | S12 | S14 | SW15 | SW17 | WSW23 | WSW22 | SW20 | WSW27 | WSW27 | WSW20 | WSW25 | WSW26 | WSW23 | WSW16 | WSW19 | WSW20 | WSW18 | SW14.5 | WSW27 |
| 29-Aug | SW11 | SW13 | SW13 | SW13 | SW13 | SSW11 | SSW9 | SSW11 | SSW11 | SW14 | SW14 | WSW19 | WSW18 | WSW19 | WSW21 | WSW19 | SW17 | SW14 | SSW6 | SSW6 | SW6 | SSW8 | S10 | S11 | SW12.1 | WSW21 |
| 30-Aug | S12 | SSE10 | SSE10 | SSE11 | S6 | SSE7 | SSW5 | SSW4 | SSW4 | SSE7 | SSE5 | SE4 | SW2 | SW2 | S4 | S1 | ESE3 | S4 | SW5 | SSW6 | S10 | S7 | SSW8 | W9 | S5.3 | S12 |
| 31-Aug | WNW6 | NW4 | W9 | WNW10 | WNW9 | WNW8 | W7 | WNW6 | NW6 | W7 | WNW7 | W9 | WNW9 | W11 | WSW11 | W12 | WSW12 | W13 | WSW11 | WSW8 | W5 | NE5 | ENE5 | S3 | W6.7 | W13 |
| | WSW3.1 | WSW2.8 | SW3.4 | SW2.9 | WSW3.4 | SW3.3 | SW2.5 | WSW2.5 | W2.6 | WNW3.6 | NW3.7 | WNW5.2 | WNW4.5 | WNW4.1 | NW3.2 | NW3.0 | NW2.8 | NNW2.2 | NNW1.8 | NNW1.7 | NW1.6 | W1.8 | WSW2.9 | WSW3.3 | Diurnal Average | |
| | WNW18 | WNW18 | WNW21 | WNW23 | WNW23 | WNW21 | WNW19 | WNW21 | WNW19 | N23 | NNW28 | N28 | N26 | NNW25 | WSW27 | NNW28 | N25 | WSW25 | WSW26 | WSW23 | NNW21 | WSW19 | WSW20 | WNW19 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 20m (WS20) - km/h

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14 km/h on Aug 1 21:00

Minimum Value: 1 km/h on Aug 9 05:00

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 2 Median = 3 $Q_3$ = 5 $P_{90}$ = 6 $P_{99}$ = 9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

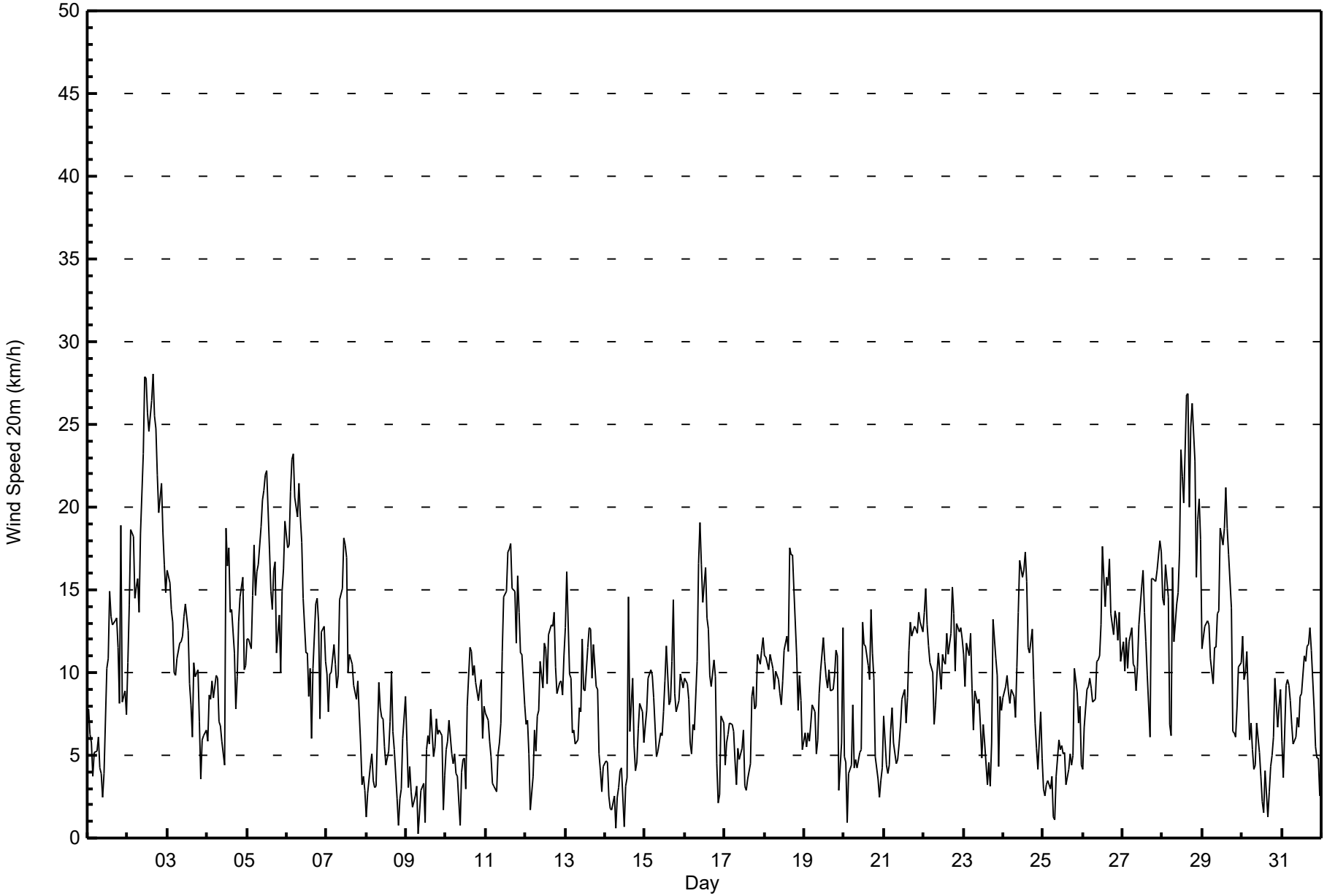
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 4 | 6 | 5 | 5 | 5 | 5 | 3 | 4 | 14 | 11 | 4 | 5 | 14 |
| 2-Aug | 4 | 5 | 6 | 7 | 6 | 5 | 6 | 6 | 6 | 8 | 9 | 10 | 9 | 9 | 9 | 10 | 9 | 8 | 8 | 7 | 8 | 7 | 5 | 5 | 10 |
| 3-Aug | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 3 | 2 | 1 | 6 |
| 4-Aug | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 5 | 6 | 5 | 4 | 5 | 6 | 3 | 3 | 4 | 6 | 6 | 4 | 4 | 6 |
| 5-Aug | 3 | 3 | 2 | 3 | 3 | 4 | 5 | 6 | 8 | 6 | 7 | 7 | 8 | 7 | 5 | 5 | 5 | 7 | 4 | 5 | 4 | 4 | 4 | 5 | 8 |
| 6-Aug | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 5 | 5 | 3 | 5 | 3 | 4 | 4 | 4 | 5 | 2 | 4 | 3 | 2 | 6 |
| 7-Aug | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 5 |
| 8-Aug | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 5 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 2 | 5 |
| 9-Aug | 2 | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 4 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 4 |
| 10-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 3 | 3 | 4 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 5 |
| 11-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 5 | 6 | 5 | 4 | 4 | 4 | 2 | 7 |
| 12-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 5 | 4 | 5 | 5 | 4 | 6 | 4 | 5 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 6 |
| 13-Aug | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 2 | 1 | 5 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 7 | 5 | 4 | 3 | 2 | 1 | 2 | 2 | 2 | 1 | 7 |
| 15-Aug | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 5 | 4 | 5 | 3 | 4 | 4 | 4 | 4 | 2 | 1 | 2 | 2 | 1 | 5 |
| 16-Aug | 1 | 1 | 1 | 4 | 4 | 2 | 3 | 4 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 7 |
| 17-Aug | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| 18-Aug | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 5 | 5 | 5 | 2 | 2 | 1 | 1 | 1 | 6 |
| 19-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 3 | 4 | 3 | 3 | 5 | 2 | 2 | 5 | 5 |
| 20-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 1 | 2 | 1 | 5 |
| 21-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 5 |
| 22-Aug | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 3 | 3 | 4 | 3 | 3 | 5 |
| 23-Aug | 3 | 2 | 3 | 3 | 4 | 3 | 2 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 4 | 3 | 3 | 4 | 3 | 2 | 2 | 4 |
| 24-Aug | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 4 | 4 | 7 | 7 | 7 | 7 | 7 | 5 | 4 | 4 | 3 | 2 | 1 | 3 | 2 | 2 | 7 |
| 25-Aug | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 4 | 2 | 2 | 3 | 3 | 3 | 4 |
| 26-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 4 | 4 | 3 | 3 | 3 | 2 | 6 |
| 27-Aug | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 5 | 6 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 6 |
| 28-Aug | 4 | 5 | 6 | 5 | 5 | 4 | 5 | 4 | 5 | 6 | 6 | 7 | 7 | 7 | 9 | 8 | 7 | 8 | 8 | 7 | 5 | 5 | 6 | 5 | 9 |
| 29-Aug | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 5 | 6 | 6 | 7 | 6 | 7 | 6 | 6 | 6 | 6 | 2 | 1 | 1 | 1 | 3 | 2 | 7 |
| 30-Aug | 2 | 2 | 3 | 4 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 4 |
| 31-Aug | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 5 |
| | 5 | 5 | 6 | 7 | 6 | 6 | 6 | 6 | 8 | 8 | 9 | 10 | 9 | 9 | 9 | 10 | 9 | 8 | 8 | 7 | 14 | 11 | 6 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 20m (WS20) - km/h**

**Mannix - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 165 | 22.18 | 22.18 |
| 6 - 11 | 345 | 46.37 | 68.55 |
| 12 - 19 | 202 | 27.15 | 95.70 |
| 20 - 28 | 32 | 4.30 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 20m (WS20) - km/h**

**Mannix - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 11 | 12 | 12 | 2 | 4 | 5 | 4 | 7 | 18 | 18 | 9 | 11 | 17 | 15 | 11 | 9 | 165 |
| 6 - 11 | 35 | 21 | 14 | 3 | 1 | 2 | 5 | 73 | 34 | 20 | 21 | 17 | 22 | 27 | 20 | 30 | 345 |
| 12 - 19 | 23 | 9 | 2 | 2 | 0 | 5 | 10 | 37 | 13 | 0 | 10 | 17 | 9 | 26 | 20 | 19 | 202 |
| 20 - 28 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 7 | 2 | 8 | 32 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 73 | 42 | 28 | 7 | 5 | 12 | 19 | 117 | 65 | 38 | 41 | 55 | 48 | 75 | 53 | 66 | 744 |

Total Number of Valid Hours: 744

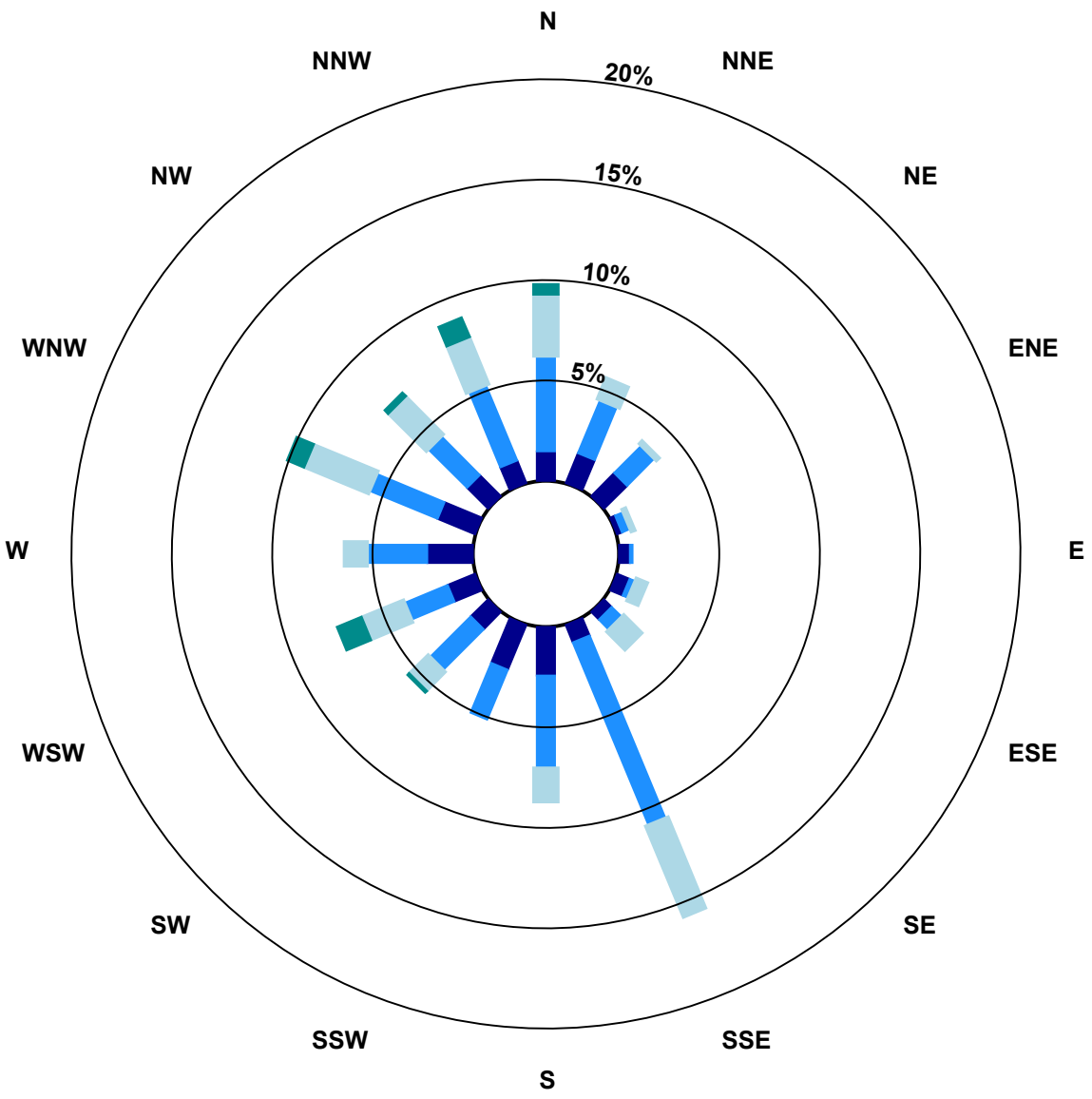
Total Number of Hours: 744

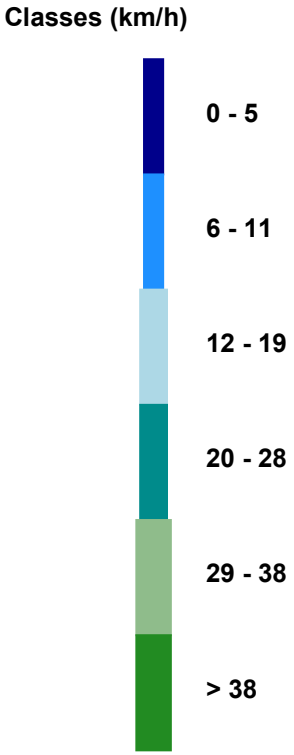
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Wind Speed 20m (WS20) - km/h

## Mannix




Total Number of Valid Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 45m (WS45) - km/h

## Mannix - August 2026

Maximum Speed: 40 km/h on Aug 2 12:00

Maximum Daily Speed Average: 29.6 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 9 08:00

Minimum Daily Speed Average: 1.3 km/h on Aug 14

Maximum Diurnal Speed Average: 7.0 km/h at hour 12

Minimum Diurnal Speed Average: 2.0 km/h at hour 22

Monthly Average Velocity: 3.2 km/h 273.5 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 5 $Q_1$ = 9 Median = 14 $Q_3$ = 19 $P_{90}$ = 23 $P_{99}$ = 34

Hours in Service: 744

Hours of Data: 744

Hours of Missing Data: 0

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSE14 | SSE11 | SSE12 | S10 | SSE10 | SE11 | SE11 | SSE7 | E6 | ESE3 | SE6 | ENE12 | ENE13 | SE19 | ESE16 | ESE15 | SE17 | SE19 | SE17 | SE12 | NW27 | NNW13 | NW14 | NW11 | SE6.4 | NW27 |
| 2-Aug | NW18 | NNW22 | NNW27 | NNW27 | N22 | NNW23 | NNW23 | N21 | NNW28 | NNW34 | NNW39 | NNW40 | NNW36 | NNW35 | NNW38 | NNW40 | NNW36 | NNW35 | NNW32 | NNW30 | NNW32 | NW29 | NW27 | NW25 | NNW29.6 | NNW40 |
| 3-Aug | NW26 | NW25 | NW23 | NW21 | WNW16 | WNW15 | WNW15 | WNW15 | NW17 | NW18 | NNW20 | NW21 | NW18 | NNW14 | NNW11 | N8 | N14 | N14 | NNE13 | NE10 | ENE5 | ESE8 | SSE12 | S15 | NW11.1 | NW26 |
| 4-Aug | S15 | S16 | SSE18 | SSE16 | SSE15 | SSE14 | SSE12 | SSE9 | SSE9 | SSE8 | S6 | WSW22 | WSW20 | WSW21 | WSW16 | SW18 | NNW16 | NNE11 | WNW14 | WNW20 | WNW21 | NW26 | NW18 | NW19 | WSW6.9 | NW26 |
| 5-Aug | WNW21 | W17 | W17 | W21 | W22 | WNW21 | WNW23 | WNW23 | NW29 | WNW28 | WNW31 | WNW31 | NW32 | NW27 | WNW23 | NW20 | N24 | N25 | NNW19 | NW21 | NW16 | WNW20 | WNW23 | WNW28 | WNW21.9 | NW32 |
| 6-Aug | WNW26 | WNW25 | WNW29 | WNW32 | WNW33 | WNW30 | WNW26 | WNW29 | WNW26 | NW26 | NW22 | NW16 | WNW15 | NW12 | NNW15 | NNW9 | W13 | WNW20 | WNW20 | WNW20 | WNW13 | WNW19 | WNW19 | WNW17 | WNW20.7 | WNW33 |
| 7-Aug | WNW17 | WNW13 | W15 | W15 | W17 | W15 | W13 | W13 | W18 | W19 | WNW24 | WNW23 | WNW21 | NW14 | NNW16 | NNW15 | NNW14 | N13 | NNE11 | NNE12 | NNE8 | N5 | N6 | W3 | WNW11.3 | WNW24 |
| 8-Aug | NW3 | NNW4 | NW5 | W10 | NNW6 | NW5 | NW4 | N12 | NNW11 | NNW11 | N10 | N8 | NNE5 | NNE6 | NW10 | NW16 | NW10 | NNW7 | NNW4 | NW1 | NNW4 | NNE4 | NNE9 | NNE13 | NNW6.6 | NW16 |
| 9-Aug | NE10 | N4 | NNW3 | N1 | N1 | WSW3 | NNE5 | ENE0 | SW2 | WSW3 | WSW4 | W2 | N7 | NNE7 | NNE7 | NNE10 | NNW7 | NNE7 | NNE10 | N10 | NNE10 | NE11 | ENE5 | SSE7 | NNE3.9 | NE11 |
| 10-Aug | SSE10 | S9 | S12 | SSE7 | SSE9 | SSE8 | SSE7 | S5 | SW1 | N5 | N6 | N6 | NNW5 | NW11 | N16 | NNW15 | N14 | NNE13 | NNE13 | NNE14 | N14 | NNE16 | N11 | W4 | N3.6 | NNE16 |
| 11-Aug | WNW9 | WNW13 | WNW12 | WNW11 | WNW9 | W5 | W5 | W7 | W7 | NW10 | NNW16 | NNW20 | NNW21 | NNW24 | NNW24 | NNW24 | N21 | N21 | N17 | NNE22 | NNE20 | NNE17 | N16 | N11 | NNW12.8 | NNW24 |
| 12-Aug | NNW13 | N10 | NW9 | NW6 | NNW9 | WNW11 | NW9 | NW12 | NNW13 | NW17 | NNW15 | NNW18 | N16 | NNW13 | NNW19 | NNE18 | N19 | N19 | N15 | N14 | NNW15 | NNW15 | N14 | N17 | NNW13.3 | N19 |
| 13-Aug | N19 | N23 | NNE16 | NNE13 | N10 | N10 | N9 | NNW9 | NNW11 | NNW11 | N15 | NNE11 | NNE11 | NNE15 | NNE16 | NE15 | NE12 | NE16 | NNE13 | NNE13 | NNE9 | NNE7 | NNW5 | NNW6 | NNE11.4 | N23 |
| 14-Aug | NNW6 | NW7 | NNW5 | NNW3 | N4 | SSE2 | NNW2 | WSW2 | W4 | NW6 | N5 | NNE1 | NW4 | NE4 | ENE17 | SE8 | WSW12 | SW7 | SSW6 | SSW8 | S8 | S15 | S13 | S11 | SSW1.3 | ENE17 |
| 15-Aug | S13 | S9 | S8 | S11 | S12 | S12 | S11 | S6 | SSE6 | S8 | SSE8 | SW10 | SW13 | WSW14 | SSW12 | SSW12 | SSW15 | SW18 | SW13 | SSW15 | SW16 | SW19 | WSW16 | WSW17 | SSW11.1 | SW19 |
| 16-Aug | WSW17 | WSW17 | WSW15 | WNW11 | WNW8 | W9 | NNW10 | N16 | NNW25 | N28 | NNW24 | NNW20 | NNW22 | NNW19 | NNW18 | NNW14 | NW13 | N16 | NE12 | NE6 | NE3 | NNE1 | SW7 | SW10 | NNW10.3 | N28 |
| 17-Aug | SSW8 | SW10 | SW11 | SW10 | WSW11 | WSW10 | SW7 | SSW4 | SW7 | SW5 | W7 | W8 | NNE3 | E3 | ESE4 | SSE6 | SE11 | SE12 | SSE11 | S15 | S20 | S21 | S22 | SSE22 | S7.8 | SSE22 |
| 18-Aug | SSE21 | SSE20 | SSE19 | SSE17 | SSE19 | SSE19 | SSE15 | SSE15 | SE12 | SE12 | S12 | SW13 | SW14 | SW16 | SSW17 | SW23 | WSW22 | W20 | WSW18 | WSW17 | SW14 | WSW17 | WSW15 | SW5 | SSW11.8 | SW23 |
| 19-Aug | SW6 | WSW6 | SW7 | SW8 | SSW10 | SSE12 | SSE11 | S9 | SSW9 | W11 | W12 | WNW15 | W13 | NW13 | NNW12 | NNW15 | WNW12 | NW14 | N15 | NNE17 | NNE16 | NW3 | WSW5 | WNW20 | WNW5.6 | WNW20 |
| 20-Aug | SSW4 | SW7 | NW3 | N5 | W5 | SW11 | SSW7 | SW6 | W5 | WNW6 | NNW8 | NNW19 | NW17 | NNW16 | NNW15 | NNW14 | N19 | N15 | NNE13 | NNE8 | NNE6 | NNE5 | NE6 | SE1 | NNW5.9 | N19 |
| 21-Aug | SSW4 | SW8 | SSW6 | SSE6 | SSE12 | SSE13 | SSE8 | SSE6 | SSE6 | SSE7 | SE9 | SE11 | SSE12 | S9 | SSE10 | SE15 | SSE17 | SSE17 | SSE19 | SE20 | SSE20 | SSE23 | SSE23 | SSE21 | SSE12.1 | SSE23 |
| 22-Aug | SSE23 | SSE25 | SSE21 | SSE19 | SE19 | SE18 | SE13 | SE12 | SSE14 | SSE14 | SSE12 | SSE15 | SSE14 | SSE14 | SSE16 | SSE14 | SE17 | SE20 | SE20 | SSE17 | S23 | S23 | SSE21 | SSE21 | SSE17.3 | SSE25 |
| 23-Aug | SSE18 | SSE16 | SSE19 | SSE19 | SSE20 | SSE15 | SSE12 | SSE14 | SSE11 | S13 | SSE9 | S6 | SSE9 | SE8 | S4 | SSW6 | S5 | SW9 | W18 | WNW19 | NW17 | NW8 | WNW15 | NW15 | S6.0 | SSE20 |
| 24-Aug | NW16 | NW17 | NW18 | NNW15 | NW15 | NW15 | NW15 | WNW11 | WNW14 | WNW19 | NW25 | NW23 | NNW25 | NW24 | NNW23 | N16 | NNW16 | NNE16 | NNE13 | N10 | N7 | N3 | WNW9 | NNE8 | NNW14.1 | NW25 |
| 25-Aug | N7 | N7 | N9 | NNW8 | N6 | N5 | N3 | WNW2 | NNE4 | WNW7 | WNW6 | W7 | W6 | W6 | WSW5 | WNW5 | E6 | SE5 | NNE6 | NNE14 | NE14 | ENE11 | SE11 | ESE7 | N3.1 | NNE14 |
| 26-Aug | SE7 | SE12 | SE14 | SE14 | SSE17 | SSE18 | SSE15 | SSE11 | SSE14 | SE14 | SSE15 | SSE18 | SSE23 | SSE19 | SSE21 | SSE19 | SSE22 | SSE19 | SE19 | SE22 | SSE21 | SSE19 | SSE22 | SSE18 | SSE17.1 | SSE23 |
| 27-Aug | SSE19 | SE17 | SE19 | SE17 | SE19 | SE20 | SE16 | SSE14 | SE12 | SE13 | SE16 | SSE20 | SSE21 | SE17 | SSE16 | SE15 | ESE10 | E20 | ESE19 | ESE19 | SE20 | SE21 | SE24 | SE23 | SE17.2 | SE24 |
| 28-Aug | SE20 | SE17 | SE24 | S23 | SW12 | SE7 | SSE24 | S18 | S22 | SSW22 | SW23 | WSW30 | SW28 | SW27 | WSW34 | WSW33 | WSW26 | SW32 | WSW34 | WSW30 | SW21 | SW25 | SW26 | WSW24 | SW19.4 | WSW34 |
| 29-Aug | SW17 | SSW19 | SW18 | SW18 | SW19 | SSW18 | SSW15 | SSW18 | SSW16 | SW17 | SW19 | SW24 | SW22 | WSW23 | WSW27 | SW24 | SW24 | SW18 | SSW12 | S12 | SSW10 | S14 | SSE21 | S19 | SSW17.5 | WSW27 |
| 30-Aug | S20 | SSE17 | SSE18 | SE20 | SSE11 | SE12 | SSE10 | S7 | S6 | SE9 | SSE7 | SE5 | SSW3 | SSW3 | SSE5 | SW2 | E4 | SSE5 | SSW7 | S10 | SSE18 | S14 | S12 | W13 | SSE8.5 | S20 |
| 31-Aug | NW10 | NNW7 | WNW12 | WNW16 | WNW15 | WNW12 | W9 | WNW7 | NW8 | W9 | WNW8 | W11 | WNW12 | W13 | SW13 | WSW14 | WSW14 | WSW15 | WSW16 | WSW13 | W9 | NNE9 | ENE7 | SE6 | W8.6 | WNW16 |
| | SW3.9 | SW3.7 | SW4.1 | SW3.7 | SW4.3 | SW4.1 | SW3.2 | WSW3.3 | W3.6 | WNW5.0 | WNW5.3 | WNW7.0 | WNW6.2 | WNW5.7 | NW4.7 | NW4.3 | NW4.0 | NNW3.3 | NNW2.4 | NNW2.4 | NW2.3 | WSW2.0 | SW3.6 | WSW4.1 | Diurnal Average | |
| | WNW26 | NW25 | WNW29 | WNW32 | WNW33 | WNW30 | WNW26 | WNW29 | NW29 | NNW34 | NNW39 | NNW40 | NNW36 | NNW35 | NNW38 | NNW40 | NNW36 | NNW35 | WSW34 | WSW30 | NNW32 | NW29 | NW27 | WNW28 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 17 km/h on Aug 1 21:00

Minimum Value: 1 km/h on Aug 11 02:00

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 2 Median = 3 $Q_3$ = 4 $P_{90}$ = 5 $P_{99}$ = 8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

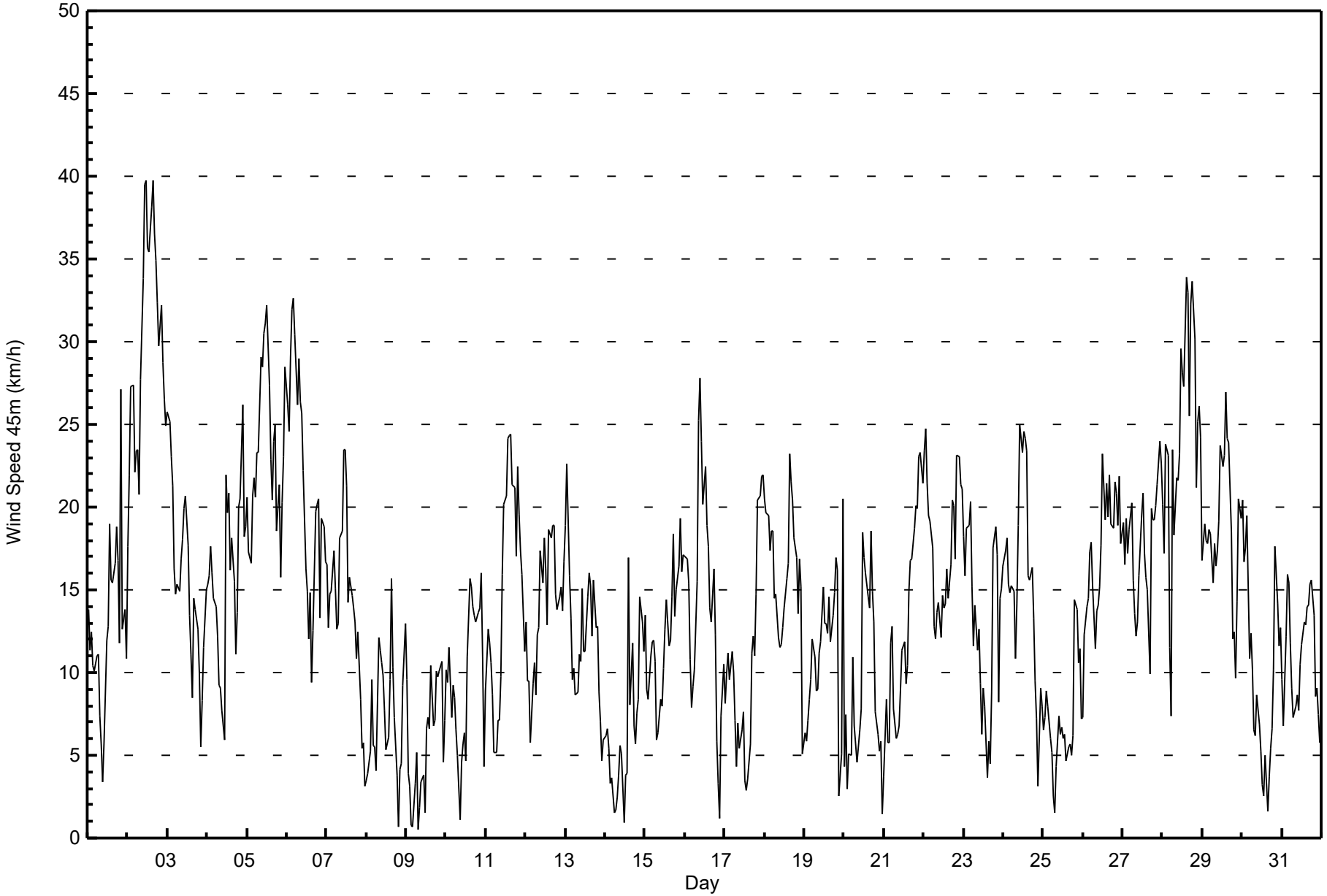
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 3 | 2 | 4 | 5 | 5 | 5 | 6 | 5 | 3 | 5 | 17 | 14 | 4 | 6 | 17 |
| 2-Aug | 4 | 4 | 5 | 6 | 5 | 4 | 5 | 6 | 5 | 7 | 8 | 9 | 7 | 8 | 8 | 9 | 8 | 7 | 6 | 6 | 6 | 7 | 4 | 4 | 9 |
| 3-Aug | 4 | 4 | 4 | 3 | 2 | 3 | 2 | 2 | 3 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 5 |
| 4-Aug | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 5 | 4 | 4 | 4 | 6 | 4 | 3 | 3 | 6 | 4 | 4 | 3 | 6 |
| 5-Aug | 3 | 3 | 2 | 3 | 2 | 3 | 4 | 5 | 8 | 5 | 5 | 6 | 7 | 6 | 5 | 5 | 5 | 8 | 4 | 4 | 4 | 3 | 4 | 4 | 8 |
| 6-Aug | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 6 | 3 | 3 | 5 | 3 | 4 | 2 | 3 | 3 | 2 | 6 |
| 7-Aug | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 5 |
| 8-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 5 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 5 |
| 9-Aug | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 4 |
| 10-Aug | 1 | 2 | 2 | 2 | 4 | 3 | 2 | 2 | 1 | 3 | 2 | 3 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 5 |
| 11-Aug | 2 | 1 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 4 | 5 | 5 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 4 | 4 | 3 | 3 | 6 |
| 12-Aug | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | 7 | 4 | 5 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 7 |
| 13-Aug | 3 | 3 | 5 | 3 | 4 | 5 | 5 | 3 | 2 | 3 | 3 | 3 | 3 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 5 |
| 14-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 7 | 6 | 4 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 7 |
| 15-Aug | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 5 | 4 | 5 | 3 | 3 | 3 | 4 | 2 | 1 | 1 | 2 | 2 | 1 | 5 |
| 16-Aug | 1 | 1 | 2 | 4 | 5 | 3 | 3 | 5 | 6 | 7 | 6 | 6 | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 1 | 3 | 1 | 7 |
| 17-Aug | 3 | 3 | 3 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 |
| 18-Aug | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 2 | 2 | 2 | 2 | 3 | 5 |
| 19-Aug | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 5 | 4 | 3 | 3 | 5 | 4 | 5 | 2 | 3 | 3 | 4 | 6 | 2 | 4 | 5 | 6 |
| 20-Aug | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 5 |
| 21-Aug | 2 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 4 |
| 22-Aug | 2 | 1 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 3 | 4 | 2 | 2 | 4 |
| 23-Aug | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 5 | 2 | 3 | 5 | 4 | 2 | 3 | 5 |
| 24-Aug | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 3 | 3 | 4 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 4 | 3 | 3 | 1 | 2 | 2 | 2 | 7 |
| 25-Aug | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 4 | 2 | 2 | 3 | 4 | 3 | 4 |
| 26-Aug | 3 | 1 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 3 | 3 | 3 | 2 | 3 | 2 | 5 |
| 27-Aug | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 6 | 4 | 5 | 4 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 6 |
| 28-Aug | 3 | 5 | 5 | 5 | 6 | 5 | 4 | 4 | 4 | 5 | 5 | 7 | 6 | 6 | 9 | 7 | 7 | 6 | 7 | 6 | 5 | 5 | 5 | 5 | 9 |
| 29-Aug | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 6 | 5 | 6 | 6 | 5 | 5 | 5 | 2 | 1 | 2 | 2 | 3 | 2 | 6 |
| 30-Aug | 1 | 2 | 2 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 5 | 5 |
| 31-Aug | 2 | 3 | 4 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | 4 |
| | 4 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | 8 | 7 | 8 | 9 | 7 | 8 | 9 | 9 | 8 | 8 | 7 | 6 | 17 | 14 | 5 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 45m (WS45) - km/h**

**Mannix - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 80 | 10.75 | 10.75 |
| 6 - 11 | 199 | 26.75 | 37.50 |
| 12 - 19 | 304 | 40.86 | 78.36 |
| 20 - 28 | 133 | 17.88 | 96.24 |
| 29 - 38 | 25 | 3.36 | 99.60 |
| > 38 | 3 | 0.40 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 45m (WS45) - km/h**

**Mannix - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 11 | 8 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 6 | 5 | 7 | 7 | 2 | 8 | 9 | 80 |
| 6 - 11 | 20 | 20 | 5 | 2 | 2 | 3 | 13 | 30 | 17 | 10 | 17 | 3 | 13 | 14 | 13 | 17 | 199 |
| 12 - 19 | 23 | 21 | 5 | 3 | 0 | 4 | 31 | 56 | 16 | 13 | 17 | 18 | 16 | 25 | 26 | 30 | 304 |
| 20 - 28 | 8 | 2 | 0 | 0 | 1 | 0 | 11 | 23 | 8 | 1 | 11 | 8 | 3 | 22 | 16 | 19 | 133 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 7 | 3 | 9 | 25 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| **Totals** | 62 | 51 | 12 | 8 | 5 | 9 | 58 | 112 | 43 | 30 | 51 | 41 | 39 | 70 | 66 | 87 | 744 |

Total Number of Valid Hours: 744

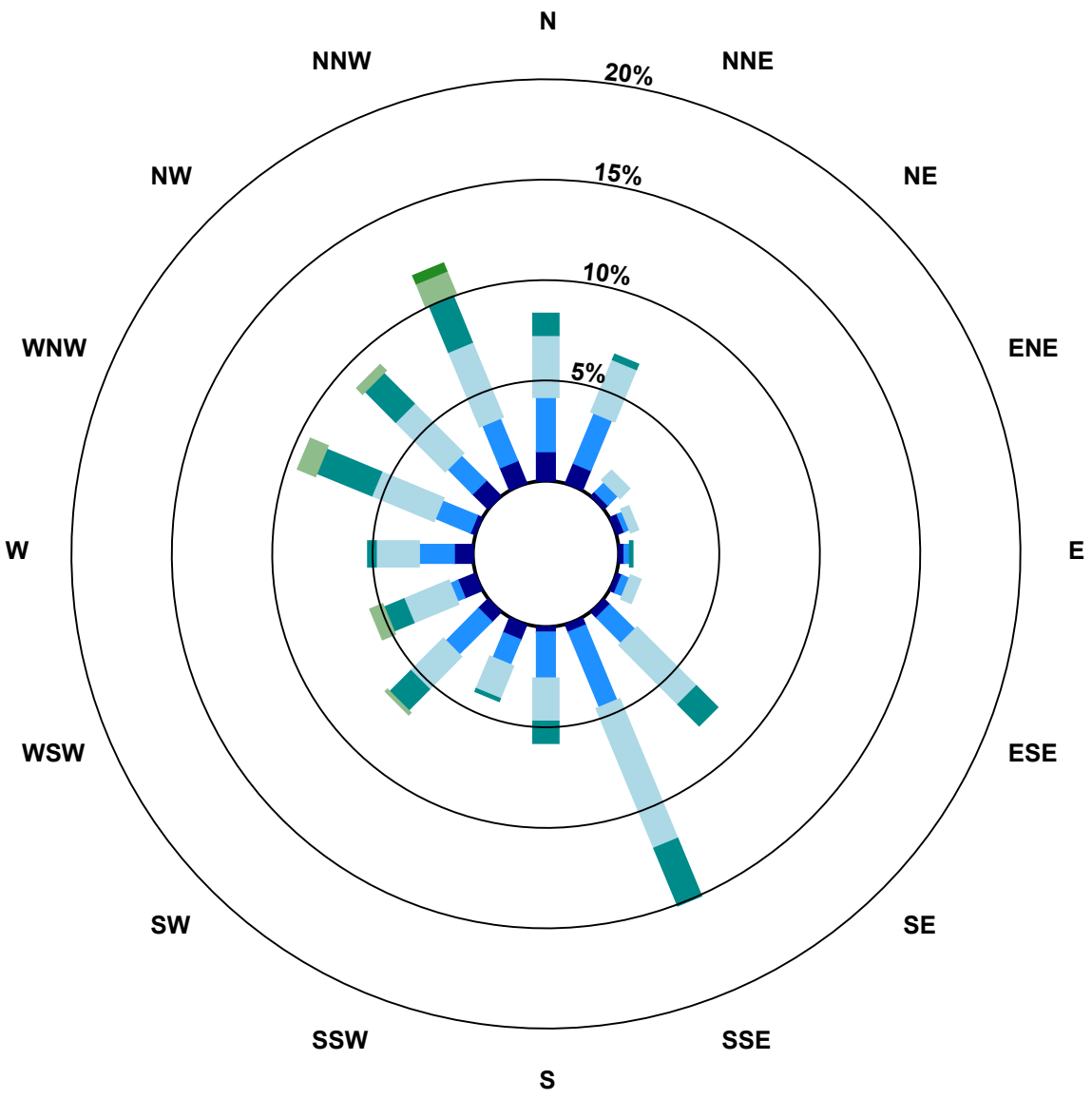
Total Number of Hours: 744

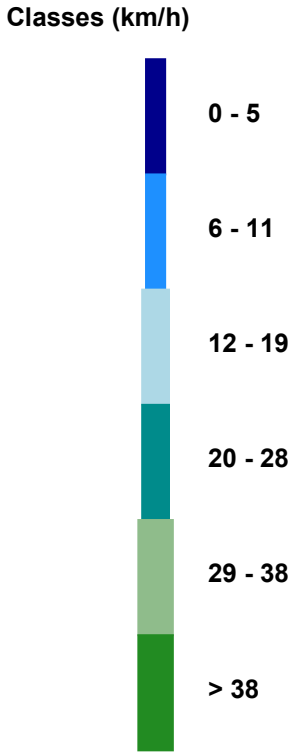
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 45m (WS45) - km/h

Mannix




Total Number of Valid Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 75m (WS75) - km/h

## Mannix - August 2026

Maximum Speed: 46 km/h on Aug 2 16:00

Maximum Daily Speed Average: 34.3 km/h on Aug 2

Minimum Speed Value: 1 km/h on Aug 9 05:00

Minimum Daily Speed Average: 0.9 km/h on Aug 14

Maximum Diurnal Speed Average: 7.2 km/h at hour 12

Minimum Diurnal Speed Average: 2.3 km/h at hour 22

Monthly Average Velocity: 3.6 km/h 285.0 deg

Percentiles: $P_1$ = 2 $P_{10}$ = 6 $Q_1$ = 10 Median = 16 $Q_3$ = 22 $P_{90}$ = 27 $P_{99}$ = 40

Hours in Service: 744

Hours of Data: 744

Hours of Missing Data: 0

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSE17 | SSE16 | SSE14 | S10 | SSE12 | SSE17 | SSE16 | S12 | ESE4 | SE4 | SE7 | ENE13 | E14 | SE16 | ESE13 | ESE12 | SE14 | SE20 | SE15 | SE10 | NW29 | N15 | NNW16 | NNW12 | SE6.7 | NW29 |
| 2-Aug | NNW20 | NNW27 | N32 | N32 | N26 | NNW27 | N27 | N25 | N32 | N40 | NNW46 | N46 | N40 | NNW40 | NNW44 | NNW46 | N42 | NNW40 | NNW38 | NNW35 | NNW37 | NNW33 | NW30 | NW28 | NNW34.3 | NNW46 |
| 3-Aug | NW28 | NW28 | NW26 | NW24 | NW20 | WNW18 | WNW17 | WNW16 | NW18 | NNW20 | NNW22 | NNW23 | NW19 | NNW14 | NNW12 | N9 | N15 | N15 | NE14 | NE13 | ENE7 | ESE7 | SE12 | SSE16 | NNW12.4 | NW28 |
| 4-Aug | S21 | S21 | S22 | SSE23 | SSE19 | SSE17 | SSE12 | SSE9 | SSE9 | SSE8 | SSW7 | W23 | WSW21 | WSW22 | WSW17 | SW19 | NNW18 | NNE15 | WNW18 | WNW24 | WNW25 | NW30 | NW21 | NW22 | WSW8.1 | NW30 |
| 5-Aug | NW25 | WNW21 | W20 | WNW25 | WNW25 | WNW24 | WNW26 | WNW25 | NW31 | WNW30 | WNW32 | NW33 | NW34 | NW30 | NW24 | NW22 | N27 | N29 | NNW22 | NNW25 | NW19 | WNW23 | WNW26 | WNW32 | NW24.6 | NW34 |
| 6-Aug | WNW30 | WNW28 | WNW33 | WNW35 | WNW36 | WNW34 | WNW29 | WNW31 | WNW29 | NW27 | NW24 | NW17 | WNW15 | NNW13 | NNW16 | NNW11 | W14 | WNW21 | WNW23 | NW22 | NW16 | WNW24 | WNW23 | WNW21 | WNW23.2 | WNW36 |
| 7-Aug | NW20 | NW15 | WNW18 | WNW19 | W21 | W18 | W16 | W16 | W20 | WNW19 | WNW24 | WNW24 | WNW22 | NW15 | N17 | N16 | NNW15 | N15 | NNE13 | NNE15 | NNE11 | N7 | N8 | WNW7 | NW13.1 | WNW24 |
| 8-Aug | NW5 | N6 | NNW6 | WNW12 | NNW8 | NNW8 | NNW5 | NNE14 | NNW12 | N11 | NNE11 | N8 | NNE6 | NE7 | NW10 | NNW17 | NNW12 | NNW8 | N4 | NNE1 | N5 | NNE8 | NE13 | NNE18 | N7.9 | NNE18 |
| 9-Aug | NE14 | NE7 | NNE2 | SE1 | NNW1 | WSW2 | NE5 | NNE1 | SW1 | WSW3 | W4 | W2 | N7 | NE8 | NE7 | NNE12 | NNW7 | NNE8 | NNE13 | NNE14 | NNE17 | NE15 | E5 | SE10 | NE5.0 | NNE17 |
| 10-Aug | SSE12 | SSE11 | S11 | SSE9 | SSE14 | SSE12 | SSE8 | S5 | SW1 | NNE5 | N6 | N7 | N5 | NNW12 | N17 | NNW16 | N15 | NNE15 | NNE15 | NNE18 | NNE19 | NNE22 | NNE16 | N4 | NNE5.0 | NNE22 |
| 11-Aug | NW7 | NW9 | WNW13 | NW13 | NW11 | WNW9 | NW8 | WNW8 | WNW8 | NNW10 | NNW17 | NNW22 | N23 | N26 | N27 | N26 | N24 | N24 | N20 | NNE27 | NNE24 | NNE23 | N20 | N13 | N15.2 | N27 |
| 12-Aug | NNW17 | NNW12 | NNW13 | NNW10 | NNW13 | NW13 | NW11 | NNW14 | NNW15 | NNW19 | NNW17 | NNW21 | N19 | N14 | N21 | NNE22 | N22 | NNE22 | N17 | N17 | N16 | N18 | N16 | N19 | N16.0 | N22 |
| 13-Aug | N22 | N26 | NNE20 | NNE16 | N12 | N13 | N12 | NNW9 | NNW11 | N11 | NNE16 | NE13 | NNE12 | NNE16 | NE18 | ENE18 | ENE14 | NE17 | NNE15 | NNE17 | NE14 | NNE11 | N7 | N8 | NNE13.8 | N26 |
| 14-Aug | NNW8 | NNW9 | N8 | NNW6 | N6 | NE1 | N3 | W2 | WNW4 | NW5 | NNE5 | NNE2 | NNW4 | NE5 | ENE19 | SE9 | WSW12 | SW7 | SSW6 | SSW8 | SSW7 | S14 | S10 | SSW10 | W0.9 | ENE19 |
| 15-Aug | SSW11 | SW7 | SW7 | SSW8 | SSW8 | SSW7 | SSW9 | SSW7 | S7 | S9 | SSE8 | SW11 | SW14 | WSW15 | SSW12 | SSW13 | SW15 | SW20 | SW16 | SW18 | SW20 | SW25 | WSW23 | WSW24 | SW12.3 | SW25 |
| 16-Aug | WSW25 | WSW26 | WSW22 | WNW15 | NW9 | WNW9 | NNW13 | N18 | N29 | N31 | N27 | N22 | N25 | NNW21 | NNW19 | NNW15 | NW14 | N18 | NE14 | ENE7 | NE5 | NE3 | SSW3 | SSW9 | NNW11.7 | N31 |
| 17-Aug | SSW11 | SW18 | WSW16 | WSW10 | W13 | W13 | WSW10 | SW5 | SW7 | SW6 | W7 | WNW8 | NE4 | E3 | ESE4 | SSE6 | SE11 | SE13 | SSE13 | S18 | S24 | SSW29 | S30 | S27 | SSW9.5 | S30 |
| 18-Aug | S27 | S25 | S25 | SSE24 | SSE26 | SSE27 | SSE22 | SSE17 | SE12 | SE11 | S13 | SW14 | SW14 | SW17 | SSW18 | SW26 | WSW23 | W22 | WSW20 | WSW21 | WSW18 | WSW25 | WSW20 | W8 | SSW15.1 | SSE27 |
| 19-Aug | WSW9 | W9 | WSW9 | WSW12 | WSW10 | S9 | S12 | SW13 | SW12 | W12 | WNW12 | WNW16 | W13 | NW14 | N13 | NNW16 | WNW13 | NW16 | N17 | NNE22 | NNE20 | NNE3 | WSW3 | NW24 | WNW7.4 | NW24 |
| 20-Aug | WNW2 | WSW12 | WNW6 | N5 | WNW6 | SW10 | SSW5 | WSW6 | WNW4 | NW6 | NNW9 | NNW20 | NNW18 | NNW17 | NNW16 | N15 | N20 | NNE16 | NNE16 | NE10 | NE9 | NNE8 | NE9 | E3 | NNW7.0 | N20 |
| 21-Aug | SSE4 | SSW7 | SSW9 | SW6 | S4 | S5 | SSW10 | SSE8 | S8 | S7 | SSE9 | SSE11 | SSE12 | S10 | SSE11 | SE14 | SSE18 | SSE19 | SSE24 | SSE26 | SSE27 | SSE32 | S30 | S27 | SSE13.5 | SSE32 |
| 22-Aug | S28 | S28 | SSE29 | SSE28 | SE24 | SE22 | SE15 | SE17 | SSE16 | SSE15 | SSE12 | SSE16 | SSE15 | SSE15 | SSE17 | SSE15 | SE17 | SE21 | SE20 | SSE23 | S32 | S33 | S27 | S25 | SSE20.6 | S33 |
| 23-Aug | SSE25 | SSE19 | SSE23 | SSE20 | SSE24 | SSE20 | SSE17 | SSE19 | S14 | S15 | S9 | S7 | SSE10 | SSE9 | SSW3 | SW6 | SW5 | WSW11 | W21 | NW23 | NNW22 | NNW12 | NW18 | NW19 | SSW7.0 | SSE25 |
| 24-Aug | NW20 | NW21 | NNW23 | NNW20 | NNW17 | NNW19 | NNW19 | NW13 | NW15 | WNW20 | NW26 | NW25 | NNW27 | NNW26 | NNW26 | N18 | N17 | NNE18 | NNE16 | NNE12 | N8 | NNE5 | NW6 | N10 | NNW16.2 | NNW27 |
| 25-Aug | NNE13 | NNE14 | NNE14 | N13 | NNW10 | NNW9 | NNW7 | N2 | N4 | NW7 | NW6 | W7 | W6 | W6 | W5 | WNW5 | E5 | SE5 | NE7 | NE18 | NE17 | E12 | SE8 | ESE8 | NNE4.9 | NE18 |
| 26-Aug | SE8 | SE10 | SE13 | SE18 | SSE19 | SSE24 | SSE23 | SSE17 | SSE15 | SSE15 | SSE16 | SSE19 | SSE25 | SSE21 | SSE23 | SSE21 | SSE24 | SSE22 | SSE24 | SSE28 | SSE29 | SSE26 | SSE30 | SSE27 | SSE20.4 | SSE30 |
| 27-Aug | SSE26 | SE18 | SE22 | SE18 | SE22 | SE20 | SE14 | SSE15 | SSE13 | SE12 | SE14 | SSE20 | SSE23 | SSE17 | SSE17 | SE15 | ESE10 | ESE18 | ESE16 | ESE16 | SE16 | SE17 | SE20 | SE18 | SE17.0 | SSE26 |
| 28-Aug | SE17 | SE12 | SE28 | S29 | WSW15 | SE5 | SSE29 | S23 | S25 | SSW24 | SW26 | WSW32 | SW31 | SW31 | WSW38 | WSW37 | WSW29 | WSW35 | WSW37 | WSW34 | SW24 | WSW28 | WSW29 | WSW28 | SW22.1 | WSW38 |
| 29-Aug | SW21 | SW24 | SW21 | SW21 | SW22 | SSW23 | SSW18 | SSW20 | SSW17 | SW18 | SW21 | SW25 | SW24 | WSW25 | WSW29 | SW26 | SW26 | SW21 | SSW15 | SSW15 | SSW14 | SSW18 | S25 | S26 | SW20.6 | WSW29 |
| 30-Aug | S23 | S21 | S21 | SSE24 | SSE14 | SSE16 | SSE14 | S9 | S7 | SSE9 | SSE6 | SSE5 | SSW3 | SSW3 | SSE5 | SSW2 | ESE4 | SSE5 | SSW6 | S11 | S21 | S19 | SSW13 | WNW16 | S10.1 | SSE24 |
| 31-Aug | NNW11 | NNW9 | WNW13 | NW18 | NW18 | NW15 | NW11 | NW8 | NW8 | WNW9 | WNW8 | W11 | WNW12 | W14 | WSW13 | W15 | WSW15 | WSW17 | WSW19 | WSW18 | W11 | NE11 | ENE10 | SE7 | WNW9.2 | WSW19 |
| | WSW4.2 | WSW4.5 | WSW4.9 | WSW4.3 | WSW4.3 | SW3.9 | SW3.3 | WSW3.5 | WNW3.9 | WNW5.2 | NW5.8 | WNW7.2 | WNW6.3 | NW6.1 | NW5.1 | NW4.8 | NW4.6 | NNW3.9 | NNW3.1 | NNW3.0 | NW2.7 | W2.3 | WSW3.8 | W4.6 | Diurnal Average | |
| | WNW30 | S28 | WNW33 | WNW35 | WNW36 | WNW34 | SSE29 | WNW31 | NNW32 | N40 | NNW46 | N46 | N40 | NNW40 | NNW44 | NNW46 | N42 | NNW40 | NNW38 | NNW35 | NNW37 | NNW33 | NW30 | WNW32 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 75m (WS75) - km/h

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 20 km/h on Aug 1 21:00

Minimum Value: 1 km/h on Aug 21 02:00

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 2 Median = 3 $Q_3$ = 4 $P_{90}$ = 6 $P_{99}$ = 8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

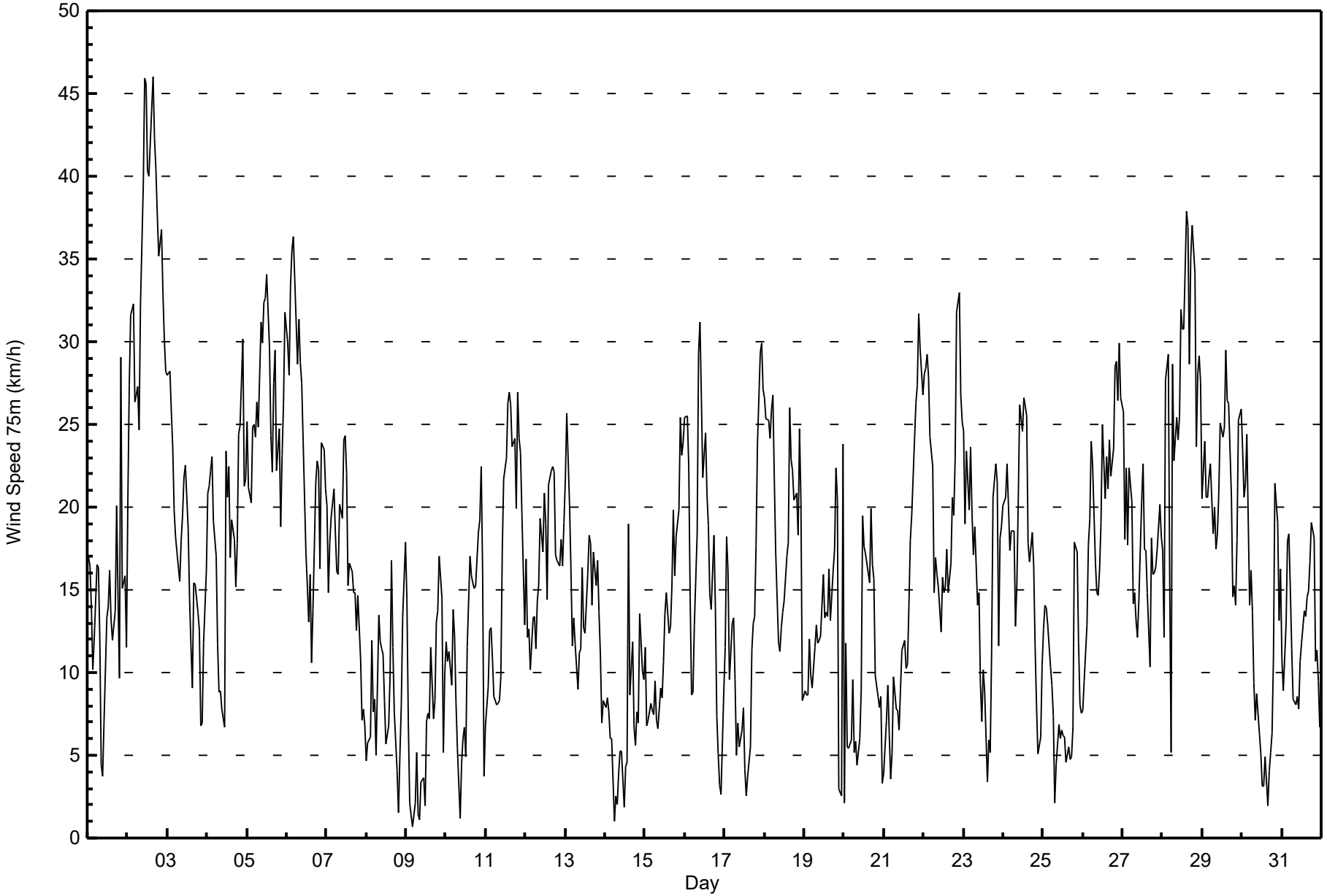
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 4 | 3 | 2 | 3 | 3 | 4 | 7 | 5 | 5 | 6 | 7 | 6 | 6 | 20 | 17 | 4 | 6 | 20 |
| 2-Aug | 3 | 3 | 4 | 6 | 6 | 4 | 6 | 6 | 5 | 6 | 8 | 9 | 8 | 8 | 8 | 9 | 9 | 7 | 6 | 6 | 7 | 7 | 4 | 3 | 9 |
| 3-Aug | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 5 |
| 4-Aug | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 4 | 4 | 4 | 7 | 4 | 3 | 3 | 6 | 4 | 4 | 3 | 7 |
| 5-Aug | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 8 | 5 | 5 | 6 | 6 | 6 | 4 | 6 | 5 | 8 | 3 | 4 | 4 | 3 | 4 | 4 | 8 |
| 6-Aug | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 7 | 4 | 3 | 5 | 3 | 4 | 2 | 4 | 3 | 2 | 7 |
| 7-Aug | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 5 |
| 8-Aug | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 5 | 2 | 2 | 1 | 1 | 3 | 4 | 1 | 2 | 5 |
| 9-Aug | 1 | 3 | 1 | 1 | 1 | 3 | 3 | 2 | 1 | 2 | 2 | 3 | 4 | 2 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 4 |
| 10-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 3 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 3 | 1 | 2 | 4 | 3 | 2 | 5 |
| 11-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 4 | 2 | 3 | 3 | 4 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 7 | 5 | 3 | 4 | 4 | 3 | 7 |
| 12-Aug | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 5 | 5 | 8 | 4 | 5 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 |
| 13-Aug | 3 | 3 | 4 | 3 | 5 | 5 | 6 | 3 | 2 | 4 | 3 | 3 | 3 | 5 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 6 |
| 14-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 8 | 7 | 4 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 8 |
| 15-Aug | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 5 | 4 | 5 | 3 | 3 | 3 | 4 | 2 | 1 | 2 | 2 | 1 | 1 | 5 |
| 16-Aug | 1 | 1 | 2 | 3 | 5 | 4 | 3 | 5 | 6 | 7 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 7 |
| 17-Aug | 1 | 5 | 3 | 2 | 1 | 4 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 5 |
| 18-Aug | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 2 | 2 | 3 | 3 | 4 | 5 |
| 19-Aug | 2 | 2 | 4 | 4 | 2 | 2 | 1 | 3 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 6 | 2 | 3 | 3 | 4 | 7 | 2 | 4 | 6 | 7 |
| 20-Aug | 6 | 2 | 4 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 6 |
| 21-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 5 | 4 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 5 |
| 22-Aug | 2 | 1 | 2 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 5 | 2 | 4 | 4 | 2 | 1 | 6 |
| 23-Aug | 3 | 2 | 3 | 2 | 4 | 2 | 2 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 5 | 2 | 4 | 6 | 6 | 3 | 3 | 6 |
| 24-Aug | 2 | 2 | 2 | 5 | 3 | 2 | 2 | 3 | 3 | 4 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 2 | 3 | 7 |
| 25-Aug | 4 | 1 | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 5 | 2 | 2 | 4 | 3 | 3 | 5 |
| 26-Aug | 3 | 4 | 5 | 3 | 3 | 2 | 2 | 4 | 2 | 3 | 3 | 4 | 4 | 6 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 6 |
| 27-Aug | 3 | 6 | 3 | 4 | 3 | 5 | 4 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 4 | 6 | 5 | 6 | 7 | 7 | 8 | 8 | 8 |
| 28-Aug | 7 | 5 | 6 | 5 | 6 | 6 | 4 | 4 | 4 | 5 | 5 | 7 | 7 | 6 | 9 | 7 | 7 | 6 | 7 | 5 | 5 | 4 | 4 | 5 | 9 |
| 29-Aug | 3 | 3 | 4 | 3 | 4 | 2 | 3 | 3 | 3 | 5 | 4 | 6 | 5 | 6 | 6 | 5 | 5 | 5 | 2 | 1 | 2 | 4 | 2 | 3 | 6 |
| 30-Aug | 1 | 2 | 2 | 5 | 5 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 1 | 4 | 2 | 6 | 6 |
| 31-Aug | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 1 | 2 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 4 |
| | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 7 | 8 | 9 | 8 | 8 | 9 | 9 | 9 | 8 | 7 | 6 | 20 | 17 | 8 | 8 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 75m (WS75) - km/h**

**Mannix - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 66 | 8.87 | 8.87 |
| 6 - 11 | 162 | 21.77 | 30.65 |
| 12 - 19 | 266 | 35.75 | 66.40 |
| 20 - 28 | 191 | 25.67 | 92.07 |
| 29 - 38 | 50 | 6.72 | 98.79 |
| > 38 | 9 | 1.21 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 75m (WS75) - km/h**

**Mannix - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 8 | 8 | 6 | 0 | 4 | 3 | 4 | 4 | 3 | 6 | 4 | 3 | 4 | 4 | 2 | 3 | 66 |
| 6 - 11 | 15 | 8 | 9 | 3 | 0 | 3 | 10 | 16 | 13 | 18 | 9 | 7 | 8 | 11 | 13 | 19 | 162 |
| 12 - 19 | 28 | 28 | 12 | 4 | 2 | 5 | 21 | 44 | 8 | 10 | 12 | 13 | 10 | 17 | 19 | 33 | 266 |
| 20 - 28 | 20 | 9 | 0 | 0 | 0 | 0 | 10 | 31 | 21 | 3 | 17 | 16 | 4 | 21 | 21 | 18 | 191 |
| 29 - 38 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 1 | 2 | 9 | 0 | 11 | 7 | 5 | 50 |
| > 38 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 |
| **Totals** | 80 | 53 | 27 | 7 | 6 | 11 | 45 | 100 | 50 | 38 | 44 | 48 | 26 | 64 | 62 | 83 | 744 |

Total Number of Valid Hours: 744

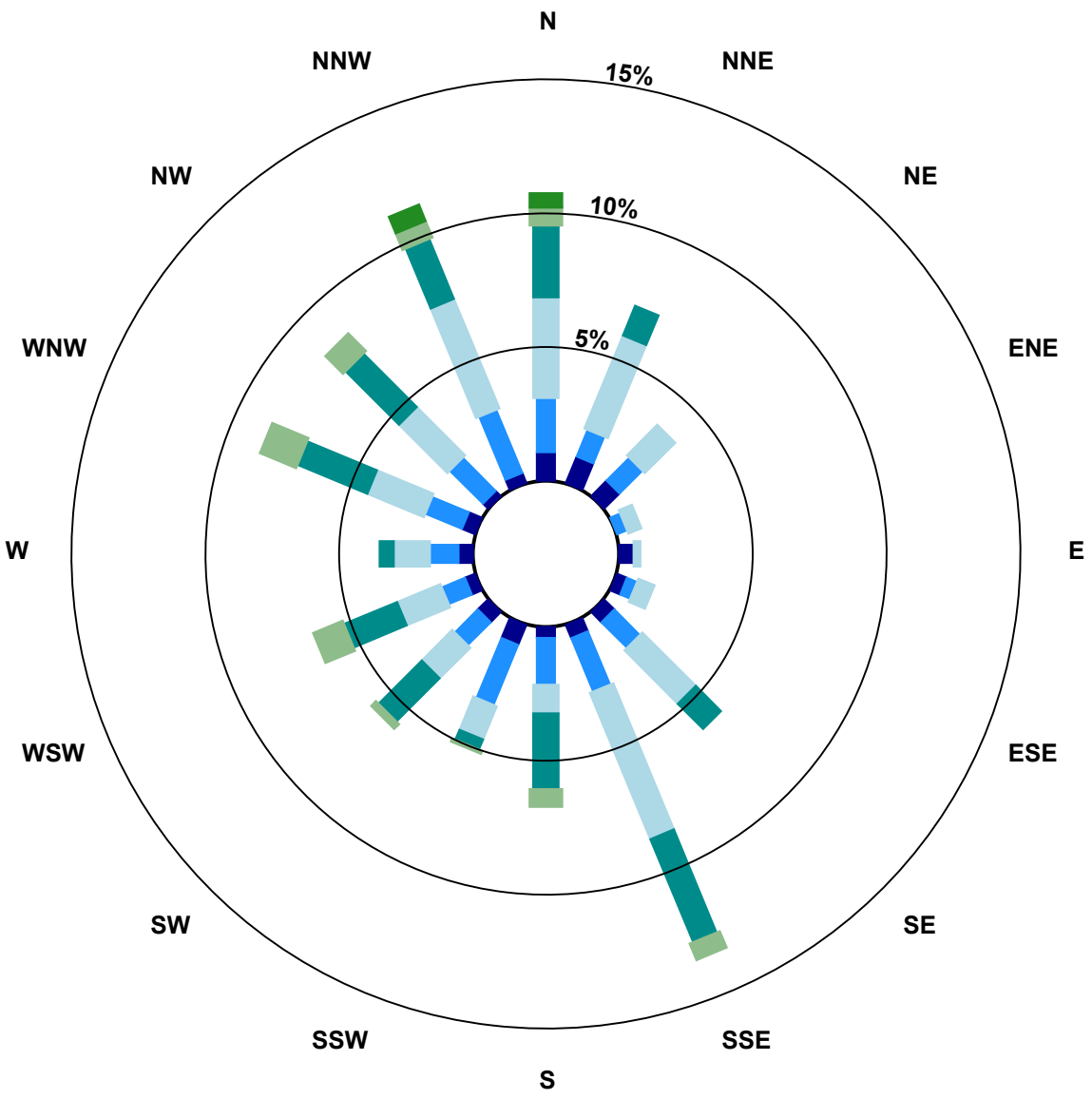
Total Number of Hours: 744

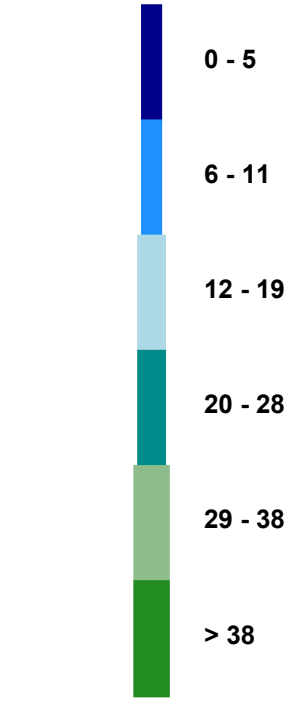
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 75m (WS75) - km/h**

**Mannix**




**Total Number of Valid Hours: 744**

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 90m (WS90) - km/h

## Mannix - August 2026

Maximum Speed: 49 km/h on Aug 2 11:00

Maximum Daily Speed Average: 37.3 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 9 05:00

Minimum Daily Speed Average: 1.1 km/h on Aug 14

Maximum Diurnal Speed Average: 7.6 km/h at hour 12

Minimum Diurnal Speed Average: 2.7 km/h at hour 22

Monthly Average Velocity: 4.0 km/h 277.6 deg

Percentiles: $P_1$ = 2 $P_{10}$ = 6 $Q_1$ = 10 Median = 17 $Q_3$ = 23 $P_{90}$ = 29 $P_{99}$ = 42

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSE18 | SSE18 | SSE11 | S7 | SSE9 | SE14 | SSE18 | S14 | ESE6 | ESE5 | ESE9 | ENE14 | E15 | SE20 | ESE17 | ESE17 | ESE18 | SE23 | SE18 | SE13 | NW28 | NNW14 | NNW17 | NNW12 | SE7.9 | NW28 |
| 2-Aug | UO | NNW30 | NNW34 | NNW34 | N28 | NNW28 | NNW29 | N26 | NNW35 | NNW42 | NNW49 | NNW48 | NNW43 | NNW43 | NNW47 | NNW49 | NNW45 | NNW43 | NNW41 | NNW38 | NNW40 | NW35 | NW32 | NW30 | NNW37.3 | NNW49 |
| 3-Aug | NW30 | NW30 | NW28 | NW25 | WNW22 | WNW20 | WNW18 | WNW16 | NW19 | NW20 | NNW23 | NW24 | NW19 | NNW15 | NNW12 | NNW9 | NNW16 | N16 | NNE13 | NE13 | ENE7 | ESE9 | SE12 | SSE15 | NW13.1 | NW30 |
| 4-Aug | SSE20 | S22 | S24 | SSE23 | S17 | SSE13 | SSE9 | SSE8 | SSE9 | SSE8 | SSW7 | WSW24 | WSW21 | WSW23 | SW17 | SW20 | NW20 | NNE17 | WNW20 | WNW27 | WNW28 | NW32 | NW23 | NW23 | WSW9.1 | NW32 |
| 5-Aug | WNW27 | W23 | W22 | W28 | W28 | WNW27 | WNW28 | WNW26 | NW32 | WNW31 | WNW34 | WNW34 | NW36 | NW31 | WNW25 | NW23 | N29 | N31 | NW24 | NW26 | NW20 | WNW25 | WNW28 | WNW34 | WNW26.3 | NW36 |
| 6-Aug | WNW32 | WNW30 | WNW36 | WNW37 | WNW39 | WNW36 | W31 | WNW33 | WNW30 | WNW29 | NW25 | NW18 | WNW16 | NW14 | NNW16 | NW11 | W15 | WNW23 | WNW25 | WNW23 | WNW18 | WNW27 | WNW26 | WNW23 | WNW24.8 | WNW39 |
| 7-Aug | WNW22 | WNW16 | W20 | W22 | W23 | W20 | W18 | W18 | W22 | W20 | W25 | WNW25 | W23 | NW16 | NNW17 | NNW17 | NNW15 | NNW15 | NNE13 | NNE15 | NNE12 | N7 | NNW8 | WNW8 | WNW14.2 | WNW25 |
| 8-Aug | WNW5 | NNW6 | NW6 | WNW11 | NNW8 | NNW9 | NNW6 | N14 | NNW12 | NNW12 | N11 | N8 | NNE6 | NNE7 | NW10 | NW18 | NW12 | NNW8 | NNW4 | NNE2 | N5 | NNE10 | NNE14 | NNE19 | NNW8.1 | NNE19 |
| 9-Aug | NE16 | NE8 | NE2 | SE2 | ENE0 | SW1 | NE5 | NNE2 | SSW1 | SW4 | WSW4 | W2 | N7 | NE7 | NNE7 | NNE12 | NNW7 | NNE8 | NNE14 | NNE15 | NNE18 | NE15 | E6 | SE11 | NNE5.2 | NNE18 |
| 10-Aug | SE13 | SSE12 | SSE11 | SSE9 | SE13 | SSE11 | SE9 | S6 | SSW1 | N4 | N6 | N7 | N5 | NW12 | N17 | NNW16 | N16 | NNE15 | NNE16 | NNE19 | NNE21 | NNE24 | NNE17 | N5 | NNE5.3 | NNE24 |
| 11-Aug | NW7 | NW8 | WNW12 | NW12 | NW9 | WNW8 | NW8 | W7 | WNW9 | NW10 | NNW18 | NNW22 | NNW24 | NNW27 | NNW28 | NNW27 | N24 | N25 | N21 | NNE28 | NNE25 | NNE25 | N21 | N13 | NNW15.9 | NNE28 |
| 12-Aug | NNW18 | NNW14 | NW14 | NW12 | NNW15 | NW15 | NW13 | NW15 | NNW17 | NW20 | NNW18 | NNW22 | N20 | NNW15 | NNW22 | NNE23 | N24 | N23 | N18 | N17 | NNW17 | N19 | N18 | N20 | NNW17.0 | N24 |
| 13-Aug | N23 | N27 | N21 | N17 | N12 | N14 | N13 | NNW9 | NNW11 | N11 | N17 | NNE13 | NNE12 | NNE16 | NNE19 | NE18 | NE14 | NE18 | NNE16 | NNE18 | NNE15 | NNE12 | N7 | N9 | NNE14.4 | N27 |
| 14-Aug | NNW8 | NNW8 | NNW8 | NNW7 | N6 | NNE1 | N3 | WSW2 | WNW4 | NW5 | N5 | NNE2 | NNW4 | NE5 | ENE19 | SE9 | WSW12 | SSW7 | SSW6 | SSW7 | SSW6 | S12 | S8 | SSW10 | W1.1 | ENE19 |
| 15-Aug | SSW11 | SW8 | SW8 | SSW8 | SSW7 | SSW7 | SW9 | SW8 | S7 | S9 | SSE9 | SW11 | SW14 | WSW16 | SSW13 | SSW13 | SSW16 | SW20 | SW17 | SW19 | SW21 | SW27 | WSW26 | WSW27 | SW13.0 | WSW27 |
| 16-Aug | WSW30 | WSW30 | WSW26 | WNW16 | NW9 | WNW8 | NNW14 | N19 | NNW31 | N33 | NNW28 | NNW22 | NNW25 | NNW21 | NNW19 | NNW15 | NW14 | N19 | NE14 | NE8 | NE6 | NE4 | S1 | SSW8 | NW12.5 | N33 |
| 17-Aug | SSW12 | SW20 | WSW18 | WSW10 | W15 | W15 | WSW11 | SW6 | SW7 | SW6 | W7 | W8 | NNE4 | ESE3 | ESE4 | SSE6 | SE12 | SE14 | SSE14 | S18 | S25 | S32 | S33 | S28 | SSW10.3 | S33 |
| 18-Aug | S27 | S25 | S25 | S24 | SSE26 | SSE27 | SSE25 | SSE18 | SE13 | SE13 | S13 | SSW14 | SW15 | SW18 | SSW18 | SW27 | WSW24 | WSW23 | WSW21 | WSW22 | WSW21 | WSW28 | WSW22 | W11 | SSW16.2 | WSW28 |
| 19-Aug | WSW11 | W11 | WSW12 | WSW15 | WSW12 | SSW8 | SSW11 | SW14 | SW13 | W13 | W13 | W17 | W14 | NW14 | NNW14 | NNW17 | WNW14 | NW18 | N18 | NNE24 | NNE22 | NE4 | SW2 | WNW25 | WNW8.8 | WNW25 |
| 20-Aug | WNW2 | SW11 | WNW6 | NNW5 | W7 | WSW10 | SW4 | WSW6 | WNW4 | WNW6 | NNW9 | NNW20 | NW18 | NNW17 | NNW16 | NNW16 | N21 | N17 | NNE16 | NNE11 | NNE9 | NNE8 | NE10 | ENE5 | NNW7.5 | N21 |
| 21-Aug | SSE3 | S7 | SSW10 | SSW11 | S6 | SSW6 | SSW10 | S8 | S10 | S7 | SSE9 | SE12 | SSE12 | S11 | SSE11 | SE16 | SSE18 | SSE20 | SE25 | SE28 | SSE30 | SSE34 | S31 | S28 | SSE14.3 | SSE34 |
| 22-Aug | S29 | S29 | SSE31 | SSE30 | SE26 | SE24 | SE19 | SE18 | SE17 | SSE15 | SE13 | SSE16 | SSE15 | SSE15 | SSE18 | SSE15 | SE18 | SE23 | SE23 | SSE25 | S34 | S37 | S28 | S25 | SSE21.7 | S37 |
| 23-Aug | SSE25 | SSE18 | SSE22 | SSE17 | SSE21 | SSE18 | SSE18 | SSE21 | SSE15 | S16 | SSE11 | S8 | SSE11 | SSE10 | SSW4 | SW6 | SW6 | WSW13 | W23 | NW25 | NNW23 | NW13 | WNW20 | NW21 | SSW7.1 | SSE25 |
| 24-Aug | NW22 | NW22 | NW24 | NNW22 | NW19 | NW20 | NW20 | NW14 | WNW16 | WNW21 | WNW27 | NW26 | NW28 | NW27 | NNW27 | N18 | NNW17 | NNE19 | NNE17 | N12 | N8 | NNE6 | NW5 | N11 | NNW17.2 | NNW28 |
| 25-Aug | NNE14 | N15 | NNE15 | N15 | NNW11 | NNW11 | NNW9 | N3 | N4 | NW7 | WNW6 | W7 | W6 | W6 | W5 | W6 | E5 | SE5 | NE7 | NNE19 | NE18 | E13 | ESE10 | ESE10 | NNE5.1 | NNE19 |
| 26-Aug | ESE10 | ESE12 | SE13 | SE20 | SE21 | SE23 | SE23 | SSE20 | SSE16 | SE15 | SSE16 | SSE19 | SSE25 | SSE21 | SSE23 | SE22 | SSE24 | SSE23 | SE25 | SE30 | SSE32 | SSE29 | SSE33 | SSE30 | SE21.6 | SSE33 |
| 27-Aug | SSE28 | SE21 | SE24 | SE24 | SE25 | SE26 | SE19 | SE17 | SE14 | SE14 | SE16 | SSE21 | SSE23 | SE18 | SSE18 | SE18 | ESE14 | E27 | ESE26 | ESE26 | ESE22 | SE23 | SE25 | SE24 | SE20.8 | SSE28 |
| 28-Aug | SE21 | ESE18 | SE30 | S31 | SW17 | SE5 | SSE30 | S24 | S26 | SSW25 | SW26 | SW33 | SW32 | SW32 | WSW39 | WSW38 | SW30 | SW36 | SW38 | WSW36 | SW25 | SW29 | SW31 | WSW29 | SW22.9 | WSW39 |
| 29-Aug | SW22 | SSW26 | SW22 | SW22 | SSW23 | SSW24 | SSW19 | SSW21 | SSW18 | SW19 | SSW22 | SW26 | SW25 | SW26 | SW30 | SW27 | SW27 | SW22 | SSW15 | S16 | SSW16 | SSW19 | S26 | S28 | SSW21.7 | SW30 |
| 30-Aug | S25 | S21 | S20 | SSE25 | SSE16 | SE17 | SSE14 | S10 | S8 | SE9 | SE7 | SSE6 | SSW4 | S4 | SSE6 | SSW3 | E4 | SSE5 | SSW6 | S11 | SSE22 | S20 | SSW13 | WNW17 | S10.6 | SSE25 |
| 31-Aug | NNW12 | NNW10 | WNW13 | NW19 | NW19 | NW16 | NW12 | NW9 | NW8 | W9 | WNW8 | W11 | WNW12 | W14 | SW14 | WSW15 | WSW15 | WSW17 | WSW21 | WSW19 | W11 | NNE12 | ENE10 | ESE8 | WNW9.5 | WSW21 |
| | SW4.7 | WSW5.1 | WSW5.7 | WSW5.1 | WSW4.9 | WSW4.2 | SW3.5 | WSW4.0 | W4.4 | WNW5.5 | WNW6.1 | WNW7.6 | WNW6.7 | WNW6.4 | NW5.4 | NW4.9 | NW4.7 | NNW4.0 | NNW3.1 | NNW3.2 | NW3.0 | WSW2.7 | WSW4.2 | WSW5.1 | Diurnal Average | |
| | WNW32 | NW30 | WNW36 | WNW37 | WNW39 | WNW36 | W31 | WNW33 | NNW35 | NNW42 | NNW49 | NNW48 | NNW43 | NNW43 | NNW47 | NNW49 | NNW45 | NNW43 | NNW41 | NNW38 | NNW40 | S37 | SSE33 | WNW34 | Diurnal Maximum | |

UO - Unstable Operation

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 20 km/h on Aug 1 21:00

Minimum Value: 1 km/h on Aug 3 23:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 3 $Q_3 = 4$ $P_{90} = 6$ $P_{99} = 8$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 1 | 3 | 4 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 5 | 5 | 6 | 6 | 5 | 4 | 6 | 20 | 16 | 3 | 6 | 20 |
| 2-Aug | UO | 3 | 4 | 6 | 6 | 4 | 6 | 6 | 5 | 7 | 8 | 9 | 8 | 8 | 8 | 9 | 9 | 7 | 6 | 6 | 7 | 7 | 4 | 3 | 9 |
| 3-Aug | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 3 | 3 | 3 | 1 | 2 | 1 | 1 | 2 | 5 |
| 4-Aug | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 4 | 5 | 4 | 4 | 3 | 7 | 4 | 3 | 3 | 6 | 4 | 4 | 3 | 7 |
| 5-Aug | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 5 | 9 | 5 | 6 | 6 | 6 | 6 | 4 | 6 | 5 | 8 | 3 | 4 | 4 | 4 | 4 | 4 | 9 |
| 6-Aug | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 7 | 3 | 3 | 5 | 3 | 4 | 2 | 4 | 3 | 2 | 7 |
| 7-Aug | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 3 | 5 | 6 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 2 | 2 | 1 | 6 |
| 8-Aug | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 6 | 2 | 2 | 1 | 1 | 3 | 4 | 1 | 2 | 6 |
| 9-Aug | 1 | 3 | 2 | 1 | 1 | 2 | 3 | 2 | 1 | 2 | 2 | 3 | 4 | 2 | 3 | 4 | 3 | 3 | 4 | 4 | 1 | 3 | 2 | 2 | 4 |
| 10-Aug | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 3 | 1 | 2 | 4 | 3 | 2 | 5 |
| 11-Aug | 1 | 1 | 2 | 2 | 3 | 1 | 4 | 2 | 3 | 3 | 4 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 7 | 5 | 3 | 4 | 4 | 3 | 7 |
| 12-Aug | 3 | 4 | 2 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 5 | 5 | 8 | 4 | 5 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 |
| 13-Aug | 3 | 3 | 4 | 3 | 5 | 5 | 5 | 3 | 2 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 5 |
| 14-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 8 | 6 | 4 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 8 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 5 |
| 16-Aug | 1 | 1 | 2 | 4 | 5 | 5 | 3 | 6 | 6 | 7 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 2 | 1 | 2 | 7 |
| 17-Aug | 1 | 4 | 3 | 2 | 1 | 5 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 5 |
| 18-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 2 | 2 | 3 | 3 | 4 | 5 |
| 19-Aug | 3 | 2 | 4 | 3 | 2 | 2 | 1 | 3 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 6 | 2 | 4 | 3 | 4 | 6 | 3 | 3 | 6 | 6 |
| 20-Aug | 7 | 1 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 7 |
| 21-Aug | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 5 |
| 22-Aug | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 3 | 2 | 4 | 4 | 2 | 1 | 5 |
| 23-Aug | 2 | 2 | 3 | 2 | 5 | 2 | 2 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 1 | 5 | 2 | 4 | 6 | 7 | 3 | 3 | 7 |
| 24-Aug | 2 | 2 | 1 | 5 | 3 | 2 | 2 | 3 | 3 | 4 | 6 | 7 | 5 | 7 | 6 | 4 | 4 | 4 | 4 | 4 | 1 | 3 | 2 | 3 | 7 |
| 25-Aug | 4 | 1 | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 5 | 2 | 2 | 3 | 3 | 3 | 5 |
| 26-Aug | 3 | 3 | 4 | 3 | 4 | 1 | 1 | 4 | 3 | 3 | 2 | 4 | 4 | 6 | 4 | 4 | 5 | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 6 |
| 27-Aug | 3 | 4 | 3 | 2 | 2 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 6 | 4 | 5 | 4 | 5 | 5 | 6 | 7 | 6 | 5 | 6 | 6 | 7 |
| 28-Aug | 5 | 4 | 5 | 5 | 6 | 6 | 3 | 4 | 3 | 4 | 5 | 7 | 6 | 6 | 9 | 7 | 7 | 6 | 7 | 5 | 5 | 5 | 4 | 5 | 9 |
| 29-Aug | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 5 | 4 | 6 | 5 | 6 | 5 | 5 | 4 | 5 | 2 | 1 | 2 | 4 | 3 | 2 | 6 |
| 30-Aug | 1 | 3 | 2 | 5 | 5 | 2 | 3 | 3 | 1 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 4 | 1 | 3 | 2 | 5 | 5 |
| 31-Aug | 3 | 3 | 4 | 3 | 2 | 2 | 1 | 1 | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 4 |
| | 7 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 9 | 7 | 8 | 9 | 8 | 8 | 9 | 9 | 9 | 8 | 7 | 7 | 20 | 16 | 6 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

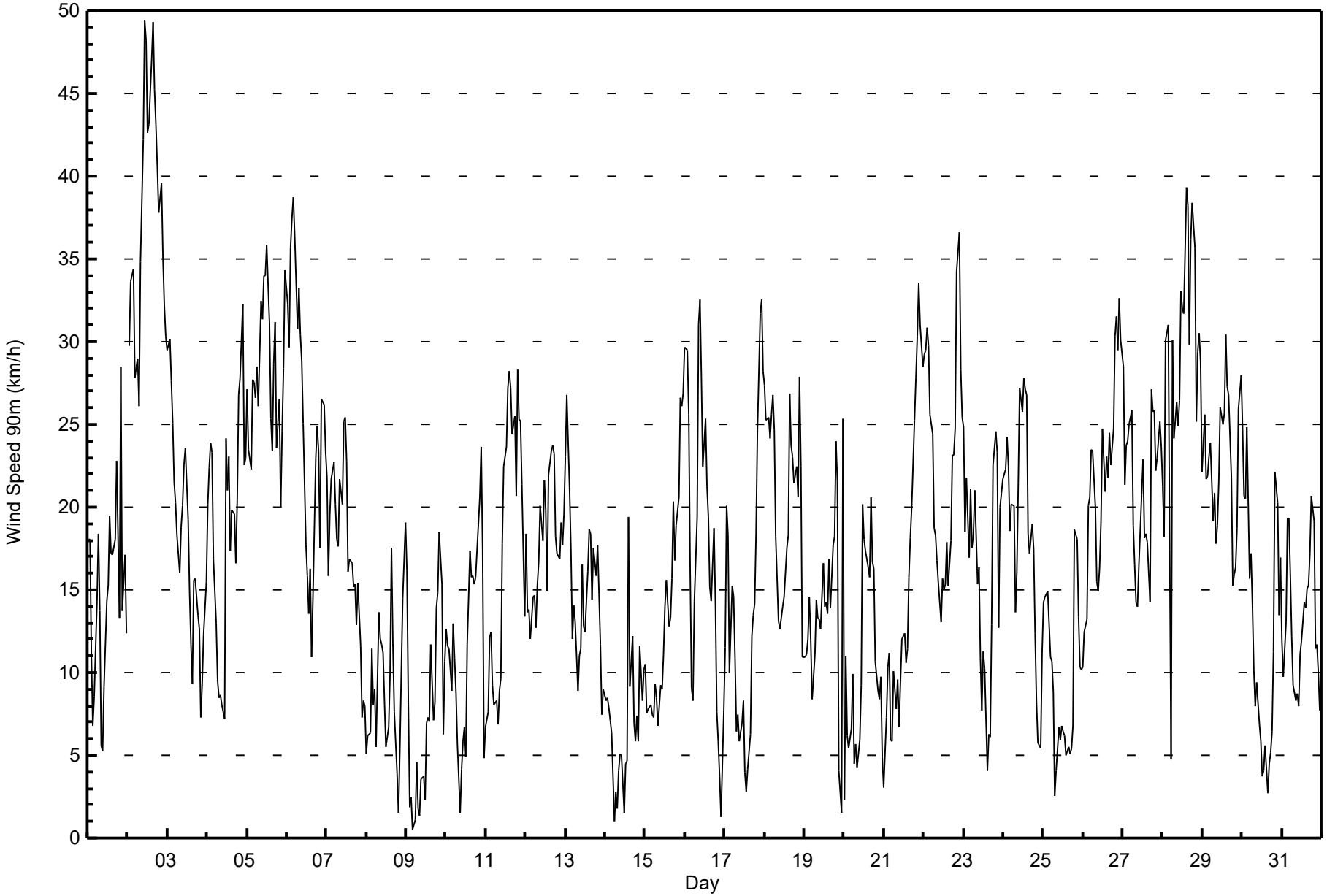
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 90m (WS90) - km/h**

**Mannix - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 54 | 7.27 | 7.27 |
| 6 - 11 | 162 | 21.80 | 29.07 |
| 12 - 19 | 244 | 32.84 | 61.91 |
| 20 - 28 | 205 | 27.59 | 89.50 |
| 29 - 38 | 65 | 8.75 | 98.25 |
| > 38 | 13 | 1.75 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 90m (WS90) - km/h**

**Mannix - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 8 | 5 | 5 | 2 | 2 | 3 | 3 | 2 | 2 | 5 | 4 | 3 | 1 | 4 | 2 | 3 | 54 |
| 6 - 11 | 12 | 10 | 5 | 2 | 1 | 7 | 4 | 19 | 15 | 18 | 11 | 5 | 13 | 10 | 11 | 19 | 162 |
| 12 - 19 | 22 | 30 | 8 | 2 | 2 | 6 | 27 | 27 | 7 | 12 | 10 | 12 | 10 | 13 | 24 | 32 | 244 |
| 20 - 28 | 14 | 8 | 0 | 0 | 1 | 3 | 23 | 22 | 19 | 6 | 17 | 14 | 13 | 24 | 21 | 20 | 205 |
| 29 - 38 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 8 | 0 | 8 | 6 | 1 | 12 | 9 | 7 | 65 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 11 | 13 |
| **Totals** | 59 | 53 | 18 | 6 | 6 | 19 | 59 | 79 | 51 | 41 | 50 | 41 | 38 | 64 | 67 | 92 | 743 |

Total Number of Valid Hours: 743

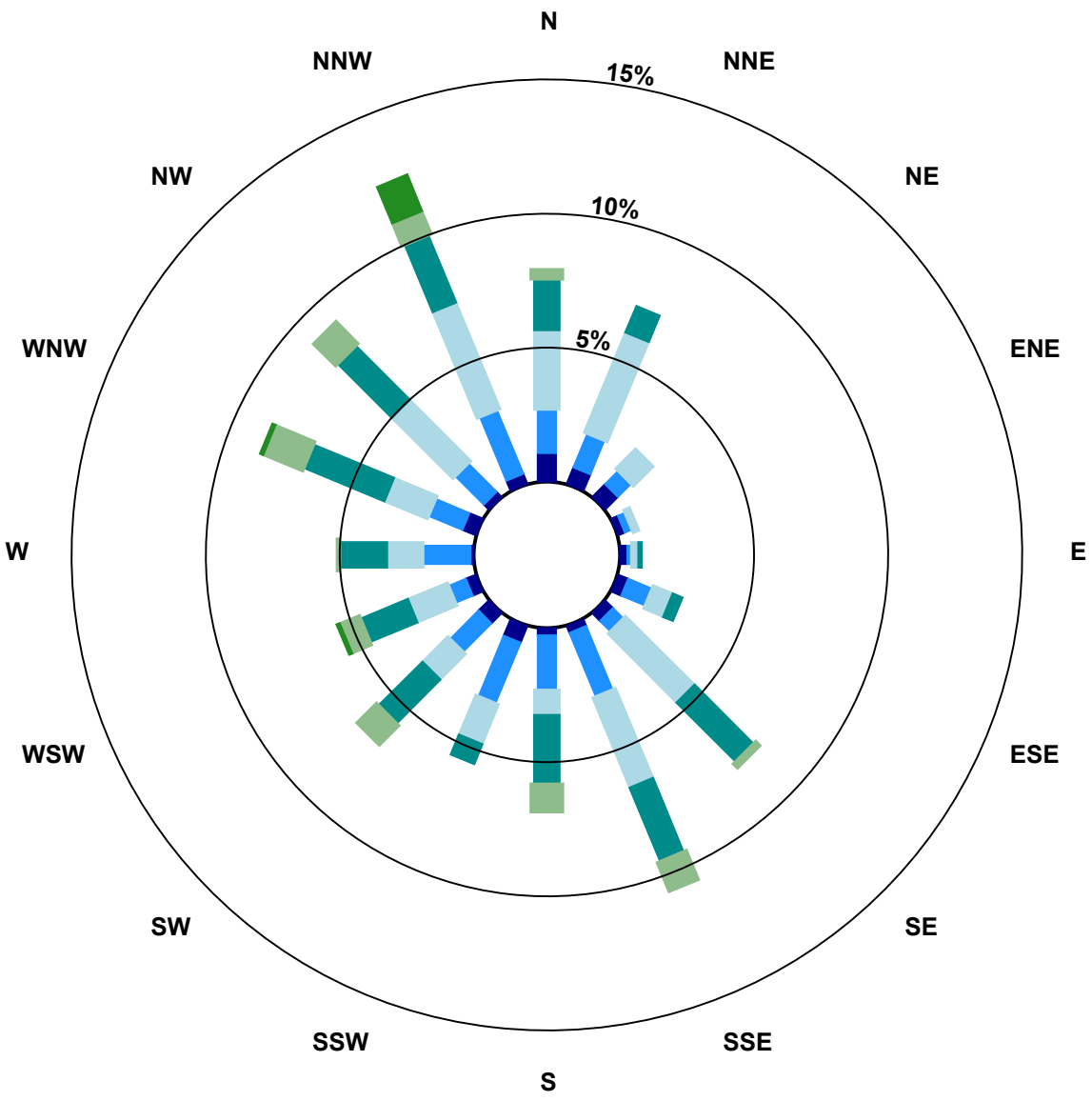
Total Number of Hours: 744

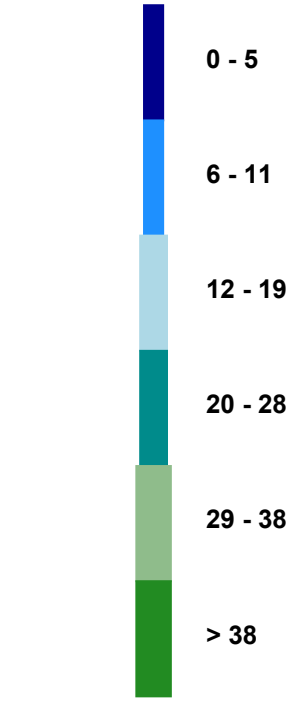
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 90m (WS90) - km/h**

**Mannix**




**Total Number of Valid Hours: 743**

Direction of Maximum Speed: 347 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 345.0 deg on Aug 2

Direction of Minimum Speed: 105 deg on Aug 9 08:00

Direction of Minimum Daily Speed Average: 1.3 deg on Aug 14

Monthly Average Direction: 276.2 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 171 | 160 | 163 | 197 | 169 | 155 | 154 | 174 | 85 | 125 | 145 | 72 | 85 | 142 | 121 | 118 | 136 | 147 | 150 | 157 | 320 | 347 | 329 | 314 | 133.7 |
| 2-Aug | 324 | 344 | 347 | 350 | 357 | 342 | 352 | 357 | 345 | 349 | 348 | 352 | 352 | 346 | 345 | 347 | 351 | 347 | 347 | 344 | 340 | 330 | 322 | 317 | 345.0 |
| 3-Aug | 320 | 315 | 320 | 321 | 300 | 291 | 294 | 288 | 310 | 333 | 341 | 333 | 322 | 336 | 348 | 358 | 355 | 359 | 45 | 49 | 90 | 124 | 177 | 201 | 327.4 |
| 4-Aug | 188 | 174 | 170 | 161 | 163 | 165 | 162 | 157 | 159 | 161 | 182 | 265 | 251 | 256 | 253 | 242 | 334 | 44 | 289 | 295 | 288 | 317 | 316 | 315 | 247.8 |
| 5-Aug | 302 | 280 | 264 | 283 | 277 | 286 | 297 | 303 | 320 | 303 | 303 | 308 | 317 | 320 | 309 | 316 | 359 | 360 | 335 | 333 | 311 | 286 | 290 | 300 | 306.9 |
| 6-Aug | 302 | 289 | 294 | 296 | 299 | 302 | 289 | 295 | 298 | 312 | 326 | 320 | 299 | 335 | 340 | 332 | 267 | 291 | 292 | 308 | 303 | 290 | 286 | 287 | 300.1 |
| 7-Aug | 299 | 304 | 267 | 271 | 268 | 268 | 274 | 268 | 282 | 284 | 289 | 292 | 287 | 320 | 355 | 355 | 339 | 359 | 26 | 29 | 27 | 359 | 341 | 205 | 303.4 |
| 8-Aug | 319 | 290 | 281 | 274 | 311 | 289 | 284 | 15 | 346 | 348 | 20 | 358 | 44 | 49 | 317 | 332 | 331 | 351 | 344 | 236 | 343 | 3 | 23 | 24 | 346.9 |
| 9-Aug | 41 | 310 | 290 | 260 | 323 | 252 | 48 | 105 | 231 | 260 | 254 | 275 | 4 | 42 | 44 | 27 | 352 | 30 | 21 | 6 | 0 | 45 | 57 | 193 | 7.5 |
| 10-Aug | 206 | 242 | 204 | 186 | 185 | 178 | 176 | 195 | 246 | 30 | 24 | 8 | 8 | 327 | 4 | 349 | 7 | 22 | 28 | 35 | 8 | 21 | 1 | 268 | 358.5 |
| 11-Aug | 287 | 281 | 263 | 262 | 247 | 206 | 241 | 253 | 283 | 324 | 340 | 341 | 357 | 352 | 351 | 355 | 2 | 2 | 9 | 24 | 30 | 21 | 10 | 2 | 348.1 |
| 12-Aug | 338 | 7 | 329 | 289 | 310 | 277 | 298 | 332 | 344 | 327 | 336 | 346 | 359 | 355 | 356 | 22 | 11 | 16 | 7 | 360 | 348 | 350 | 354 | 357 | 350.5 |
| 13-Aug | 8 | 12 | 24 | 26 | 8 | 9 | 11 | 338 | 341 | 357 | 21 | 39 | 32 | 23 | 43 | 69 | 66 | 45 | 34 | 29 | 35 | 12 | 295 | 296 | 23.4 |
| 14-Aug | 286 | 289 | 305 | 321 | 35 | 185 | 329 | 242 | 279 | 323 | 21 | 87 | 322 | 55 | 78 | 143 | 259 | 229 | 210 | 208 | 181 | 176 | 177 | 167 | 206.7 |
| 15-Aug | 178 | 168 | 172 | 174 | 174 | 182 | 179 | 176 | 170 | 176 | 154 | 232 | 239 | 251 | 212 | 215 | 224 | 239 | 225 | 215 | 219 | 230 | 248 | 241 | 208.4 |
| 16-Aug | 249 | 251 | 243 | 302 | 290 | 278 | 345 | 5 | 354 | 357 | 350 | 354 | 353 | 346 | 348 | 339 | 325 | 1 | 49 | 51 | 32 | 250 | 248 | 249 | 335.5 |
| 17-Aug | 229 | 235 | 215 | 211 | 233 | 228 | 210 | 205 | 225 | 240 | 271 | 286 | 53 | 101 | 110 | 158 | 149 | 147 | 165 | 182 | 175 | 175 | 172 | 170 | 190.7 |
| 18-Aug | 168 | 162 | 164 | 159 | 165 | 159 | 158 | 159 | 147 | 143 | 180 | 225 | 234 | 244 | 210 | 242 | 253 | 271 | 264 | 249 | 234 | 243 | 232 | 181 | 208.6 |
| 19-Aug | 210 | 212 | 217 | 200 | 188 | 164 | 169 | 181 | 211 | 277 | 281 | 289 | 282 | 320 | 352 | 350 | 295 | 313 | 6 | 27 | 35 | 271 | 259 | 308 | 288.9 |
| 20-Aug | 210 | 227 | 269 | 6 | 270 | 223 | 209 | 238 | 278 | 291 | 332 | 341 | 329 | 349 | 348 | 354 | 360 | 12 | 26 | 30 | 38 | 1 | 24 | 256 | 335.4 |
| 21-Aug | 245 | 225 | 211 | 167 | 158 | 163 | 168 | 159 | 162 | 162 | 150 | 150 | 166 | 193 | 168 | 145 | 166 | 162 | 157 | 154 | 160 | 168 | 168 | 170 | 166.6 |
| 22-Aug | 167 | 166 | 165 | 162 | 153 | 157 | 148 | 155 | 155 | 159 | 157 | 166 | 167 | 164 | 164 | 162 | 150 | 146 | 142 | 157 | 178 | 191 | 171 | 171 | 161.6 |
| 23-Aug | 162 | 161 | 164 | 165 | 166 | 156 | 159 | 175 | 170 | 192 | 170 | 197 | 155 | 144 | 178 | 207 | 185 | 231 | 278 | 305 | 328 | 308 | 297 | 307 | 193.0 |
| 24-Aug | 305 | 317 | 325 | 335 | 319 | 327 | 324 | 297 | 302 | 297 | 313 | 323 | 338 | 335 | 338 | 7 | 353 | 28 | 35 | 6 | 8 | 270 | 283 | 21 | 331.8 |
| 25-Aug | 320 | 333 | 332 | 355 | 23 | 35 | 36 | 262 | 32 | 303 | 299 | 271 | 280 | 274 | 262 | 293 | 107 | 150 | 26 | 29 | 44 | 77 | 149 | 121 | 4.2 |
| 26-Aug | 142 | 159 | 158 | 171 | 179 | 184 | 178 | 168 | 159 | 155 | 154 | 165 | 168 | 170 | 169 | 156 | 159 | 159 | 149 | 153 | 158 | 163 | 167 | 162 | 162.8 |
| 27-Aug | 163 | 159 | 157 | 151 | 159 | 153 | 151 | 160 | 155 | 147 | 142 | 163 | 165 | 155 | 164 | 149 | 116 | 105 | 117 | 122 | 143 | 143 | 142 | 144 | 146.6 |
| 28-Aug | 147 | 139 | 148 | 176 | 238 | 137 | 169 | 179 | 181 | 217 | 231 | 246 | 240 | 236 | 252 | 255 | 247 | 244 | 249 | 253 | 239 | 243 | 245 | 251 | 227.2 |
| 29-Aug | 233 | 222 | 232 | 228 | 222 | 207 | 201 | 202 | 213 | 231 | 225 | 239 | 243 | 246 | 247 | 242 | 230 | 230 | 204 | 196 | 230 | 193 | 173 | 176 | 224.6 |
| 30-Aug | 171 | 164 | 160 | 157 | 179 | 163 | 206 | 198 | 199 | 152 | 153 | 139 | 224 | 232 | 172 | 188 | 109 | 173 | 215 | 199 | 179 | 175 | 200 | 276 | 179.0 |
| 31-Aug | 301 | 326 | 278 | 300 | 293 | 284 | 279 | 293 | 308 | 276 | 291 | 274 | 300 | 274 | 243 | 269 | 254 | 261 | 257 | 251 | 267 | 38 | 74 | 178 | 277.4 |
| | 242.0 | 240.0 | 230.5 | 234.6 | 236.9 | 223.3 | 226.7 | 244.0 | 276.5 | 289.1 | 305.2 | 297.9 | 297.9 | 303.1 | 313.5 | 312.4 | 312.2 | 334.2 | 335.4 | 339.2 | 310.7 | 261.0 | 243.6 | 252.4 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 106 deg on Aug 14 12:00

Minimum Value: 5 deg on Aug 16 01:00

Percentiles: $P_1$ = 8 $P_{10}$ = 11 $Q_1$ = 14 Median = 18 $Q_3$ = 28 $P_{90}$ = 47 $P_{99}$ = 90

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

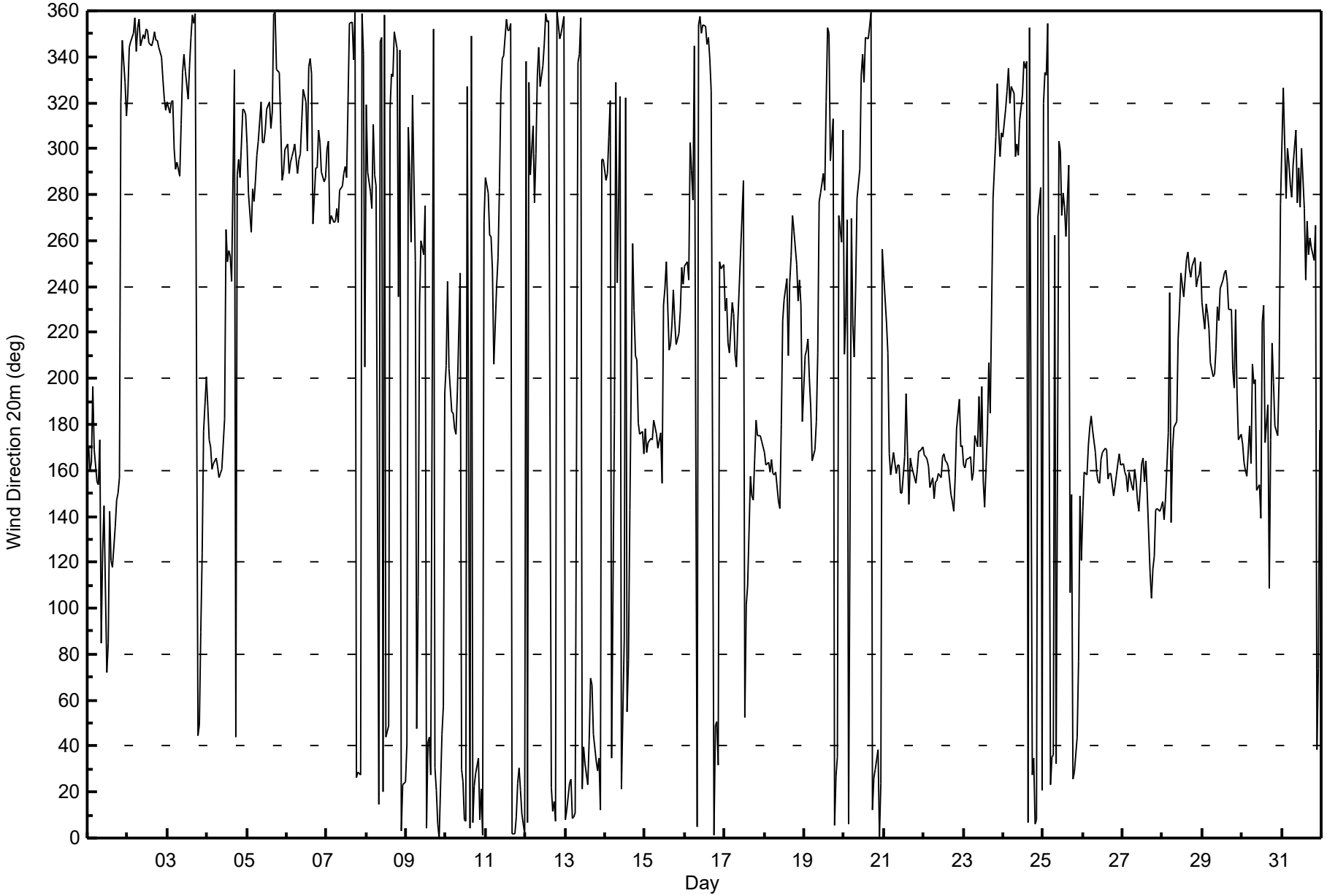
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 10 | 11 | 12 | 20 | 15 | 17 | 16 | 48 | 62 | 39 | 41 | 18 | 21 | 15 | 22 | 18 | 18 | 14 | 10 | 60 | 37 | 63 | 33 | 49 | 63 |
| 2-Aug | 21 | 16 | 14 | 15 | 21 | 15 | 19 | 19 | 15 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 15 | 15 | 14 | 16 | 15 | 14 | 15 | 21 |
| 3-Aug | 15 | 15 | 17 | 14 | 14 | 13 | 12 | 12 | 21 | 21 | 22 | 23 | 25 | 33 | 33 | 61 | 23 | 24 | 22 | 17 | 41 | 17 | 20 | 12 | 61 |
| 4-Aug | 9 | 9 | 10 | 14 | 15 | 12 | 14 | 18 | 27 | 25 | 43 | 14 | 16 | 17 | 22 | 17 | 56 | 27 | 14 | 12 | 14 | 15 | 16 | 15 | 56 |
| 5-Aug | 12 | 16 | 10 | 11 | 8 | 12 | 14 | 15 | 18 | 15 | 15 | 16 | 17 | 18 | 16 | 21 | 19 | 19 | 17 | 16 | 20 | 12 | 12 | 13 | 21 |
| 6-Aug | 13 | 11 | 11 | 11 | 12 | 13 | 12 | 12 | 13 | 18 | 17 | 23 | 20 | 37 | 30 | 27 | 23 | 15 | 13 | 15 | 17 | 11 | 11 | 11 | 37 |
| 7-Aug | 15 | 17 | 11 | 13 | 10 | 11 | 13 | 12 | 13 | 13 | 13 | 14 | 17 | 47 | 25 | 20 | 21 | 21 | 19 | 17 | 23 | 39 | 38 | 25 | 47 |
| 8-Aug | 74 | 54 | 44 | 31 | 38 | 43 | 67 | 25 | 27 | 32 | 42 | 49 | 58 | 59 | 30 | 23 | 19 | 20 | 42 | 95 | 70 | 23 | 15 | 11 | 95 |
| 9-Aug | 17 | 49 | 34 | 74 | 40 | 89 | 61 | 103 | 81 | 42 | 56 | 93 | 62 | 34 | 42 | 34 | 42 | 32 | 23 | 17 | 15 | 11 | 90 | 20 | 103 |
| 10-Aug | 15 | 28 | 18 | 28 | 30 | 30 | 22 | 34 | 90 | 56 | 37 | 50 | 85 | 35 | 32 | 26 | 31 | 22 | 18 | 13 | 12 | 16 | 47 | 18 | 90 |
| 11-Aug | 5 | 10 | 12 | 14 | 65 | 56 | 64 | 20 | 23 | 30 | 24 | 20 | 26 | 23 | 23 | 20 | 23 | 20 | 22 | 14 | 14 | 17 | 13 | 15 | 65 |
| 12-Aug | 18 | 14 | 26 | 64 | 37 | 14 | 33 | 21 | 22 | 18 | 22 | 21 | 22 | 24 | 25 | 19 | 20 | 13 | 22 | 24 | 20 | 14 | 13 | 14 | 64 |
| 13-Aug | 13 | 12 | 21 | 17 | 21 | 23 | 37 | 24 | 22 | 30 | 21 | 34 | 29 | 24 | 18 | 23 | 20 | 17 | 17 | 13 | 14 | 15 | 42 | 25 | 42 |
| 14-Aug | 13 | 18 | 27 | 44 | 72 | 48 | 82 | 55 | 40 | 45 | 50 | 106 | 62 | 67 | 23 | 64 | 23 | 25 | 24 | 19 | 14 | 11 | 11 | 13 | 106 |
| 15-Aug | 9 | 10 | 7 | 8 | 8 | 11 | 18 | 22 | 24 | 27 | 29 | 54 | 34 | 29 | 22 | 27 | 24 | 16 | 19 | 10 | 9 | 9 | 8 | 6 | 54 |
| 16-Aug | 5 | 5 | 7 | 64 | 74 | 24 | 33 | 18 | 17 | 17 | 18 | 25 | 23 | 25 | 22 | 32 | 26 | 27 | 18 | 25 | 60 | 90 | 8 | 9 | 90 |
| 17-Aug | 29 | 21 | 10 | 12 | 10 | 23 | 18 | 37 | 25 | 31 | 32 | 41 | 60 | 69 | 54 | 42 | 16 | 14 | 12 | 10 | 10 | 10 | 9 | 9 | 69 |
| 18-Aug | 10 | 11 | 11 | 10 | 10 | 13 | 14 | 19 | 14 | 15 | 29 | 25 | 18 | 22 | 26 | 21 | 13 | 14 | 12 | 9 | 11 | 7 | 8 | 23 | 29 |
| 19-Aug | 24 | 23 | 19 | 30 | 22 | 10 | 16 | 26 | 28 | 28 | 18 | 19 | 20 | 40 | 27 | 21 | 23 | 26 | 17 | 15 | 15 | 59 | 17 | 16 | 59 |
| 20-Aug | 56 | 36 | 82 | 16 | 36 | 11 | 29 | 17 | 26 | 25 | 49 | 21 | 24 | 25 | 31 | 29 | 16 | 20 | 18 | 33 | 42 | 35 | 46 | 12 | 82 |
| 21-Aug | 8 | 38 | 25 | 22 | 15 | 10 | 12 | 24 | 25 | 23 | 22 | 21 | 31 | 39 | 41 | 17 | 16 | 12 | 11 | 11 | 10 | 9 | 9 | 8 | 41 |
| 22-Aug | 9 | 10 | 10 | 11 | 10 | 10 | 19 | 14 | 15 | 14 | 22 | 18 | 18 | 23 | 18 | 18 | 15 | 13 | 11 | 11 | 13 | 17 | 10 | 10 | 23 |
| 23-Aug | 11 | 10 | 10 | 10 | 12 | 12 | 16 | 16 | 16 | 23 | 41 | 45 | 27 | 18 | 35 | 30 | 27 | 24 | 11 | 17 | 24 | 63 | 12 | 15 | 63 |
| 24-Aug | 15 | 14 | 14 | 15 | 16 | 14 | 15 | 17 | 16 | 16 | 19 | 22 | 21 | 20 | 23 | 25 | 19 | 21 | 15 | 17 | 11 | 60 | 16 | 44 | 60 |
| 25-Aug | 60 | 49 | 29 | 15 | 26 | 13 | 79 | 87 | 44 | 23 | 28 | 36 | 42 | 55 | 69 | 68 | 51 | 37 | 72 | 13 | 12 | 30 | 19 | 32 | 87 |
| 26-Aug | 40 | 12 | 10 | 14 | 11 | 12 | 14 | 15 | 16 | 18 | 18 | 19 | 18 | 24 | 18 | 15 | 12 | 14 | 12 | 11 | 10 | 10 | 8 | 9 | 40 |
| 27-Aug | 10 | 9 | 9 | 11 | 8 | 10 | 11 | 14 | 19 | 18 | 20 | 19 | 15 | 16 | 17 | 13 | 45 | 11 | 12 | 13 | 15 | 12 | 11 | 11 | 45 |
| 28-Aug | 11 | 12 | 13 | 21 | 54 | 40 | 16 | 25 | 20 | 19 | 17 | 16 | 16 | 19 | 13 | 14 | 13 | 15 | 12 | 13 | 14 | 13 | 12 | 12 | 54 |
| 29-Aug | 17 | 14 | 15 | 13 | 16 | 15 | 20 | 19 | 22 | 28 | 29 | 18 | 17 | 18 | 16 | 20 | 17 | 15 | 14 | 12 | 18 | 10 | 11 | 10 | 29 |
| 30-Aug | 8 | 9 | 10 | 11 | 28 | 18 | 32 | 28 | 29 | 20 | 31 | 53 | 77 | 91 | 51 | 93 | 70 | 48 | 24 | 29 | 14 | 20 | 37 | 40 | 93 |
| 31-Aug | 32 | 47 | 12 | 17 | 16 | 13 | 13 | 37 | 41 | 24 | 43 | 28 | 27 | 29 | 25 | 23 | 16 | 14 | 12 | 8 | 40 | 25 | 13 | 45 | 47 |
| | 74 | 54 | 82 | 74 | 74 | 89 | 82 | 103 | 90 | 56 | 56 | 106 | 85 | 91 | 69 | 93 | 70 | 48 | 72 | 95 | 70 | 90 | 90 | 49 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 20m (WD20) - deg**

**Mannix - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 45m (WD45) - deg

## Mannix - August 2026

Direction of Maximum Speed: 346 deg on Aug 2 12:00
Direction of Maximum Daily Speed Average: 337.9 deg on Aug 2

Direction of Minimum Speed: 71 deg on Aug 9 08:00

Direction of Minimum Daily Speed Average: 1.3 deg on Aug 14

Monthly Average Direction: 273.5 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 160 | 156 | 159 | 169 | 154 | 143 | 146 | 167 | 95 | 120 | 137 | 62 | 76 | 131 | 112 | 109 | 126 | 137 | 136 | 139 | 315 | 342 | 324 | 319 | 127.9 |
| 2-Aug | 318 | 338 | 341 | 345 | 352 | 337 | 348 | 349 | 339 | 344 | 341 | 346 | 344 | 339 | 337 | 339 | 344 | 340 | 339 | 337 | 332 | 322 | 314 | 310 | 337.9 |
| 3-Aug | 314 | 308 | 312 | 313 | 296 | 286 | 289 | 283 | 305 | 325 | 333 | 325 | 314 | 330 | 335 | 349 | 349 | 353 | 33 | 38 | 72 | 107 | 151 | 173 | 320.0 |
| 4-Aug | 172 | 169 | 157 | 151 | 152 | 156 | 154 | 149 | 150 | 155 | 182 | 256 | 241 | 246 | 242 | 232 | 329 | 30 | 287 | 291 | 283 | 310 | 310 | 309 | 237.3 |
| 5-Aug | 299 | 278 | 263 | 278 | 273 | 283 | 291 | 296 | 312 | 295 | 296 | 301 | 309 | 312 | 300 | 308 | 352 | 353 | 327 | 325 | 306 | 282 | 283 | 294 | 301.1 |
| 6-Aug | 294 | 282 | 287 | 289 | 291 | 294 | 283 | 288 | 291 | 305 | 318 | 314 | 293 | 325 | 334 | 327 | 260 | 285 | 284 | 302 | 300 | 285 | 282 | 284 | 293.8 |
| 7-Aug | 297 | 303 | 268 | 270 | 263 | 265 | 269 | 264 | 275 | 278 | 282 | 285 | 282 | 311 | 348 | 345 | 329 | 349 | 19 | 20 | 21 | 0 | 351 | 259 | 299.3 |
| 8-Aug | 314 | 331 | 317 | 281 | 339 | 316 | 309 | 5 | 338 | 343 | 9 | 350 | 24 | 33 | 315 | 323 | 322 | 339 | 338 | 307 | 339 | 14 | 26 | 18 | 342.9 |
| 9-Aug | 34 | 8 | 331 | 356 | 349 | 253 | 20 | 71 | 232 | 253 | 254 | 268 | 354 | 33 | 29 | 17 | 337 | 19 | 18 | 8 | 12 | 43 | 69 | 147 | 15.1 |
| 10-Aug | 159 | 184 | 186 | 165 | 168 | 166 | 168 | 188 | 231 | 5 | 8 | 356 | 348 | 322 | 354 | 341 | 357 | 15 | 21 | 23 | 7 | 17 | 10 | 280 | 7.4 |
| 11-Aug | 292 | 290 | 286 | 284 | 286 | 268 | 266 | 261 | 279 | 320 | 332 | 335 | 348 | 345 | 346 | 348 | 354 | 357 | 3 | 15 | 19 | 15 | 3 | 356 | 340.2 |
| 12-Aug | 333 | 349 | 322 | 320 | 328 | 297 | 308 | 325 | 333 | 322 | 328 | 338 | 350 | 344 | 348 | 14 | 1 | 8 | 359 | 354 | 342 | 347 | 350 | 353 | 343.0 |
| 13-Aug | 0 | 3 | 15 | 14 | 2 | 2 | 2 | 333 | 333 | 346 | 11 | 30 | 22 | 13 | 31 | 54 | 54 | 36 | 24 | 23 | 29 | 20 | 344 | 344 | 14.2 |
| 14-Aug | 328 | 323 | 343 | 343 | 4 | 147 | 347 | 246 | 279 | 318 | 6 | 20 | 321 | 39 | 65 | 135 | 250 | 219 | 205 | 198 | 186 | 171 | 178 | 176 | 206.4 |
| 15-Aug | 182 | 183 | 186 | 179 | 172 | 175 | 173 | 176 | 166 | 170 | 149 | 219 | 230 | 242 | 202 | 204 | 213 | 230 | 214 | 209 | 217 | 221 | 242 | 246 | 206.3 |
| 16-Aug | 248 | 249 | 252 | 296 | 298 | 279 | 335 | 357 | 348 | 351 | 343 | 347 | 346 | 340 | 341 | 329 | 317 | 353 | 39 | 48 | 38 | 29 | 223 | 218 | 328.0 |
| 17-Aug | 204 | 220 | 218 | 227 | 247 | 249 | 226 | 198 | 216 | 225 | 267 | 278 | 28 | 93 | 120 | 147 | 139 | 139 | 155 | 178 | 173 | 176 | 172 | 164 | 188.4 |
| 18-Aug | 159 | 157 | 158 | 152 | 156 | 151 | 149 | 153 | 137 | 136 | 173 | 214 | 226 | 234 | 199 | 230 | 244 | 261 | 254 | 243 | 236 | 244 | 239 | 225 | 198.4 |
| 19-Aug | 229 | 239 | 231 | 229 | 209 | 167 | 161 | 185 | 212 | 268 | 276 | 282 | 274 | 315 | 344 | 342 | 291 | 311 | 358 | 20 | 23 | 312 | 252 | 302 | 289.8 |
| 20-Aug | 196 | 230 | 304 | 358 | 280 | 216 | 203 | 232 | 275 | 290 | 331 | 335 | 322 | 342 | 337 | 346 | 352 | 5 | 20 | 29 | 30 | 19 | 38 | 145 | 335.4 |
| 21-Aug | 192 | 229 | 197 | 166 | 155 | 156 | 159 | 152 | 158 | 161 | 143 | 140 | 155 | 184 | 161 | 136 | 156 | 153 | 148 | 146 | 151 | 156 | 162 | 167 | 157.6 |
| 22-Aug | 161 | 159 | 155 | 151 | 137 | 136 | 131 | 146 | 147 | 150 | 148 | 157 | 157 | 155 | 154 | 151 | 140 | 136 | 133 | 149 | 172 | 184 | 165 | 164 | 152.8 |
| 23-Aug | 155 | 154 | 154 | 156 | 156 | 148 | 149 | 165 | 165 | 184 | 163 | 182 | 149 | 138 | 173 | 205 | 191 | 235 | 273 | 303 | 326 | 313 | 298 | 308 | 185.0 |
| 24-Aug | 304 | 315 | 320 | 330 | 317 | 322 | 317 | 302 | 296 | 291 | 305 | 315 | 329 | 326 | 331 | 359 | 347 | 19 | 25 | 2 | 358 | 358 | 285 | 19 | 326.4 |
| 25-Aug | 359 | 9 | 4 | 344 | 351 | 7 | 10 | 287 | 12 | 301 | 299 | 264 | 274 | 272 | 253 | 282 | 94 | 138 | 23 | 24 | 36 | 74 | 132 | 118 | 7.0 |
| 26-Aug | 132 | 139 | 140 | 146 | 159 | 158 | 160 | 154 | 151 | 145 | 147 | 158 | 159 | 162 | 161 | 147 | 150 | 149 | 141 | 146 | 150 | 151 | 155 | 151 | 151.3 |
| 27-Aug | 155 | 142 | 142 | 136 | 145 | 140 | 139 | 147 | 144 | 134 | 131 | 153 | 155 | 144 | 153 | 136 | 111 | 97 | 110 | 112 | 130 | 131 | 131 | 132 | 135.6 |
| 28-Aug | 134 | 125 | 140 | 169 | 230 | 131 | 161 | 172 | 172 | 206 | 221 | 237 | 230 | 226 | 243 | 247 | 238 | 235 | 239 | 243 | 231 | 235 | 235 | 242 | 216.5 |
| 29-Aug | 224 | 212 | 223 | 219 | 214 | 200 | 195 | 193 | 205 | 222 | 214 | 231 | 232 | 237 | 238 | 231 | 221 | 218 | 197 | 185 | 206 | 186 | 168 | 173 | 212.7 |
| 30-Aug | 169 | 161 | 154 | 146 | 156 | 141 | 155 | 184 | 189 | 146 | 148 | 143 | 202 | 213 | 165 | 217 | 97 | 160 | 201 | 187 | 167 | 173 | 191 | 279 | 167.3 |
| 31-Aug | 310 | 331 | 282 | 301 | 295 | 290 | 281 | 294 | 304 | 271 | 295 | 266 | 293 | 266 | 235 | 258 | 246 | 253 | 248 | 247 | 264 | 29 | 65 | 137 | 276.4 |
| | 232.6 | 234.5 | 227.1 | 234.1 | 231.4 | 215.2 | 215.2 | 238.2 | 274.5 | 287.3 | 300.9 | 293.8 | 293.7 | 298.6 | 308.5 | 308.9 | 311.4 | 333.2 | 331.8 | 328.7 | 304.8 | 252.8 | 230.2 | 244.0 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 101 deg on Aug 14 12:00

Minimum Value: 2 deg on Aug 16 00:00

Percentiles: $P_1$ = 4 $P_{10}$ = 6 $Q_1$ = 8 Median = 13 $Q_3$ = 20 $P_{90}$ = 37 $P_{99}$ = 77

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

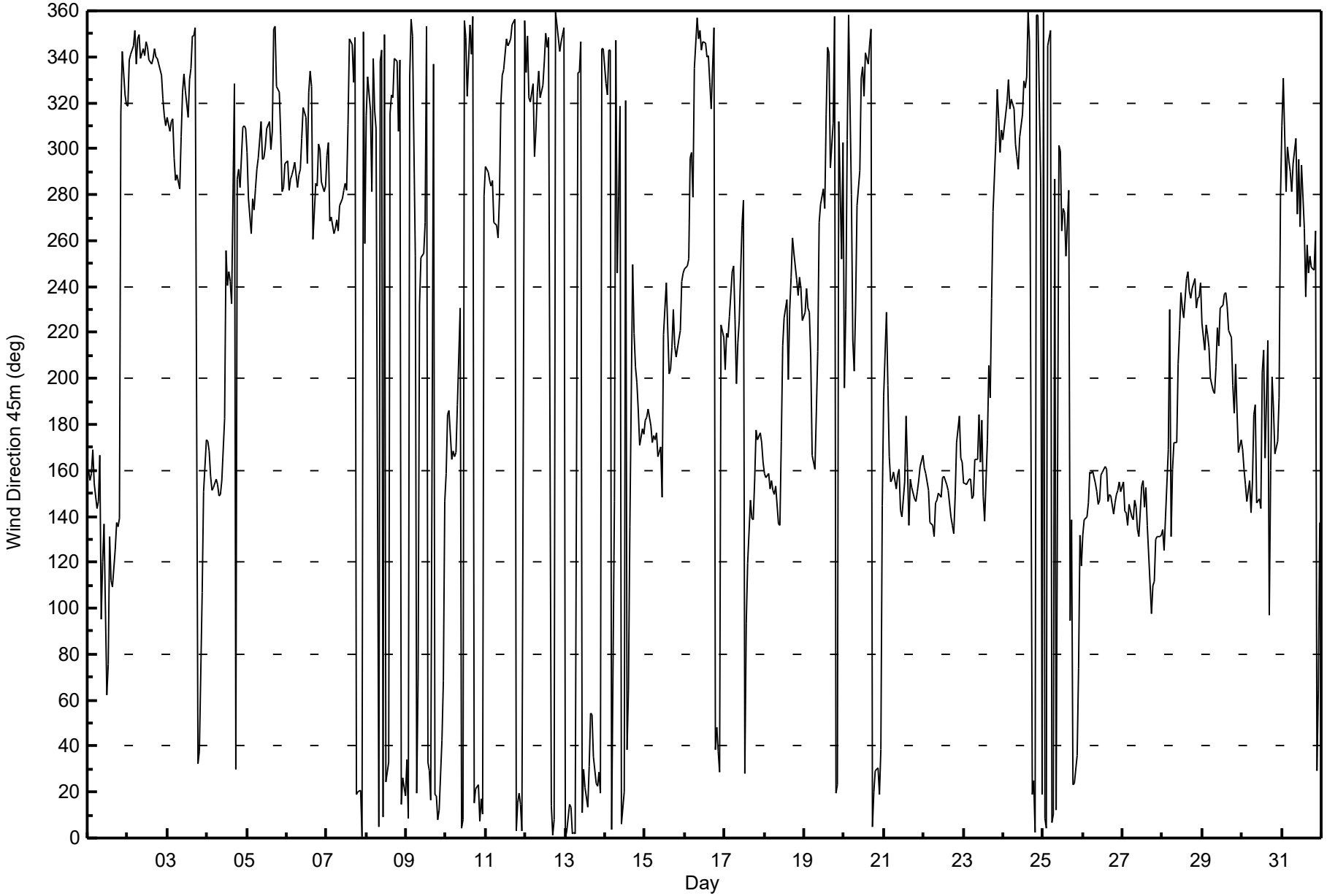
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 6 | 5 | 6 | 9 | 9 | 9 | 10 | 41 | 45 | 31 | 35 | 15 | 19 | 11 | 18 | 15 | 15 | 9 | 6 | 61 | 31 | 56 | 31 | 42 | 61 |
| 2-Aug | 17 | 10 | 9 | 9 | 17 | 9 | 14 | 14 | 9 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 9 | 9 | 9 | 11 | 8 | 8 | 7 | 17 |
| 3-Aug | 7 | 8 | 10 | 7 | 8 | 7 | 7 | 7 | 16 | 15 | 16 | 17 | 19 | 27 | 22 | 34 | 15 | 15 | 16 | 11 | 29 | 17 | 10 | 4 | 34 |
| 4-Aug | 4 | 5 | 4 | 7 | 8 | 6 | 8 | 9 | 14 | 17 | 37 | 11 | 13 | 12 | 19 | 12 | 56 | 20 | 14 | 7 | 12 | 9 | 8 | 8 | 56 |
| 5-Aug | 5 | 14 | 6 | 9 | 5 | 7 | 9 | 10 | 11 | 10 | 9 | 11 | 12 | 11 | 9 | 16 | 15 | 13 | 11 | 9 | 16 | 8 | 8 | 8 | 16 |
| 6-Aug | 8 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 12 | 11 | 18 | 16 | 34 | 24 | 19 | 21 | 11 | 10 | 9 | 12 | 7 | 7 | 8 | 34 |
| 7-Aug | 12 | 10 | 10 | 9 | 5 | 7 | 7 | 7 | 10 | 10 | 8 | 10 | 14 | 44 | 15 | 14 | 15 | 15 | 12 | 12 | 15 | 19 | 28 | 33 | 44 |
| 8-Aug | 53 | 35 | 21 | 11 | 24 | 34 | 49 | 16 | 17 | 25 | 32 | 32 | 43 | 41 | 23 | 14 | 12 | 12 | 27 | 82 | 54 | 25 | 10 | 6 | 82 |
| 9-Aug | 10 | 37 | 31 | 89 | 76 | 82 | 52 | 94 | 66 | 35 | 39 | 86 | 57 | 24 | 35 | 29 | 33 | 25 | 16 | 17 | 13 | 11 | 27 | 10 | 94 |
| 10-Aug | 6 | 27 | 10 | 31 | 18 | 22 | 12 | 30 | 75 | 43 | 26 | 63 | 67 | 27 | 26 | 19 | 24 | 16 | 12 | 7 | 9 | 12 | 8 | 37 | 75 |
| 11-Aug | 8 | 8 | 5 | 6 | 11 | 23 | 46 | 15 | 17 | 22 | 16 | 13 | 18 | 17 | 15 | 15 | 18 | 15 | 16 | 9 | 8 | 10 | 9 | 9 | 46 |
| 12-Aug | 14 | 15 | 13 | 31 | 11 | 10 | 15 | 15 | 16 | 10 | 13 | 14 | 17 | 17 | 20 | 14 | 16 | 8 | 15 | 19 | 16 | 8 | 8 | 7 | 31 |
| 13-Aug | 7 | 6 | 9 | 10 | 16 | 16 | 29 | 14 | 12 | 20 | 13 | 20 | 20 | 15 | 14 | 17 | 16 | 11 | 9 | 8 | 8 | 11 | 16 | 15 | 29 |
| 14-Aug | 8 | 11 | 14 | 25 | 53 | 63 | 50 | 59 | 35 | 30 | 40 | 101 | 59 | 61 | 23 | 64 | 17 | 16 | 16 | 15 | 16 | 4 | 12 | 8 | 101 |
| 15-Aug | 12 | 12 | 8 | 8 | 5 | 5 | 8 | 14 | 17 | 16 | 21 | 46 | 29 | 29 | 16 | 18 | 18 | 11 | 12 | 5 | 4 | 5 | 5 | 2 | 46 |
| 16-Aug | 3 | 4 | 4 | 39 | 65 | 25 | 25 | 12 | 10 | 11 | 11 | 18 | 15 | 16 | 15 | 25 | 19 | 23 | 13 | 14 | 59 | 59 | 6 | 3 | 65 |
| 17-Aug | 19 | 12 | 12 | 9 | 7 | 15 | 14 | 24 | 17 | 30 | 30 | 37 | 54 | 68 | 61 | 34 | 10 | 8 | 8 | 7 | 7 | 5 | 4 | 6 | 68 |
| 18-Aug | 4 | 5 | 4 | 5 | 4 | 7 | 9 | 11 | 8 | 10 | 24 | 18 | 14 | 19 | 19 | 17 | 9 | 11 | 8 | 5 | 7 | 5 | 5 | 28 | 28 |
| 19-Aug | 23 | 15 | 24 | 28 | 13 | 9 | 10 | 17 | 27 | 22 | 14 | 15 | 17 | 36 | 19 | 16 | 20 | 23 | 13 | 9 | 10 | 59 | 30 | 11 | 59 |
| 20-Aug | 68 | 13 | 55 | 18 | 34 | 7 | 18 | 13 | 26 | 17 | 41 | 13 | 16 | 17 | 23 | 19 | 11 | 15 | 12 | 21 | 14 | 10 | 25 | 38 | 68 |
| 21-Aug | 25 | 5 | 17 | 15 | 8 | 5 | 8 | 18 | 18 | 19 | 14 | 12 | 24 | 33 | 41 | 12 | 12 | 7 | 6 | 5 | 5 | 3 | 3 | 3 | 41 |
| 22-Aug | 4 | 3 | 5 | 6 | 5 | 5 | 6 | 8 | 8 | 9 | 15 | 11 | 12 | 14 | 12 | 13 | 9 | 7 | 5 | 5 | 10 | 8 | 5 | 4 | 15 |
| 23-Aug | 5 | 6 | 5 | 4 | 5 | 6 | 9 | 10 | 10 | 13 | 37 | 40 | 22 | 11 | 36 | 31 | 22 | 15 | 9 | 10 | 22 | 62 | 8 | 7 | 62 |
| 24-Aug | 9 | 5 | 7 | 9 | 9 | 8 | 7 | 12 | 11 | 10 | 14 | 16 | 14 | 14 | 17 | 20 | 14 | 15 | 10 | 14 | 11 | 50 | 8 | 29 | 50 |
| 25-Aug | 22 | 8 | 7 | 7 | 13 | 13 | 70 | 69 | 28 | 17 | 21 | 33 | 28 | 42 | 46 | 32 | 35 | 40 | 70 | 8 | 8 | 20 | 13 | 22 | 70 |
| 26-Aug | 23 | 7 | 6 | 8 | 4 | 4 | 6 | 9 | 8 | 8 | 10 | 12 | 13 | 19 | 14 | 10 | 9 | 9 | 6 | 6 | 5 | 5 | 4 | 5 | 23 |
| 27-Aug | 5 | 7 | 3 | 5 | 5 | 5 | 5 | 9 | 11 | 14 | 15 | 15 | 11 | 10 | 14 | 9 | 28 | 10 | 10 | 11 | 12 | 8 | 6 | 6 | 28 |
| 28-Aug | 7 | 10 | 7 | 18 | 43 | 39 | 12 | 20 | 14 | 11 | 12 | 11 | 13 | 16 | 9 | 10 | 10 | 10 | 8 | 9 | 9 | 8 | 8 | 8 | 43 |
| 29-Aug | 13 | 9 | 10 | 8 | 10 | 8 | 14 | 11 | 15 | 25 | 23 | 14 | 13 | 15 | 12 | 16 | 11 | 10 | 8 | 7 | 12 | 9 | 5 | 4 | 25 |
| 30-Aug | 5 | 6 | 5 | 5 | 14 | 8 | 24 | 20 | 21 | 15 | 19 | 37 | 61 | 77 | 47 | 82 | 55 | 35 | 19 | 26 | 10 | 13 | 39 | 30 | 82 |
| 31-Aug | 23 | 31 | 8 | 13 | 7 | 9 | 13 | 32 | 37 | 21 | 38 | 23 | 19 | 25 | 20 | 21 | 13 | 10 | 7 | 4 | 38 | 15 | 9 | 30 | 38 |
| | 68 | 37 | 55 | 89 | 76 | 82 | 70 | 94 | 75 | 43 | 41 | 101 | 67 | 77 | 61 | 82 | 56 | 40 | 70 | 82 | 59 | 62 | 39 | 42 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 45m (WD45) - deg**

**Mannix - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 75m (WD75) - deg

## Mannix - August 2026

Direction of Maximum Speed: 347 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 345.6 deg on Aug 2

Direction of Minimum Speed: 344 deg on Aug 9 05:00

Direction of Minimum Daily Speed Average: 0.9 deg on Aug 14

Monthly Average Direction: 285.0 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 156 | 161 | 168 | 178 | 163 | 155 | 153 | 174 | 105 | 128 | 134 | 72 | 84 | 136 | 115 | 114 | 131 | 142 | 137 | 141 | 320 | 355 | 335 | 337 | 134.7 |
| 2-Aug | 327 | 345 | 349 | 353 | 1 | 345 | 356 | 359 | 349 | 352 | 348 | 354 | 351 | 345 | 344 | 347 | 350 | 346 | 346 | 344 | 339 | 329 | 323 | 319 | 345.6 |
| 3-Aug | 321 | 315 | 320 | 320 | 307 | 295 | 298 | 293 | 313 | 331 | 339 | 332 | 320 | 337 | 341 | 356 | 355 | 359 | 38 | 47 | 72 | 110 | 146 | 168 | 328.6 |
| 4-Aug | 175 | 179 | 173 | 162 | 163 | 168 | 161 | 157 | 159 | 167 | 195 | 259 | 245 | 249 | 244 | 235 | 335 | 33 | 300 | 300 | 290 | 317 | 318 | 317 | 242.3 |
| 5-Aug | 308 | 287 | 273 | 286 | 283 | 290 | 298 | 301 | 318 | 300 | 301 | 306 | 315 | 319 | 304 | 315 | 359 | 1 | 335 | 332 | 314 | 288 | 290 | 300 | 308.0 |
| 6-Aug | 300 | 289 | 293 | 294 | 297 | 300 | 288 | 294 | 297 | 311 | 325 | 321 | 301 | 332 | 341 | 333 | 267 | 289 | 290 | 309 | 307 | 294 | 291 | 295 | 300.0 |
| 7-Aug | 305 | 310 | 282 | 282 | 274 | 275 | 277 | 274 | 281 | 284 | 287 | 290 | 288 | 317 | 355 | 352 | 336 | 354 | 25 | 27 | 26 | 10 | 359 | 296 | 307.1 |
| 8-Aug | 312 | 355 | 328 | 299 | 347 | 336 | 337 | 13 | 346 | 352 | 15 | 2 | 32 | 36 | 325 | 330 | 329 | 345 | 351 | 12 | 357 | 31 | 37 | 27 | 354.4 |
| 9-Aug | 43 | 50 | 13 | 141 | 344 | 241 | 36 | 30 | 220 | 249 | 263 | 273 | 358 | 41 | 38 | 24 | 348 | 27 | 27 | 23 | 29 | 56 | 95 | 145 | 33.8 |
| 10-Aug | 154 | 158 | 173 | 163 | 159 | 166 | 161 | 183 | 223 | 12 | 10 | 359 | 3 | 332 | 0 | 348 | 5 | 23 | 28 | 29 | 20 | 25 | 24 | 1 | 31.7 |
| 11-Aug | 322 | 311 | 302 | 306 | 306 | 298 | 305 | 282 | 288 | 330 | 339 | 343 | 355 | 353 | 354 | 354 | 1 | 4 | 10 | 21 | 25 | 20 | 10 | 4 | 350.4 |
| 12-Aug | 344 | 345 | 330 | 327 | 337 | 312 | 322 | 333 | 338 | 330 | 336 | 345 | 358 | 350 | 356 | 20 | 7 | 15 | 7 | 5 | 353 | 357 | 1 | 2 | 350.7 |
| 13-Aug | 8 | 10 | 19 | 17 | 11 | 11 | 10 | 347 | 345 | 358 | 17 | 36 | 28 | 20 | 38 | 59 | 58 | 42 | 32 | 31 | 34 | 28 | 359 | 5 | 22.0 |
| 14-Aug | 341 | 338 | 352 | 348 | 359 | 51 | 0 | 264 | 295 | 325 | 14 | 22 | 340 | 44 | 68 | 137 | 250 | 219 | 213 | 207 | 206 | 186 | 190 | 200 | 268.0 |
| 15-Aug | 211 | 218 | 219 | 208 | 205 | 205 | 208 | 208 | 179 | 179 | 162 | 223 | 234 | 246 | 210 | 209 | 217 | 234 | 220 | 219 | 230 | 234 | 251 | 254 | 223.1 |
| 16-Aug | 254 | 254 | 258 | 299 | 315 | 298 | 343 | 5 | 356 | 359 | 350 | 354 | 352 | 348 | 347 | 337 | 323 | 360 | 45 | 57 | 42 | 44 | 213 | 213 | 334.7 |
| 17-Aug | 205 | 228 | 241 | 254 | 267 | 273 | 250 | 225 | 224 | 230 | 272 | 282 | 37 | 97 | 123 | 151 | 145 | 146 | 161 | 188 | 189 | 192 | 188 | 178 | 203.4 |
| 18-Aug | 174 | 173 | 177 | 168 | 166 | 161 | 156 | 163 | 144 | 143 | 178 | 217 | 230 | 235 | 204 | 233 | 247 | 264 | 257 | 250 | 247 | 249 | 250 | 270 | 205.5 |
| 19-Aug | 257 | 265 | 256 | 257 | 238 | 191 | 188 | 220 | 232 | 274 | 284 | 288 | 278 | 320 | 352 | 347 | 301 | 325 | 5 | 26 | 29 | 22 | 246 | 310 | 301.2 |
| 20-Aug | 289 | 239 | 295 | 354 | 283 | 233 | 206 | 251 | 292 | 307 | 344 | 343 | 331 | 347 | 342 | 352 | 358 | 12 | 28 | 39 | 38 | 30 | 47 | 91 | 346.1 |
| 21-Aug | 168 | 196 | 203 | 218 | 171 | 187 | 192 | 168 | 181 | 177 | 152 | 149 | 159 | 188 | 167 | 143 | 160 | 157 | 152 | 150 | 155 | 164 | 173 | 178 | 166.2 |
| 22-Aug | 175 | 173 | 165 | 159 | 146 | 144 | 140 | 146 | 152 | 155 | 153 | 161 | 161 | 159 | 158 | 155 | 145 | 142 | 140 | 155 | 180 | 191 | 176 | 175 | 161.2 |
| 23-Aug | 166 | 168 | 164 | 167 | 161 | 157 | 157 | 168 | 170 | 188 | 174 | 179 | 157 | 150 | 194 | 221 | 215 | 249 | 281 | 313 | 337 | 327 | 309 | 320 | 193.7 |
| 24-Aug | 318 | 325 | 333 | 341 | 330 | 332 | 327 | 319 | 304 | 299 | 311 | 321 | 336 | 332 | 339 | 6 | 353 | 25 | 30 | 13 | 7 | 31 | 309 | 11 | 336.2 |
| 25-Aug | 20 | 16 | 19 | 5 | 345 | 341 | 346 | 349 | 11 | 312 | 308 | 271 | 279 | 280 | 268 | 283 | 99 | 143 | 37 | 35 | 49 | 87 | 130 | 121 | 13.7 |
| 26-Aug | 130 | 134 | 138 | 141 | 147 | 147 | 151 | 152 | 155 | 149 | 153 | 162 | 162 | 167 | 164 | 152 | 155 | 154 | 147 | 151 | 154 | 155 | 160 | 157 | 153.2 |
| 27-Aug | 158 | 144 | 144 | 139 | 142 | 140 | 139 | 147 | 147 | 138 | 135 | 158 | 158 | 147 | 155 | 140 | 119 | 102 | 114 | 115 | 132 | 134 | 136 | 135 | 139.5 |
| 28-Aug | 137 | 128 | 144 | 175 | 238 | 131 | 165 | 179 | 176 | 210 | 225 | 240 | 233 | 230 | 246 | 249 | 240 | 237 | 242 | 246 | 234 | 238 | 240 | 244 | 220.9 |
| 29-Aug | 229 | 218 | 227 | 224 | 218 | 208 | 204 | 199 | 211 | 227 | 219 | 234 | 235 | 241 | 239 | 234 | 224 | 220 | 206 | 194 | 206 | 195 | 183 | 190 | 217.4 |
| 30-Aug | 189 | 179 | 175 | 156 | 159 | 148 | 158 | 181 | 183 | 152 | 151 | 153 | 209 | 198 | 166 | 212 | 103 | 165 | 202 | 186 | 173 | 183 | 201 | 297 | 175.7 |
| 31-Aug | 333 | 345 | 303 | 313 | 315 | 309 | 304 | 321 | 316 | 282 | 303 | 272 | 296 | 271 | 241 | 262 | 249 | 256 | 253 | 256 | 279 | 37 | 70 | 127 | 289.2 |
| | 245.5 | 247.3 | 240.8 | 249.8 | 248.7 | 234.4 | 227.4 | 241.9 | 283.0 | 296.7 | 309.8 | 301.6 | 301.7 | 306.1 | 317.9 | 317.6 | 320.2 | 343.0 | 340.7 | 344.5 | 321.5 | 263.0 | 244.0 | 259.4 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 95 deg on Aug 9 06:00

Minimum Value: 2 deg on Aug 16 00:00

Percentiles: $P_1$ = 3 $P_{10}$ = 5 $Q_1$ = 7 Median = 11 $Q_3$ = 18 $P_{90}$ = 34 $P_{99}$ = 77

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

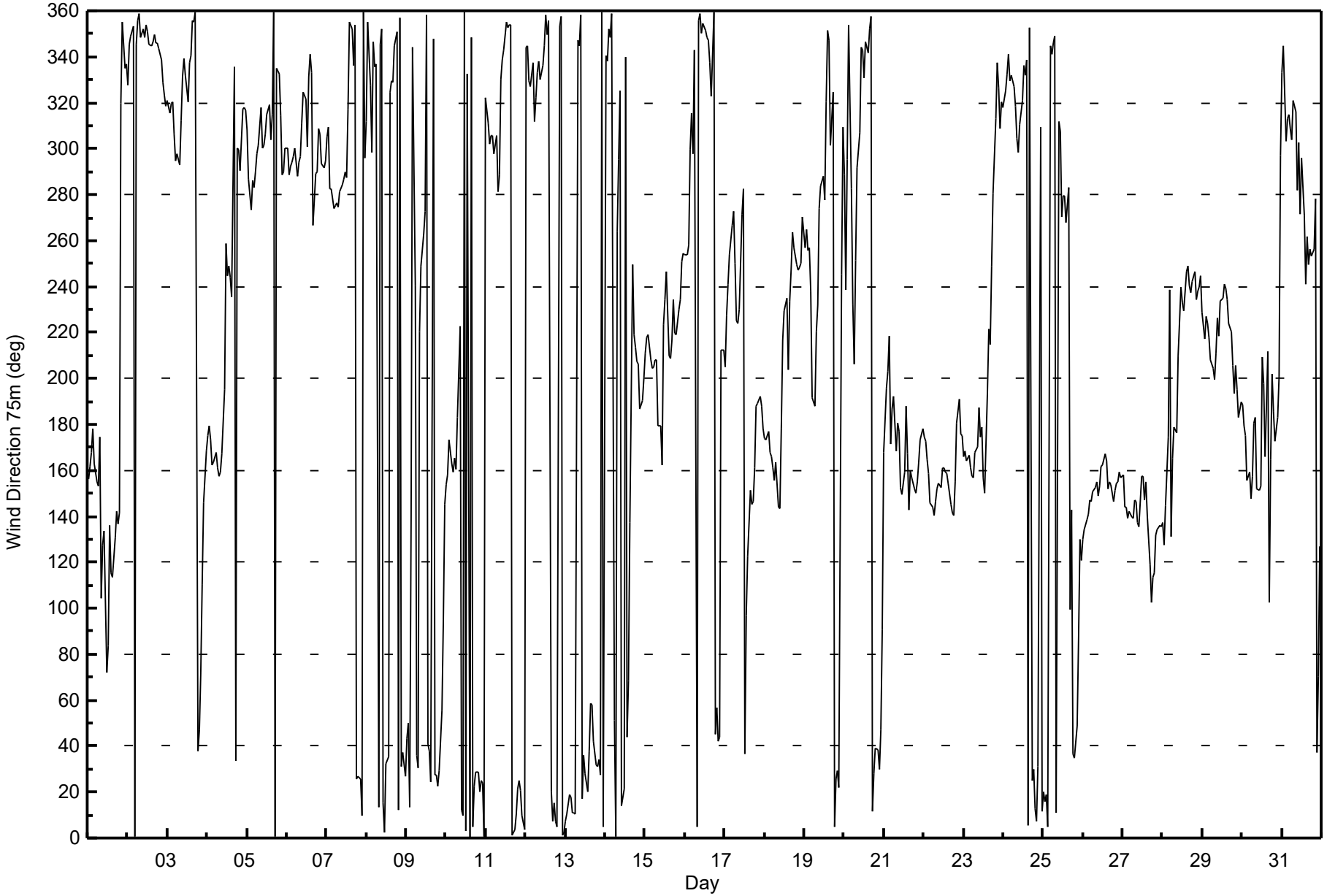
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 5 | 3 | 4 | 4 | 7 | 6 | 6 | 23 | 55 | 26 | 25 | 13 | 17 | 14 | 19 | 16 | 16 | 9 | 10 | 62 | 34 | 53 | 32 | 41 | 62 |
| 2-Aug | 15 | 8 | 8 | 7 | 14 | 8 | 12 | 12 | 7 | 7 | 8 | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 9 | 7 | 7 | 6 | 15 |
| 3-Aug | 7 | 7 | 9 | 6 | 7 | 6 | 6 | 8 | 14 | 13 | 15 | 17 | 19 | 24 | 21 | 21 | 13 | 13 | 15 | 8 | 23 | 19 | 7 | 8 | 24 |
| 4-Aug | 5 | 3 | 3 | 5 | 6 | 5 | 10 | 12 | 15 | 18 | 36 | 10 | 12 | 11 | 19 | 11 | 56 | 18 | 14 | 6 | 11 | 9 | 7 | 6 | 56 |
| 5-Aug | 4 | 14 | 6 | 9 | 5 | 6 | 8 | 10 | 10 | 10 | 8 | 10 | 12 | 11 | 8 | 17 | 15 | 12 | 9 | 8 | 13 | 7 | 7 | 8 | 17 |
| 6-Aug | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 8 | 7 | 12 | 9 | 18 | 17 | 31 | 22 | 18 | 21 | 10 | 11 | 10 | 13 | 6 | 6 | 6 | 31 |
| 7-Aug | 10 | 9 | 11 | 7 | 5 | 6 | 5 | 6 | 9 | 9 | 7 | 8 | 13 | 44 | 13 | 12 | 14 | 13 | 10 | 9 | 12 | 11 | 19 | 18 | 44 |
| 8-Aug | 40 | 15 | 12 | 10 | 21 | 22 | 46 | 12 | 16 | 22 | 27 | 26 | 36 | 33 | 20 | 15 | 10 | 11 | 23 | 72 | 41 | 18 | 6 | 3 | 72 |
| 9-Aug | 8 | 14 | 39 | 54 | 70 | 95 | 65 | 87 | 93 | 37 | 39 | 79 | 55 | 20 | 30 | 28 | 31 | 20 | 11 | 10 | 5 | 13 | 22 | 5 | 95 |
| 10-Aug | 5 | 13 | 12 | 22 | 10 | 10 | 13 | 25 | 72 | 39 | 22 | 38 | 60 | 25 | 23 | 17 | 23 | 13 | 9 | 3 | 6 | 8 | 6 | 37 | 72 |
| 11-Aug | 10 | 10 | 5 | 5 | 9 | 10 | 18 | 13 | 17 | 22 | 15 | 12 | 16 | 15 | 15 | 14 | 17 | 14 | 14 | 6 | 5 | 7 | 7 | 8 | 22 |
| 12-Aug | 12 | 12 | 9 | 9 | 7 | 12 | 11 | 12 | 13 | 8 | 11 | 13 | 16 | 17 | 20 | 12 | 15 | 6 | 12 | 16 | 14 | 7 | 9 | 7 | 20 |
| 13-Aug | 6 | 5 | 6 | 8 | 12 | 11 | 15 | 15 | 11 | 17 | 11 | 16 | 16 | 12 | 11 | 14 | 13 | 8 | 6 | 5 | 3 | 6 | 10 | 10 | 17 |
| 14-Aug | 8 | 6 | 7 | 9 | 8 | 63 | 32 | 77 | 33 | 26 | 36 | 91 | 59 | 48 | 22 | 64 | 20 | 14 | 16 | 16 | 19 | 10 | 6 | 8 | 91 |
| 15-Aug | 6 | 14 | 10 | 11 | 9 | 9 | 10 | 15 | 18 | 15 | 21 | 44 | 26 | 26 | 14 | 17 | 18 | 10 | 9 | 6 | 4 | 5 | 5 | 2 | 44 |
| 16-Aug | 2 | 3 | 5 | 29 | 58 | 37 | 19 | 10 | 8 | 9 | 10 | 16 | 12 | 15 | 13 | 24 | 18 | 23 | 11 | 10 | 24 | 20 | 34 | 3 | 58 |
| 17-Aug | 6 | 5 | 11 | 5 | 6 | 18 | 11 | 19 | 17 | 29 | 30 | 35 | 49 | 67 | 51 | 40 | 9 | 7 | 7 | 8 | 9 | 5 | 4 | 5 | 67 |
| 18-Aug | 3 | 6 | 4 | 4 | 3 | 5 | 6 | 8 | 10 | 9 | 23 | 17 | 12 | 18 | 18 | 16 | 9 | 11 | 7 | 4 | 6 | 5 | 9 | 14 | 23 |
| 19-Aug | 14 | 9 | 15 | 23 | 10 | 15 | 13 | 16 | 19 | 17 | 14 | 12 | 17 | 36 | 17 | 15 | 17 | 20 | 12 | 6 | 8 | 79 | 74 | 11 | 79 |
| 20-Aug | 93 | 7 | 46 | 19 | 31 | 11 | 26 | 16 | 27 | 20 | 34 | 11 | 14 | 14 | 21 | 17 | 10 | 13 | 9 | 13 | 9 | 10 | 17 | 20 | 93 |
| 21-Aug | 40 | 9 | 5 | 6 | 34 | 16 | 11 | 12 | 17 | 22 | 13 | 13 | 25 | 31 | 38 | 14 | 10 | 6 | 5 | 4 | 3 | 5 | 3 | 4 | 40 |
| 22-Aug | 4 | 3 | 5 | 5 | 3 | 4 | 6 | 5 | 7 | 8 | 13 | 9 | 11 | 13 | 11 | 12 | 9 | 7 | 7 | 4 | 8 | 6 | 6 | 4 | 13 |
| 23-Aug | 4 | 5 | 4 | 4 | 5 | 4 | 6 | 8 | 8 | 11 | 36 | 37 | 17 | 12 | 44 | 32 | 20 | 8 | 11 | 10 | 20 | 41 | 7 | 5 | 44 |
| 24-Aug | 8 | 4 | 6 | 7 | 9 | 6 | 5 | 9 | 12 | 9 | 14 | 16 | 12 | 13 | 16 | 18 | 11 | 13 | 8 | 12 | 13 | 21 | 16 | 10 | 21 |
| 25-Aug | 10 | 4 | 5 | 5 | 7 | 5 | 23 | 40 | 28 | 19 | 22 | 30 | 24 | 41 | 41 | 28 | 33 | 38 | 69 | 7 | 7 | 20 | 14 | 18 | 69 |
| 26-Aug | 17 | 12 | 10 | 6 | 4 | 3 | 4 | 7 | 7 | 7 | 9 | 10 | 11 | 17 | 12 | 8 | 8 | 8 | 4 | 4 | 4 | 3 | 3 | 3 | 17 |
| 27-Aug | 4 | 7 | 3 | 6 | 3 | 6 | 8 | 10 | 12 | 15 | 17 | 13 | 9 | 10 | 11 | 9 | 23 | 11 | 13 | 14 | 14 | 11 | 9 | 10 | 23 |
| 28-Aug | 10 | 13 | 6 | 18 | 36 | 61 | 10 | 18 | 14 | 10 | 11 | 10 | 13 | 15 | 8 | 9 | 9 | 9 | 7 | 8 | 8 | 7 | 8 | 7 | 61 |
| 29-Aug | 11 | 7 | 9 | 7 | 8 | 7 | 13 | 10 | 14 | 25 | 21 | 14 | 12 | 14 | 11 | 15 | 10 | 10 | 6 | 6 | 12 | 10 | 7 | 6 | 25 |
| 30-Aug | 10 | 7 | 10 | 9 | 8 | 6 | 16 | 14 | 18 | 14 | 17 | 33 | 60 | 73 | 45 | 77 | 36 | 38 | 18 | 25 | 10 | 6 | 39 | 29 | 77 |
| 31-Aug | 14 | 20 | 12 | 12 | 6 | 7 | 19 | 28 | 38 | 23 | 35 | 22 | 16 | 23 | 19 | 19 | 11 | 9 | 5 | 4 | 35 | 15 | 8 | 27 | 38 |
| | 93 | 20 | 46 | 54 | 70 | 95 | 65 | 87 | 93 | 39 | 39 | 91 | 60 | 73 | 51 | 77 | 56 | 38 | 69 | 72 | 41 | 79 | 74 | 41 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 75m (WD75) - deg**

**Mannix - August 2026**



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 101 deg on Aug 14 12:00

Minimum Value: 1 deg on Aug 27 04:00

Percentiles: $P_1$ = 2 $P_{10}$ = 5 $Q_1$ = 7 Median = 11 $Q_3$ = 17 $P_{90}$ = 33 $P_{99}$ = 80

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 4 | 4 | 5 | 5 | 10 | 8 | 5 | 17 | 60 | 18 | 18 | 12 | 16 | 11 | 15 | 13 | 12 | 7 | 6 | 60 | 37 | 50 | 32 | 37 | 60 |
| 2-Aug | UO | 8 | 8 | 7 | 14 | 7 | 11 | 12 | 7 | 6 | 8 | 7 | 8 | 8 | 7 | 7 | 8 | 8 | 8 | 7 | 9 | 6 | 6 | 6 | 14 |
| 3-Aug | 7 | 6 | 8 | 5 | 7 | 5 | 6 | 8 | 12 | 13 | 15 | 16 | 17 | 24 | 22 | 22 | 13 | 13 | 15 | 7 | 21 | 15 | 7 | 9 | 24 |
| 4-Aug | 4 | 4 | 4 | 6 | 6 | 9 | 13 | 14 | 15 | 18 | 35 | 9 | 12 | 10 | 18 | 11 | 54 | 17 | 14 | 5 | 10 | 8 | 7 | 5 | 54 |
| 5-Aug | 4 | 14 | 5 | 9 | 5 | 5 | 8 | 9 | 10 | 9 | 8 | 9 | 11 | 11 | 7 | 16 | 16 | 11 | 9 | 8 | 13 | 8 | 7 | 7 | 16 |
| 6-Aug | 7 | 7 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 12 | 9 | 18 | 17 | 30 | 22 | 18 | 20 | 10 | 11 | 10 | 12 | 6 | 6 | 6 | 30 |
| 7-Aug | 9 | 8 | 10 | 7 | 5 | 6 | 4 | 5 | 8 | 9 | 7 | 8 | 12 | 44 | 12 | 12 | 14 | 14 | 11 | 9 | 10 | 12 | 19 | 17 | 44 |
| 8-Aug | 40 | 15 | 12 | 12 | 18 | 20 | 43 | 11 | 17 | 22 | 27 | 29 | 40 | 42 | 19 | 15 | 10 | 11 | 23 | 77 | 40 | 15 | 6 | 2 | 77 |
| 9-Aug | 7 | 10 | 66 | 42 | 84 | 95 | 67 | 89 | 95 | 33 | 37 | 77 | 58 | 22 | 38 | 29 | 32 | 19 | 9 | 8 | 4 | 15 | 23 | 4 | 95 |
| 10-Aug | 4 | 10 | 10 | 15 | 10 | 12 | 13 | 22 | 64 | 57 | 26 | 40 | 64 | 24 | 23 | 19 | 24 | 13 | 8 | 3 | 5 | 7 | 5 | 34 | 64 |
| 11-Aug | 12 | 13 | 5 | 5 | 11 | 10 | 20 | 16 | 17 | 23 | 15 | 11 | 16 | 15 | 15 | 15 | 17 | 14 | 14 | 5 | 4 | 6 | 7 | 8 | 23 |
| 12-Aug | 12 | 11 | 8 | 6 | 6 | 11 | 10 | 12 | 11 | 8 | 10 | 12 | 16 | 18 | 20 | 11 | 15 | 5 | 11 | 15 | 14 | 7 | 9 | 7 | 20 |
| 13-Aug | 5 | 5 | 5 | 6 | 11 | 10 | 11 | 18 | 11 | 16 | 10 | 16 | 16 | 11 | 10 | 14 | 13 | 8 | 6 | 4 | 2 | 5 | 11 | 8 | 18 |
| 14-Aug | 9 | 7 | 6 | 8 | 5 | 71 | 31 | 85 | 32 | 33 | 37 | 101 | 63 | 54 | 22 | 63 | 20 | 15 | 16 | 22 | 23 | 11 | 10 | 8 | 101 |
| 15-Aug | 6 | 14 | 10 | 12 | 10 | 9 | 9 | 14 | 19 | 15 | 21 | 42 | 25 | 24 | 13 | 15 | 18 | 10 | 8 | 7 | 4 | 5 | 3 | 1 | 42 |
| 16-Aug | 2 | 2 | 4 | 27 | 54 | 41 | 17 | 10 | 8 | 9 | 10 | 16 | 13 | 15 | 12 | 24 | 17 | 23 | 11 | 12 | 17 | 17 | 64 | 6 | 64 |
| 17-Aug | 6 | 4 | 12 | 4 | 7 | 16 | 10 | 21 | 17 | 28 | 29 | 33 | 53 | 61 | 51 | 42 | 8 | 6 | 8 | 7 | 9 | 5 | 3 | 5 | 61 |
| 18-Aug | 3 | 7 | 5 | 3 | 3 | 6 | 5 | 7 | 8 | 7 | 23 | 16 | 12 | 18 | 18 | 15 | 8 | 10 | 7 | 4 | 5 | 4 | 9 | 10 | 23 |
| 19-Aug | 10 | 7 | 9 | 15 | 9 | 17 | 14 | 12 | 16 | 16 | 14 | 11 | 16 | 34 | 18 | 15 | 15 | 17 | 12 | 5 | 8 | 82 | 71 | 10 | 82 |
| 20-Aug | 91 | 7 | 40 | 23 | 28 | 13 | 30 | 16 | 29 | 20 | 32 | 11 | 14 | 13 | 22 | 17 | 11 | 13 | 8 | 11 | 8 | 11 | 15 | 17 | 91 |
| 21-Aug | 44 | 6 | 5 | 4 | 26 | 20 | 9 | 10 | 12 | 21 | 13 | 13 | 23 | 30 | 37 | 12 | 10 | 6 | 4 | 3 | 3 | 6 | 3 | 4 | 44 |
| 22-Aug | 4 | 4 | 5 | 7 | 2 | 3 | 3 | 4 | 7 | 8 | 13 | 9 | 10 | 12 | 10 | 11 | 8 | 6 | 5 | 4 | 7 | 5 | 6 | 4 | 13 |
| 23-Aug | 4 | 5 | 4 | 6 | 5 | 5 | 4 | 7 | 8 | 11 | 35 | 36 | 15 | 14 | 42 | 32 | 16 | 7 | 11 | 9 | 20 | 46 | 6 | 6 | 46 |
| 24-Aug | 6 | 4 | 5 | 6 | 9 | 6 | 5 | 9 | 12 | 8 | 13 | 14 | 11 | 13 | 16 | 18 | 11 | 12 | 7 | 11 | 14 | 12 | 17 | 12 | 18 |
| 25-Aug | 5 | 3 | 5 | 4 | 8 | 7 | 12 | 42 | 35 | 20 | 25 | 31 | 25 | 43 | 44 | 31 | 31 | 36 | 69 | 6 | 8 | 19 | 10 | 12 | 69 |
| 26-Aug | 12 | 7 | 5 | 3 | 4 | 2 | 2 | 5 | 7 | 7 | 9 | 10 | 11 | 17 | 13 | 8 | 8 | 8 | 4 | 4 | 3 | 2 | 4 | 3 | 17 |
| 27-Aug | 4 | 5 | 4 | 1 | 2 | 2 | 3 | 9 | 10 | 12 | 15 | 13 | 9 | 10 | 10 | 8 | 18 | 8 | 9 | 9 | 10 | 7 | 6 | 6 | 18 |
| 28-Aug | 7 | 9 | 6 | 20 | 33 | 75 | 10 | 17 | 14 | 10 | 11 | 9 | 12 | 15 | 8 | 8 | 9 | 9 | 7 | 7 | 8 | 7 | 7 | 6 | 75 |
| 29-Aug | 10 | 6 | 9 | 7 | 8 | 6 | 13 | 10 | 13 | 25 | 20 | 13 | 12 | 14 | 10 | 15 | 9 | 9 | 6 | 5 | 13 | 11 | 6 | 6 | 25 |
| 30-Aug | 11 | 8 | 11 | 13 | 9 | 6 | 16 | 11 | 15 | 12 | 16 | 32 | 54 | 62 | 38 | 65 | 35 | 38 | 18 | 26 | 9 | 5 | 37 | 29 | 65 |
| 31-Aug | 12 | 17 | 12 | 10 | 5 | 5 | 18 | 23 | 37 | 25 | 36 | 20 | 18 | 21 | 19 | 18 | 11 | 9 | 4 | 5 | 32 | 15 | 9 | 23 | 37 |
| | 91 | 17 | 66 | 42 | 84 | 95 | 67 | 89 | 95 | 57 | 37 | 101 | 64 | 62 | 51 | 65 | 54 | 38 | 69 | 77 | 40 | 82 | 71 | 37 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

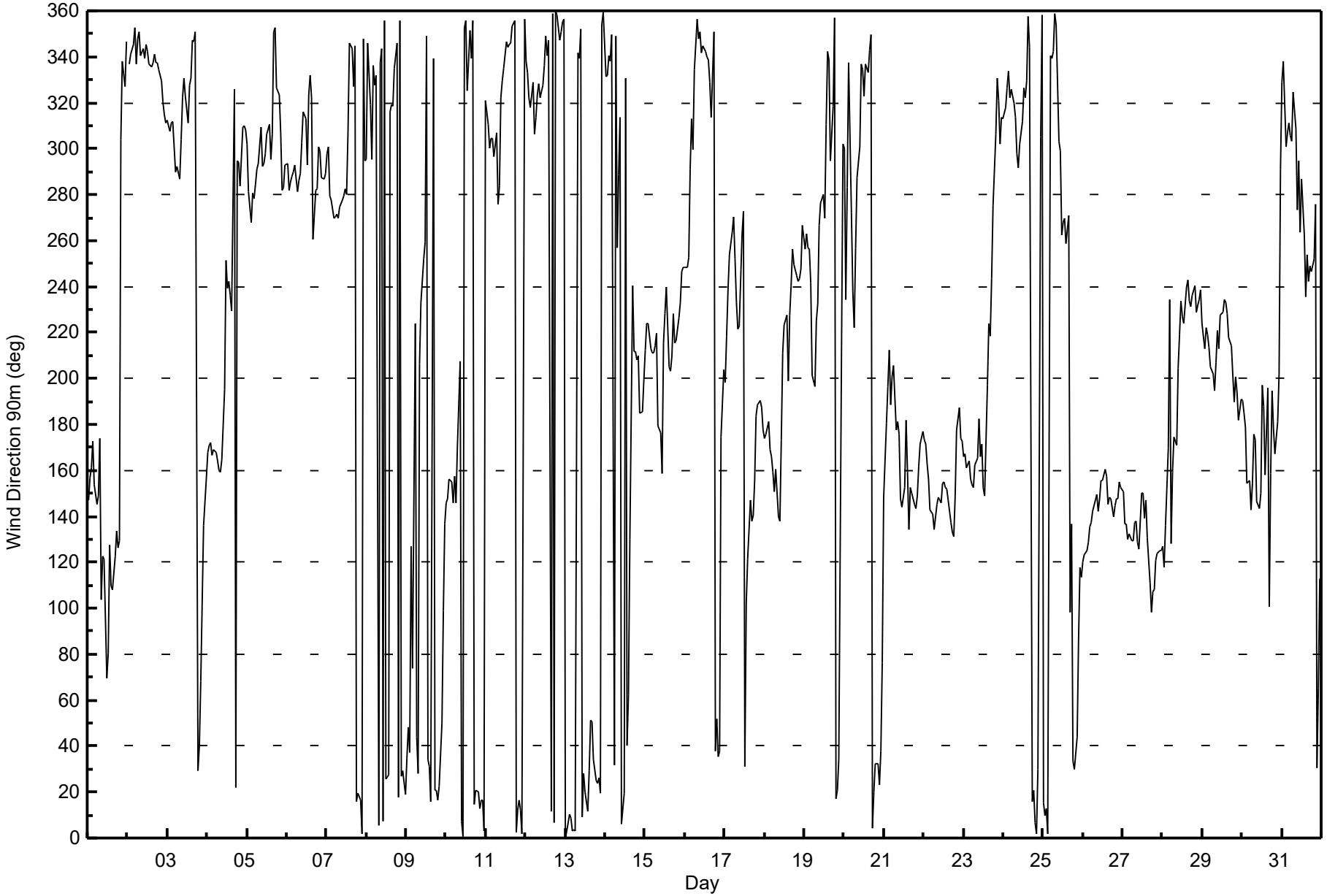
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 90m (WD90) - deg**

**Mannix - August 2026**



Maximum Value: 0.8 km/h on Aug 1 15:00

Maximum Daily Average: 0.3 km/h on Aug 27

Minimum Value: -1.8 km/h on Aug 2 13:00

Minimum Daily Average: -1.2 km/h on Aug 2

Maximum Diurnal Average: -0.2 km/h at hour 7

Minimum Diurnal Average: -0.4 km/h at hour 20

Monthly Average: -0.29 km/h

Percentiles: $P_1$ = -1.4 $P_{10}$ = -0.8 $Q_1$ = -0.6 Median = -0.3 $Q_3$ = 0.0 $P_{90}$ = 0.3 $P_{99}$ = 0.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.2 | 0.5 | 0.8 | 0.7 | 0.6 | 0.3 | 0.0 | -0.1 | -1.0 | -0.6 | -0.6 | -0.5 | 0.0 | 0.8 |
| 2-Aug | -0.7 | -0.9 | -1.2 | -1.0 | -0.8 | -1.0 | -0.8 | -0.7 | -1.3 | -1.6 | -1.4 | -1.6 | -1.8 | -1.6 | -1.4 | -1.6 | -1.6 | -1.5 | -1.2 | -1.2 | -1.3 | -1.1 | -1.0 | -0.9 | -1.2 | -0.7 |
| 3-Aug | -1.1 | -0.9 | -0.8 | -0.9 | -0.7 | -0.3 | -0.4 | -0.1 | -0.7 | -0.8 | -0.7 | -0.9 | -0.9 | -0.4 | -0.6 | -0.6 | -0.8 | -0.7 | -0.6 | -0.2 | -0.4 | -0.6 | 0.0 | -0.3 | -0.6 | 0.0 |
| 4-Aug | -0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 | 0.0 | 0.0 | -0.2 | 0.0 | -0.1 | -0.3 | 0.1 | -0.8 | -0.4 | -0.3 | -0.6 | -0.4 | -1.0 | -0.7 | -0.7 | -0.1 | 0.4 |
| 5-Aug | -0.7 | -0.4 | -0.2 | -0.3 | -0.3 | -0.2 | -0.6 | -1.0 | -1.0 | -1.0 | -0.8 | -0.9 | -1.3 | -1.0 | -0.8 | -0.8 | -1.1 | -1.1 | -0.8 | -1.0 | -0.7 | -0.2 | -0.2 | -0.7 | -0.7 | -0.2 |
| 6-Aug | -0.8 | -0.1 | -0.5 | -0.7 | -1.0 | -0.8 | -0.2 | -0.7 | -0.9 | -1.0 | -1.0 | -0.8 | -0.5 | -0.8 | -0.7 | -0.5 | -0.2 | -0.3 | -0.5 | -0.8 | -0.4 | -0.3 | -0.4 | -0.4 | -0.6 | -0.1 |
| 7-Aug | -0.5 | -0.5 | -0.2 | -0.2 | -0.2 | -0.2 | -0.3 | -0.2 | -0.4 | -0.3 | -0.2 | -0.3 | -0.4 | -0.5 | -0.6 | -0.8 | -0.7 | -0.7 | -0.5 | -0.7 | -0.6 | -0.5 | -0.5 | -0.3 | -0.4 | -0.2 |
| 8-Aug | -0.3 | -0.4 | -0.4 | -0.3 | -0.5 | -0.3 | -0.3 | -0.7 | -0.5 | -0.4 | -0.5 | -0.4 | 0.0 | -0.2 | -0.6 | -0.6 | -0.5 | -0.5 | -0.3 | -0.3 | -0.4 | -0.5 | -0.7 | -0.8 | -0.4 | 0.0 |
| 9-Aug | -0.5 | -0.5 | -0.6 | -0.4 | -0.3 | -0.4 | -0.4 | -0.3 | -0.1 | -0.1 | -0.3 | -0.2 | -0.4 | -0.4 | -0.4 | -0.3 | -0.5 | -0.3 | -0.7 | -0.8 | -0.9 | -0.5 | -0.3 | -0.2 | -0.4 | -0.1 |
| 10-Aug | -0.2 | -0.4 | -0.3 | -0.2 | -0.2 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | -0.3 | -0.5 | -0.3 | -0.6 | -0.6 | -1.0 | -0.4 | -0.7 | -0.7 | -0.7 | -0.9 | -0.9 | -0.7 | -0.7 | -0.4 | 0.0 |
| 11-Aug | -0.4 | -0.3 | -0.2 | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 | -0.5 | -0.7 | -0.8 | -1.0 | -0.9 | -1.3 | -1.2 | -1.2 | -1.0 | -0.9 | -0.9 | -0.9 | -0.9 | -0.8 | -1.0 | -0.8 | -0.7 | -0.2 |
| 12-Aug | -0.5 | -0.7 | -0.6 | -0.3 | -0.4 | -0.3 | -0.2 | -0.5 | -0.6 | -0.7 | -0.4 | -0.7 | -0.8 | -0.8 | -0.8 | -0.9 | -1.0 | -1.1 | -0.6 | -0.6 | -0.7 | -0.7 | -0.7 | -0.9 | -0.7 | -0.2 |
| 13-Aug | -1.0 | -1.4 | -0.5 | -0.7 | -0.6 | -0.5 | -0.5 | -0.4 | -0.5 | -0.5 | -0.7 | -0.3 | -0.6 | -0.7 | -0.7 | -0.2 | -0.3 | -0.7 | -0.6 | -0.7 | -0.4 | -0.5 | -0.3 | -0.5 | -0.6 | -0.2 |
| 14-Aug | -0.3 | -0.3 | -0.3 | -0.3 | -0.4 | -0.3 | -0.3 | -0.2 | -0.4 | -0.3 | -0.2 | 0.2 | -0.5 | 0.2 | 0.2 | 0.2 | -0.1 | -0.1 | -0.2 | -0.2 | -0.2 | 0.1 | 0.0 | -0.1 | -0.2 | 0.2 |
| 15-Aug | -0.1 | -0.1 | -0.2 | -0.1 | -0.1 | -0.3 | 0.0 | 0.1 | -0.1 | 0.2 | 0.2 | 0.0 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 | -0.1 | -0.3 | -0.3 | -0.2 | -0.2 | -0.2 | -0.1 | 0.2 |
| 16-Aug | -0.2 | -0.3 | -0.3 | -0.4 | -0.3 | -0.4 | -0.6 | -0.7 | -0.9 | -1.0 | -1.1 | -0.9 | -1.1 | -0.7 | -0.9 | -0.6 | -0.7 | -0.8 | -0.5 | -0.4 | -0.3 | -0.3 | -0.6 | -0.4 | -0.6 | -0.2 |
| 17-Aug | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 | -0.2 | -0.3 | 0.0 | -0.2 | -0.2 | -0.3 | -0.5 | -0.2 | -0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.4 | 0.3 | -0.1 | 0.4 |
| 18-Aug | 0.3 | 0.3 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 | 0.3 | 0.2 | 0.4 | -0.1 | -0.1 | -0.3 | -0.1 | 0.0 | 0.1 | -0.1 | -0.1 | -0.2 | -0.2 | -0.3 | -0.2 | -0.3 | -0.2 | 0.0 | 0.4 |
| 19-Aug | -0.3 | -0.3 | -0.3 | -0.2 | -0.2 | 0.0 | 0.1 | -0.1 | -0.2 | -0.3 | -0.3 | -0.4 | -0.3 | -0.5 | -0.5 | -0.8 | -0.4 | -0.5 | -0.7 | -0.8 | -0.7 | -0.5 | -0.2 | -0.8 | -0.4 | 0.1 |
| 20-Aug | -0.2 | -0.3 | -0.2 | -0.5 | -0.3 | -0.3 | -0.3 | -0.2 | -0.5 | -0.4 | -0.1 | -0.9 | -0.7 | -0.6 | -0.6 | -0.6 | -1.1 | -0.8 | -0.7 | -0.5 | -0.3 | -0.3 | -0.3 | -0.2 | -0.5 | -0.1 |
| 21-Aug | -0.5 | -0.4 | -0.2 | -0.2 | 0.0 | 0.1 | -0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.0 | -0.1 | 0.0 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.1 | 0.5 |
| 22-Aug | 0.5 | 0.5 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.3 | 0.3 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.0 | 0.4 | 0.4 | 0.3 | 0.5 |
| 23-Aug | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.2 | 0.1 | 0.2 | 0.1 | -0.1 | 0.2 | -0.1 | 0.2 | 0.1 | -0.1 | -0.2 | -0.1 | -0.2 | -0.2 | -0.6 | -0.7 | -0.5 | -0.5 | -0.5 | 0.0 | 0.5 |
| 24-Aug | -0.6 | -0.6 | -0.8 | -0.8 | -0.7 | -0.9 | -0.7 | -0.6 | -0.6 | -0.5 | -0.8 | -0.8 | -1.0 | -1.1 | -0.9 | -0.7 | -0.9 | -0.8 | -0.7 | -0.7 | -0.6 | -0.5 | -0.4 | -0.5 | -0.7 | -0.4 |
| 25-Aug | -0.5 | -0.4 | -0.6 | -0.6 | -0.4 | -0.4 | -0.2 | -0.3 | -0.1 | -0.5 | -0.4 | -0.3 | -0.4 | -0.2 | -0.1 | -0.3 | 0.1 | -0.1 | -0.5 | -0.7 | -0.7 | -0.1 | 0.3 | 0.1 | -0.3 | 0.3 |
| 26-Aug | 0.0 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.5 | 0.2 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 |
| 27-Aug | 0.4 | 0.1 | 0.3 | 0.1 | 0.3 | 0.3 | 0.1 | 0.2 | 0.1 | 0.3 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.1 | 0.0 | 0.6 | 0.7 | 0.5 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.7 |
| 28-Aug | 0.2 | 0.4 | 0.5 | 0.3 | -0.2 | 0.1 | 0.5 | 0.4 | 0.3 | -0.2 | 0.0 | -0.1 | 0.2 | 0.0 | 0.3 | 0.2 | 0.1 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.2 | 0.5 |
| 29-Aug | 0.0 | -0.1 | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | -0.1 | -0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | -0.2 | -0.2 | -0.2 | -0.3 | -0.2 | 0.3 | 0.2 | 0.0 | 0.3 |
| 30-Aug | 0.3 | 0.3 | 0.3 | 0.3 | -0.1 | 0.0 | -0.3 | -0.2 | 0.0 | 0.0 | -0.1 | -0.2 | -0.2 | 0.1 | -0.1 | 0.2 | -0.2 | -0.1 | -0.2 | -0.2 | 0.1 | 0.0 | 0.0 | -0.3 | 0.0 | 0.3 |
| 31-Aug | -0.4 | -0.4 | -0.2 | -0.5 | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 | -0.5 | -0.1 | -0.3 | -0.4 | -0.4 | -0.2 | -0.3 | -0.1 | -0.1 | 0.0 | -0.2 | -0.4 | -0.5 | -0.2 | -0.2 | -0.3 | 0.0 |
| | -0.3 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.3 | -0.3 | -0.3 | -0.3 | -0.4 | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 | -0.4 | -0.4 | -0.3 | -0.2 | -0.3 | Diurnal Average | |
| | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | Diurnal Maximum | |

## Summary of Hour Standard Deviations

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.6 km/h on Aug 2 12:00

Minimum Value: 0.2 km/h on Aug 10 00:00

Percentiles: $P_1$ = 0.3 $P_{10}$ = 0.5 $Q_1$ = 0.9 Median = 1.5 $Q_3$ = 2.1 $P_{90}$ = 2.7 $P_{99}$ = 3.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.7 | 1.0 | 0.8 | 0.7 | 0.6 | 0.9 | 1.7 | 1.8 | 2.3 | 2.2 | 2.1 | 2.3 | 2.1 | 1.5 | 1.7 | 3.3 | 2.8 | 1.5 | 1.5 | 3.3 |
| 2-Aug | 2.0 | 2.5 | 3.0 | 3.2 | 2.7 | 2.6 | 3.0 | 2.6 | 3.2 | 3.8 | 4.5 | 4.6 | 4.1 | 4.1 | 4.5 | 4.5 | 4.4 | 3.9 | 3.6 | 3.3 | 3.7 | 3.1 | 2.9 | 2.6 | 4.6 |
| 3-Aug | 2.7 | 2.6 | 2.5 | 2.3 | 1.5 | 1.5 | 1.6 | 1.7 | 2.2 | 2.4 | 2.7 | 2.6 | 2.3 | 2.1 | 2.0 | 1.8 | 2.0 | 2.0 | 1.5 | 1.2 | 0.7 | 1.1 | 0.6 | 0.4 | 2.7 |
| 4-Aug | 0.5 | 0.9 | 1.0 | 1.4 | 1.4 | 1.3 | 1.4 | 1.3 | 1.4 | 1.4 | 1.3 | 2.3 | 2.3 | 2.6 | 2.0 | 2.2 | 2.7 | 1.4 | 1.3 | 1.8 | 1.9 | 2.7 | 1.8 | 1.8 | 2.7 |
| 5-Aug | 1.7 | 1.3 | 1.1 | 1.7 | 1.4 | 1.9 | 2.4 | 2.5 | 3.4 | 2.9 | 3.2 | 3.2 | 3.4 | 3.0 | 2.4 | 2.3 | 2.7 | 2.9 | 2.2 | 2.5 | 1.8 | 2.0 | 2.3 | 2.6 | 3.4 |
| 6-Aug | 2.4 | 2.4 | 2.9 | 3.0 | 3.1 | 3.0 | 2.8 | 2.9 | 2.6 | 2.8 | 2.6 | 2.1 | 2.0 | 1.9 | 2.1 | 1.3 | 1.5 | 2.1 | 2.0 | 2.0 | 1.1 | 1.7 | 1.5 | 1.2 | 3.1 |
| 7-Aug | 1.4 | 1.1 | 0.9 | 1.0 | 1.2 | 1.1 | 1.1 | 1.1 | 1.8 | 2.0 | 2.5 | 2.6 | 2.4 | 2.1 | 2.4 | 1.9 | 1.8 | 1.5 | 1.4 | 1.5 | 1.1 | 0.5 | 0.6 | 0.3 | 2.6 |
| 8-Aug | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.5 | 0.8 | 1.9 | 1.8 | 1.8 | 1.9 | 1.7 | 1.6 | 1.4 | 1.7 | 2.1 | 1.2 | 1.0 | 0.7 | 0.4 | 0.6 | 0.5 | 0.6 | 0.8 | 2.1 |
| 9-Aug | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 | 0.6 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.6 | 1.7 | 1.4 | 1.6 | 1.9 | 1.2 | 1.3 | 1.1 | 0.8 | 0.8 | 0.6 | 0.3 | 0.2 | 1.9 |
| 10-Aug | 0.2 | 0.4 | 0.5 | 0.4 | 0.7 | 0.8 | 0.7 | 1.0 | 0.8 | 1.4 | 1.5 | 1.7 | 1.7 | 2.0 | 2.4 | 2.2 | 2.1 | 1.9 | 1.6 | 1.3 | 0.9 | 1.2 | 0.6 | 0.5 | 2.4 |
| 11-Aug | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 0.8 | 1.2 | 1.6 | 2.3 | 2.8 | 2.9 | 3.1 | 3.2 | 3.2 | 2.7 | 2.6 | 2.1 | 2.4 | 2.1 | 2.0 | 1.6 | 1.1 | 3.2 |
| 12-Aug | 1.2 | 0.8 | 0.6 | 0.4 | 0.7 | 0.8 | 1.1 | 1.5 | 1.7 | 2.2 | 2.0 | 2.4 | 2.2 | 2.0 | 2.5 | 2.1 | 2.0 | 2.1 | 1.9 | 1.5 | 1.4 | 1.5 | 1.3 | 1.8 | 2.5 |
| 13-Aug | 1.9 | 2.1 | 1.9 | 1.6 | 1.2 | 1.3 | 1.2 | 1.4 | 1.6 | 1.8 | 2.3 | 2.0 | 1.9 | 2.2 | 2.1 | 2.0 | 1.6 | 2.0 | 1.6 | 1.4 | 0.7 | 0.4 | 0.3 | 0.5 | 2.3 |
| 14-Aug | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 1.0 | 1.5 | 1.7 | 1.6 | 1.4 | 1.6 | 2.4 | 1.8 | 1.4 | 1.2 | 0.8 | 0.6 | 0.4 | 0.8 | 0.7 | 0.4 | 2.4 |
| 15-Aug | 0.7 | 0.5 | 0.6 | 0.9 | 1.0 | 1.0 | 1.1 | 1.0 | 1.2 | 1.6 | 1.5 | 2.0 | 2.2 | 2.1 | 1.6 | 1.8 | 2.0 | 2.1 | 1.4 | 0.8 | 0.7 | 1.0 | 0.8 | 0.5 | 2.2 |
| 16-Aug | 0.4 | 0.4 | 0.3 | 1.0 | 0.9 | 0.9 | 1.3 | 1.9 | 3.1 | 3.4 | 3.0 | 2.8 | 3.1 | 2.7 | 2.4 | 2.1 | 1.8 | 2.1 | 1.6 | 0.7 | 0.4 | 0.3 | 0.3 | 0.4 | 3.4 |
| 17-Aug | 0.3 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 0.8 | 1.0 | 1.3 | 1.4 | 1.2 | 1.6 | 1.2 | 1.2 | 1.4 | 1.3 | 1.3 | 1.3 | 0.9 | 0.8 | 1.1 | 1.1 | 1.2 | 1.4 | 1.6 |
| 18-Aug | 1.4 | 1.4 | 1.3 | 1.4 | 1.2 | 1.3 | 1.4 | 1.7 | 1.6 | 1.5 | 1.8 | 1.9 | 1.9 | 2.1 | 2.3 | 2.7 | 2.3 | 2.1 | 1.8 | 1.1 | 0.7 | 0.4 | 0.4 | 0.5 | 2.7 |
| 19-Aug | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 1.0 | 0.9 | 0.9 | 1.5 | 1.7 | 2.0 | 1.7 | 2.0 | 2.1 | 2.0 | 1.3 | 1.6 | 1.7 | 1.8 | 1.8 | 0.4 | 0.4 | 2.0 | 2.1 |
| 20-Aug | 0.8 | 0.4 | 0.2 | 0.2 | 0.4 | 0.7 | 0.5 | 0.8 | 0.9 | 1.2 | 1.8 | 2.6 | 2.4 | 2.5 | 2.2 | 2.2 | 2.3 | 2.0 | 1.6 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 2.6 |
| 21-Aug | 0.3 | 0.3 | 0.2 | 0.3 | 0.7 | 0.9 | 0.7 | 1.0 | 1.3 | 1.4 | 1.5 | 1.7 | 1.9 | 1.9 | 1.8 | 1.8 | 1.9 | 1.6 | 1.6 | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 1.9 |
| 22-Aug | 1.5 | 1.7 | 1.5 | 1.4 | 1.4 | 1.1 | 1.0 | 1.2 | 1.7 | 1.6 | 1.6 | 1.8 | 1.8 | 1.9 | 1.9 | 1.7 | 1.9 | 2.2 | 2.0 | 1.2 | 1.7 | 2.0 | 1.3 | 1.4 | 2.2 |
| 23-Aug | 1.4 | 1.1 | 1.3 | 1.3 | 1.6 | 1.2 | 0.9 | 1.5 | 1.3 | 1.6 | 1.5 | 1.4 | 1.3 | 1.1 | 0.7 | 0.9 | 0.6 | 0.9 | 1.1 | 1.7 | 1.8 | 0.9 | 1.1 | 1.2 | 1.8 |
| 24-Aug | 1.2 | 1.6 | 1.7 | 1.6 | 1.3 | 1.3 | 1.5 | 1.0 | 1.6 | 2.1 | 2.9 | 3.0 | 3.1 | 3.0 | 3.1 | 2.4 | 2.1 | 2.2 | 1.6 | 0.8 | 0.4 | 0.4 | 0.3 | 0.4 | 3.1 |
| 25-Aug | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.8 | 1.3 | 1.4 | 1.6 | 1.6 | 1.7 | 1.5 | 1.5 | 1.3 | 1.2 | 0.8 | 1.1 | 1.2 | 1.2 | 1.1 | 1.3 | 1.0 | 1.7 |
| 26-Aug | 0.8 | 0.8 | 1.0 | 0.8 | 1.2 | 1.2 | 1.4 | 1.3 | 1.6 | 1.8 | 1.9 | 2.2 | 2.5 | 2.5 | 2.4 | 2.1 | 2.3 | 2.0 | 1.8 | 1.8 | 1.6 | 1.4 | 1.4 | 1.1 | 2.5 |
| 27-Aug | 1.3 | 0.9 | 1.1 | 1.4 | 1.1 | 1.6 | 1.4 | 1.5 | 1.6 | 1.9 | 2.1 | 2.2 | 2.2 | 2.0 | 1.7 | 1.4 | 1.1 | 2.2 | 2.6 | 2.7 | 2.4 | 2.4 | 2.5 | 2.3 | 2.7 |
| 28-Aug | 2.0 | 2.1 | 2.3 | 2.4 | 1.5 | 1.0 | 2.3 | 1.9 | 2.4 | 2.6 | 2.8 | 3.3 | 3.3 | 3.3 | 3.8 | 3.6 | 2.8 | 3.5 | 3.4 | 3.2 | 2.3 | 2.5 | 2.6 | 2.6 | 3.8 |
| 29-Aug | 1.6 | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 | 1.7 | 2.1 | 2.2 | 2.5 | 2.5 | 2.9 | 2.8 | 2.9 | 3.1 | 2.8 | 2.8 | 2.1 | 1.1 | 0.5 | 0.4 | 0.6 | 1.2 | 1.2 | 3.1 |
| 30-Aug | 1.2 | 0.9 | 1.1 | 1.3 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.4 | 1.3 | 1.2 | 0.9 | 0.6 | 0.6 | 1.0 | 0.8 | 0.9 | 0.9 | 1.5 |
| 31-Aug | 0.8 | 0.7 | 0.8 | 1.4 | 1.4 | 1.0 | 0.8 | 0.9 | 1.5 | 1.4 | 1.8 | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 | 1.7 | 1.7 | 1.6 | 0.6 | 0.4 | 0.7 | 0.5 | 0.3 | 2.0 |
| | 2.7 | 2.6 | 3.0 | 3.2 | 3.1 | 3.0 | 3.0 | 2.9 | 3.4 | 3.8 | 4.5 | 4.6 | 4.1 | 4.1 | 4.5 | 4.5 | 4.4 | 3.9 | 3.6 | 3.3 | 3.7 | 3.1 | 2.9 | 2.6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Vertical Wind Speed 45m (VW45) - km/h

## Mannix - August 2026

Maximum Value: 2.3 km/h on Aug 26 17:00

Maximum Daily Average: 1.6 km/h on Aug 26

Minimum Value: -2.7 km/h on Aug 2 15:00

Minimum Daily Average: -1.9 km/h on Aug 2

Maximum Diurnal Average: 0.3 km/h at hour 8

Minimum Diurnal Average: 0.0 km/h at hour 17

Monthly Average: 0.16 km/h

Percentiles: $P_1$ = -2.3 $P_{10}$ = -0.9 $Q_1$ = -0.4 Median = 0.1 $Q_3$ = 0.8 $P_{90}$ = 1.5 $P_{99}$ = 2.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 1.0 | 1.0 | 0.6 | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 | 1.3 | 1.6 | 1.7 | 1.7 | 1.3 | 0.9 | 0.7 | -1.3 | -0.2 | -0.7 | -0.3 | 0.6 | 1.7 |
| 2-Aug | -0.8 | -1.5 | -1.8 | -1.7 | -0.8 | -1.5 | -0.9 | -0.7 | -2.2 | -2.6 | -2.5 | -2.5 | -2.7 | -2.5 | -2.7 | -2.5 | -2.4 | -2.3 | -2.1 | -2.0 | -2.0 | -1.6 | -1.2 | -0.9 | -1.9 | -0.7 |
| 3-Aug | -1.2 | -0.7 | -0.9 | -0.9 | -0.4 | -0.1 | -0.3 | 0.2 | -0.2 | -0.7 | -0.7 | -1.2 | -0.6 | 0.0 | -0.6 | -0.6 | -1.0 | -1.0 | -0.4 | -0.1 | 0.1 | 0.5 | 1.3 | 1.1 | -0.4 | 1.3 |
| 4-Aug | 1.1 | 1.2 | 1.6 | 1.6 | 1.5 | 1.3 | 1.1 | 0.8 | 1.2 | 0.7 | 0.6 | 0.3 | 0.6 | 0.1 | 0.3 | 0.8 | -0.6 | -0.3 | -0.3 | -0.5 | -0.2 | -1.0 | -0.5 | -0.7 | 0.4 | 1.6 |
| 5-Aug | -0.5 | -0.1 | 0.1 | -0.2 | -0.1 | -0.2 | -0.3 | -0.3 | -1.2 | -0.8 | -0.7 | -0.9 | -1.1 | -1.1 | -0.7 | -0.9 | -1.5 | -1.2 | -1.1 | -1.3 | -0.4 | -0.1 | -0.1 | -0.6 | -0.6 | 0.1 |
| 6-Aug | -0.7 | 0.0 | -0.4 | -0.7 | -0.7 | -0.7 | -0.1 | -0.7 | -0.4 | -0.7 | -1.0 | -0.5 | -0.1 | -0.8 | -0.6 | -0.4 | 0.1 | 0.1 | -0.1 | -0.7 | -0.3 | -0.3 | -0.3 | -0.3 | -0.4 | 0.1 |
| 7-Aug | -0.4 | -0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | -0.2 | 0.0 | -0.1 | -0.1 | -0.3 | -0.4 | -0.6 | -1.1 | -0.7 | -0.9 | -0.2 | -0.5 | -0.4 | -0.4 | -0.2 | 0.0 | -0.3 | 0.1 |
| 8-Aug | -0.1 | -0.2 | -0.3 | -0.2 | -0.4 | -0.1 | -0.2 | -0.4 | -0.3 | -0.3 | -0.5 | -0.1 | 0.2 | 0.2 | -0.4 | -0.7 | -0.6 | -0.4 | -0.3 | 0.0 | -0.3 | -0.3 | -0.4 | -0.7 | -0.3 | 0.2 |
| 9-Aug | -0.4 | -0.1 | -0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | -0.1 | 0.5 | -0.1 | -0.1 | -0.1 | -0.2 | 0.0 | 0.5 | -0.3 | -0.5 | -0.7 | -0.3 | 0.2 | 0.6 | 0.0 | 0.6 |
| 10-Aug | 0.8 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 | 0.7 | 0.2 | 0.1 | -0.2 | -0.8 | 0.5 | -0.4 | -0.4 | -1.0 | 0.2 | -0.2 | -0.4 | -0.6 | -0.9 | -0.8 | -0.5 | -0.2 | 0.0 | 0.8 |
| 11-Aug | -0.2 | -0.3 | -0.4 | -0.4 | -0.2 | 0.0 | 0.0 | -0.2 | -0.3 | -0.7 | -0.9 | -1.4 | -0.9 | -1.7 | -1.5 | -1.5 | -0.9 | -0.9 | -0.7 | -1.2 | -0.9 | -0.6 | -1.0 | -1.0 | -0.7 | 0.0 |
| 12-Aug | -0.6 | -0.6 | -0.6 | -0.2 | -0.3 | -0.2 | 0.0 | -0.3 | -0.5 | -0.7 | -0.3 | -0.9 | -0.7 | -0.8 | -0.7 | -0.8 | -1.1 | -1.2 | -0.7 | -0.6 | -0.7 | -0.9 | -0.8 | -1.1 | -0.6 | 0.0 |
| 13-Aug | -1.4 | -1.7 | 0.1 | -0.5 | -0.5 | -0.4 | -0.2 | -0.2 | -0.5 | -0.2 | -0.8 | -0.1 | -0.4 | -0.4 | -0.2 | 0.3 | -0.1 | -0.3 | -0.5 | -0.4 | -0.1 | -0.3 | -0.3 | -0.3 | -0.4 | 0.3 |
| 14-Aug | -0.4 | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 0.1 | 0.2 | 0.0 | -0.3 | 0.1 | 0.6 | 0.1 | 1.0 | 0.8 | 1.0 | 0.3 | 0.5 | 0.3 | 0.2 | 0.4 | 1.0 | 0.8 | 0.7 | 0.3 | 1.0 |
| 15-Aug | 0.8 | 0.4 | 0.3 | 0.5 | 0.4 | 0.3 | 0.5 | 0.7 | 0.6 | 0.9 | 1.1 | 0.7 | 0.8 | 0.7 | 0.7 | 1.1 | 0.5 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.0 | -0.1 | 0.5 | 1.1 |
| 16-Aug | 0.0 | -0.1 | 0.0 | -0.2 | -0.1 | -0.2 | -0.3 | -0.4 | -1.2 | -1.4 | -1.5 | -0.9 | -1.2 | -0.5 | -1.3 | -0.4 | -0.7 | -1.0 | -0.3 | -0.1 | 0.0 | 0.0 | 0.0 | 0.2 | -0.5 | 0.2 |
| 17-Aug | 0.3 | 0.3 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.6 | 0.5 | 0.2 | 0.5 | -0.4 | 0.5 | 0.3 | 1.3 | 0.9 | 1.0 | 1.0 | 0.9 | 1.1 | 1.6 | 1.6 | 1.9 | 1.9 | 0.7 | 1.9 |
| 18-Aug | 1.9 | 1.9 | 1.9 | 1.5 | 1.7 | 1.7 | 1.3 | 1.4 | 1.0 | 1.2 | 1.0 | 0.4 | 0.3 | 0.2 | 1.3 | 0.8 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | -0.1 | -0.1 | 0.1 | 0.9 | 1.9 |
| 19-Aug | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.6 | 0.8 | 0.4 | 0.3 | 0.0 | 0.4 | -0.1 | 0.2 | -0.1 | -0.2 | -1.1 | -0.3 | -0.3 | -0.8 | -0.5 | -0.9 | -0.2 | 0.0 | -0.6 | -0.1 | 0.8 |
| 20-Aug | 0.3 | 0.0 | 0.0 | -0.2 | -0.1 | 0.2 | 0.2 | 0.3 | 0.0 | -0.2 | 0.2 | -1.3 | -0.6 | -1.1 | -0.5 | -0.4 | -1.5 | -0.7 | -0.3 | -0.2 | -0.2 | -0.2 | -0.1 | 0.2 | -0.3 | 0.3 |
| 21-Aug | 0.2 | 0.2 | 0.3 | 0.3 | 0.9 | 1.1 | 0.4 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 0.9 | 0.6 | 0.9 | 1.1 | 1.3 | 1.7 | 1.8 | 1.9 | 1.9 | 2.1 | 1.9 | 1.7 | 1.0 | 2.1 |
| 22-Aug | 2.0 | 2.2 | 1.9 | 1.7 | 1.9 | 1.6 | 0.9 | 1.0 | 1.5 | 1.3 | 1.5 | 1.5 | 1.3 | 1.3 | 1.7 | 1.2 | 1.3 | 1.5 | 1.6 | 1.5 | 1.7 | 1.4 | 1.7 | 1.7 | 1.5 | 2.2 |
| 23-Aug | 1.7 | 1.6 | 1.6 | 1.7 | 1.8 | 1.4 | 1.1 | 1.3 | 1.0 | 0.8 | 1.0 | 0.6 | 1.1 | 0.8 | 0.4 | 0.3 | 0.5 | 0.1 | -0.1 | -0.7 | -0.8 | -0.3 | -0.5 | -0.6 | 0.7 | 1.8 |
| 24-Aug | -0.7 | -0.8 | -1.2 | -1.0 | -0.9 | -1.3 | -1.1 | -0.5 | -0.3 | -0.3 | -0.3 | -0.5 | -1.1 | -1.5 | -1.2 | -0.5 | -1.1 | -0.5 | -0.2 | -0.6 | -0.5 | -0.1 | -0.3 | -0.4 | -0.7 | -0.1 |
| 25-Aug | -0.4 | -0.4 | -0.6 | -0.5 | -0.3 | -0.3 | 0.0 | 0.2 | 0.3 | -0.5 | -0.5 | 0.2 | 0.0 | 0.1 | 0.4 | 0.1 | 0.5 | 0.6 | 0.0 | -0.5 | -0.5 | 0.5 | 1.7 | 0.9 | 0.0 | 1.7 |
| 26-Aug | 1.0 | 1.6 | 0.8 | 1.0 | 1.6 | 1.5 | 1.2 | 1.0 | 1.7 | 1.6 | 1.7 | 2.1 | 1.8 | 1.8 | 2.2 | 1.6 | 2.3 | 1.8 | 1.7 | 2.0 | 2.2 | 1.6 | 2.0 | 1.6 | 1.6 | 2.3 |
| 27-Aug | 1.6 | 1.3 | 1.5 | 1.2 | 1.4 | 1.6 | 1.2 | 1.2 | 0.8 | 1.5 | 1.6 | 1.8 | 2.1 | 1.5 | 1.4 | 0.9 | 0.5 | 0.9 | 1.2 | 1.5 | 1.3 | 1.1 | 1.4 | 1.5 | 1.3 | 2.1 |
| 28-Aug | 1.3 | 1.3 | 1.9 | 2.0 | 0.5 | 0.8 | 2.1 | 1.6 | 1.8 | 1.0 | 0.8 | 0.6 | 1.0 | 1.0 | 0.5 | 0.6 | 0.5 | 0.9 | 0.4 | 0.5 | 0.6 | 0.7 | 0.4 | 0.4 | 1.0 | 2.1 |
| 29-Aug | 0.5 | 0.7 | 0.6 | 0.4 | 0.7 | 0.7 | 0.8 | 1.0 | 0.6 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 0.4 | 0.7 | 0.2 | 0.7 | 1.9 | 1.4 | 0.7 | 1.9 |
| 30-Aug | 1.6 | 1.5 | 1.7 | 1.8 | 0.9 | 1.0 | 0.7 | 0.5 | 0.6 | 0.8 | 0.4 | 0.5 | 0.1 | 0.4 | 0.7 | 1.1 | 0.7 | 0.7 | 0.2 | 0.6 | 1.5 | 1.3 | 0.7 | -0.2 | 0.8 | 1.8 |
| 31-Aug | -0.2 | -0.3 | 0.0 | -0.2 | -0.1 | -0.4 | -0.3 | -0.2 | -0.1 | 0.0 | 0.1 | -0.1 | -0.2 | -0.2 | 0.5 | 0.2 | 0.3 | 0.3 | 0.2 | 0.0 | -0.2 | -0.3 | 0.1 | 0.4 | 0.0 | 0.5 |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | Diurnal Average | |
| | 2.0 | 2.2 | 1.9 | 2.0 | 1.9 | 1.7 | 2.1 | 1.6 | 1.8 | 1.6 | 1.7 | 2.1 | 2.1 | 1.8 | 2.2 | 1.7 | 2.3 | 1.8 | 1.8 | 2.0 | 2.2 | 2.1 | 2.0 | 1.9 | Diurnal Maximum | |

## Summary of Hour Standard Deviations

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 1
Maximum Value: 5.0 km/h on Aug 2 16:00

Minimum Value: 0.2 km/h on Aug 17 00:00

Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.5 $Q_1$ = 0.8 Median = 1.5 $Q_3$ = 2.2 $P_{90}$ = 2.8 $P_{99}$ = 4.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 1.0 | 0.9 | 0.5 | 0.7 | 1.0 | 1.6 | 2.0 | 2.6 | 2.7 | 2.6 | 2.6 | 2.4 | 1.5 | 2.0 | 3.1 | 3.0 | 1.5 | 1.3 | 3.1 |
| 2-Aug | 1.6 | 2.5 | 3.0 | 3.2 | 3.0 | 2.7 | 3.1 | 2.9 | 3.4 | 3.8 | 4.8 | 4.8 | 4.3 | 4.5 | 4.7 | 5.0 | 4.7 | 4.2 | 4.0 | 3.6 | 3.8 | 3.2 | 2.5 | 2.2 | 5.0 |
| 3-Aug | 2.5 | 2.5 | 2.4 | 1.9 | 1.2 | 1.4 | 1.4 | 1.5 | 2.1 | 2.7 | 3.0 | 2.9 | 2.7 | 2.5 | 2.3 | 2.1 | 2.1 | 2.0 | 1.5 | 1.2 | 0.8 | 0.9 | 0.4 | 0.4 | 3.0 |
| 4-Aug | 0.4 | 0.3 | 0.6 | 1.3 | 1.3 | 1.0 | 1.1 | 1.2 | 1.5 | 1.5 | 1.5 | 2.5 | 2.7 | 2.6 | 2.3 | 2.4 | 2.6 | 1.5 | 1.1 | 1.6 | 1.8 | 2.2 | 1.4 | 1.4 | 2.7 |
| 5-Aug | 1.2 | 1.1 | 0.8 | 1.5 | 1.4 | 1.7 | 2.3 | 2.4 | 3.1 | 2.6 | 2.8 | 3.4 | 3.4 | 2.9 | 2.3 | 2.4 | 2.6 | 3.0 | 1.9 | 2.3 | 1.8 | 1.6 | 2.1 | 2.4 | 3.4 |
| 6-Aug | 2.1 | 2.2 | 2.6 | 2.8 | 3.2 | 2.9 | 2.5 | 2.9 | 2.6 | 2.6 | 2.7 | 2.3 | 2.2 | 2.1 | 2.6 | 1.5 | 1.5 | 2.2 | 1.7 | 1.8 | 0.9 | 1.4 | 1.2 | 1.0 | 3.2 |
| 7-Aug | 1.1 | 0.8 | 0.6 | 0.9 | 0.8 | 0.7 | 0.9 | 1.2 | 1.4 | 1.8 | 2.5 | 2.5 | 2.6 | 2.2 | 2.9 | 2.1 | 1.9 | 1.4 | 1.8 | 1.6 | 1.1 | 0.8 | 0.9 | 0.5 | 2.9 |
| 8-Aug | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 0.6 | 0.9 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 1.8 | 1.9 | 2.4 | 1.2 | 1.1 | 0.9 | 0.6 | 0.9 | 0.9 | 0.7 | 0.7 | 2.4 |
| 9-Aug | 0.8 | 0.5 | 0.2 | 0.3 | 0.2 | 0.5 | 0.6 | 0.8 | 1.1 | 1.5 | 1.8 | 2.1 | 2.1 | 1.8 | 2.1 | 2.4 | 1.8 | 1.8 | 1.4 | 1.1 | 1.1 | 0.5 | 0.4 | 0.3 | 2.4 |
| 10-Aug | 0.3 | 0.6 | 0.3 | 0.5 | 0.6 | 0.6 | 0.6 | 1.2 | 0.9 | 1.8 | 1.8 | 2.2 | 2.2 | 2.5 | 3.0 | 2.5 | 2.6 | 2.0 | 1.7 | 1.4 | 1.0 | 1.4 | 0.7 | 0.5 | 3.0 |
| 11-Aug | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.4 | 0.5 | 0.7 | 1.4 | 2.1 | 2.8 | 3.0 | 3.3 | 3.2 | 3.5 | 3.2 | 3.0 | 3.0 | 2.3 | 2.4 | 1.9 | 2.1 | 1.8 | 1.2 | 3.5 |
| 12-Aug | 1.2 | 1.1 | 0.8 | 0.6 | 0.9 | 0.7 | 1.2 | 1.7 | 1.9 | 2.0 | 2.1 | 2.3 | 2.4 | 2.2 | 2.6 | 2.1 | 2.1 | 1.8 | 2.0 | 1.3 | 1.5 | 1.3 | 1.3 | 1.4 | 2.6 |
| 13-Aug | 1.8 | 1.6 | 2.0 | 1.8 | 1.4 | 1.5 | 1.2 | 1.5 | 1.5 | 2.1 | 2.4 | 2.3 | 2.4 | 2.5 | 2.2 | 2.1 | 1.7 | 1.8 | 1.6 | 1.4 | 1.0 | 0.6 | 0.4 | 0.5 | 2.5 |
| 14-Aug | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.9 | 1.1 | 1.7 | 2.1 | 2.0 | 1.9 | 2.2 | 2.7 | 2.1 | 1.7 | 1.5 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.4 | 2.7 |
| 15-Aug | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 1.2 | 1.6 | 1.9 | 1.9 | 2.7 | 2.7 | 2.3 | 1.7 | 2.2 | 2.0 | 1.9 | 1.3 | 0.4 | 0.3 | 0.6 | 0.6 | 0.3 | 2.7 |
| 16-Aug | 0.5 | 0.6 | 0.7 | 1.0 | 0.7 | 0.8 | 1.5 | 2.2 | 3.1 | 3.6 | 3.2 | 3.1 | 3.4 | 3.4 | 2.6 | 2.5 | 2.1 | 2.0 | 1.6 | 0.8 | 0.7 | 0.4 | 0.3 | 0.2 | 3.6 |
| 17-Aug | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 1.2 | 1.5 | 1.8 | 1.7 | 2.1 | 1.7 | 1.5 | 1.8 | 1.9 | 1.4 | 1.5 | 0.9 | 0.6 | 0.5 | 0.7 | 0.7 | 0.7 | 2.1 |
| 18-Aug | 1.1 | 1.1 | 1.0 | 1.2 | 1.0 | 1.2 | 1.5 | 1.6 | 1.6 | 1.7 | 1.9 | 2.1 | 2.3 | 2.3 | 2.5 | 2.8 | 2.2 | 2.3 | 1.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.6 | 2.8 |
| 19-Aug | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 0.7 | 1.0 | 1.8 | 2.1 | 2.2 | 2.2 | 2.5 | 2.7 | 1.9 | 1.2 | 1.7 | 1.7 | 1.8 | 1.4 | 0.5 | 0.3 | 1.6 | 2.7 |
| 20-Aug | 1.0 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 | 1.0 | 1.5 | 2.1 | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.3 | 2.1 | 1.7 | 1.1 | 0.8 | 0.5 | 0.4 | 0.4 | 2.7 |
| 21-Aug | 0.3 | 0.3 | 0.2 | 0.3 | 0.7 | 0.6 | 0.7 | 1.1 | 1.2 | 1.6 | 1.7 | 2.1 | 2.2 | 2.5 | 2.3 | 2.4 | 2.0 | 1.7 | 1.6 | 1.6 | 1.3 | 1.0 | 0.8 | 0.8 | 2.5 |
| 22-Aug | 1.0 | 0.9 | 1.4 | 1.3 | 1.0 | 1.0 | 0.9 | 1.3 | 1.9 | 1.6 | 1.9 | 2.1 | 2.2 | 2.3 | 2.2 | 2.0 | 2.0 | 2.1 | 1.5 | 1.2 | 1.4 | 1.8 | 0.9 | 0.8 | 2.3 |
| 23-Aug | 1.3 | 0.9 | 1.0 | 0.7 | 1.1 | 1.0 | 0.8 | 1.2 | 1.3 | 1.6 | 1.3 | 1.5 | 1.4 | 1.3 | 0.9 | 0.7 | 0.7 | 1.0 | 1.0 | 1.3 | 1.7 | 1.2 | 0.8 | 0.7 | 1.7 |
| 24-Aug | 0.8 | 1.1 | 1.4 | 1.6 | 1.1 | 1.1 | 1.3 | 0.9 | 1.5 | 2.1 | 3.0 | 3.3 | 3.6 | 3.2 | 3.2 | 2.7 | 2.2 | 2.4 | 1.8 | 0.9 | 0.6 | 0.4 | 0.3 | 0.4 | 3.6 |
| 25-Aug | 0.3 | 0.3 | 0.5 | 0.5 | 0.3 | 0.3 | 0.4 | 0.8 | 1.5 | 1.6 | 1.9 | 2.3 | 2.2 | 2.1 | 2.2 | 1.9 | 1.6 | 1.2 | 1.2 | 1.2 | 0.9 | 1.4 | 1.4 | 1.6 | 2.3 |
| 26-Aug | 1.3 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 1.0 | 1.2 | 1.8 | 2.1 | 2.1 | 2.3 | 2.6 | 2.9 | 2.5 | 2.2 | 2.2 | 1.8 | 1.7 | 1.8 | 1.7 | 1.3 | 1.0 | 1.3 | 2.9 |
| 27-Aug | 0.9 | 0.6 | 0.8 | 1.2 | 1.1 | 1.5 | 1.1 | 1.5 | 1.8 | 2.3 | 2.5 | 2.3 | 2.4 | 2.4 | 2.1 | 1.3 | 1.3 | 2.6 | 3.4 | 3.5 | 2.8 | 2.4 | 2.4 | 2.2 | 3.5 |
| 28-Aug | 2.0 | 2.5 | 2.2 | 2.1 | 1.7 | 1.3 | 2.0 | 1.8 | 2.2 | 2.6 | 2.7 | 3.5 | 3.4 | 3.3 | 3.8 | 3.9 | 2.9 | 3.6 | 3.3 | 3.3 | 2.3 | 2.6 | 2.6 | 2.8 | 3.9 |
| 29-Aug | 1.4 | 2.0 | 1.9 | 1.9 | 2.0 | 1.6 | 1.5 | 2.1 | 2.2 | 2.9 | 2.7 | 3.1 | 3.0 | 3.3 | 3.2 | 3.0 | 2.6 | 2.2 | 0.7 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 3.3 |
| 30-Aug | 0.5 | 0.7 | 0.9 | 1.0 | 0.8 | 0.5 | 0.4 | 0.8 | 1.2 | 1.7 | 1.8 | 2.2 | 2.1 | 2.2 | 1.9 | 1.7 | 1.9 | 1.2 | 0.5 | 0.6 | 0.5 | 0.6 | 0.9 | 0.8 | 2.2 |
| 31-Aug | 0.6 | 0.6 | 0.8 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 1.8 | 1.8 | 2.3 | 2.4 | 2.4 | 2.6 | 2.2 | 2.4 | 2.0 | 1.9 | 1.6 | 0.6 | 0.6 | 0.7 | 0.6 | 0.5 | 2.6 |
| | 2.5 | 2.5 | 3.0 | 3.2 | 3.2 | 2.9 | 3.1 | 2.9 | 3.4 | 3.8 | 4.8 | 4.8 | 4.3 | 4.5 | 4.7 | 5.0 | 4.7 | 4.2 | 4.0 | 3.6 | 3.8 | 3.2 | 2.6 | 2.8 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Vertical Wind Speed 75m (VW75) - km/h

## Mannix - August 2026

Maximum Value: 2.5 km/h on Aug 28 13:00

Maximum Daily Average: 1.4 km/h on Aug 28

Minimum Value: -2.3 km/h on Aug 2 12:00

Minimum Daily Average: -1.4 km/h on Aug 2

Maximum Diurnal Average: 0.5 km/h at hour 3

Minimum Diurnal Average: -0.1 km/h at hour 19

Monthly Average: 0.25 km/h

Percentiles: $P_1$ = -1.9 $P_{10}$ = -0.8 $Q_1$ = -0.3 Median = 0.2 $Q_3$ = 0.8 $P_{90}$ = 1.3 $P_{99}$ = 2.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | -0.2 | 0.1 | -0.1 | -0.5 | -0.4 | -0.1 | 0.8 | 0.5 | 0.5 | -0.2 | -0.6 | -0.2 | -0.1 | 0.1 | -0.2 | -0.1 | 0.2 | 0.9 |
| 2-Aug | -0.2 | -1.3 | -1.4 | -1.6 | -0.7 | -1.3 | -0.4 | -0.1 | -1.9 | -2.1 | -2.0 | -2.3 | -2.3 | -1.8 | -2.1 | -1.9 | -2.1 | -1.8 | -1.7 | -1.4 | -1.1 | -0.7 | -0.3 | -0.1 | -1.4 | -0.1 |
| 3-Aug | -0.1 | 0.4 | 0.2 | -0.2 | 0.6 | 0.8 | 0.5 | 0.8 | 0.5 | 0.1 | -0.2 | -0.4 | 0.1 | 0.4 | -0.4 | -0.8 | -1.1 | -1.1 | -0.8 | -0.6 | -0.3 | -0.3 | 0.3 | 1.1 | 0.0 | 1.1 |
| 4-Aug | 1.5 | 1.5 | 1.6 | 1.5 | 1.2 | 1.0 | 0.5 | 0.1 | 0.5 | 0.5 | 0.4 | 1.2 | 1.6 | 0.9 | 1.0 | 1.5 | -0.1 | -0.9 | 0.5 | 0.8 | 0.8 | -0.2 | 0.2 | 0.1 | 0.7 | 1.6 |
| 5-Aug | 0.4 | 0.9 | 0.9 | 0.8 | 1.0 | 0.9 | 0.8 | 1.3 | 0.5 | 0.7 | 1.2 | 0.8 | 0.6 | 0.3 | 0.7 | 0.3 | -1.3 | -0.9 | -0.7 | -0.7 | 0.0 | 0.9 | 1.1 | 0.8 | 0.5 | 1.3 |
| 6-Aug | 0.8 | 1.1 | 1.0 | 1.0 | 1.2 | 0.9 | 1.4 | 0.9 | 0.8 | 0.6 | -0.3 | 0.2 | 1.0 | -0.2 | -0.2 | -0.1 | 0.6 | 1.2 | 0.9 | 0.2 | 0.4 | 0.9 | 0.8 | 0.7 | 0.7 | 1.4 |
| 7-Aug | 0.5 | 0.3 | 0.8 | 0.8 | 0.9 | 0.8 | 0.9 | 0.8 | 0.6 | 1.1 | 1.1 | 1.2 | 0.7 | 0.2 | -0.6 | -0.9 | -0.1 | -0.7 | -0.6 | -0.9 | -0.6 | -0.4 | -0.2 | 0.3 | 0.2 | 1.2 |
| 8-Aug | 0.0 | -0.3 | -0.3 | 0.3 | -0.4 | 0.0 | -0.2 | -0.7 | -0.3 | -0.1 | -0.8 | -0.2 | -0.3 | -0.3 | 0.0 | -0.2 | -0.3 | -0.2 | -0.5 | 0.1 | -0.4 | -0.5 | -0.8 | -1.1 | -0.3 | 0.3 |
| 9-Aug | -0.9 | -0.2 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.2 | 0.4 | 0.2 | -0.5 | 0.3 | -0.1 | -0.2 | -0.4 | -0.7 | 0.3 | 0.4 | -0.4 | -0.4 | -0.9 | -0.7 | -0.2 | 0.0 | -0.2 | 0.4 |
| 10-Aug | 0.5 | 0.5 | 0.5 | 0.2 | 0.8 | 0.8 | 0.5 | 0.6 | 0.3 | 0.0 | -0.4 | -1.3 | 0.8 | -0.2 | -0.2 | -0.7 | 0.4 | -0.2 | -0.6 | -1.0 | -0.9 | -1.1 | -0.6 | -0.1 | -0.1 | 0.8 |
| 11-Aug | -0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.0 | -0.2 | -0.5 | -1.0 | -0.8 | -1.4 | -1.4 | -1.2 | -0.5 | -0.5 | -0.6 | -1.5 | -1.5 | -0.7 | -1.2 | -1.1 | -0.5 | 0.3 |
| 12-Aug | -0.4 | -0.5 | -0.4 | 0.1 | 0.0 | 0.1 | 0.6 | 0.1 | -0.2 | -0.5 | 0.3 | -0.6 | -0.5 | -0.4 | -0.6 | -1.3 | -1.2 | -1.2 | -0.7 | -0.6 | -0.6 | -0.7 | -0.6 | -0.8 | -0.4 | 0.6 |
| 13-Aug | -1.6 | -2.1 | 0.0 | -0.6 | -0.4 | -0.5 | -0.2 | 0.0 | -0.1 | 0.0 | -1.1 | -0.6 | -0.7 | -0.7 | -0.4 | -0.5 | -0.7 | -1.0 | -0.8 | -0.8 | -0.6 | -0.5 | -0.4 | -0.3 | -0.6 | 0.0 |
| 14-Aug | -0.3 | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.2 | -0.2 | 0.4 | 0.7 | 0.3 | 1.1 | -0.2 | 0.4 | 0.9 | 0.6 | 0.3 | 0.3 | 0.2 | 0.8 | 0.6 | 0.4 | 0.3 | 1.1 |
| 15-Aug | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.3 | 0.2 | 0.3 | 0.7 | 0.9 | 0.6 | 1.1 | 1.7 | 0.6 | 1.4 | 0.7 | 0.8 | 0.8 | 0.8 | 1.0 | 1.3 | 1.1 | 1.2 | 0.7 | 1.7 |
| 16-Aug | 1.2 | 1.1 | 1.0 | 0.4 | 0.0 | 0.0 | -0.1 | -0.1 | -0.8 | -1.0 | -1.0 | -0.4 | -1.1 | 0.0 | -1.2 | 0.1 | -0.2 | -0.9 | -0.7 | -0.4 | -0.5 | -0.3 | 0.1 | 0.4 | -0.2 | 1.2 |
| 17-Aug | 0.5 | 1.2 | 1.0 | 0.5 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.1 | 0.9 | 0.1 | 0.3 | 0.0 | 1.5 | 0.5 | 0.3 | -0.1 | 0.7 | 1.2 | 1.4 | 1.8 | 2.0 | 2.1 | 0.8 | 2.1 |
| 18-Aug | 2.1 | 2.2 | 2.3 | 1.7 | 1.8 | 1.6 | 0.8 | 1.0 | 0.2 | 0.4 | 0.7 | 0.4 | 0.6 | 0.8 | 1.5 | 1.5 | 1.3 | 1.6 | 1.2 | 1.0 | 0.8 | 1.1 | 0.8 | 0.3 | 1.2 | 2.3 |
| 19-Aug | 0.3 | 0.3 | 0.5 | 0.6 | 0.4 | 0.3 | 0.5 | 0.4 | 0.5 | 0.6 | 1.1 | 0.7 | 0.9 | 0.5 | 0.1 | -0.9 | 0.2 | 0.2 | -0.5 | -0.9 | -1.5 | -0.1 | 0.2 | 0.3 | 0.2 | 1.1 |
| 20-Aug | 0.0 | 0.4 | 0.3 | -0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.3 | -1.2 | -0.3 | -1.1 | -0.5 | -0.3 | -1.3 | -0.9 | -0.5 | -0.4 | -0.3 | -0.4 | -0.5 | -0.1 | -0.2 | 0.4 |
| 21-Aug | 0.2 | 0.4 | 0.4 | 0.3 | 0.1 | 0.4 | 0.4 | 0.7 | 0.5 | 0.6 | 0.2 | 0.5 | 0.2 | 0.3 | 0.3 | -0.1 | 0.7 | 1.1 | 0.8 | 0.6 | 1.1 | 2.0 | 2.0 | 1.9 | 0.7 | 2.0 |
| 22-Aug | 1.8 | 1.9 | 1.9 | 1.5 | 0.4 | 0.2 | -0.2 | 0.2 | 0.6 | 0.7 | 0.9 | 1.1 | 0.7 | 0.8 | 0.9 | 0.3 | 0.0 | -0.2 | -0.3 | 0.9 | 2.0 | 1.9 | 1.7 | 1.8 | 0.9 | 2.0 |
| 23-Aug | 1.8 | 1.4 | 1.5 | 1.3 | 1.4 | 1.1 | 0.9 | 1.4 | 0.9 | 1.0 | 0.6 | 0.5 | 0.5 | 0.2 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | 0.1 | -0.4 | 0.1 | 0.2 | -0.2 | 0.7 | 1.8 |
| 24-Aug | -0.2 | -0.4 | -0.8 | -0.7 | -0.6 | -0.9 | -0.6 | -0.2 | 0.3 | 0.6 | 1.2 | 0.6 | -0.8 | -0.8 | -0.8 | -0.5 | -1.0 | -0.8 | -0.7 | -0.7 | -0.6 | -0.3 | 0.0 | -0.4 | -0.4 | 1.2 |
| 25-Aug | -0.7 | -0.7 | -0.7 | -0.7 | -0.4 | -0.4 | -0.3 | 0.2 | 0.2 | 0.0 | -0.7 | 0.4 | 0.0 | 0.2 | 0.1 | 0.2 | 0.2 | 0.5 | 0.0 | -0.9 | -1.1 | 0.0 | 1.0 | 0.6 | -0.1 | 1.0 |
| 26-Aug | 0.8 | 0.2 | -0.4 | -0.4 | 0.4 | 0.2 | 0.5 | 0.4 | 1.0 | 0.6 | 0.9 | 1.7 | 0.9 | 1.3 | 1.9 | 0.7 | 1.2 | 0.8 | 0.2 | 0.8 | 1.2 | 1.0 | 1.7 | 1.1 | 0.8 | 1.9 |
| 27-Aug | 1.4 | 0.0 | 0.0 | -0.4 | -0.2 | -0.4 | -0.2 | 0.3 | -0.1 | 0.7 | 0.3 | 0.7 | 1.4 | 0.3 | 0.5 | -0.4 | -0.6 | -1.1 | -0.7 | -0.3 | -0.7 | -0.7 | -0.6 | -0.3 | 0.0 | 1.4 |
| 28-Aug | -0.4 | 0.0 | 0.0 | 1.8 | 0.8 | 0.4 | 1.6 | 1.5 | 1.8 | 1.3 | 1.6 | 1.6 | 2.5 | 1.8 | 2.3 | 2.1 | 1.6 | 2.1 | 1.9 | 2.1 | 1.4 | 1.8 | 1.6 | 1.6 | 1.4 | 2.5 |
| 29-Aug | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 | 0.8 | 1.3 | 1.3 | 1.8 | 1.7 | 1.7 | 1.6 | 1.4 | 1.0 | 1.2 | 0.5 | 0.8 | 0.6 | 1.0 | 2.1 | 1.4 | 1.2 | 2.1 |
| 30-Aug | 1.3 | 1.6 | 1.7 | 1.1 | 0.7 | 0.1 | 0.4 | 0.8 | 0.6 | 0.5 | -0.1 | 0.2 | -0.5 | -0.1 | 0.5 | 1.5 | 0.8 | 0.5 | 0.0 | 0.7 | 1.5 | 1.7 | 0.9 | 0.2 | 0.7 | 1.7 |
| 31-Aug | 0.0 | 0.0 | 0.5 | 0.4 | 0.4 | 0.0 | 0.0 | -0.1 | 0.2 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 1.0 | 0.8 | 0.7 | 0.9 | 1.0 | 0.9 | 0.4 | -0.5 | -0.5 | 0.0 | 0.3 | 1.0 |
| | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.3 | 0.4 | 0.4 | Diurnal Average | |
| | 2.1 | 2.2 | 2.3 | 1.8 | 1.8 | 1.6 | 1.6 | 1.5 | 1.8 | 1.3 | 1.6 | 1.8 | 2.5 | 1.8 | 2.3 | 2.1 | 1.6 | 2.1 | 1.9 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | Diurnal Maximum | |

## Summary of Hour Standard Deviations

## Mannix - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 5.0 km/h on Aug 27 20:00

Minimum Value: 0.2 km/h on Aug 21 03:00

Percentiles: $P_1$ = 0.3 $P_{10}$ = 0.5 $Q_1$ = 0.8 Median = 1.5 $Q_3$ = 2.4 $P_{90}$ = 3.0 $P_{99}$ = 4.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.9 | 0.7 | 1.0 | 1.0 | 1.4 | 1.7 | 2.3 | 2.8 | 3.7 | 3.7 | 3.2 | 2.6 | 1.8 | 2.3 | 3.1 | 3.4 | 1.6 | 1.4 | 3.7 |
| 2-Aug | 1.4 | 2.1 | 2.6 | 2.9 | 2.8 | 2.5 | 3.0 | 2.9 | 3.1 | 3.5 | 4.5 | 4.7 | 4.1 | 4.4 | 4.4 | 4.7 | 4.2 | 4.0 | 3.8 | 3.5 | 3.6 | 3.0 | 2.4 | 2.1 | 4.7 |
| 3-Aug | 2.4 | 2.5 | 2.5 | 1.7 | 1.3 | 1.3 | 1.2 | 1.5 | 2.2 | 3.0 | 3.2 | 3.0 | 3.2 | 3.1 | 2.7 | 2.4 | 2.3 | 2.1 | 1.6 | 0.9 | 0.9 | 1.3 | 0.7 | 0.4 | 3.2 |
| 4-Aug | 0.3 | 0.2 | 0.3 | 0.8 | 0.7 | 0.9 | 0.8 | 0.9 | 1.3 | 1.6 | 1.6 | 2.3 | 3.2 | 2.6 | 2.5 | 2.7 | 2.5 | 1.1 | 1.1 | 1.4 | 1.6 | 2.0 | 1.4 | 1.3 | 3.2 |
| 5-Aug | 1.0 | 1.1 | 0.9 | 1.4 | 1.3 | 1.7 | 2.4 | 2.9 | 3.1 | 2.7 | 3.2 | 3.5 | 3.7 | 3.0 | 2.3 | 2.3 | 2.4 | 3.1 | 1.6 | 2.1 | 2.1 | 1.6 | 2.0 | 2.4 | 3.7 |
| 6-Aug | 2.0 | 2.1 | 2.6 | 2.8 | 3.0 | 2.8 | 2.6 | 2.8 | 2.6 | 2.6 | 2.7 | 2.8 | 2.6 | 2.2 | 2.9 | 1.7 | 1.4 | 2.4 | 1.7 | 1.7 | 0.9 | 1.4 | 1.1 | 0.9 | 3.0 |
| 7-Aug | 1.2 | 0.9 | 0.6 | 0.7 | 0.5 | 0.6 | 0.7 | 0.9 | 1.4 | 1.9 | 2.8 | 2.7 | 2.8 | 2.7 | 3.0 | 2.1 | 2.1 | 1.4 | 1.8 | 1.6 | 1.1 | 0.9 | 1.2 | 0.6 | 3.0 |
| 8-Aug | 1.0 | 0.9 | 0.8 | 0.7 | 1.1 | 0.6 | 1.2 | 2.0 | 2.2 | 2.4 | 2.3 | 2.5 | 2.7 | 2.0 | 2.4 | 2.8 | 1.0 | 1.1 | 1.1 | 1.0 | 1.4 | 1.1 | 0.6 | 0.5 | 2.8 |
| 9-Aug | 0.6 | 0.6 | 0.3 | 0.4 | 0.2 | 0.6 | 0.6 | 0.8 | 1.2 | 1.7 | 2.2 | 2.3 | 2.6 | 2.2 | 2.4 | 2.7 | 2.1 | 2.3 | 1.4 | 1.1 | 1.0 | 0.3 | 0.6 | 0.4 | 2.7 |
| 10-Aug | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.5 | 0.6 | 1.0 | 0.9 | 1.7 | 2.0 | 2.7 | 2.8 | 2.9 | 3.2 | 2.7 | 3.0 | 2.1 | 1.7 | 0.8 | 0.8 | 1.0 | 0.5 | 0.5 | 3.2 |
| 11-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 1.4 | 2.4 | 3.3 | 3.1 | 3.3 | 3.3 | 3.6 | 3.4 | 3.2 | 3.2 | 2.4 | 2.1 | 1.5 | 1.7 | 1.8 | 1.4 | 3.6 |
| 12-Aug | 1.3 | 1.4 | 1.0 | 0.6 | 0.9 | 0.8 | 1.5 | 1.6 | 2.0 | 1.8 | 2.0 | 2.0 | 2.6 | 2.3 | 2.5 | 2.0 | 1.9 | 1.7 | 1.8 | 1.2 | 1.4 | 1.3 | 1.5 | 1.6 | 2.6 |
| 13-Aug | 1.9 | 1.9 | 1.7 | 1.6 | 1.5 | 1.5 | 1.2 | 1.3 | 1.4 | 2.4 | 2.5 | 2.7 | 2.8 | 2.8 | 2.5 | 2.0 | 1.8 | 1.6 | 1.4 | 1.1 | 0.7 | 0.4 | 0.6 | 0.7 | 2.8 |
| 14-Aug | 0.5 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.9 | 1.2 | 2.0 | 2.6 | 2.5 | 2.4 | 2.7 | 2.7 | 2.3 | 1.9 | 1.5 | 0.6 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 2.7 |
| 15-Aug | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 1.0 | 1.4 | 2.0 | 2.0 | 2.9 | 3.1 | 2.8 | 1.9 | 2.6 | 2.2 | 1.9 | 1.1 | 0.3 | 0.2 | 0.4 | 0.4 | 0.3 | 3.1 |
| 16-Aug | 0.5 | 0.5 | 0.7 | 1.2 | 0.7 | 0.9 | 1.8 | 2.3 | 3.4 | 3.6 | 3.3 | 3.5 | 3.6 | 3.9 | 2.8 | 2.9 | 2.4 | 1.7 | 1.6 | 0.7 | 0.9 | 0.7 | 0.4 | 0.2 | 3.9 |
| 17-Aug | 0.2 | 0.7 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 1.0 | 1.5 | 1.9 | 2.0 | 2.7 | 2.3 | 1.9 | 2.2 | 2.2 | 1.6 | 1.4 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 0.6 | 2.7 |
| 18-Aug | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 | 0.9 | 1.2 | 1.4 | 1.4 | 1.7 | 2.2 | 2.4 | 2.7 | 2.8 | 2.9 | 2.8 | 2.3 | 2.3 | 1.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.7 | 2.9 |
| 19-Aug | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.7 | 1.0 | 1.9 | 2.3 | 2.6 | 2.6 | 3.0 | 3.2 | 2.1 | 1.2 | 1.8 | 1.5 | 1.5 | 1.1 | 0.7 | 0.5 | 1.6 | 3.2 |
| 20-Aug | 1.0 | 0.6 | 0.7 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 | 1.5 | 2.5 | 2.9 | 3.1 | 2.9 | 2.9 | 2.9 | 2.3 | 2.2 | 1.7 | 1.1 | 0.8 | 0.8 | 0.5 | 0.8 | 3.1 |
| 21-Aug | 0.4 | 0.3 | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 0.9 | 1.0 | 1.7 | 1.8 | 2.2 | 2.3 | 2.8 | 3.1 | 2.7 | 2.1 | 1.5 | 1.3 | 1.2 | 1.0 | 0.8 | 0.7 | 1.0 | 3.1 |
| 22-Aug | 1.0 | 0.8 | 1.2 | 1.1 | 0.6 | 0.8 | 1.1 | 1.2 | 1.7 | 1.6 | 2.3 | 2.3 | 2.4 | 2.7 | 2.3 | 2.1 | 2.1 | 2.1 | 1.6 | 0.9 | 1.3 | 1.6 | 1.0 | 0.7 | 2.7 |
| 23-Aug | 0.9 | 0.7 | 0.8 | 0.6 | 0.9 | 0.7 | 0.7 | 1.0 | 1.2 | 1.7 | 1.3 | 1.7 | 1.4 | 1.3 | 0.8 | 0.7 | 0.7 | 1.2 | 1.0 | 1.2 | 1.5 | 1.2 | 0.7 | 0.7 | 1.7 |
| 24-Aug | 0.8 | 0.9 | 1.0 | 1.5 | 1.3 | 0.9 | 1.1 | 0.9 | 1.5 | 2.0 | 3.4 | 3.3 | 3.6 | 3.6 | 3.4 | 2.8 | 2.4 | 2.2 | 1.7 | 0.9 | 0.9 | 0.4 | 0.3 | 0.4 | 3.6 |
| 25-Aug | 0.4 | 0.3 | 0.4 | 0.6 | 0.3 | 0.3 | 0.5 | 0.8 | 1.6 | 2.0 | 2.2 | 2.7 | 2.7 | 2.5 | 2.7 | 2.5 | 1.9 | 1.5 | 1.3 | 0.9 | 0.8 | 2.0 | 1.9 | 2.2 | 2.7 |
| 26-Aug | 1.8 | 1.6 | 1.3 | 1.2 | 0.6 | 0.6 | 0.6 | 1.1 | 1.9 | 2.0 | 2.1 | 2.6 | 2.9 | 3.1 | 2.9 | 2.4 | 2.2 | 1.8 | 1.4 | 1.5 | 1.4 | 1.0 | 1.0 | 1.0 | 3.1 |
| 27-Aug | 1.0 | 1.0 | 0.7 | 1.4 | 1.0 | 1.5 | 1.3 | 1.4 | 1.8 | 2.6 | 2.9 | 2.7 | 2.8 | 2.7 | 2.0 | 1.6 | 2.1 | 3.9 | 4.8 | 5.0 | 3.3 | 2.6 | 2.4 | 2.2 | 5.0 |
| 28-Aug | 2.1 | 3.2 | 2.1 | 2.2 | 1.7 | 1.6 | 1.8 | 1.6 | 2.1 | 2.8 | 2.8 | 3.6 | 3.7 | 3.3 | 3.8 | 3.7 | 3.1 | 4.0 | 3.3 | 3.2 | 2.3 | 2.5 | 2.8 | 2.8 | 4.0 |
| 29-Aug | 1.3 | 1.8 | 2.1 | 1.9 | 1.9 | 1.4 | 1.5 | 2.3 | 2.4 | 3.0 | 3.0 | 3.4 | 3.3 | 3.6 | 3.2 | 3.1 | 2.7 | 2.2 | 0.7 | 0.3 | 0.5 | 0.6 | 0.5 | 0.8 | 3.6 |
| 30-Aug | 0.6 | 0.6 | 0.6 | 0.9 | 0.8 | 0.6 | 0.5 | 0.8 | 1.0 | 1.8 | 2.2 | 2.7 | 2.4 | 2.6 | 2.3 | 2.0 | 2.6 | 1.4 | 0.5 | 0.6 | 0.5 | 0.6 | 0.9 | 1.0 | 2.7 |
| 31-Aug | 0.7 | 0.7 | 0.9 | 1.3 | 1.0 | 0.7 | 0.8 | 0.7 | 2.1 | 1.9 | 2.7 | 3.0 | 2.7 | 3.0 | 2.7 | 2.7 | 2.2 | 2.0 | 1.3 | 0.3 | 0.9 | 0.7 | 0.5 | 0.8 | 3.0 |
| | 2.4 | 3.2 | 2.6 | 2.9 | 3.0 | 2.8 | 3.0 | 2.9 | 3.4 | 3.6 | 4.5 | 4.7 | 4.1 | 4.4 | 4.4 | 4.7 | 4.2 | 4.0 | 4.8 | 5.0 | 3.6 | 3.4 | 2.8 | 2.8 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Vertical Wind Speed 90m (VW90) - km/h

## Mannix - August 2026

Maximum Value: 1.6 km/h on Aug 26 15:00

Maximum Daily Average: 0.9 km/h on Aug 26

Minimum Value: -1.6 km/h on Aug 2 15:00

Minimum Daily Average: -0.9 km/h on Aug 2

Maximum Diurnal Average: 0.3 km/h at hour 8

Minimum Diurnal Average: 0.0 km/h at hour 19

Monthly Average: 0.12 km/h

Percentiles: $P_1$ = -1.3 $P_{10}$ = -0.4 $Q_1$ = -0.1 Median = 0.1 $Q_3$ = 0.4 $P_{90}$ = 0.8 $P_{99}$ = 1.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.5 | 0.5 | 0.3 | 0.1 | 0.3 | 0.7 | 0.8 | 0.2 | -0.1 | 0.2 | 0.1 | -0.1 | 0.0 | 0.0 | 1.1 | 0.9 | 0.5 | 0.0 | -0.7 | -0.3 | 0.0 | 0.4 | -0.1 | 0.1 | 0.2 | 1.1 |
| 2-Aug | UO | -0.8 | -0.9 | -1.0 | 0.0 | -1.0 | 0.4 | 0.7 | -1.3 | -1.4 | -1.3 | -1.4 | -1.5 | -1.1 | -1.6 | -1.3 | -1.3 | -1.2 | -1.2 | -0.9 | -0.8 | -0.6 | -0.2 | -0.2 | -0.9 | 0.7 |
| 3-Aug | 0.1 | 0.3 | 0.3 | -0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.2 | 0.3 | 0.0 | -0.3 | 0.0 | 0.5 | -0.4 | -0.7 | -0.8 | -0.8 | -0.3 | 0.0 | -0.1 | -0.1 | 0.5 | 0.5 | 0.0 | 0.5 |
| 4-Aug | 0.6 | 0.5 | 0.6 | 0.8 | 0.6 | 0.2 | 0.1 | -0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.7 | -0.2 | 0.1 | 0.5 | -0.1 | -0.4 | 0.2 | 0.3 | 0.1 | -0.2 | 0.2 | 0.1 | 0.2 | 0.8 |
| 5-Aug | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 | 0.2 | 0.9 | 0.6 | 0.2 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.1 | -0.4 | -0.2 | -0.6 | -0.4 | 0.1 | 0.4 | 0.5 | 0.3 | 0.2 | 0.9 |
| 6-Aug | 0.4 | 0.8 | 0.5 | 0.5 | 0.7 | 0.3 | 0.7 | 0.2 | 0.3 | 0.5 | -0.2 | 0.2 | 0.8 | -0.1 | -0.1 | -0.2 | 0.1 | 0.5 | 0.3 | 0.0 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.8 |
| 7-Aug | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 0.4 | 0.0 | 0.5 | 0.4 | 0.5 | -0.1 | 0.1 | -0.4 | -0.7 | -0.1 | -0.4 | -0.2 | -0.4 | -0.3 | -0.1 | -0.1 | 0.2 | 0.0 | 0.5 |
| 8-Aug | -0.1 | -0.3 | -0.4 | 0.0 | -0.4 | 0.0 | -0.2 | -0.2 | -0.4 | 0.1 | -0.4 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.2 | -0.3 | -0.5 | 0.1 | -0.3 | -0.3 | -0.3 | -0.4 | -0.2 | 0.1 |
| 9-Aug | -0.3 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.1 | 0.2 | 0.3 | -0.1 | -0.7 | 0.0 | 0.1 | 0.2 | -0.2 | -0.1 | 0.6 | 0.8 | 0.1 | 0.3 | -0.1 | -0.1 | 0.0 | 0.3 | 0.0 | 0.8 |
| 10-Aug | 0.4 | 0.5 | 0.2 | 0.1 | 0.5 | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | -0.3 | -1.1 | 0.8 | -0.3 | 0.0 | -0.4 | 1.0 | 0.6 | -0.1 | -0.2 | -0.1 | -0.2 | -0.1 | 0.0 | 0.1 | 1.0 |
| 11-Aug | -0.2 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.2 | 0.0 | -0.4 | -0.8 | -0.4 | -1.0 | -0.8 | -0.6 | 0.2 | 0.3 | 0.0 | -0.6 | -0.5 | 0.3 | -0.7 | -0.9 | -0.3 | 0.3 |
| 12-Aug | -0.2 | -0.3 | -0.4 | 0.3 | 0.1 | 0.0 | 0.6 | 0.2 | -0.1 | -0.3 | 0.6 | -0.1 | -0.1 | -0.1 | -0.2 | -0.4 | -0.6 | -0.6 | -0.3 | -0.2 | -0.3 | -0.3 | -0.1 | -0.3 | -0.1 | 0.6 |
| 13-Aug | -1.1 | -1.6 | 0.7 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 | -0.6 | -0.1 | -0.1 | -0.2 | 0.4 | 0.3 | -0.1 | -0.3 | -0.2 | -0.2 | 0.0 | -0.1 | -0.3 | -0.1 | -0.2 | 0.7 |
| 14-Aug | -0.3 | -0.2 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | -0.2 | 0.6 | 0.6 | 0.5 | 1.2 | 0.6 | 0.4 | 0.3 | 0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 1.2 |
| 15-Aug | 0.0 | 0.0 | -0.1 | -0.1 | -0.2 | -0.2 | -0.1 | -0.3 | 0.0 | 0.2 | 0.8 | 0.0 | 0.3 | 1.1 | -0.1 | 0.7 | 0.0 | -0.2 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 1.1 |
| 16-Aug | 0.2 | 0.1 | 0.2 | 0.1 | -0.1 | -0.2 | 0.1 | 0.4 | -0.2 | -0.2 | -0.7 | 0.0 | -0.6 | 0.3 | -1.0 | 0.2 | -0.1 | -0.5 | -0.1 | -0.1 | -0.3 | -0.3 | 0.1 | 0.0 | -0.1 | 0.4 |
| 17-Aug | 0.1 | 0.3 | 0.3 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | -0.2 | 0.7 | -0.2 | 0.4 | 0.0 | 1.3 | 0.3 | 0.3 | 0.0 | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 0.9 | 0.3 | 1.3 |
| 18-Aug | 1.2 | 1.2 | 1.3 | 0.8 | 1.0 | 1.1 | 0.9 | 0.6 | 0.4 | 0.6 | 0.2 | -0.2 | -0.3 | 0.0 | 0.8 | 0.3 | 0.4 | 0.8 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.5 | 1.3 |
| 19-Aug | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 0.6 | 0.2 | 0.5 | 0.5 | 0.4 | -0.6 | 0.0 | 0.1 | 0.0 | 0.1 | -0.8 | -0.1 | 0.0 | 0.3 | 0.1 | 0.6 |
| 20-Aug | -0.2 | -0.1 | 0.1 | -0.1 | 0.0 | -0.1 | -0.1 | 0.1 | 0.0 | 0.0 | 0.4 | -1.1 | -0.4 | -1.0 | -0.4 | -0.1 | -0.9 | -0.4 | 0.1 | 0.0 | 0.0 | -0.1 | -0.3 | -0.1 | -0.2 | 0.4 |
| 21-Aug | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.3 | 0.1 | 0.2 | 0.1 | 0.6 | 0.1 | -0.1 | 0.2 | -0.1 | 0.5 | 0.9 | 1.0 | 1.1 | 1.2 | 1.2 | 0.7 | 0.9 | 0.4 | 1.2 |
| 22-Aug | 0.8 | 0.6 | 1.2 | 1.2 | 1.4 | 1.4 | 0.6 | 0.8 | 0.6 | 0.5 | 0.8 | 0.7 | 0.4 | 0.4 | 0.6 | 0.0 | 0.0 | 0.4 | 0.3 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 1.4 |
| 23-Aug | 1.0 | 0.7 | 0.6 | 0.5 | 0.7 | 0.7 | 0.8 | 0.9 | 0.5 | 0.3 | 0.6 | 0.3 | 0.4 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -0.2 | 0.2 | 0.0 | -0.2 | 0.3 | 1.0 |
| 24-Aug | -0.3 | -0.4 | -0.7 | -0.5 | -0.7 | -1.0 | -0.6 | -0.4 | 0.0 | 0.2 | 1.0 | 0.5 | -0.6 | -0.6 | -0.5 | -0.1 | -0.7 | -0.1 | 0.0 | -0.3 | -0.4 | -0.2 | -0.1 | -0.2 | -0.3 | 1.0 |
| 25-Aug | -0.2 | -0.3 | -0.3 | -0.4 | -0.3 | -0.4 | -0.2 | 0.3 | 0.2 | 0.0 | -0.8 | 0.1 | -0.2 | 0.0 | -0.1 | -0.1 | 0.4 | 0.6 | 0.2 | -0.2 | -0.3 | 0.4 | 1.0 | 0.6 | 0.0 | 1.0 |
| 26-Aug | 0.8 | 0.1 | -0.5 | 0.0 | 0.9 | 1.1 | 1.1 | 0.6 | 0.7 | 0.6 | 1.0 | 1.5 | 0.3 | 1.1 | 1.6 | 0.8 | 1.1 | 0.9 | 0.9 | 1.3 | 1.5 | 1.1 | 1.3 | 1.1 | 0.9 | 1.6 |
| 27-Aug | 1.2 | 0.8 | 1.0 | 0.5 | 0.8 | 0.3 | 0.3 | 0.5 | 0.0 | 0.9 | 0.6 | 0.4 | 1.1 | 0.4 | 0.3 | -0.2 | -0.2 | -0.1 | 0.1 | 0.1 | -0.9 | -1.0 | -0.9 | -0.6 | 0.2 | 1.2 |
| 28-Aug | -0.5 | -0.2 | 0.9 | 1.1 | 0.1 | 0.3 | 1.0 | 0.8 | 1.0 | 0.2 | 0.4 | 0.2 | 1.1 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.2 | 0.4 | 0.1 | 0.5 | 0.3 | 0.2 | 0.4 | 1.1 |
| 29-Aug | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.0 | 0.4 | 0.1 | 0.4 | 0.5 | 0.6 | 0.2 | 0.1 | -0.3 | 0.2 | 0.0 | 0.3 | 0.1 | 0.2 | 1.0 | 0.4 | 0.2 | 1.0 |
| 30-Aug | 0.3 | 0.5 | 0.8 | 1.1 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | -0.2 | 0.2 | -0.6 | -0.2 | 0.4 | 1.4 | 0.8 | 0.5 | -0.4 | 0.3 | 0.6 | 0.9 | 0.3 | 0.0 | 0.4 | 1.4 |
| 31-Aug | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | -0.2 | -0.2 | -0.2 | 0.1 | 0.0 | 0.0 | -0.4 | -0.2 | -0.4 | 0.4 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.0 | -0.1 | -0.2 | 0.1 | 0.0 | 0.4 |
| | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 1.2 | 1.2 | 1.3 | 1.2 | 1.4 | 1.4 | 1.1 | 0.9 | 1.0 | 0.9 | 1.0 | 1.5 | 1.1 | 1.2 | 1.6 | 1.4 | 1.1 | 0.9 | 1.0 | 1.3 | 1.5 | 1.2 | 1.3 | 1.1 | Diurnal Maximum | |

UO - Unstable Operation

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 4.4 km/h on Aug 2 12:00

Minimum Value: 0.1 km/h on Aug 21 03:00

Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.4 $Q_1$ = 0.7 Median = 1.5 $Q_3$ = 2.4 $P_{90}$ = 3.0 $P_{99}$ = 3.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.5 | 0.8 | 0.6 | 0.6 | 0.9 | 1.0 | 1.6 | 2.2 | 2.9 | 3.1 | 3.0 | 2.9 | 2.5 | 1.6 | 2.2 | 3.0 | 3.0 | 1.5 | 1.4 | 3.1 |
| 2-Aug | UO | 1.8 | 2.4 | 2.8 | 2.7 | 2.4 | 3.1 | 3.0 | 3.0 | 3.2 | 4.1 | 4.4 | 4.0 | 4.2 | 4.0 | 4.4 | 4.1 | 3.7 | 3.6 | 3.2 | 3.2 | 2.8 | 2.4 | 2.2 | 4.4 |
| 3-Aug | 2.4 | 2.6 | 2.5 | 1.6 | 1.2 | 1.1 | 1.2 | 1.4 | 2.1 | 3.0 | 3.2 | 2.8 | 3.1 | 3.1 | 2.6 | 2.4 | 2.4 | 2.1 | 1.6 | 0.8 | 0.6 | 0.9 | 0.5 | 0.2 | 3.2 |
| 4-Aug | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.8 | 0.6 | 0.7 | 1.2 | 1.4 | 1.4 | 2.4 | 3.3 | 2.7 | 2.6 | 2.6 | 2.2 | 0.9 | 1.1 | 1.3 | 1.5 | 1.9 | 1.4 | 1.4 | 3.3 |
| 5-Aug | 1.0 | 1.0 | 0.9 | 1.3 | 1.2 | 1.5 | 2.3 | 2.8 | 3.2 | 2.7 | 3.1 | 3.4 | 3.7 | 2.9 | 2.2 | 2.2 | 2.4 | 2.9 | 1.5 | 2.0 | 1.8 | 1.5 | 2.1 | 2.4 | 3.7 |
| 6-Aug | 1.9 | 2.2 | 2.5 | 2.6 | 2.9 | 2.7 | 2.6 | 2.8 | 2.5 | 2.6 | 2.6 | 2.7 | 2.6 | 2.2 | 2.9 | 1.6 | 1.5 | 2.3 | 1.7 | 1.7 | 0.9 | 1.2 | 1.0 | 0.9 | 2.9 |
| 7-Aug | 1.2 | 0.9 | 0.5 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.3 | 1.8 | 2.8 | 2.8 | 2.9 | 2.6 | 3.0 | 2.0 | 2.2 | 1.5 | 1.7 | 1.5 | 1.0 | 0.9 | 1.2 | 0.7 | 3.0 |
| 8-Aug | 0.9 | 1.0 | 0.8 | 0.5 | 1.2 | 0.6 | 1.3 | 2.0 | 2.1 | 2.5 | 2.3 | 2.4 | 2.5 | 1.9 | 2.3 | 2.6 | 0.9 | 1.0 | 0.9 | 1.0 | 1.4 | 1.1 | 0.6 | 0.3 | 2.6 |
| 9-Aug | 0.4 | 0.8 | 0.4 | 0.4 | 0.3 | 0.6 | 0.6 | 0.7 | 1.2 | 1.5 | 1.9 | 2.2 | 2.5 | 2.2 | 2.3 | 2.7 | 2.1 | 2.4 | 1.3 | 1.0 | 0.8 | 0.2 | 0.4 | 0.3 | 2.7 |
| 10-Aug | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 1.6 | 1.9 | 2.5 | 2.7 | 2.9 | 3.2 | 2.7 | 3.0 | 2.2 | 1.6 | 0.6 | 0.6 | 0.8 | 0.4 | 0.5 | 3.2 |
| 11-Aug | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 1.1 | 2.3 | 3.1 | 3.1 | 3.3 | 3.4 | 3.7 | 3.4 | 3.2 | 3.2 | 2.4 | 2.0 | 1.3 | 1.5 | 1.8 | 1.4 | 3.7 |
| 12-Aug | 1.2 | 1.5 | 1.1 | 0.7 | 0.9 | 0.8 | 1.5 | 1.7 | 1.9 | 1.8 | 2.0 | 2.0 | 2.5 | 2.4 | 2.5 | 1.9 | 1.8 | 1.6 | 1.8 | 1.2 | 1.4 | 1.3 | 1.6 | 1.7 | 2.5 |
| 13-Aug | 2.0 | 2.0 | 1.7 | 1.6 | 1.4 | 1.4 | 1.2 | 1.2 | 1.3 | 2.4 | 2.6 | 2.9 | 2.8 | 2.8 | 2.5 | 1.9 | 1.8 | 1.6 | 1.3 | 0.8 | 0.4 | 0.3 | 0.7 | 0.8 | 2.9 |
| 14-Aug | 0.5 | 0.3 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.8 | 1.1 | 1.8 | 2.4 | 2.4 | 2.3 | 2.5 | 2.6 | 2.2 | 2.0 | 1.4 | 0.5 | 0.3 | 0.2 | 0.4 | 0.4 | 0.3 | 2.6 |
| 15-Aug | 0.4 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.8 | 1.4 | 1.9 | 2.1 | 2.8 | 3.1 | 2.9 | 1.9 | 2.5 | 2.3 | 2.0 | 1.1 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | 3.1 |
| 16-Aug | 0.4 | 0.4 | 0.6 | 1.3 | 0.6 | 1.0 | 1.8 | 2.4 | 3.3 | 3.7 | 3.2 | 3.3 | 3.7 | 3.8 | 2.9 | 2.9 | 2.4 | 1.6 | 1.5 | 0.6 | 0.8 | 0.6 | 0.4 | 0.2 | 3.8 |
| 17-Aug | 0.2 | 0.4 | 0.3 | 0.2 | 0.4 | 0.4 | 0.4 | 0.9 | 1.4 | 1.8 | 1.9 | 2.6 | 2.1 | 1.8 | 2.1 | 2.2 | 1.6 | 1.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.7 | 0.6 | 2.6 |
| 18-Aug | 0.7 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 1.0 | 1.4 | 1.4 | 1.6 | 2.2 | 2.4 | 2.6 | 2.9 | 2.8 | 2.8 | 2.4 | 2.3 | 1.8 | 0.6 | 0.7 | 0.5 | 0.6 | 0.8 | 2.9 |
| 19-Aug | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.4 | 0.5 | 0.7 | 1.1 | 1.9 | 2.3 | 2.7 | 2.6 | 2.9 | 3.2 | 2.0 | 1.1 | 1.7 | 1.6 | 1.3 | 1.0 | 0.6 | 0.5 | 1.4 | 3.2 |
| 20-Aug | 0.8 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 1.5 | 2.5 | 2.8 | 2.9 | 2.9 | 2.8 | 2.9 | 2.3 | 2.3 | 1.6 | 1.0 | 0.8 | 0.8 | 0.5 | 0.7 | 2.9 |
| 21-Aug | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.5 | 0.3 | 0.7 | 1.0 | 1.5 | 1.8 | 2.2 | 2.4 | 2.7 | 3.0 | 2.8 | 2.2 | 1.6 | 1.2 | 1.1 | 0.8 | 0.7 | 0.8 | 1.0 | 3.0 |
| 22-Aug | 1.1 | 0.8 | 1.0 | 0.9 | 0.6 | 0.7 | 0.7 | 1.0 | 1.6 | 1.5 | 2.4 | 2.4 | 2.4 | 2.7 | 2.4 | 2.2 | 2.1 | 2.0 | 1.3 | 0.8 | 1.2 | 1.3 | 1.1 | 0.8 | 2.7 |
| 23-Aug | 0.8 | 0.7 | 0.8 | 0.5 | 0.8 | 0.6 | 0.5 | 1.0 | 1.1 | 1.6 | 1.2 | 1.7 | 1.4 | 1.2 | 0.8 | 0.6 | 0.6 | 1.2 | 1.0 | 1.1 | 1.3 | 1.2 | 0.6 | 0.6 | 1.7 |
| 24-Aug | 0.8 | 0.8 | 0.8 | 1.3 | 1.4 | 0.7 | 1.0 | 0.9 | 1.4 | 1.9 | 3.4 | 3.3 | 3.5 | 3.7 | 3.4 | 2.8 | 2.4 | 2.3 | 1.6 | 1.0 | 1.0 | 0.3 | 0.2 | 0.4 | 3.7 |
| 25-Aug | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.8 | 1.4 | 2.0 | 1.9 | 2.5 | 2.6 | 2.4 | 2.5 | 2.3 | 1.8 | 1.5 | 1.2 | 0.8 | 0.7 | 1.8 | 1.8 | 1.9 | 2.6 |
| 26-Aug | 1.8 | 1.7 | 1.0 | 0.9 | 0.6 | 0.7 | 0.6 | 1.2 | 1.7 | 2.0 | 2.3 | 2.8 | 3.0 | 3.1 | 3.1 | 2.5 | 2.4 | 1.8 | 1.3 | 1.4 | 1.2 | 0.8 | 0.8 | 0.9 | 3.1 |
| 27-Aug | 0.8 | 0.8 | 0.6 | 0.7 | 0.5 | 1.0 | 1.0 | 1.3 | 1.7 | 2.6 | 2.8 | 2.6 | 2.8 | 2.7 | 2.0 | 1.5 | 1.4 | 2.6 | 3.5 | 3.6 | 3.1 | 2.7 | 2.4 | 2.4 | 3.6 |
| 28-Aug | 2.0 | 3.0 | 2.1 | 2.0 | 1.7 | 1.5 | 1.6 | 1.7 | 2.0 | 2.8 | 2.8 | 3.6 | 3.7 | 3.4 | 3.9 | 3.8 | 3.1 | 4.0 | 3.5 | 3.2 | 2.3 | 2.6 | 2.7 | 2.6 | 4.0 |
| 29-Aug | 1.3 | 1.6 | 2.1 | 1.9 | 1.8 | 1.4 | 1.5 | 2.4 | 2.4 | 3.0 | 3.1 | 3.5 | 3.5 | 3.7 | 3.5 | 3.1 | 2.7 | 2.1 | 0.7 | 0.3 | 0.5 | 0.5 | 0.5 | 0.7 | 3.7 |
| 30-Aug | 0.5 | 0.7 | 0.7 | 0.8 | 0.7 | 0.4 | 0.3 | 0.8 | 0.9 | 1.8 | 2.1 | 2.5 | 2.3 | 2.4 | 2.2 | 2.0 | 2.4 | 1.4 | 0.4 | 0.6 | 0.4 | 0.6 | 1.0 | 0.8 | 2.5 |
| 31-Aug | 0.6 | 0.8 | 0.8 | 1.2 | 1.0 | 0.6 | 0.7 | 0.7 | 2.0 | 1.8 | 2.6 | 2.8 | 2.6 | 2.9 | 2.8 | 2.7 | 2.3 | 2.1 | 1.1 | 0.2 | 0.9 | 0.7 | 0.5 | 0.6 | 2.9 |
| | 2.4 | 3.0 | 2.5 | 2.8 | 2.9 | 2.7 | 3.1 | 3.0 | 3.3 | 3.7 | 4.1 | 4.4 | 4.0 | 4.2 | 4.0 | 4.4 | 4.1 | 4.0 | 3.6 | 3.6 | 3.2 | 3.0 | 2.7 | 2.6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS06
## PATRICIA MCINNES
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PATRICIA McINNES (AMS06)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 707 | 36 | 37 | 99.87 | - | - | 14.6 | 0 | 2.9 | 0 |
| TRS (ppb) Average | 712 | 31 | 32 | 99.87 | 2.5 | 0 | 2.1 | 0 | 0.7 | 0 |
| THC (ppm) Average | 701 | 36 | 43 | 99.06 | - | - | 4 | - | 2.6 | - |
| NMHC(ppm) Average | 701 | 36 | 43 | 99.06 | - | - | 0.106 | - | 0.005 | - |
| CH4(ppm) Average | 701 | 36 | 43 | 99.06 | - | - | 4 | - | 2.6 | - |
| O3 (ppb) Average | 708 | 35 | 36 | 99.87 | - | - | 62.7 | 0 | 27.1 | - |
| NO2 (ppb) Average | 707 | 37 | 37 | 100 | - | - | 15.7 | 0 | 7.3 | - |
| NO (ppb) Average | 707 | 37 | 37 | 100 | - | - | 11.5 | - | 2.8 | - |
| NOX (ppb) Average | 707 | 37 | 37 | 100 | - | - | 23.5 | - | 10.1 | - |
| NH3 (ppb) Average | 622 | 44 | 122 | 89.52 | - | - | 0 | 0 | 0 | - |
| PM2.5 (ug/m3) Average | 742 | 2 | 2 | 100 | - | - | 97.2 | 1 | 27.9 | 0 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 29.9 | - | 21.3 | - |
| Relative Humidity (%) Average | 735 | 0 | 9 | 98.79 | - | - | 100 | - | 86.6 | - |
| Wind Speed 10 m (km/h) Average | 744 | 0 | 0 | 100 | - | - | 30 | - | 19 | - |
| Wind Direction 10 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PATRICIA McINNES (AMS06)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 707 | 0.67 | 1.6 | - | 0 | 0 | 0.1 | 0.2 | 0.5 | 1.6 | 14.6 |
| TRS (ppb) Average | 712 | 0.32 | 0.3 | - | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.6 | 2.1 |
| THC (ppm) Average | 701 | 2.17 | 0.2 | - | 1.9 | 2 | 2 | 2.1 | 2.2 | 2.4 | 4 |
| NMHC(ppm) Average | 701 | 0 | 0.004 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.106 |
| CH4(ppm) Average | 701 | 2.16 | 0.2 | - | 1.9 | 2 | 2 | 2.1 | 2.2 | 2.4 | 4 |
| O3 (ppb) Average | 708 | 20.47 | 9.6 | - | 1 | 8.5 | 13.2 | 19.6 | 26.7 | 33.9 | 62.7 |
| NO2 (ppb) Average | 707 | 2.38 | 2.3 | - | 0 | 0.1 | 0.6 | 1.8 | 3.4 | 5.5 | 15.7 |
| NO (ppb) Average | 707 | 0.75 | 1.3 | - | 0 | 0 | 0.1 | 0.3 | 0.8 | 1.7 | 11.5 |
| NOX (ppb) Average | 707 | 3.13 | 3.3 | - | 0 | 0.3 | 0.8 | 2.2 | 4.3 | 7.2 | 23.5 |
| NH3 (ppb) Average | 622 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM2.5 (ug/m3) Average | 742 | 10.37 | 9.6 | - | 0.7 | 2.9 | 4.4 | 7.4 | 12.8 | 20.5 | 97.2 |
| Temperature 2 m (C) Average | 744 | 16.86 | 5.1 | - | 6.1 | 10.3 | 12.9 | 16.3 | 20.6 | 24 | 29.9 |
| Relative Humidity (%) Average | 735 | 69.83 | 18.7 | - | 28.1 | 44.2 | 54.2 | 72.5 | 86 | 93.9 | 100 |
| Wind Speed 10 m (km/h) Average | 744 | 9.2 | 6 | - | 0 | 3 | 5 | 8 | 13 | 17 | 30 |
| Wind Direction 10 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PATRICIA MCINNES (AMS06)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| O3, NH3,NMHC,SO2,TRS | 27 Aug 2026 15:00 | 27 Aug 2026 15:00 | 1 | Maintenance - sample manifold cleaned |
| THC/NMHC/CH4 | 17 Aug 2026 10:00 | 17 Aug 2026 15:00 | 6 | Maintenance - replaced the actuator |
| NH3 | 01 Aug 2026 03:00 | 31 Aug 2026 04:00 | 77 | Stabilization after daily QA check |
| Relative Humidity | 02 Aug 2026 02:00 | 02 Aug 2026 04:00 | 3 | Sensor operated out of range |
| Relative Humidity | 02 Aug 2026 10:00 | 02 Aug 2026 10:00 | 1 | Sensor operated out of range |
| Relative Humidity | 04 Aug 2026 03:00 | 04 Aug 2026 04:00 | 2 | Sensor operated out of range |
| Relative Humidity | 15 Aug 2026 04:00 | 15 Aug 2026 06:00 | 3 | Sensor operated out of range |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Patricia McInnes - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 14.6 ppb on Aug 25 10:00

Maximum Daily Average: 2.9 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 1 03:00

Minimum Daily Average: 0.0 ppb on Aug 6

Maximum Diurnal Average: 1.4 ppb at hour 15

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 0.67 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.5 $P_{90}$ = 1.6 $P_{99}$ = 9.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.8 | 0.2 | 0.8 |
| 2-Aug | 1.3 | 2.5 | 1.9 | 0.2 | 0.3 | Z | 0.2 | 0.4 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 6.6 | 3.2 | 1.3 | 0.9 | 0.1 | 2.2 | 0.4 | 0.0 | 0.0 | 0.0 | 1.0 | 6.6 |
| 3-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 3.1 | 0.2 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1.9 | 4.5 | 1.8 | 0.1 | 0.2 | 0.2 | 0.1 | 0.6 | 4.5 |
| 4-Aug | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 1.2 | 1.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 1.5 |
| 5-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 | 0.5 | 1.3 | 0.5 | 0.1 | 0.0 | 0.0 | 0.2 | 1.3 |
| 6-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 2.6 | 3.7 | 3.9 | 4.9 | 1.4 | 0.4 | 0.2 | 0.0 | 0.0 | 0.8 | 4.9 |
| 8-Aug | 0.0 | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.4 | 1.2 | 1.8 | 2.2 | 2.7 | 1.2 | 0.7 | 1.5 | 2.0 | 1.6 | 6.0 | 10.1 | 11.1 | 3.9 | 3.1 | 1.1 | 0.6 | 0.3 | 2.3 | 11.1 |
| 9-Aug | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 1.0 | 1.4 | 2.6 | 6.6 | 14.1 | 9.5 | 1.9 | 2.5 | 2.1 | 2.4 | 1.8 | 0.5 | 0.2 | 2.1 | 14.1 |
| 10-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.7 | 0.6 | 2.7 | 1.5 | 1.8 | 3.4 | 2.8 | 2.6 | 3.0 | 2.1 | 0.9 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 1.1 | 3.4 |
| 11-Aug | 0.1 | 0.1 | Z | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 3.6 | 4.7 | 1.1 | 1.2 | 1.4 | 1.8 | 1.4 | 1.4 | 1.1 | 0.7 | 0.5 | 0.1 | 0.1 | 0.2 | 0.2 | 0.9 | 4.7 |
| 12-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 1.0 | 0.6 | 0.4 | 0.5 | 1.3 | 0.5 | 0.3 | 1.2 | 1.2 | 0.6 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 | 0.1 | 0.4 | 1.3 |
| 13-Aug | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.6 | 1.2 | 1.1 | 1.5 | 1.9 | 1.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.9 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.3 | C | C | C | C | C | 2.7 | 1.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 2.7 |
| 15-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 |
| 16-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.4 | 0.9 | 0.8 | 0.6 | 1.2 | 1.0 | 2.1 | 2.5 | 1.7 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.6 | 2.5 |
| 17-Aug | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.3 | 0.5 | 0.6 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.7 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 |
| 18-Aug | 0.0 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 |
| 20-Aug | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.4 | 0.3 | 0.6 | 4.3 | 9.5 | 10.1 | 3.0 | 1.8 | 2.8 | 2.4 | 1.7 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 1.7 | 10.1 |
| 21-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.5 | 0.2 | 0.1 | 0.4 | 0.3 | 0.2 | 0.5 |
| 22-Aug | 0.3 | Z | 0.1 | 0.0 | 0.2 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.8 | 1.2 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.5 | 1.2 |
| 23-Aug | 0.2 | 0.3 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.4 |
| 24-Aug | 0.3 | 0.1 | 0.0 | Z | 0.3 | 0.1 | 0.0 | 0.4 | 0.4 | 0.3 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.9 | 1.7 | 0.8 | 0.3 | 0.2 | 0.0 | 0.1 | 0.0 | 0.3 | 1.7 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 1.1 | 4.4 | 14.6 | 5.3 | 1.6 | 4.8 | 8.1 | 7.3 | 5.3 | 4.3 | 2.9 | 2.3 | 1.9 | 0.8 | 0.6 | 0.3 | 0.2 | 2.9 | 14.6 |
| 26-Aug | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.5 | 0.6 | 0.8 | 0.6 | 0.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.4 | 0.8 |
| 27-Aug | Z | 0.4 | 0.6 | 0.4 | 0.3 | 0.3 | 0.6 | 0.5 | 0.6 | 1.0 | 1.5 | 1.3 | 1.4 | 1.1 | M | 1.0 | 0.7 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.6 | 0.4 | 0.7 | 1.5 |
| 28-Aug | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 |
| 29-Aug | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 |
| 30-Aug | 0.1 | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.4 | 0.8 | 1.0 | 0.5 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.5 | 0.4 | 0.2 | 0.3 | 1.0 |
| 31-Aug | 0.2 | 0.4 | 0.5 | 0.3 | Z | 0.5 | 0.3 | 0.5 | 2.1 | 8.1 | 14.2 | 0.7 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 1.3 | 14.2 |
| | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.7 | 1.3 | 1.3 | 0.7 | 0.9 | 1.2 | 1.4 | 1.4 | 1.3 | 1.1 | 1.2 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | Diurnal Average | |
| | 1.3 | 2.5 | 1.9 | 0.4 | 0.3 | 0.6 | 1.2 | 1.2 | 4.4 | 14.6 | 14.2 | 4.3 | 9.5 | 10.1 | 7.3 | 14.1 | 9.5 | 10.1 | 11.1 | 3.9 | 3.1 | 1.8 | 0.6 | 0.8 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

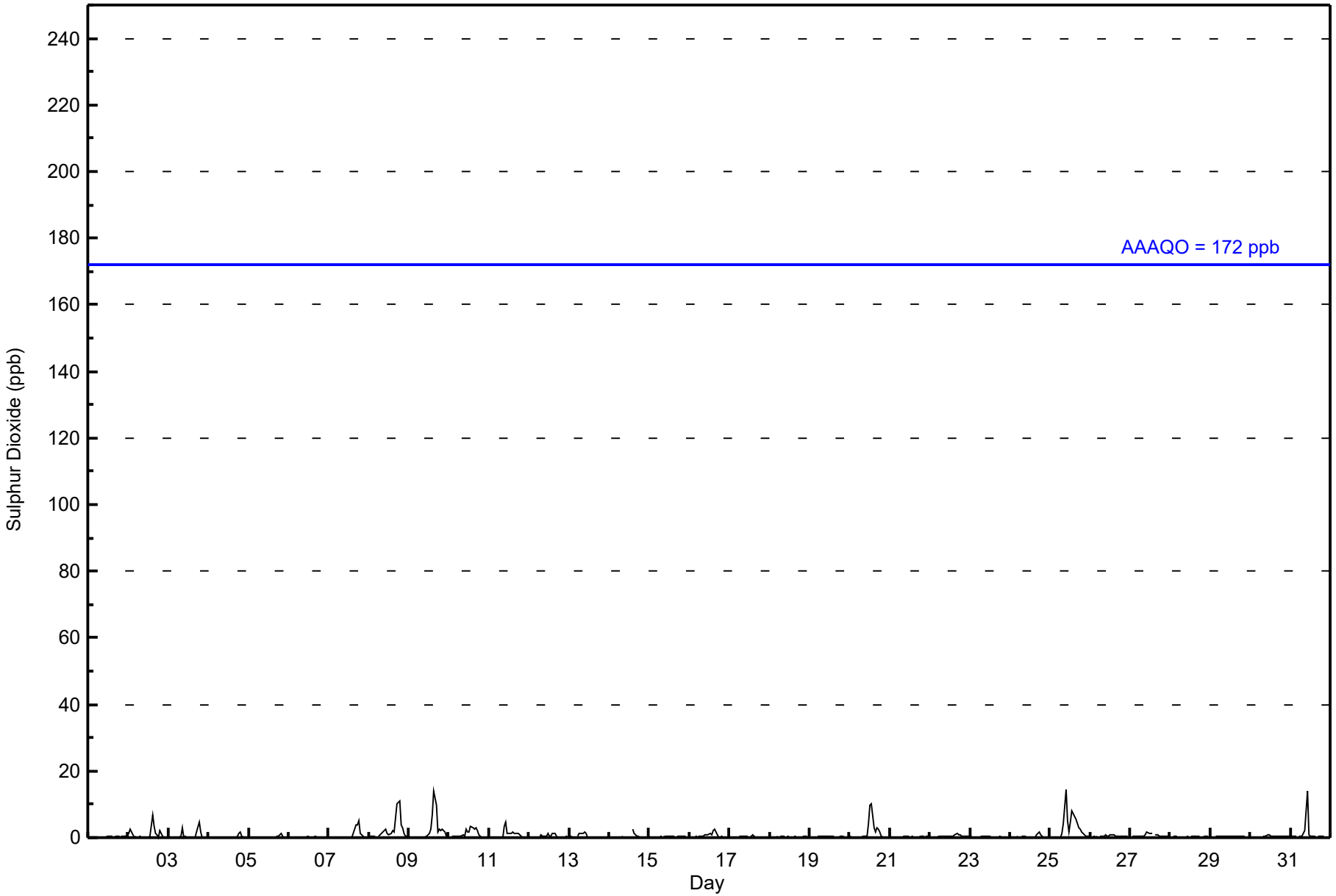
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 703 | 99.43 | 99.43 |
| 11 - 20 | 4 | 0.57 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Patricia McInnes - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 60 | 25 | 4 | 7 | 6 | 36 | 46 | 30 | 40 | 55 | 62 | 59 | 35 | 62 | 90 | 86 | 703 |
| 11 - 20 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 61 | 27 | 4 | 7 | 6 | 36 | 46 | 30 | 40 | 55 | 62 | 59 | 35 | 62 | 90 | 87 | 707 |

Total Number of Valid Hours: 707

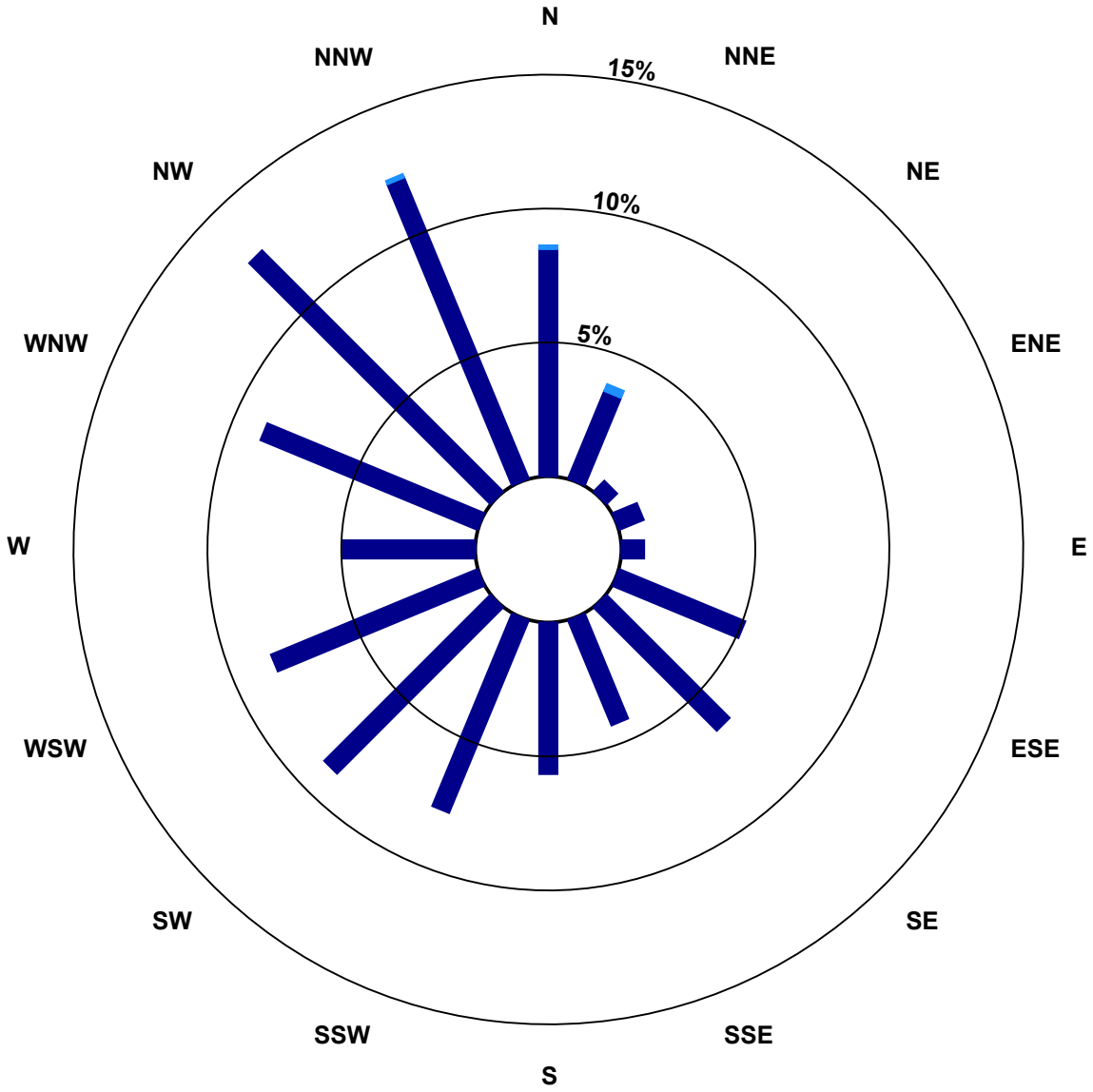
Total Number of Hours: 744

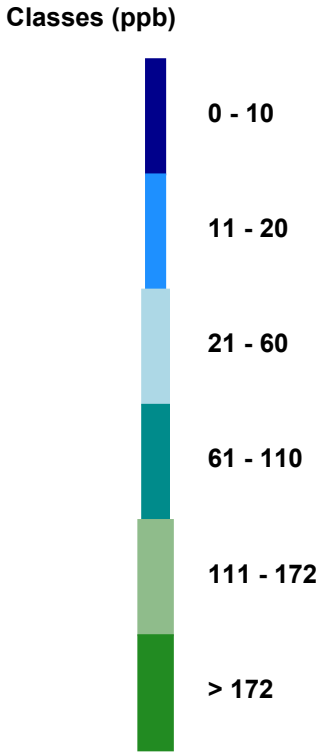
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Patricia McInnes



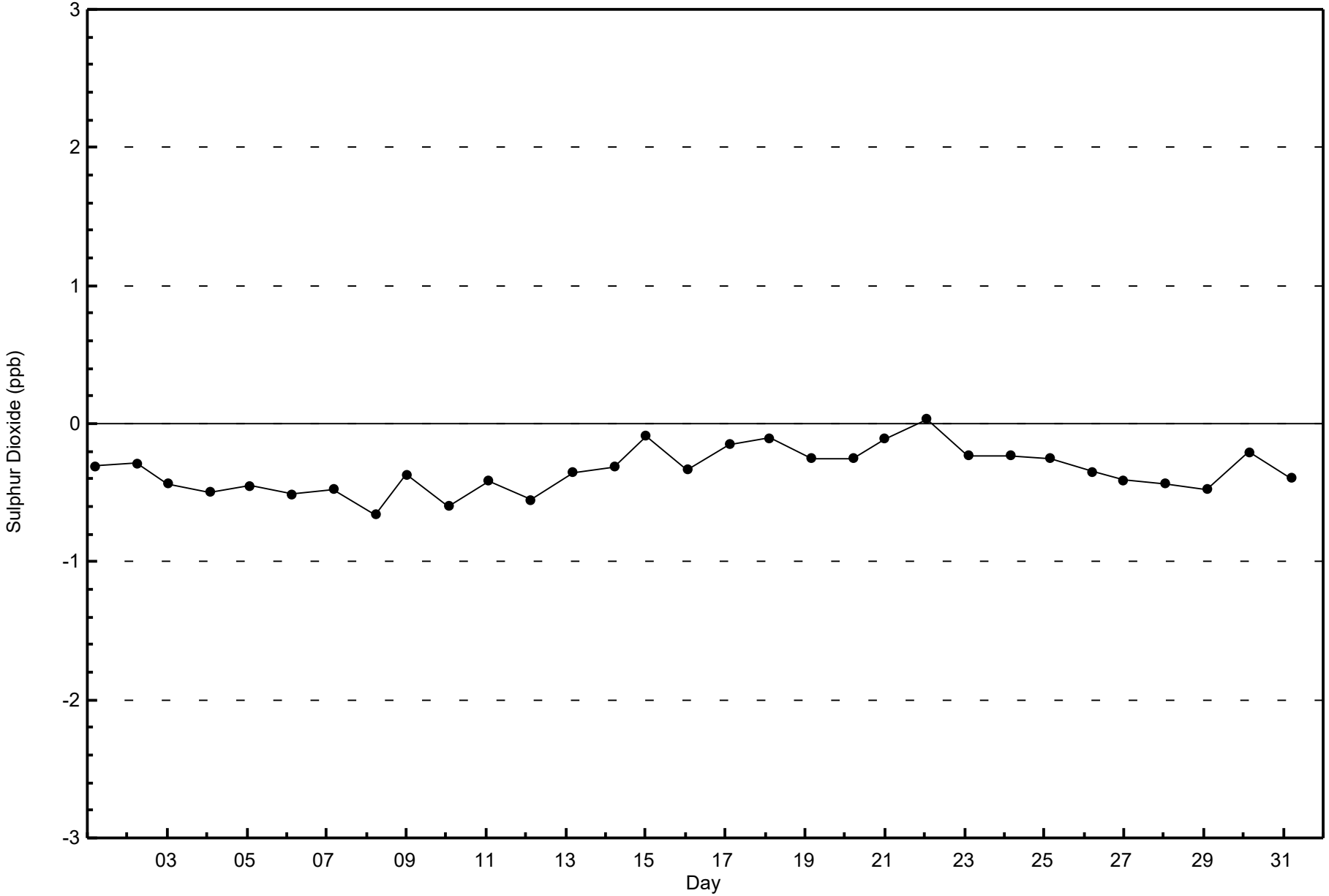

Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Patricia McInnes - August 2026**

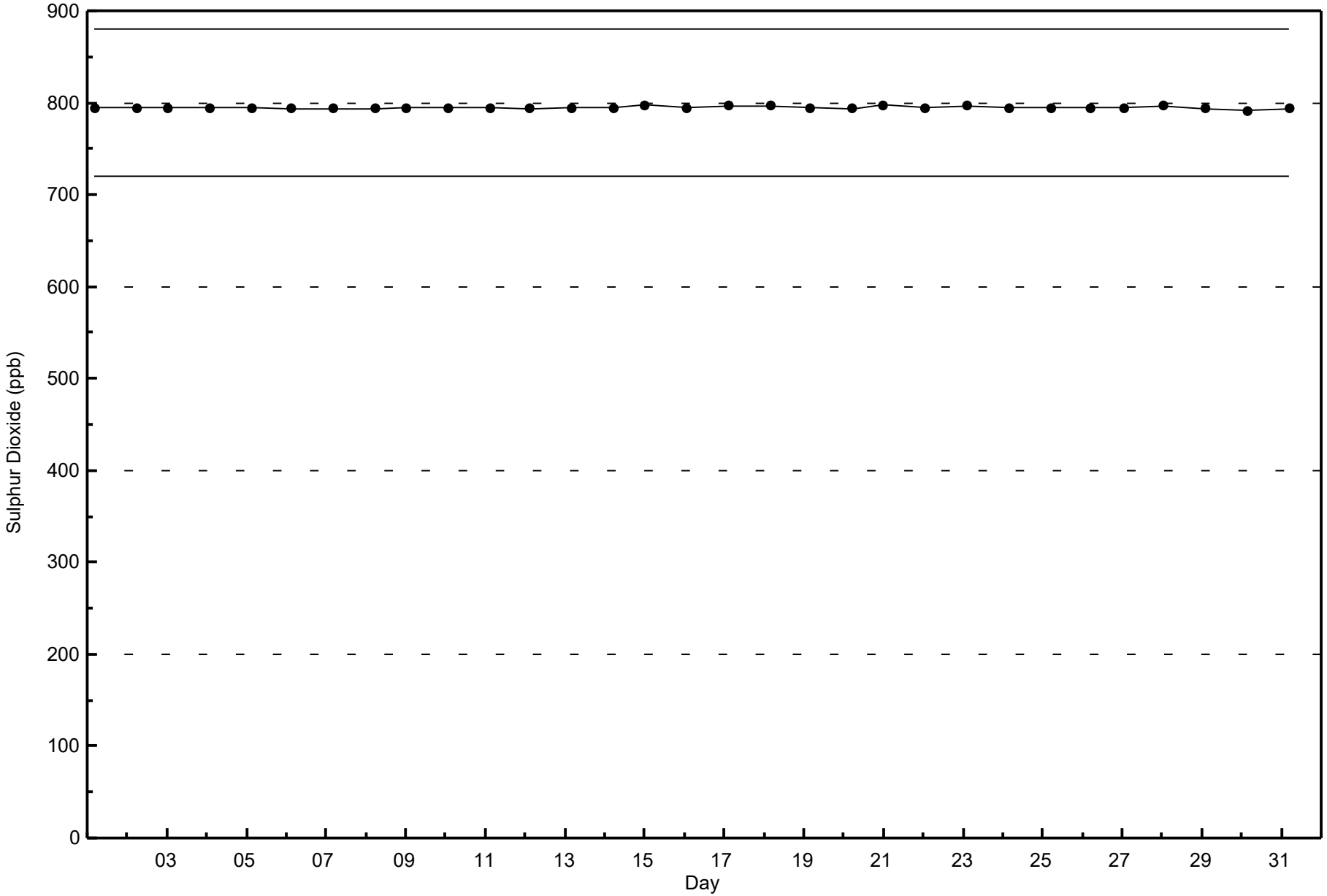


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Patricia McInnes - August 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 2.5 ppb on Aug 2 02:30 Maximum Daily Average: 0.7 ppb on Aug 25

Minimum Value: 0.1 ppb on Aug 13 17:30 Minimum Daily Average: 0.2 ppb on Aug 15

Maximum Diurnal Average: 0.4 ppb at hour 24 Minimum Diurnal Average: 0.2 ppb at hour 13

Monthly Average: 0.32 ppb Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.2 $Q_3$ = 0.3 $P_{90}$ = 0.6 $P_{99}$ = 1.5

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1424 |
| Periods of Invalid Data: | 64 |
| Periods of Calibration: | 62 |
| Percent Operational Time: | 99.9 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.6 | 0.3 | 0.6 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | | |
| 2-Aug | Z | 1.1 | 2.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 1.3 | 0.6 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.2 | 0.2 | 0.2 | 0.5 | 2.5 |
| | SP | 0.9 | 0.9 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 1.2 | 0.6 | 0.3 | 0.5 | 0.2 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | | |
| 3-Aug | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.4 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | | |
| 4-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 5-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 |
| | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 0.3 | 0.7 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 6-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 7-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 1.5 | 1.2 | 0.4 | 0.4 | 0.4 | 1.1 | 0.3 | 0.8 | 1.5 | 0.4 | 1.6 |
| | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 1.6 | 0.4 | 0.4 | 0.4 | 1.0 | 0.6 | 0.4 | 1.2 | 1.1 | | |
| 8-Aug | Z | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.5 | 0.5 | 1.1 | 0.6 | 0.6 | 0.7 | 0.6 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 1.1 |
| | SP | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 0.7 | 0.8 | 0.7 | 0.8 | 0.6 | 0.6 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.5 | | |
| 9-Aug | 0.6 | Z | 0.7 | 1.7 | 2.0 | 1.6 | 1.2 | 0.8 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.9 | 1.3 | 0.7 | 2.0 |
| | 0.9 | SP | 0.9 | 1.9 | 1.9 | 1.5 | 1.3 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 1.0 | 1.3 | | |
| 10-Aug | 1.5 | 0.9 | Z | 0.9 | 0.8 | 0.7 | 1.1 | 0.4 | 0.4 | 0.3 | 0.4 | 0.2 | 0.3 | 0.7 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 1.5 |
| | 1.1 | 0.7 | SP | 0.9 | 0.7 | 0.9 | 0.7 | 0.4 | 0.5 | 0.5 | 0.4 | 0.2 | 0.4 | 0.7 | 0.3 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.9 | | |
| 11-Aug | 1.1 | 0.8 | 0.7 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.7 | 1.1 | 0.3 | 0.3 | 0.4 | 1.1 |
| | 1.0 | 0.6 | 0.4 | SP | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.9 | 0.4 | 0.3 | 0.2 | 0.3 | 0.4 | 0.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.8 | 0.4 | 0.5 | 0.2 | | |
| 12-Aug | 0.4 | 0.5 | 0.6 | 0.4 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.5 | 0.2 | 0.4 | 0.4 | 0.4 | 1.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 1.1 | 0.4 | 0.4 | 1.3 |
| | 0.4 | 0.6 | 0.4 | 0.3 | SP | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 | 0.2 | 0.4 | 0.2 | 0.3 | 0.7 | 0.4 | 0.1 | 0.3 | 1.3 | 0.4 | | |
| 13-Aug | 0.7 | 0.5 | 0.3 | 0.2 | 0.3 | Z | 0.6 | 0.7 | 0.5 | 0.6 | 0.7 | 1.0 | 0.4 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.7 | 1.6 | 0.5 | 1.7 |
| | 0.7 | 0.3 | 0.3 | 0.2 | 0.3 | SP | 0.9 | 0.6 | 0.7 | 0.8 | 0.9 | 1.2 | 0.4 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 1.2 | 1.7 | | |
| 14-Aug | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.7 | 0.8 | 0.7 | 0.6 | 0.3 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.9 |
| | SP | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.2 | 0.3 | 0.9 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | | |
| 15-Aug | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Patricia McInnes - August 2026

| Day | 00:30<br>01:00 | 01:30<br>02:00 | 02:30<br>03:00 | 03:30<br>04:00 | 04:30<br>05:00 | 05:30<br>06:00 | 06:30<br>07:00 | 07:30<br>08:00 | 08:30<br>09:00 | 09:30<br>10:00 | 10:30<br>11:00 | 11:30<br>12:00 | 12:30<br>13:00 | 13:30<br>14:00 | 14:30<br>15:00 | 15:30<br>16:00 | 16:30<br>17:00 | 17:30<br>18:00 | 18:30<br>19:00 | 19:30<br>20:00 | 20:30<br>21:00 | 21:30<br>22:00 | 22:30<br>23:00 | 23:30<br>24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16-Aug | 0.1<br>0.1 | 0.1<br>0.2 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.2<br>0.2 | 0.3<br>0.3 | 0.8<br>0.4 | 0.4<br>0.3 | 0.3<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.2 | 0.1<br>0.2 | 0.3<br>0.3 | 0.3<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.3<br>0.3 | 0.3<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.2 | 0.8 |
| 17-Aug | 0.3<br>0.3 | 0.3<br>0.2 | 0.3<br>0.3 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2 | 0.3 |
| 18-Aug | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2 | 0.3 |
| 19-Aug | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.3<br>0.4 | 0.8<br>0.7 | 0.8<br>0.8 | 0.8<br>0.6 | 0.6<br>0.5 | 0.3 | 0.8 |
| 20-Aug | Z<br>SP | 0.3<br>0.2 | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.2 | 0.5<br>0.4 | 0.3<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.3<br>0.3 | 0.7<br>1.2 | 0.8<br>0.6 | 0.6<br>0.4 | 0.3<br>0.3 | 0.4<br>0.3 | 0.3<br>0.4 | 0.4<br>0.4 | 0.5<br>0.8 | 0.4<br>0.7 | 0.8<br>1.0 | 1.1<br>1.1 | 0.8<br>0.7 | 0.5<br>0.7 | 0.5 | 1.2 |
| 21-Aug | 0.3<br>0.3 | Z<br>SP | 0.5<br>0.7 | 0.8<br>0.8 | 0.9<br>0.9 | 0.9<br>0.8 | 0.6<br>0.5 | 0.4<br>0.3 | 0.3<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.1 | 0.2<br>0.1 | 0.2<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.3<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.3 | 0.9 |
| 22-Aug | 0.2<br>0.2 | 0.2<br>0.2 | Z<br>SP | 0.2<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.3<br>0.3 | 0.2<br>0.3 | 0.3<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.3<br>0.3 | 0.3<br>0.3 | 0.2 | 0.3 |
| 23-Aug | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.3 | Z<br>SP | 0.4<br>0.4 | 0.4<br>0.4 | 0.4<br>0.4 | 0.4<br>0.4 | 0.4<br>0.4 | 0.4<br>0.3 | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.2 | 0.2<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.3 | 0.4 |
| 24-Aug | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.3<br>0.9 | 0.9<br>0.7 | 1.1<br>0.4 | 0.2<br>0.4 | 0.7<br>0.9 | 1.1<br>0.9 | 0.7<br>0.4 | 0.5<br>0.5 | 0.3 | 1.1 |
| 25-Aug | 0.5<br>0.6 | 0.3<br>0.6 | 0.6<br>1.1 | 1.0<br>0.9 | 0.8<br>1.0 | Z<br>SP | 0.7<br>0.7 | 0.9<br>1.0 | 2.0<br>1.6 | 2.1<br>2.1 | 1.3<br>0.7 | 0.6<br>0.6 | 0.7<br>0.4 | 0.5<br>0.7 | 0.6<br>0.6 | 0.5<br>0.5 | 0.4<br>0.4 | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.4 | 0.5<br>0.4 | 0.5<br>0.6 | 0.6<br>0.8 | 0.5<br>0.2 | 0.7 | 2.1 |
| 26-Aug | Z<br>SP | 0.7<br>0.4 | 0.3<br>0.3 | 0.3<br>0.3 | 0.4<br>0.4 | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.3<br>0.5 | 0.6<br>0.5 | 0.3 | 0.7 |
| 27-Aug | 0.3<br>0.3 | Z<br>SP | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.3<br>0.3 | 0.2<br>0.3 | M<br>M | 0.2<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2 | 0.3 |
| 28-Aug | 0.2<br>0.2 | 0.2<br>0.2 | Z<br>SP | 0.3<br>0.3 | 0.3<br>0.3 | 0.3<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.3<br>0.3 | 0.4<br>0.4 | 0.4<br>0.5 | 0.4<br>0.4 | 0.4<br>0.3 | 0.3<br>0.3 | 0.2<br>0.2 | 0.2 | 0.5 |
| 29-Aug | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2 | 0.2 |
| 30-Aug | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.3<br>0.2 | Z<br>SP | 0.3<br>0.3 | 0.3<br>0.2 | 0.3<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2 | 0.3 |
| 31-Aug | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.1 | 0.2<br>0.2 | 0.2<br>0.2 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.4<br>0.5 | 0.6<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.2<br>0.1 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.3 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2 | 0.6 |
| | 0.3<br>1.5 | 0.3<br>1.1 | 0.4<br>2.5 | 0.4<br>1.9 | 0.4<br>2.0 | 0.4<br>1.6 | 0.3<br>1.3 | 0.3<br>1.0 | 0.3<br>2.0 | 0.4<br>2.1 | 0.3<br>1.3 | 0.3<br>1.2 | 0.2<br>0.8 | 0.3<br>0.7 | 0.3<br>1.3 | 0.3<br>1.6 | 0.3<br>1.2 | 0.3<br>0.9 | 0.3<br>1.1 | 0.3<br>1.0 | 0.3<br>1.1 | 0.3<br>1.1 | 0.4<br>1.3 | 0.4<br>1.7 | Diurnal Average<br>Diurnal Maximum | |

Z - zerospan M - Maintenance SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Reduced Sulphur (TRS) - ppb

## Patricia McInnes - August 2026

Maximum Value: 2.1 ppb on Aug 25 10:00

Maximum Daily Average: 0.7 ppb on Aug 25

Minimum Value: 0.1 ppb on Aug 13 18:00

Minimum Daily Average: 0.2 ppb on Aug 15

Maximum Diurnal Average: 0.4 ppb at hour 24

Minimum Diurnal Average: 0.2 ppb at hour 13

Monthly Average: 0.32 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.2 $Q_3$ = 0.4 $P_{90}$ = 0.6 $P_{99}$ = 1.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 712 |
| Hours of Missing Data: | 32 |
| Hours of Calibration: | 31 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.6 | 0.3 | 0.6 |
| 2-Aug | Z | 1.0 | 1.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 1.2 | 0.6 | 0.3 | 0.5 | 0.3 | 0.4 | 0.5 | 0.2 | 0.2 | 0.2 | 0.5 | 1.7 |
| 3-Aug | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.4 |
| 4-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| 5-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.3 | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| 6-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 7-Aug | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 1.6 | 0.8 | 0.4 | 0.4 | 0.7 | 0.9 | 0.4 | 1.0 | 1.3 | 0.4 | 1.6 |
| 8-Aug | Z | 0.5 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.6 | 0.6 | 0.9 | 0.7 | 0.7 | 0.6 | 0.6 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.9 |
| 9-Aug | 0.8 | Z | 0.8 | 1.8 | 2.0 | 1.5 | 1.3 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 1.0 | 1.3 | 0.7 | 2.0 |
| 10-Aug | 1.3 | 0.8 | Z | 0.9 | 0.7 | 0.8 | 0.9 | 0.4 | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.7 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.7 | 0.5 | 1.3 |
| 11-Aug | 1.0 | 0.7 | 0.5 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.7 | 0.8 | 0.4 | 0.3 | 0.4 | 1.0 |
| 12-Aug | 0.4 | 0.5 | 0.5 | 0.4 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.4 | 0.3 | 0.4 | 0.7 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 1.2 | 0.4 | 0.4 | 1.2 |
| 13-Aug | 0.7 | 0.4 | 0.3 | 0.2 | 0.3 | Z | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 1.1 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1.0 | 1.6 | 0.5 | 1.6 |
| 14-Aug | Z | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.8 | 0.9 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.9 |
| 15-Aug | 0.2 | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 16-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 |
| 17-Aug | 0.3 | 0.3 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 18-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.5 | 0.3 | 0.8 |
| 20-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.9 | 0.7 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 0.9 | 1.1 | 0.8 | 0.6 | 0.5 | 1.1 |
| 21-Aug | 0.3 | Z | 0.6 | 0.8 | 0.9 | 0.8 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.9 |
| 22-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 23-Aug | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 |
| 24-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.6 | 0.8 | 0.7 | 0.3 | 0.8 | 1.0 | 0.5 | 0.5 | 0.3 | 1.0 |
| 25-Aug | 0.6 | 0.5 | 0.8 | 1.0 | 0.9 | Z | 0.7 | 1.0 | 1.8 | 2.1 | 1.0 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.4 | 0.7 | 2.1 |
| 26-Aug | Z | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.3 | 0.5 |
| 27-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | M | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 28-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.5 |
| 29-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 30-Aug | 0.2 | 0.2 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 31-Aug | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 |
| | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | Diurnal Average | |
| | 1.3 | 1.0 | 1.7 | 1.8 | 2.0 | 1.5 | 1.3 | 1.0 | 1.8 | 2.1 | 1.0 | 1.1 | 0.7 | 0.7 | 1.2 | 1.6 | 0.8 | 0.8 | 0.7 | 0.7 | 0.9 | 1.1 | 1.2 | 1.6 | Diurnal Maximum | |

Z - zerospan M - Maintenance

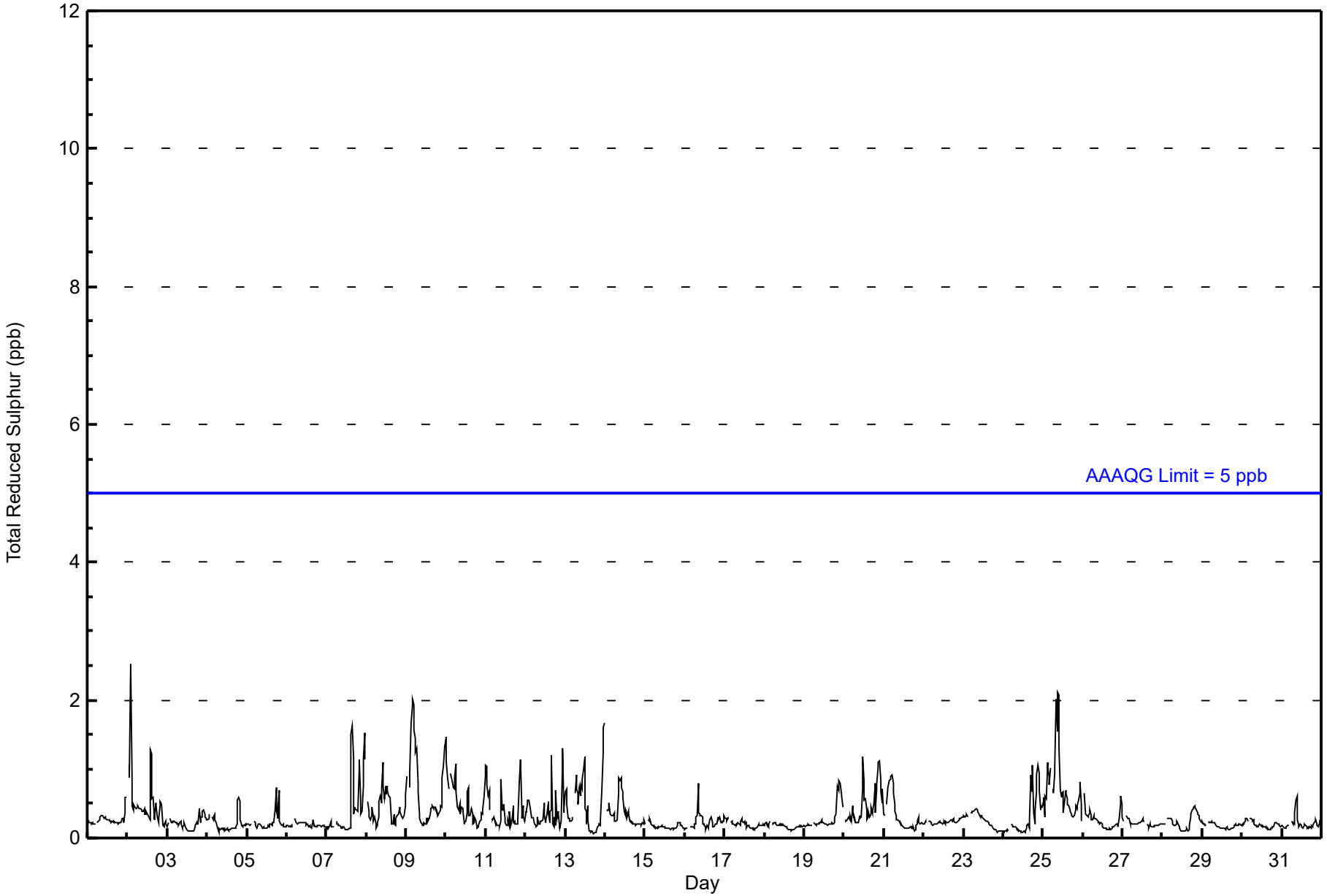
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 712 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 712

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Patricia McInnes - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 63 | 28 | 4 | 7 | 6 | 35 | 46 | 29 | 39 | 57 | 61 | 60 | 35 | 67 | 86 | 89 | 712 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 63 | 28 | 4 | 7 | 6 | 35 | 46 | 29 | 39 | 57 | 61 | 60 | 35 | 67 | 86 | 89 | 712 |

Total Number of Valid Hours: 712

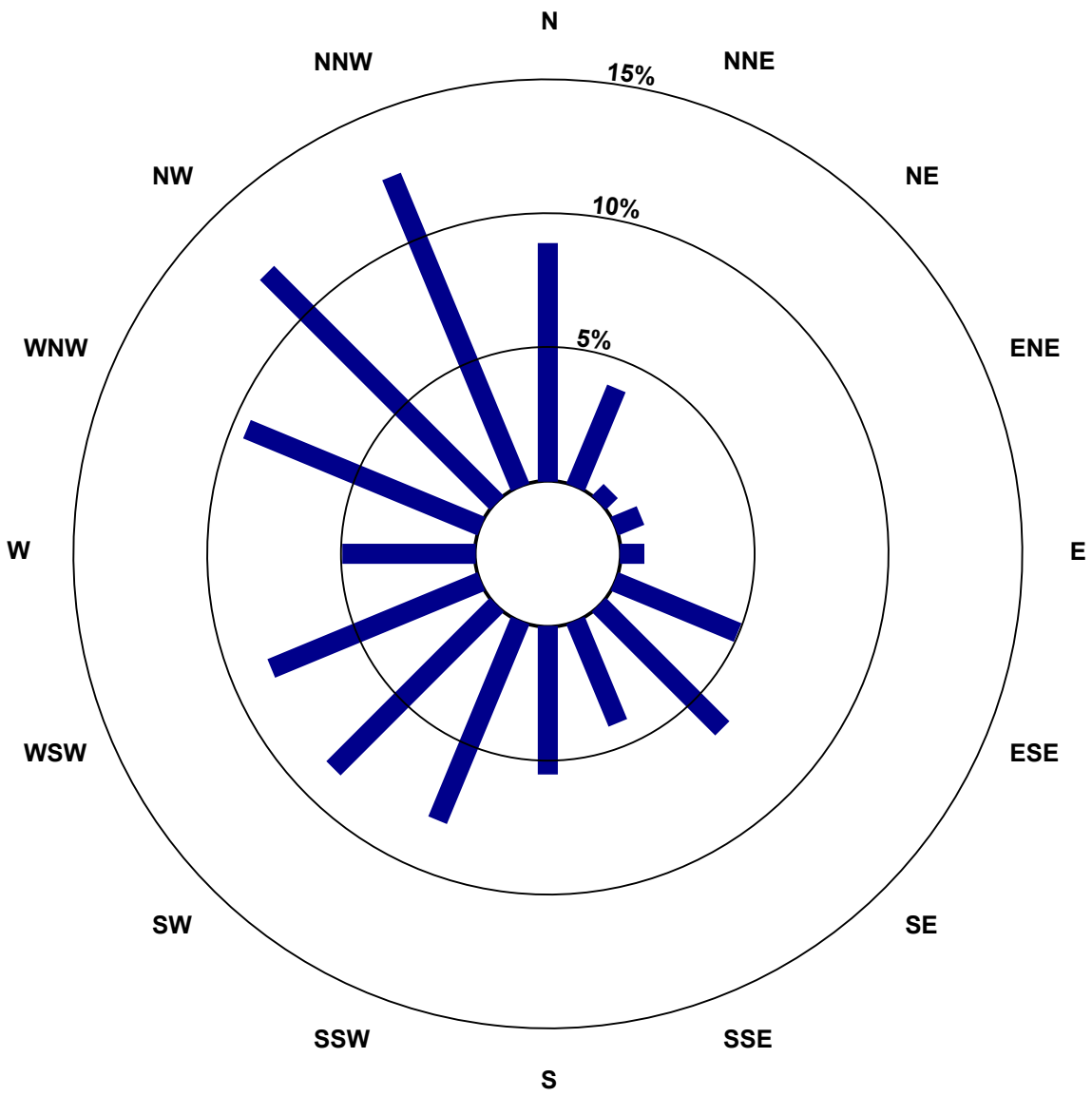
Total Number of Hours: 744

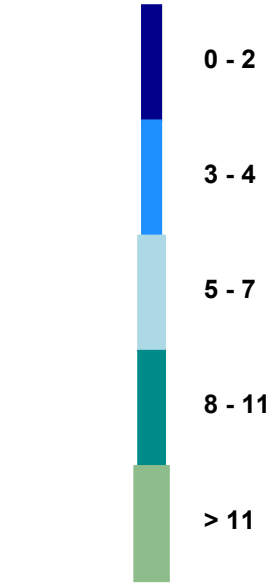
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Reduced Sulphur (TRS) - ppb**

**Patricia McInnes**



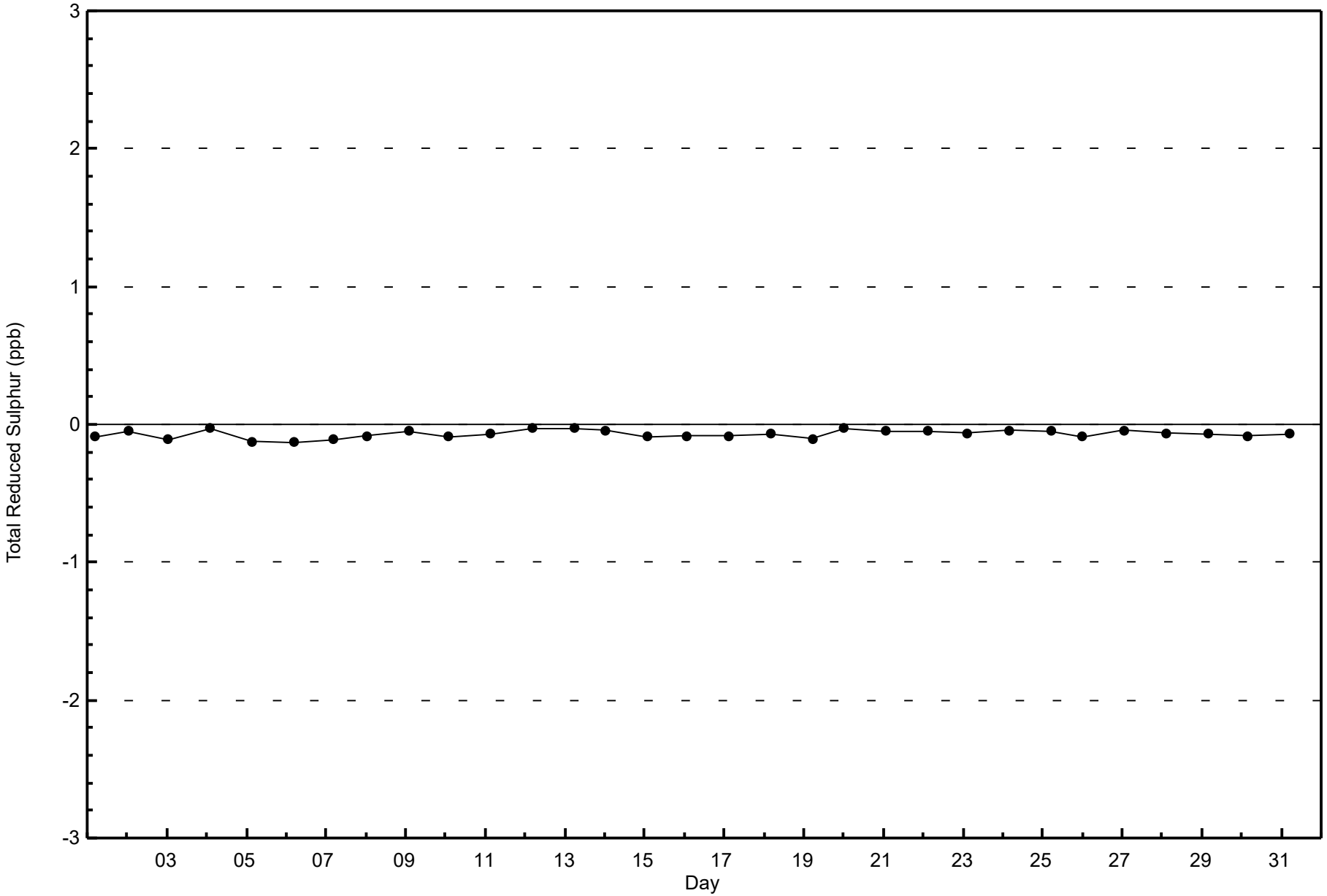

**Total Number of Valid Hours: 712**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Patricia McInnes - August 2026**

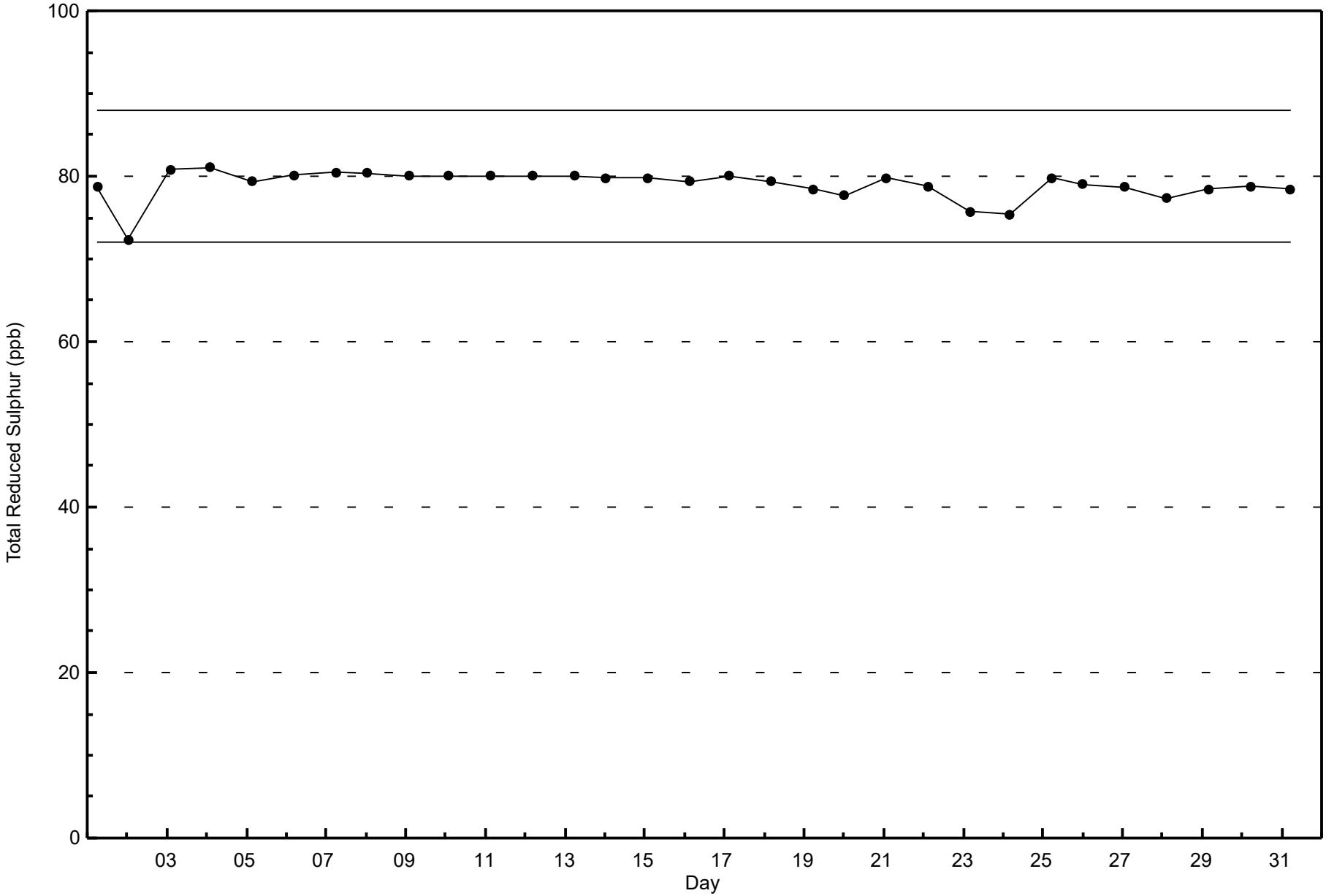


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Patricia McInnes - August 2026

Maximum Value: 4.0 ppm on Aug 27 00:00

Maximum Daily Average: 2.6 ppm on Aug 25

Minimum Value: 1.9 ppm on Aug 5 11:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.4 ppm at hour 24

Minimum Diurnal Average: 2.0 ppm at hour 15

Monthly Average: 2.17 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.4 $P_{99}$ = 3.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | 2.2 | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.4 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.4 |
| 2-Aug | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 3-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.4 | 2.4 | 2.5 | 2.6 | 2.1 | 2.6 |
| 4-Aug | 2.5 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 |
| 5-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 6-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.0 | 2.0 | 2.1 | 2.0 | Z | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.3 |
| 8-Aug | 2.3 | 2.4 | 2.3 | 2.4 | 2.2 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 | 2.5 | 2.2 | 2.5 |
| 9-Aug | Z | 2.5 | 2.3 | 2.7 | 2.6 | 2.6 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.7 | 2.7 | 3.3 | 3.3 | 2.4 | 3.3 |
| 10-Aug | 3.2 | Z | 2.5 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.5 | 2.4 | 2.5 | 2.2 | 3.2 |
| 11-Aug | 2.6 | 2.6 | Z | 2.6 | 2.5 | 2.5 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.6 |
| 12-Aug | 2.3 | 2.4 | 2.4 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 |
| 13-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.3 | 2.5 | 2.5 | 2.1 | 2.5 |
| 14-Aug | 2.4 | 2.3 | 2.6 | 2.6 | 2.4 | Z | 2.4 | 2.3 | 2.3 | C | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.6 |
| 15-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 16-Aug | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.6 | 2.5 | 2.5 | 2.5 | 2.2 | 2.6 |
| 17-Aug | 2.3 | 2.1 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | M | M | M | M | M | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | -- | 2.3 |
| 18-Aug | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 19-Aug | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.4 | 2.4 | 2.2 | 2.2 | 2.4 |
| 20-Aug | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.5 | 2.8 | 2.8 | 2.9 | 2.2 | 2.9 |
| 21-Aug | Z | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.5 | 2.1 | 2.1 | 2.2 | 2.5 |
| 22-Aug | 2.1 | Z | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 23-Aug | 2.2 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 24-Aug | 2.0 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 3.2 | 3.0 | 2.6 | 2.7 | 2.2 | 3.2 |
| 25-Aug | 2.8 | 2.7 | 3.0 | 3.4 | Z | 3.0 | 2.5 | 2.4 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 3.2 | 2.7 | 3.4 | 3.2 | 2.6 | 3.4 |
| 26-Aug | 3.5 | 2.8 | 2.1 | 2.2 | 2.4 | Z | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 3.4 | 4.0 | 2.3 | 4.0 |
| 27-Aug | Z | 2.8 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | M | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.8 |
| 28-Aug | 2.1 | Z | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 29-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 30-Aug | 2.2 | 2.2 | 2.3 | Z | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.5 |
| 31-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.4 | 2.6 | 2.2 | 2.2 | 2.4 | 2.1 | 2.6 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.3 | 2.4 | Diurnal Average | |
| | 3.5 | 2.8 | 3.0 | 3.4 | 2.6 | 3.0 | 2.5 | 2.4 | 2.5 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.5 | 3.2 | 3.0 | 3.4 | 4.0 | Diurnal Maximum | |

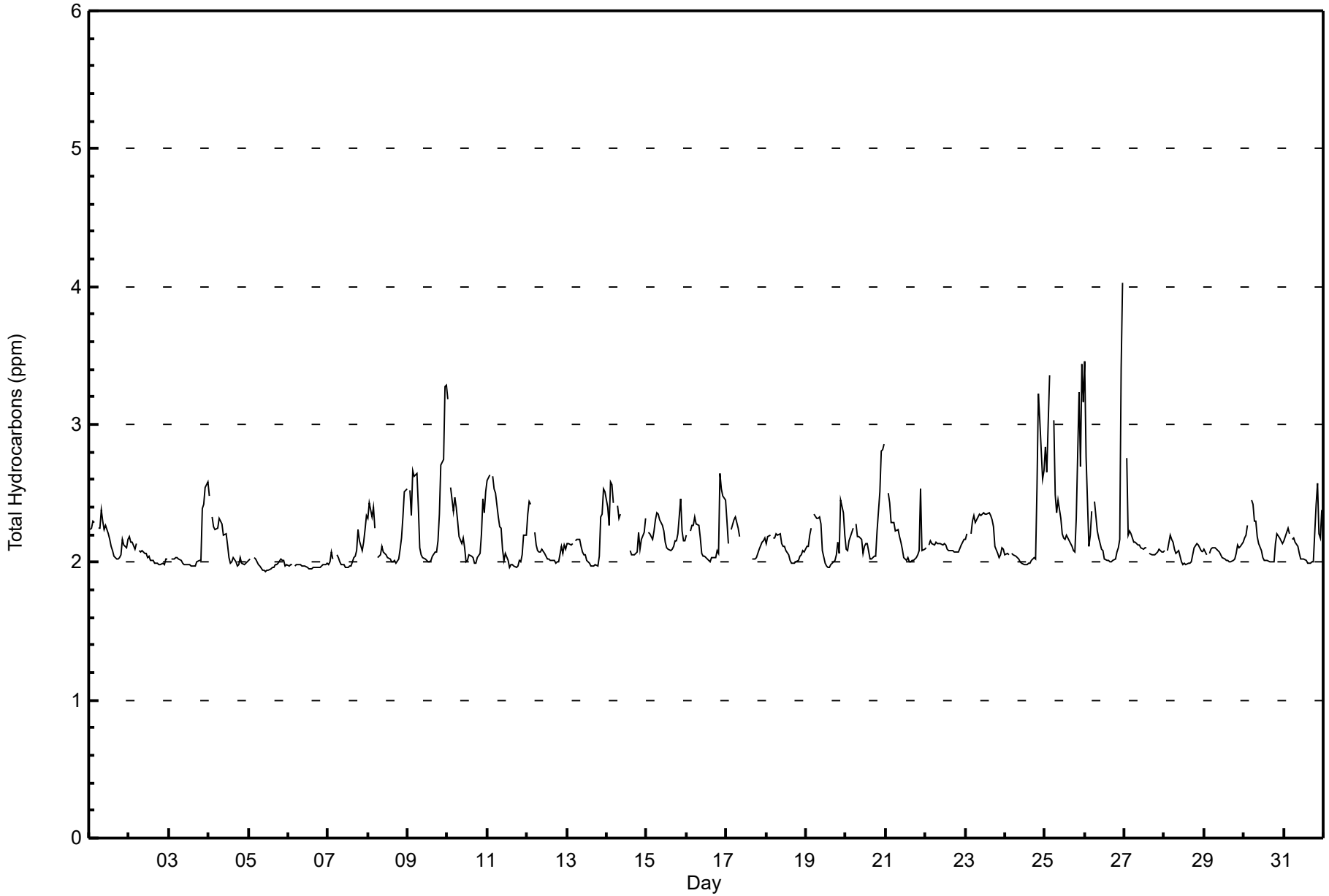
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 252 | 35.95 | 35.95 |
| 2.1 - 3.0 | 438 | 62.48 | 98.43 |
| 3.1 - 10.0 | 11 | 1.57 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Patricia McInnes - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 38 | 16 | 1 | 3 | 2 | 4 | 7 | 5 | 6 | 6 | 12 | 16 | 12 | 30 | 52 | 42 | 252 |
| 2.1 - 3.0 | 22 | 10 | 3 | 4 | 4 | 29 | 39 | 23 | 34 | 48 | 49 | 43 | 23 | 28 | 38 | 41 | 438 |
| 3.1 - 10.0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 1 | 11 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 61 | 27 | 4 | 7 | 6 | 35 | 46 | 29 | 40 | 54 | 62 | 59 | 35 | 62 | 90 | 84 | 701 |

Total Number of Valid Hours: 701

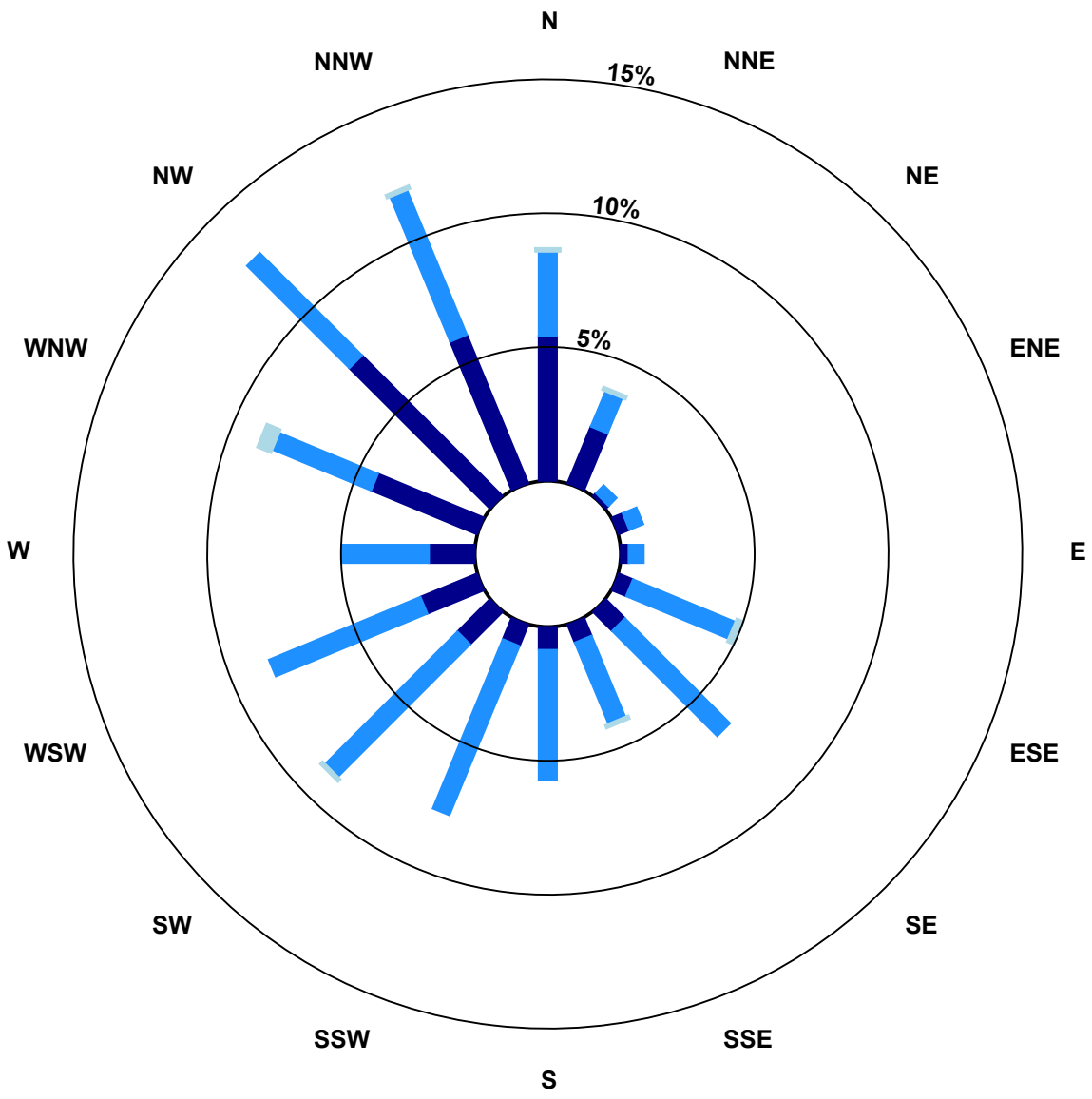
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Hydrocarbons (THC) - ppm**

**Patricia McInnes**




**Classes (ppm)**

- 0 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

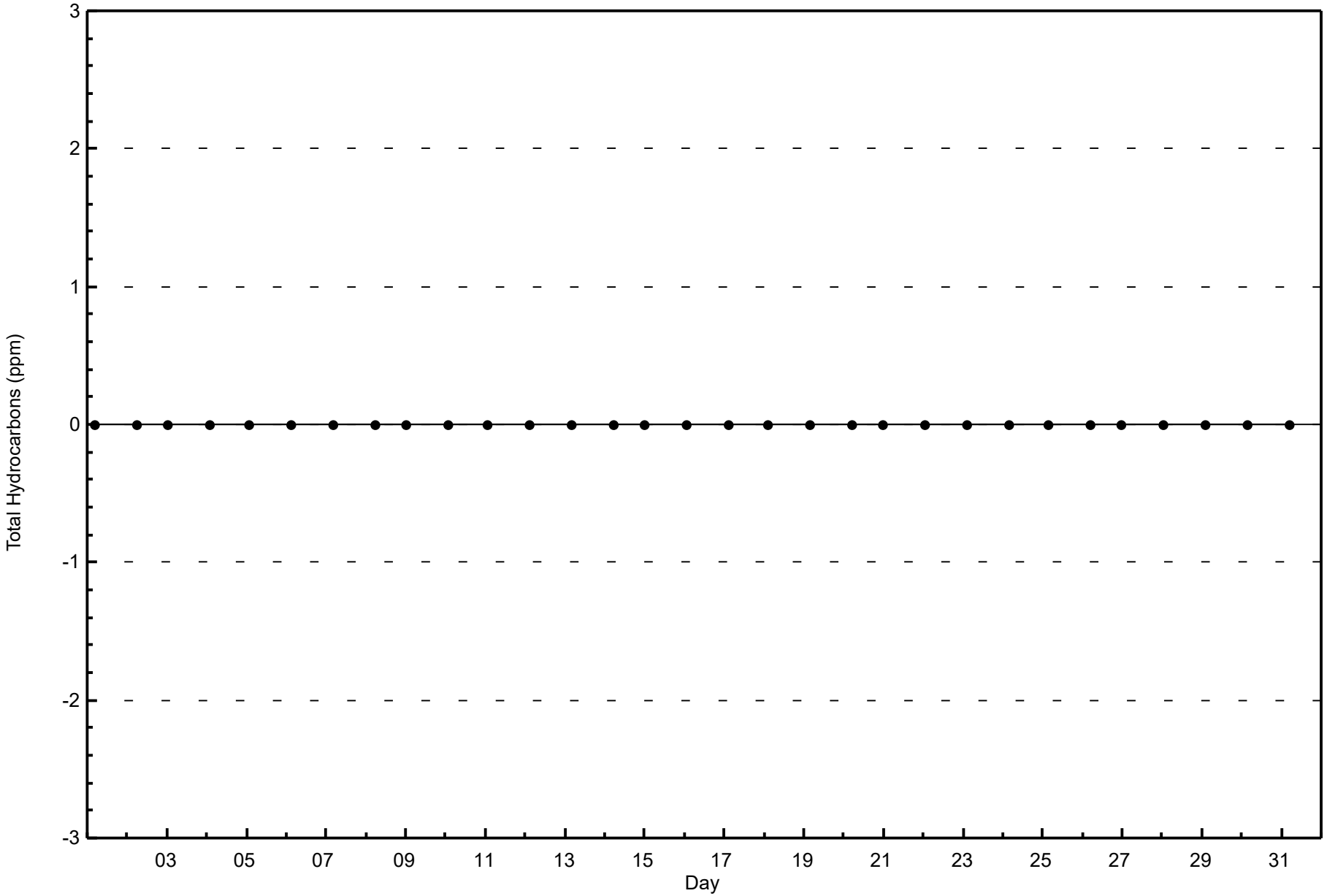
**Total Number of Valid Hours: 701**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Patricia McInnes - August 2026**

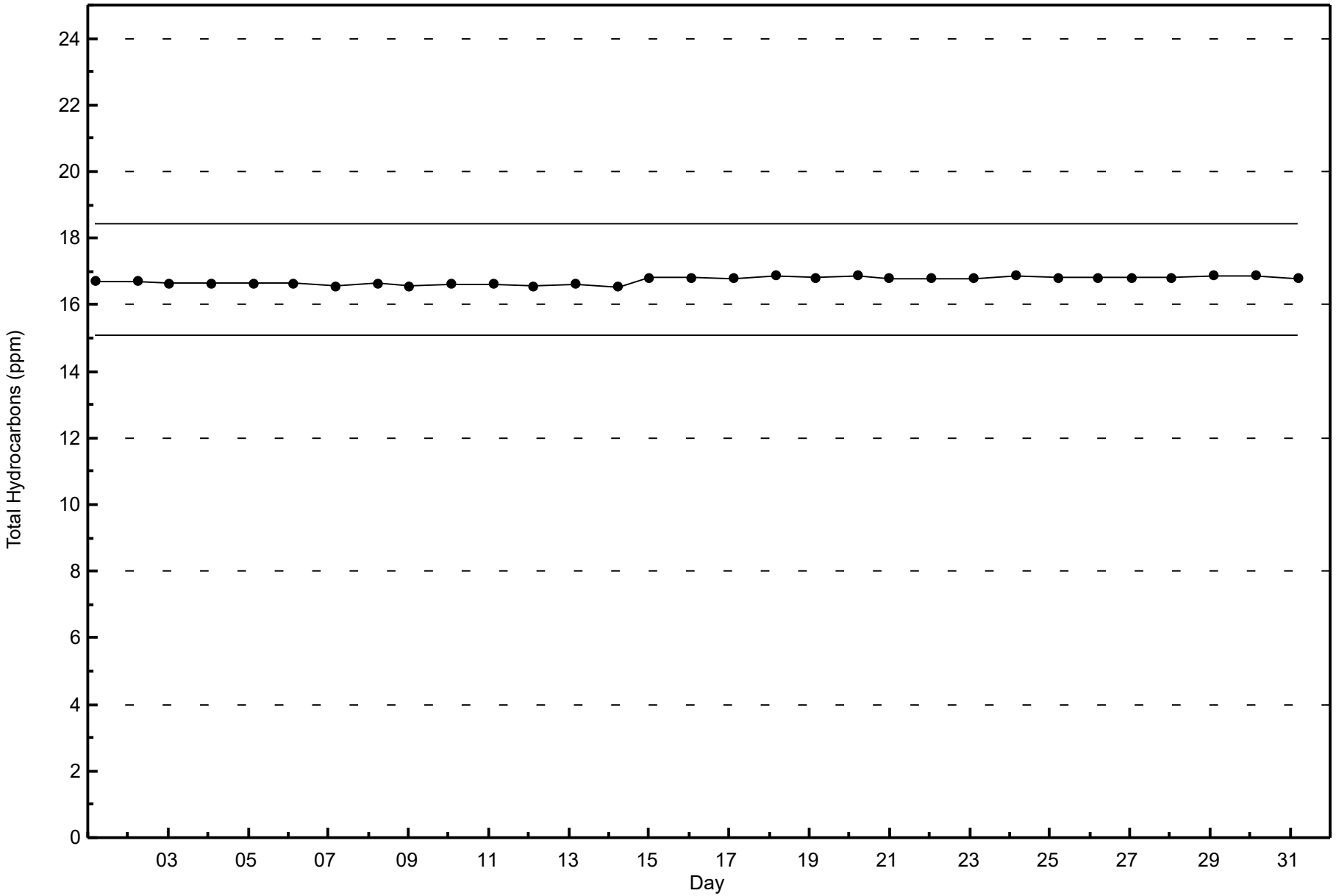


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Patricia McInnes - August 2026**



Maximum Value: 0.106 ppm on Aug 30 20:00

Maximum Daily Average: 0.005 ppm on Aug 30

Minimum Value: 0.000 ppm on Aug 1 01:00

Minimum Daily Average: 0.000 ppm on Aug 1

Maximum Diurnal Average: 0.004 ppm at hour 20

Minimum Diurnal Average: 0.000 ppm at hour 1

Monthly Average: 0.000 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2-Aug | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 |
| 3-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.002 | 0.000 | 0.000 | 0.004 |
| 4-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.005 | 0.000 | 0.000 | 0.001 | 0.009 |
| 8-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 |
| 10-Aug | 0.000 | Z | 0.003 | 0.000 | 0.000 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 |
| 11-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.006 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 |
| 14-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | C | C | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.001 |
| 15-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | M | M | M | M | M | M | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 |
| 18-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 19-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 |
| 20-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.031 | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.013 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.031 |
| 21-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 22-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 23-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 |
| 24-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 |
| 25-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.025 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.000 | 0.000 | 0.000 | 0.003 | 0.000 | 0.000 | 0.000 | 0.001 | 0.025 |
| 26-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 |
| 27-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | M | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 28-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 29-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.106 | 0.007 | 0.000 | 0.000 | 0.000 | 0.005 | 0.106 |
| 31-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.002 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.002 | 0.000 | 0.000 | 0.000 | Diurnal Average | |
| | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.005 | 0.000 | 0.000 | 0.025 | 0.000 | 0.001 | 0.000 | 0.009 | 0.031 | 0.008 | 0.000 | 0.003 | 0.002 | 0.000 | 0.106 | 0.011 | 0.005 | 0.002 | 0.000 | Diurnal Maximum | |

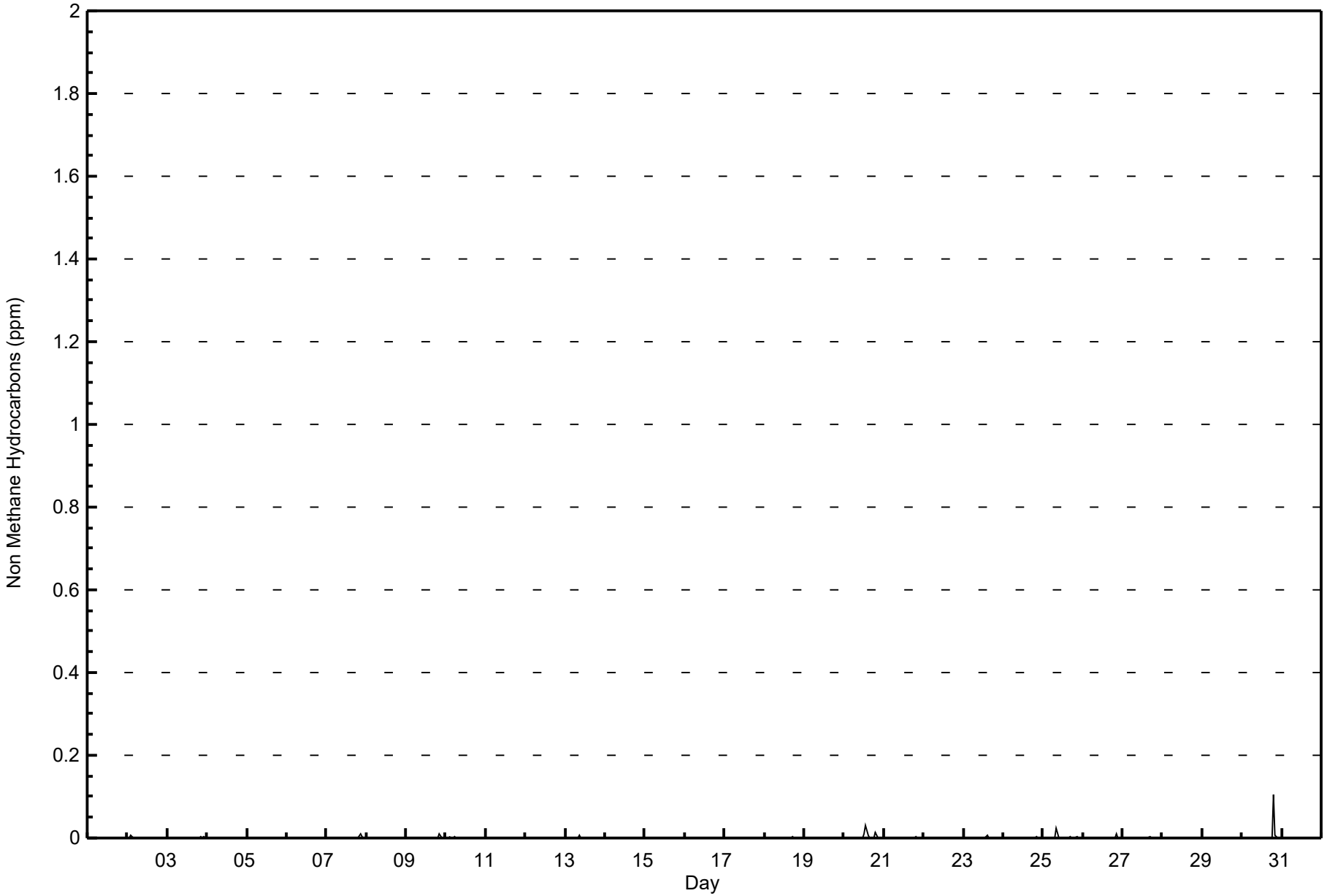
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 688 | 98.15 | 98.15 |
| 0.006 - 0.05 | 12 | 1.71 | 99.86 |
| 0.06 - 0.1 | 1 | 0.14 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Patricia McInnes - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 54 | 27 | 4 | 7 | 6 | 35 | 44 | 28 | 40 | 53 | 62 | 59 | 35 | 62 | 90 | 82 | 688 |
| 0.006 - 0.05 | 7 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 12 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 61 | 27 | 4 | 7 | 6 | 35 | 46 | 29 | 40 | 54 | 62 | 59 | 35 | 62 | 90 | 84 | 701 |

Total Number of Valid Hours: 701

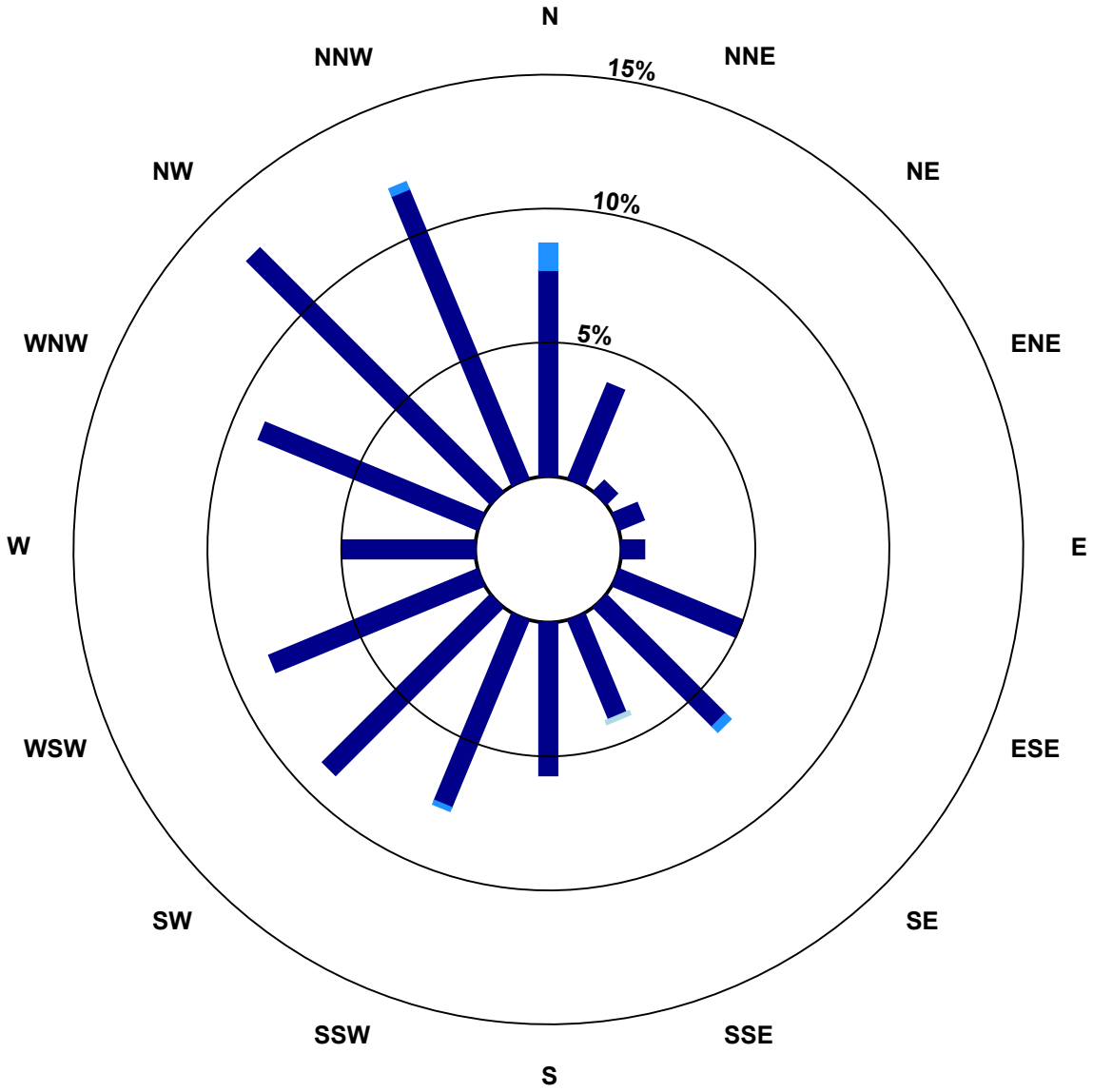
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

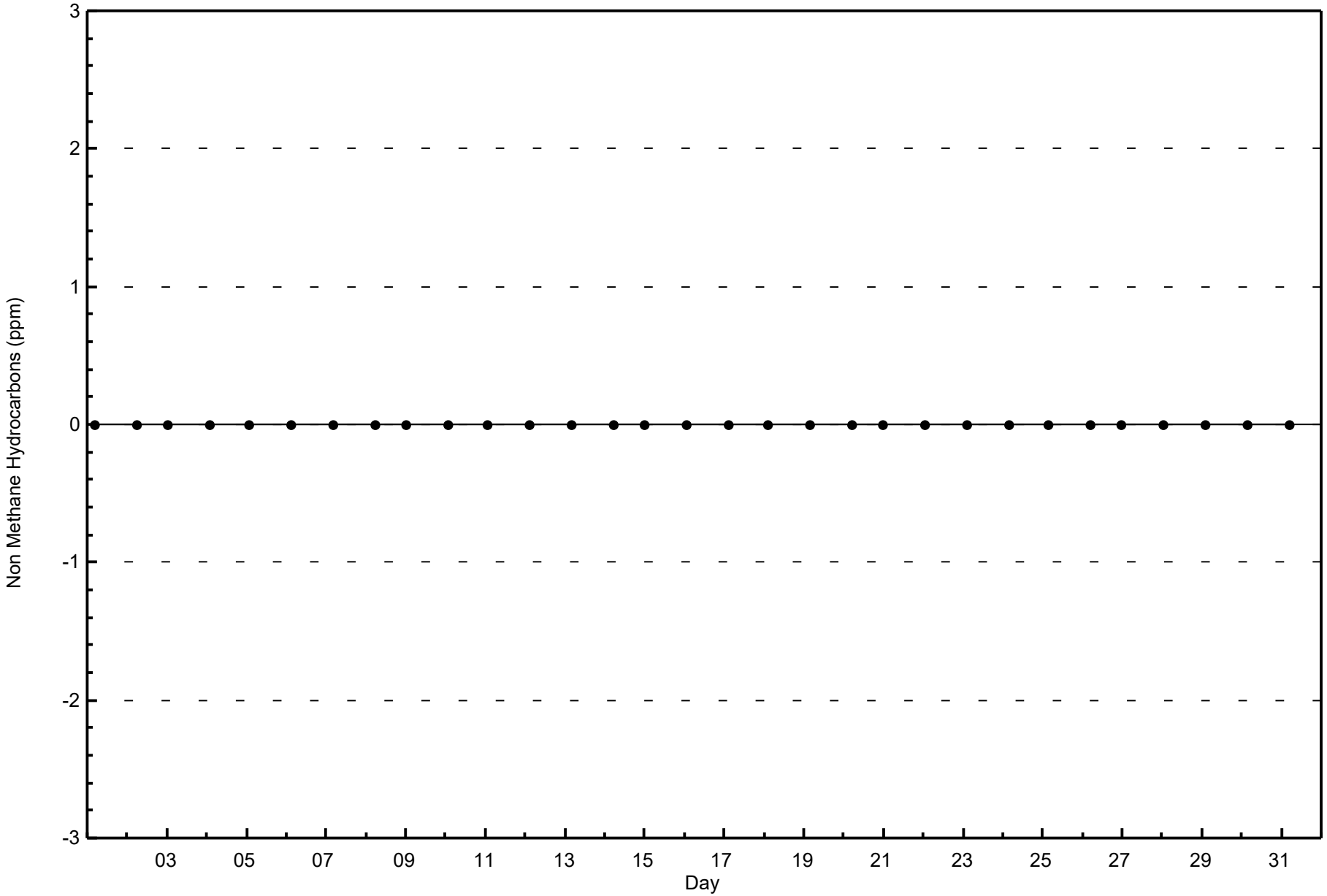
Total Number of Valid Hours: 701

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Patricia McInnes - August 2026**

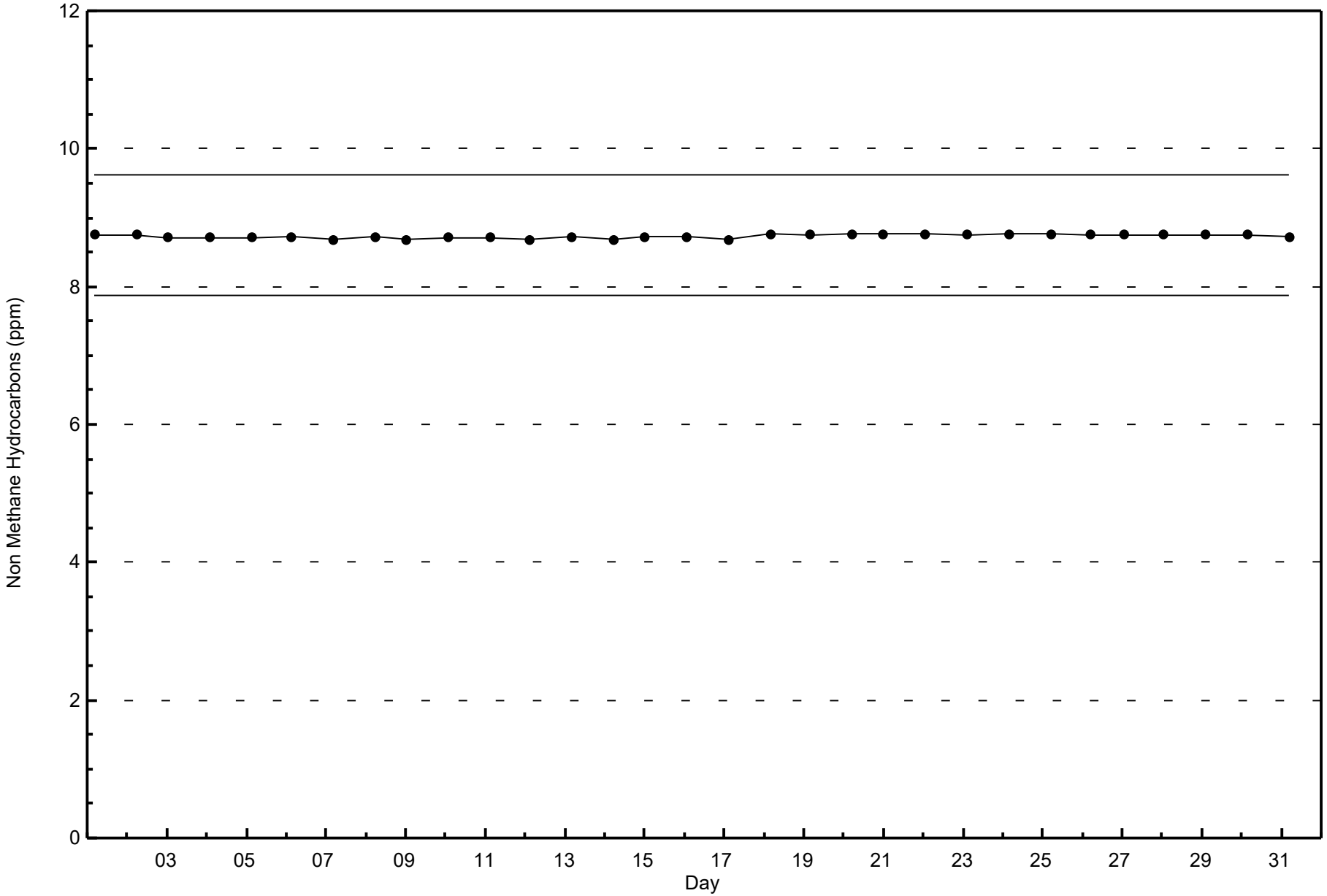


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Patricia McInnes - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 4.0 ppm on Aug 27 00:00

Maximum Daily Average: 2.6 ppm on Aug 25

Minimum Value: 1.9 ppm on Aug 5 11:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.4 ppm at hour 24

Minimum Diurnal Average: 2.0 ppm at hour 15

Monthly Average: 2.16 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.4 $P_{99}$ = 3.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | 2.2 | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.4 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.4 |
| 2-Aug | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 3-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.4 | 2.4 | 2.5 | 2.6 | 2.1 | 2.6 |
| 4-Aug | 2.5 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 |
| 5-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 6-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.0 | 2.0 | 2.1 | 2.0 | Z | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.3 |
| 8-Aug | 2.3 | 2.4 | 2.3 | 2.4 | 2.2 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 | 2.5 | 2.2 | 2.5 |
| 9-Aug | Z | 2.5 | 2.3 | 2.7 | 2.6 | 2.6 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.7 | 2.7 | 3.3 | 3.3 | 2.4 | 3.3 |
| 10-Aug | 3.2 | Z | 2.5 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.5 | 2.4 | 2.5 | 2.2 | 3.2 |
| 11-Aug | 2.6 | 2.6 | Z | 2.6 | 2.5 | 2.5 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.6 |
| 12-Aug | 2.3 | 2.4 | 2.4 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 |
| 13-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.3 | 2.5 | 2.5 | 2.1 | 2.5 |
| 14-Aug | 2.4 | 2.3 | 2.6 | 2.6 | 2.4 | Z | 2.4 | 2.3 | 2.3 | C | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.6 |
| 15-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 16-Aug | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.6 | 2.5 | 2.5 | 2.5 | 2.2 | 2.6 |
| 17-Aug | 2.3 | 2.1 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | M | M | M | M | M | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | -- | 2.3 |
| 18-Aug | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 19-Aug | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.4 | 2.4 | 2.2 | 2.2 | 2.4 |
| 20-Aug | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.5 | 2.8 | 2.8 | 2.9 | 2.2 | 2.9 |
| 21-Aug | Z | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.5 | 2.1 | 2.1 | 2.2 | 2.5 |
| 22-Aug | 2.1 | Z | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 23-Aug | 2.2 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 24-Aug | 2.0 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.5 | 3.2 | 3.0 | 2.6 | 2.7 | 2.2 | 3.2 |
| 25-Aug | 2.8 | 2.7 | 3.0 | 3.4 | Z | 3.0 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 3.2 | 2.7 | 3.4 | 3.2 | 2.6 | 3.4 |
| 26-Aug | 3.5 | 2.8 | 2.1 | 2.2 | 2.4 | Z | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 3.4 | 4.0 | 2.3 | 4.0 |
| 27-Aug | Z | 2.8 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | M | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.8 |
| 28-Aug | 2.1 | Z | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 29-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 30-Aug | 2.2 | 2.2 | 2.3 | Z | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.5 |
| 31-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.4 | 2.6 | 2.2 | 2.2 | 2.4 | 2.1 | 2.6 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.3 | 2.4 | Diurnal Average | |
| | 3.5 | 2.8 | 3.0 | 3.4 | 2.6 | 3.0 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.5 | 3.2 | 3.0 | 3.4 | 4.0 | Diurnal Maximum | |

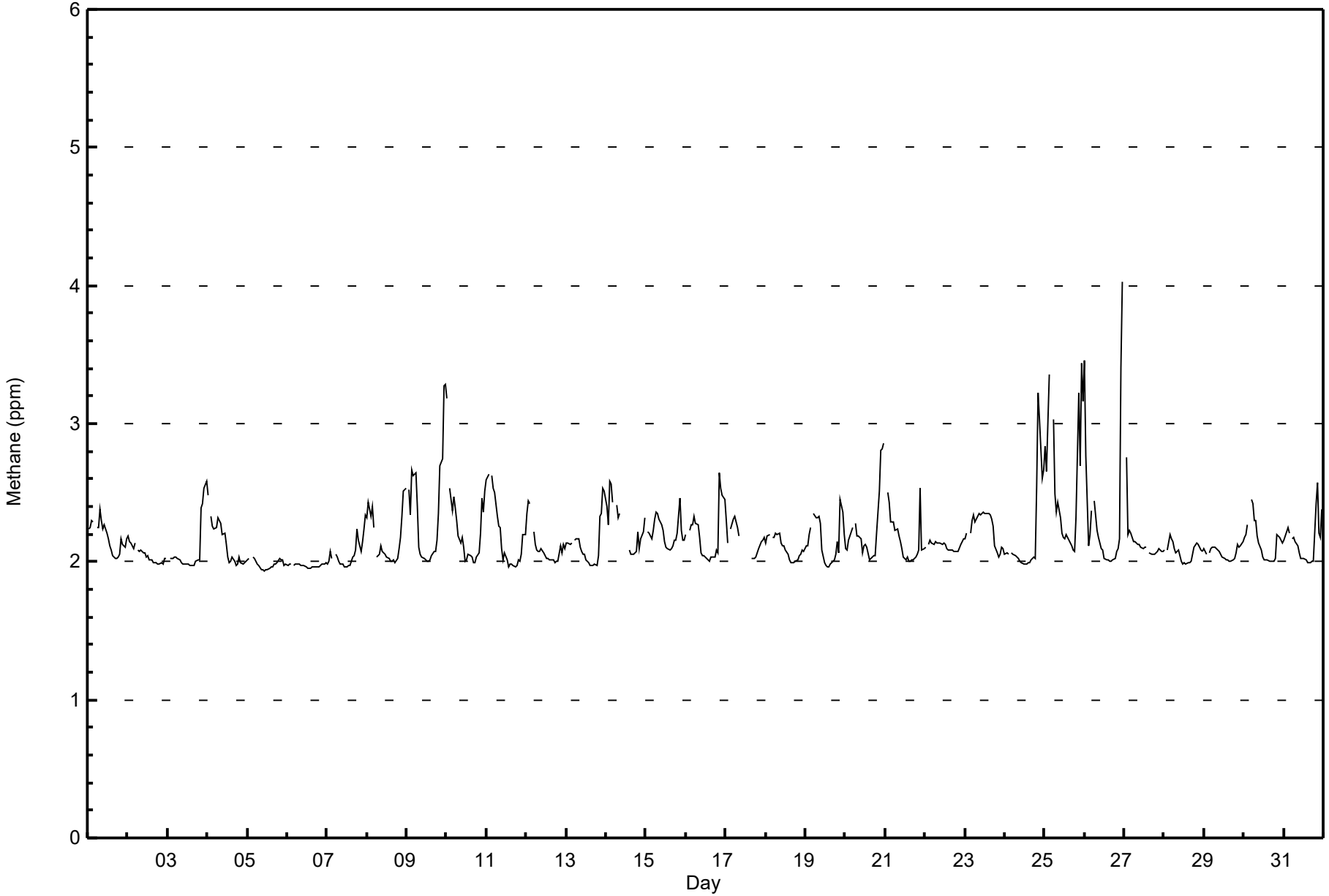
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 253 | 36.09 | 36.09 |
| 2.1 - 3.0 | 437 | 62.34 | 98.43 |
| 3.1 - 10.0 | 11 | 1.57 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 38 | 16 | 1 | 3 | 2 | 4 | 7 | 6 | 6 | 6 | 12 | 16 | 12 | 30 | 52 | 42 | 253 |
| 2.1 - 3.0 | 22 | 10 | 3 | 4 | 4 | 29 | 39 | 22 | 34 | 48 | 49 | 43 | 23 | 28 | 38 | 41 | 437 |
| 3.1 - 10.0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 1 | 11 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 61 | 27 | 4 | 7 | 6 | 35 | 46 | 29 | 40 | 54 | 62 | 59 | 35 | 62 | 90 | 84 | 701 |

Total Number of Valid Hours: 701

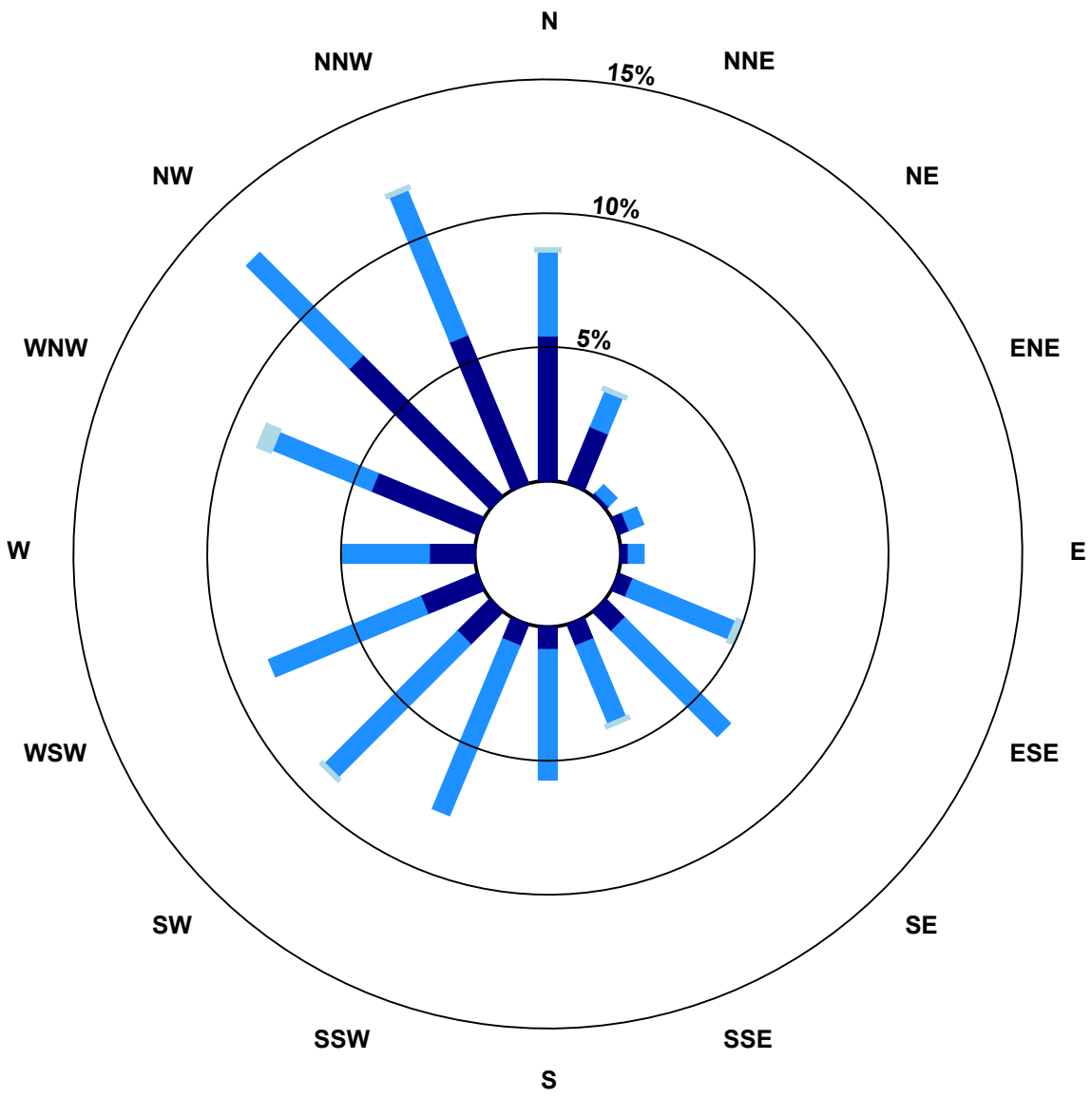
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Patricia McInnes




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

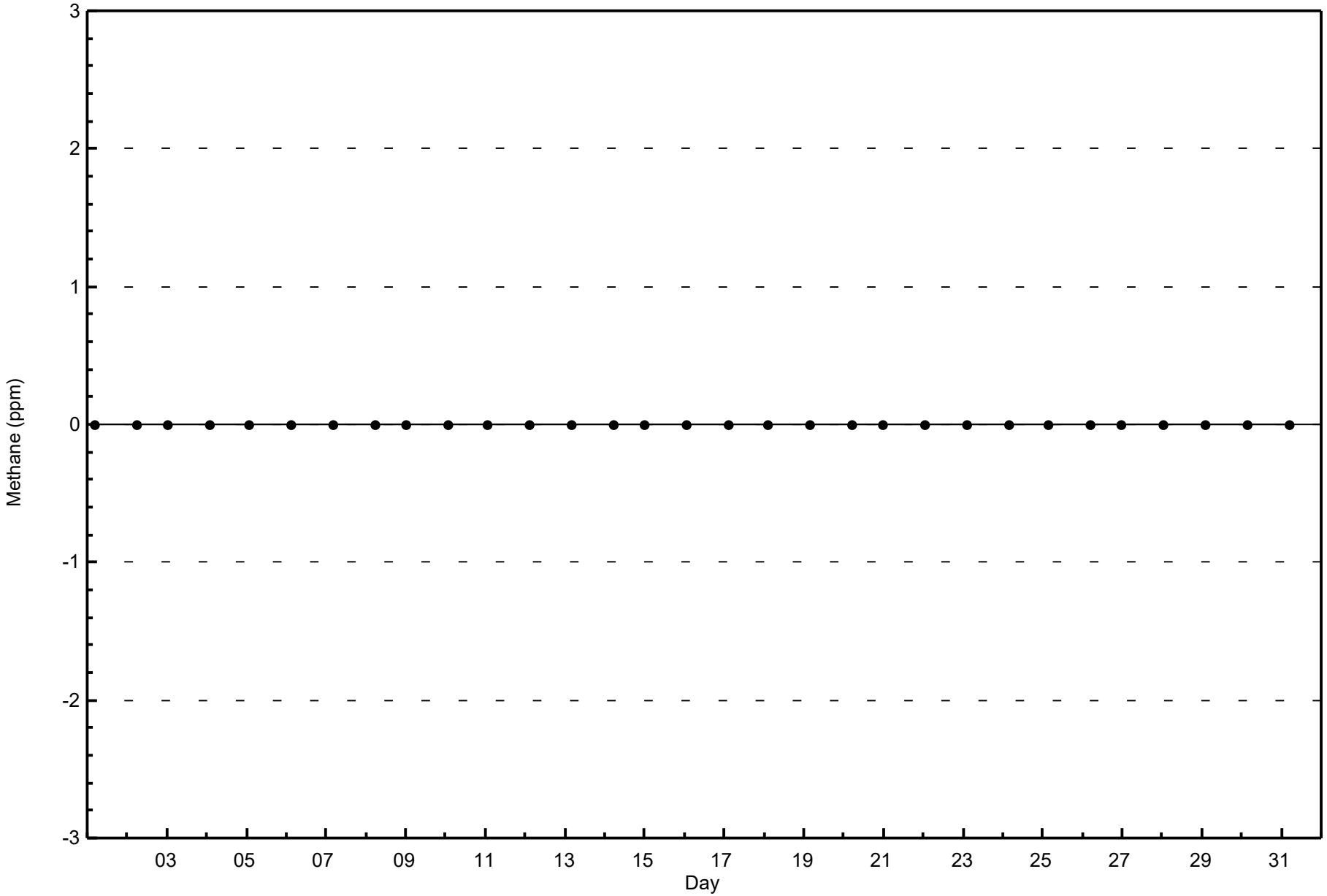
Total Number of Valid Hours: 701

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Patricia McInnes - August 2026**

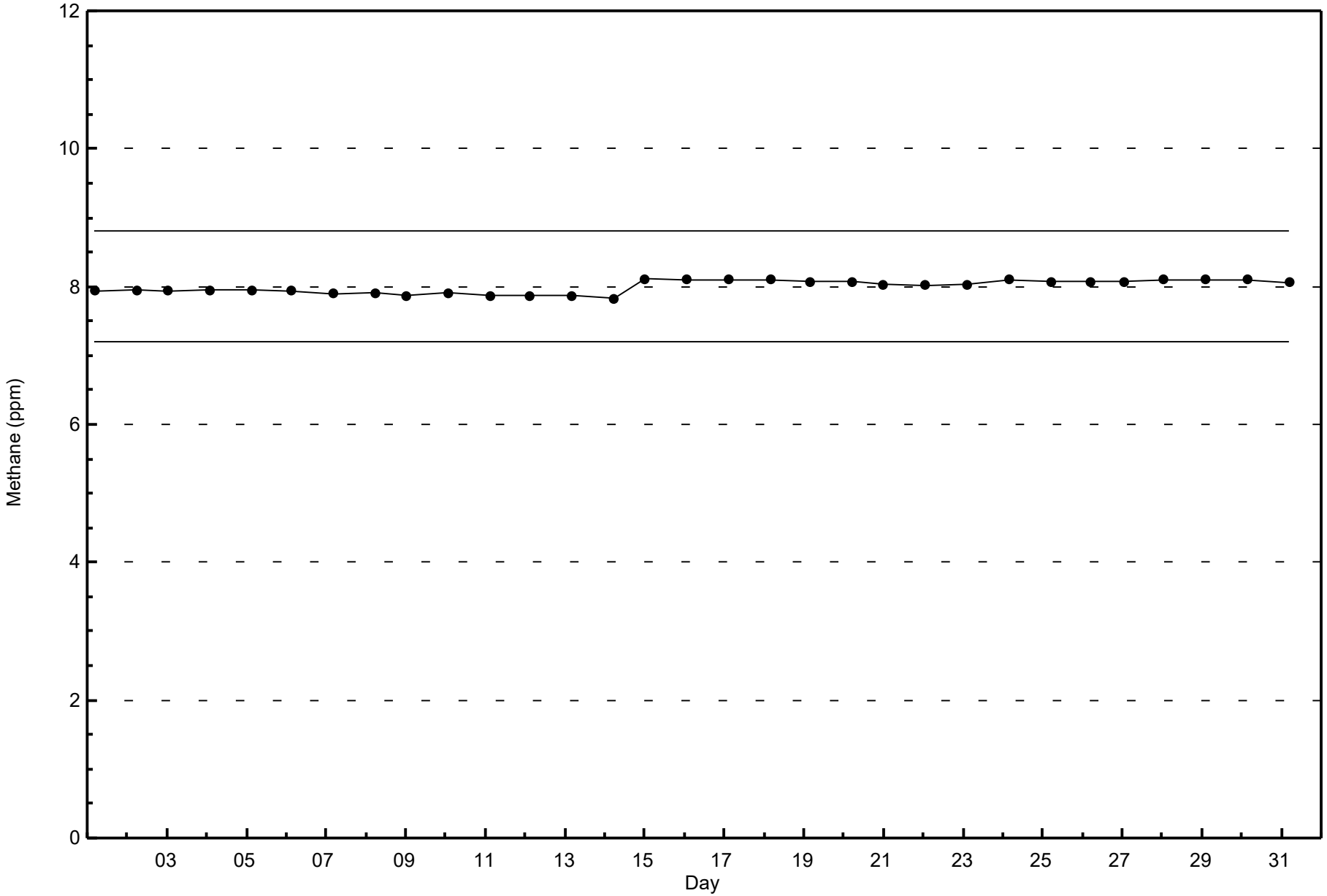


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Patricia McInnes - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Ozone ($O_3$) - ppb

## Patricia McInnes - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 62.7 ppb on Aug 25 17:00
Maximum Daily Average: 27.1 ppb on Aug 28

Minimum Value: 1.0 ppb on Aug 14 05:00
Minimum Daily Average: 14.6 ppb on Aug 23
Maximum Diurnal Average: 31.5 ppb at hour 16
Minimum Diurnal Average: 11.2 ppb at hour 6
Monthly Average: 20.47 ppb
Percentiles: $P_1$ = 3.6 $P_{10}$ = 8.5 $Q_1$ = 13.2 Median = 19.6 $Q_3$ = 26.7 $P_{90}$ = 33.9 $P_{99}$ = 41.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 9.8 | 9.0 | 8.1 | 8.1 | 5.4 | 7.1 | 5.5 | 7.8 | 10.3 | 11.5 | 19.6 | 24.0 | 29.4 | 27.9 | 33.4 | 37.7 | 37.3 | 34.7 | 31.0 | 26.7 | 28.0 | 28.5 | 23.8 | 20.2 | 37.7 |
| 2-Aug | 24.3 | Z | 27.2 | 24.5 | 22.0 | 21.7 | 20.9 | 20.6 | 18.2 | 15.4 | 15.7 | 16.2 | 17.0 | 19.2 | 19.2 | 23.3 | 26.4 | 27.1 | 26.2 | 23.7 | 22.4 | 22.5 | 22.2 | 21.3 | 21.6 | 27.2 |
| 3-Aug | 20.6 | 20.0 | Z | 19.5 | 17.9 | 16.8 | 17.4 | 17.4 | 18.1 | 19.6 | 20.6 | 23.5 | 25.7 | 27.6 | 27.1 | 27.3 | 28.5 | 29.4 | 27.4 | 23.8 | 14.8 | 9.4 | 7.3 | 7.5 | 20.3 | 29.4 |
| 4-Aug | 7.6 | 5.0 | 6.2 | Z | 4.1 | 6.4 | 9.2 | 11.7 | 13.4 | 18.8 | 18.4 | 25.0 | 27.6 | 30.8 | 28.7 | 25.6 | 24.9 | 27.7 | 24.6 | 22.3 | 19.3 | 24.1 | 24.0 | 20.8 | 18.5 | 30.8 |
| 5-Aug | 21.1 | 19.5 | 17.2 | 16.7 | Z | 18.6 | 20.8 | 20.3 | 22.0 | 24.1 | 24.7 | 27.5 | 28.7 | 25.9 | 24.0 | 23.3 | 20.7 | 23.1 | 24.6 | 23.5 | 22.6 | 21.6 | 23.5 | 22.1 | 22.4 | 28.7 |
| 6-Aug | 21.4 | 20.6 | 19.2 | 18.0 | 16.6 | Z | 13.4 | 12.8 | 12.6 | 11.9 | 12.5 | 14.9 | 18.7 | 21.5 | 25.4 | 25.5 | 24.9 | 24.4 | 24.5 | 24.3 | 22.3 | 20.4 | 18.2 | 16.3 | 19.1 | 25.5 |
| 7-Aug | Z | 16.1 | 15.5 | 15.1 | 15.0 | 12.6 | 13.1 | 13.5 | 16.0 | 18.6 | 21.6 | 23.3 | 25.2 | 25.3 | 24.6 | 23.0 | 24.4 | 23.8 | 19.2 | 14.9 | 9.5 | 9.9 | 7.9 | 7.3 | 17.2 | 25.3 |
| 8-Aug | 6.7 | Z | 6.1 | 7.3 | 10.1 | 10.4 | 14.2 | 13.9 | 12.1 | 14.7 | 15.7 | 18.2 | 20.1 | 23.2 | 26.3 | 25.6 | 21.6 | 20.1 | 18.8 | 18.0 | 14.7 | 8.9 | 7.7 | 8.1 | 14.9 | 26.3 |
| 9-Aug | 8.3 | 9.0 | Z | 7.7 | 6.2 | 6.9 | 8.5 | 15.8 | 18.3 | 20.2 | 22.9 | 26.2 | 28.6 | 34.5 | 37.3 | 37.5 | 39.1 | 35.6 | 32.5 | 25.7 | 15.1 | 10.8 | 6.5 | 4.8 | 19.9 | 39.1 |
| 10-Aug | 4.3 | 4.7 | 5.4 | Z | 5.0 | 5.8 | 8.9 | 15.1 | 23.2 | 17.0 | 28.0 | 33.9 | 35.8 | 38.0 | 39.8 | 38.3 | 37.3 | 37.5 | 33.9 | 29.6 | 26.3 | 21.6 | 20.1 | 17.4 | 22.9 | 39.8 |
| 11-Aug | 10.0 | 4.7 | 4.4 | 3.7 | Z | 7.5 | 11.6 | 13.3 | 16.1 | 21.2 | 29.6 | 29.9 | 33.0 | 35.9 | 35.3 | 34.7 | 34.0 | 33.6 | 32.5 | 27.2 | 23.0 | 21.7 | 19.4 | 19.3 | 21.8 | 35.9 |
| 12-Aug | 17.2 | 9.7 | 7.6 | 12.5 | 15.5 | Z | 14.2 | 12.3 | 10.2 | 10.4 | 12.9 | 18.7 | 20.9 | 22.5 | 24.9 | 25.4 | 24.3 | 22.5 | 22.6 | 19.3 | 15.0 | 13.2 | 12.4 | 9.9 | 16.3 | 25.4 |
| 13-Aug | Z | 7.5 | 7.5 | 6.4 | 6.7 | 7.6 | 7.9 | 9.5 | 13.3 | 16.1 | 17.7 | 19.9 | 23.3 | 27.2 | 26.7 | 25.5 | 26.3 | 25.1 | 25.5 | 17.5 | 11.4 | 8.4 | 8.0 | 8.6 | 15.4 | 27.2 |
| 14-Aug | 11.1 | Z | 3.2 | 1.3 | 1.0 | 2.1 | 3.6 | 7.4 | 7.2 | 11.7 | 17.2 | 22.7 | 25.6 | 34.6 | 35.7 | 34.3 | 34.5 | 30.6 | 32.2 | 24.5 | 20.3 | 17.8 | 12.6 | 13.2 | 17.6 | 35.7 |
| 15-Aug | 20.2 | 17.1 | Z | 11.5 | 11.1 | 9.8 | 9.0 | 9.9 | 12.1 | 12.7 | 16.0 | 23.0 | 25.0 | 24.3 | 26.8 | 26.1 | 24.6 | 24.5 | 22.0 | 18.5 | 9.3 | 14.0 | 18.7 | 17.5 | 17.5 | 26.8 |
| 16-Aug | 17.6 | 16.5 | 15.2 | Z | 15.8 | 12.6 | 13.4 | 12.9 | 19.4 | 23.4 | 28.5 | 37.2 | 41.2 | 37.1 | 34.7 | 33.8 | 33.7 | 32.2 | 28.8 | 21.2 | 8.4 | 8.3 | 7.3 | 8.4 | 22.1 | 41.2 |
| 17-Aug | 12.8 | 18.9 | 13.5 | 16.6 | Z | 12.4 | 13.6 | 14.7 | 16.5 | 15.4 | 19.2 | 29.8 | 31.7 | 33.1 | 35.5 | 33.4 | 33.8 | 34.4 | 32.1 | 25.9 | 22.8 | 21.6 | 20.4 | 18.6 | 22.9 | 35.5 |
| 18-Aug | 19.8 | 17.0 | 16.6 | 14.9 | 13.3 | Z | 14.1 | 16.0 | 16.6 | 19.4 | 19.9 | 21.0 | 24.9 | 28.3 | 31.7 | 33.8 | 34.2 | 31.0 | 28.0 | 26.7 | 22.4 | 21.7 | 19.6 | 20.4 | 22.2 | 34.2 |
| 19-Aug | Z | 16.7 | 14.0 | 13.1 | 11.7 | 9.2 | 10.4 | 10.7 | 10.5 | 12.0 | 20.3 | 22.1 | 23.0 | 24.0 | 25.2 | 23.9 | 18.8 | 17.7 | 17.1 | 14.1 | 16.2 | 10.4 | 10.5 | 13.1 | 15.9 | 25.2 |
| 20-Aug | 20.4 | Z | 17.9 | 16.5 | 16.1 | 12.3 | 7.5 | 11.9 | 14.2 | 15.4 | 23.1 | 28.4 | 29.7 | 28.4 | 33.4 | 37.3 | 38.1 | 36.7 | 29.5 | 20.8 | 12.4 | 7.6 | 7.8 | 5.6 | 20.5 | 38.1 |
| 21-Aug | 7.4 | 6.5 | Z | 9.9 | 9.2 | 9.9 | 14.2 | 12.3 | 12.9 | 21.7 | 27.2 | 29.8 | 28.5 | 29.9 | 30.2 | 30.3 | 30.2 | 29.0 | 26.9 | 22.6 | 16.1 | 13.8 | 22.5 | 22.4 | 20.2 | 30.3 |
| 22-Aug | 19.2 | 17.5 | 17.5 | Z | 16.5 | 15.1 | 14.5 | 16.2 | 18.9 | 21.9 | 26.0 | 30.4 | 34.9 | 36.5 | 38.0 | 39.2 | 39.9 | 39.3 | 36.2 | 33.8 | 33.4 | 27.7 | 24.9 | 22.5 | 27.0 | 39.9 |
| 23-Aug | 19.5 | 16.4 | 15.2 | 14.6 | Z | 10.8 | 11.3 | 10.6 | 11.1 | 12.9 | 11.4 | 11.4 | 15.6 | 16.7 | 17.6 | 16.0 | 14.7 | 14.7 | 14.9 | 15.8 | 17.8 | 17.1 | 15.4 | 15.0 | 14.6 | 19.5 |
| 24-Aug | 19.5 | 20.0 | 19.5 | 19.7 | 19.0 | Z | 20.9 | 21.0 | 22.7 | 26.7 | 25.5 | 29.4 | 30.2 | 30.4 | 32.1 | 31.6 | 33.1 | 34.3 | 30.1 | 19.6 | 10.0 | 10.7 | 9.4 | 9.1 | 22.8 | 34.3 |
| 25-Aug | Z | 8.7 | 7.5 | 2.3 | 1.4 | 1.5 | 5.8 | 9.1 | 12.8 | 16.0 | C | C | C | C | 51.7 | 60.7 | 62.7 | 57.2 | 52.8 | 36.3 | 17.6 | 18.7 | 11.4 | 7.3 | 23.2 | 62.7 |
| 26-Aug | 5.6 | Z | 16.6 | 14.0 | 7.7 | 8.2 | 9.3 | 13.8 | 16.7 | 24.1 | 28.6 | 31.6 | 41.0 | 41.5 | 40.1 | 40.2 | 40.1 | 39.5 | 34.2 | 31.1 | 24.9 | 27.9 | 13.7 | 10.3 | 24.4 | 41.5 |
| 27-Aug | 14.0 | 15.5 | Z | 19.9 | 21.7 | 20.0 | 20.9 | 21.9 | 22.6 | 25.8 | 32.0 | 35.9 | 36.9 | 35.9 | M | 34.0 | 28.1 | 26.7 | 28.0 | 27.0 | 28.8 | 29.4 | 32.5 | 33.5 | 26.9 | 36.9 |
| 28-Aug | 32.3 | 31.2 | 29.4 | Z | 29.1 | 24.6 | 27.0 | 29.9 | 26.9 | 30.4 | 38.3 | 39.5 | 36.9 | 36.3 | 34.0 | 37.5 | 33.7 | 24.5 | 20.3 | 15.1 | 11.9 | 10.6 | 11.3 | 11.9 | 27.1 | 39.5 |
| 29-Aug | 10.8 | 13.0 | 14.5 | 15.2 | Z | 12.6 | 12.8 | 13.3 | 14.7 | 16.3 | 18.3 | 20.6 | 23.0 | 25.0 | 25.0 | 25.9 | 27.1 | 28.2 | 25.9 | 19.2 | 16.6 | 17.1 | 17.8 | 15.9 | 18.6 | 28.2 |
| 30-Aug | 14.9 | 13.4 | 10.6 | 12.0 | 6.7 | Z | 8.9 | 10.6 | 18.5 | 24.1 | 28.9 | 36.6 | 40.9 | 42.4 | 42.1 | 41.2 | 40.0 | 38.4 | 36.4 | 24.6 | 15.0 | 16.8 | 17.8 | 21.4 | 24.4 | 42.4 |
| 31-Aug | Z | 15.6 | 14.3 | 12.0 | 10.8 | 10.1 | 8.8 | 10.0 | 14.4 | 20.2 | 23.1 | 22.9 | 20.6 | 22.6 | 22.9 | 27.9 | 26.6 | 23.6 | 22.3 | 16.6 | 8.9 | 11.3 | 15.9 | 9.1 | 17.0 | 27.9 |
| | 15.5 | 14.2 | 13.5 | 12.8 | 12.2 | 11.2 | 12.7 | 14.0 | 15.8 | 18.3 | 21.8 | 25.6 | 28.0 | 29.6 | 30.8 | 31.5 | 31.1 | 30.0 | 27.9 | 23.0 | 17.9 | 16.9 | 16.0 | 14.9 | Diurnal Average | |
| | 32.3 | 31.2 | 29.4 | 24.5 | 29.1 | 24.6 | 27.0 | 29.9 | 26.9 | 30.4 | 38.3 | 39.5 | 41.2 | 42.4 | 51.7 | 60.7 | 62.7 | 57.2 | 52.8 | 36.3 | 33.4 | 29.4 | 32.5 | 33.5 | Diurnal Maximum | |

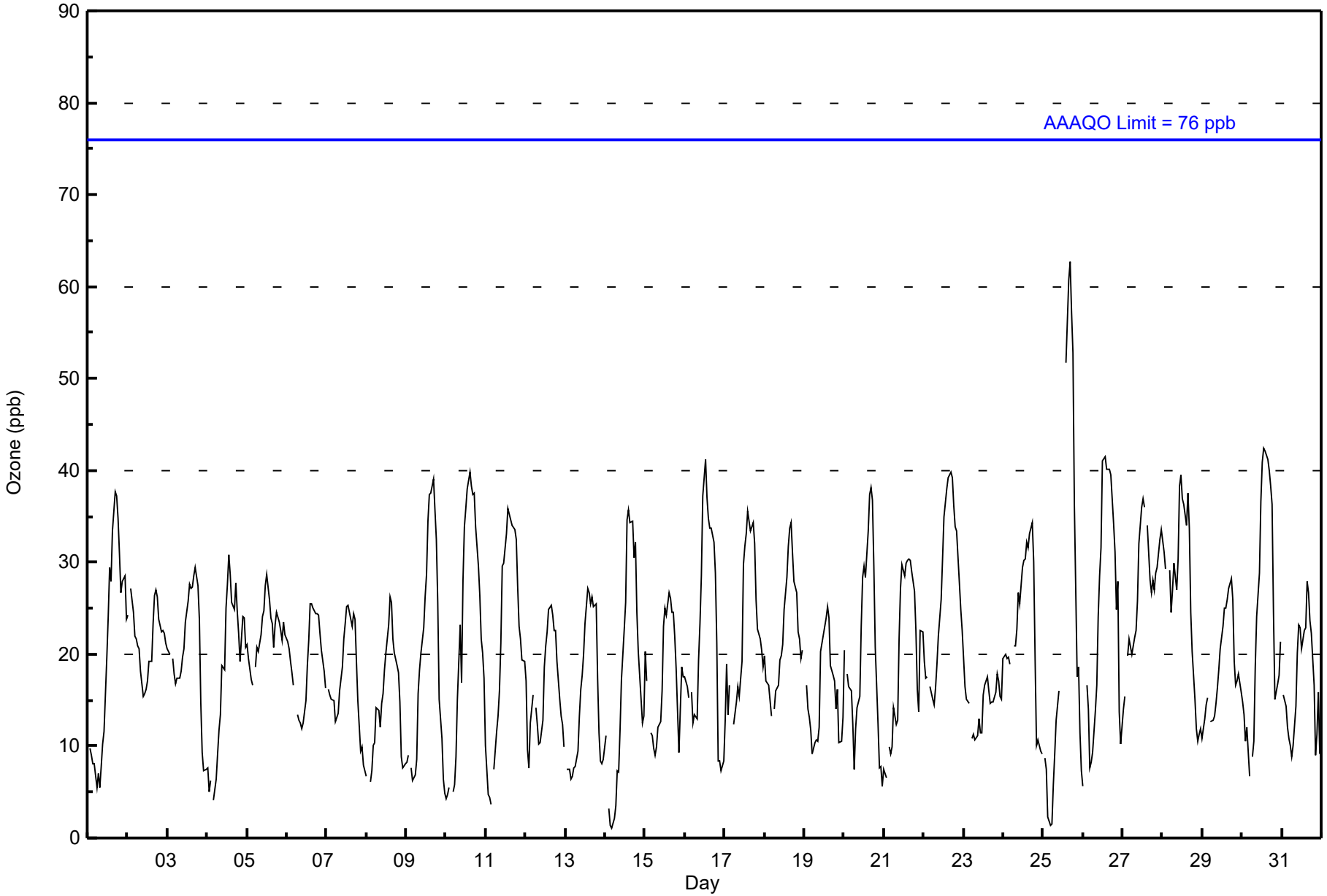
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 378 | 53.39 | 53.39 |
| 21 - 50 | 325 | 45.90 | 99.29 |
| 51 - 82 | 5 | 0.71 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 25 | 10 | 0 | 3 | 2 | 5 | 19 | 21 | 29 | 35 | 47 | 34 | 21 | 50 | 48 | 29 | 378 |
| 21 - 50 | 38 | 18 | 4 | 3 | 4 | 26 | 24 | 11 | 11 | 20 | 14 | 25 | 15 | 15 | 41 | 56 | 325 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 63 | 28 | 4 | 6 | 6 | 35 | 44 | 32 | 40 | 55 | 61 | 59 | 36 | 65 | 89 | 85 | 708 |

Total Number of Valid Hours: 708

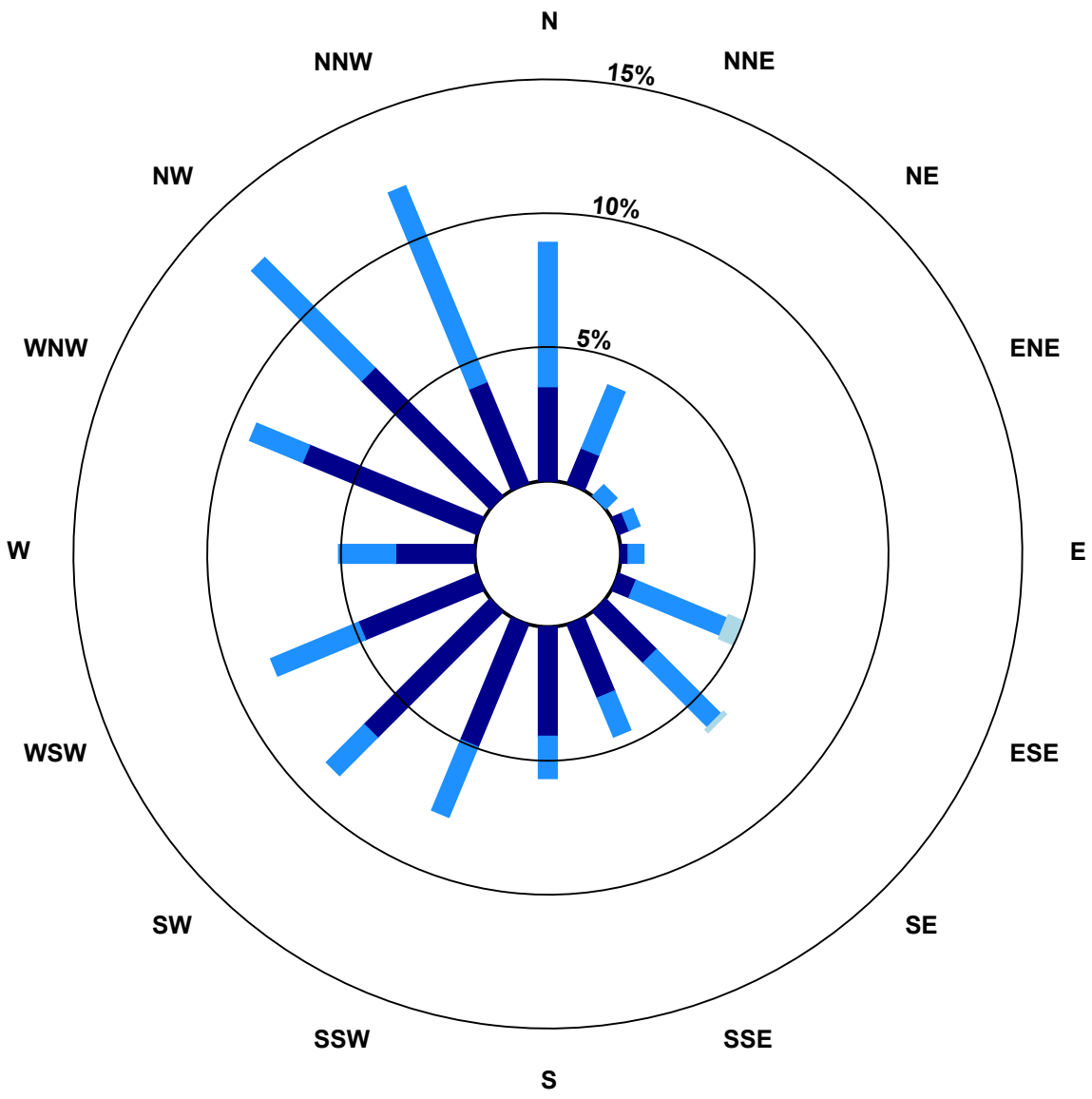
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ozone ($O_3$) - ppb

Patricia McInnes




Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

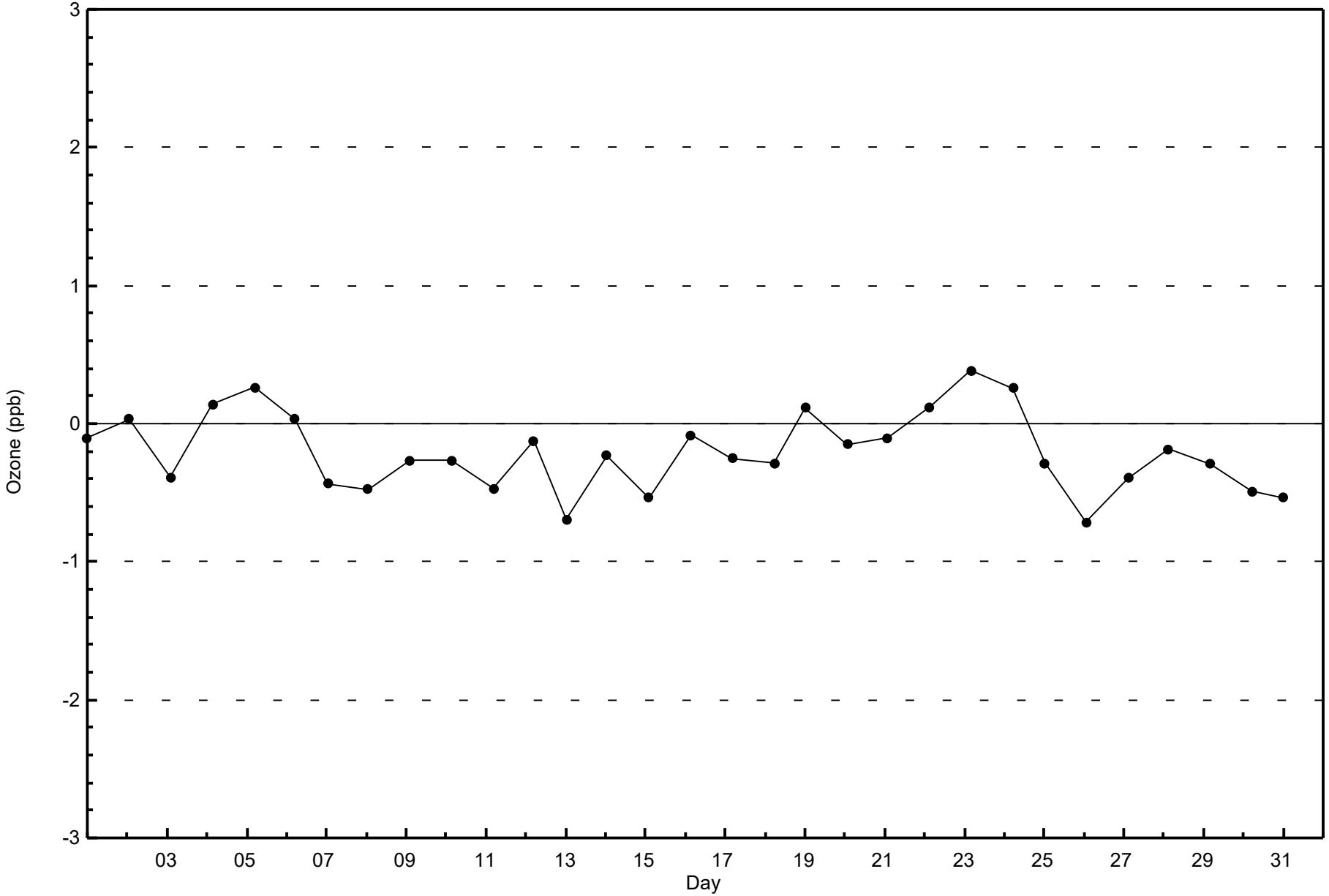
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Patricia McInnes - August 2026**

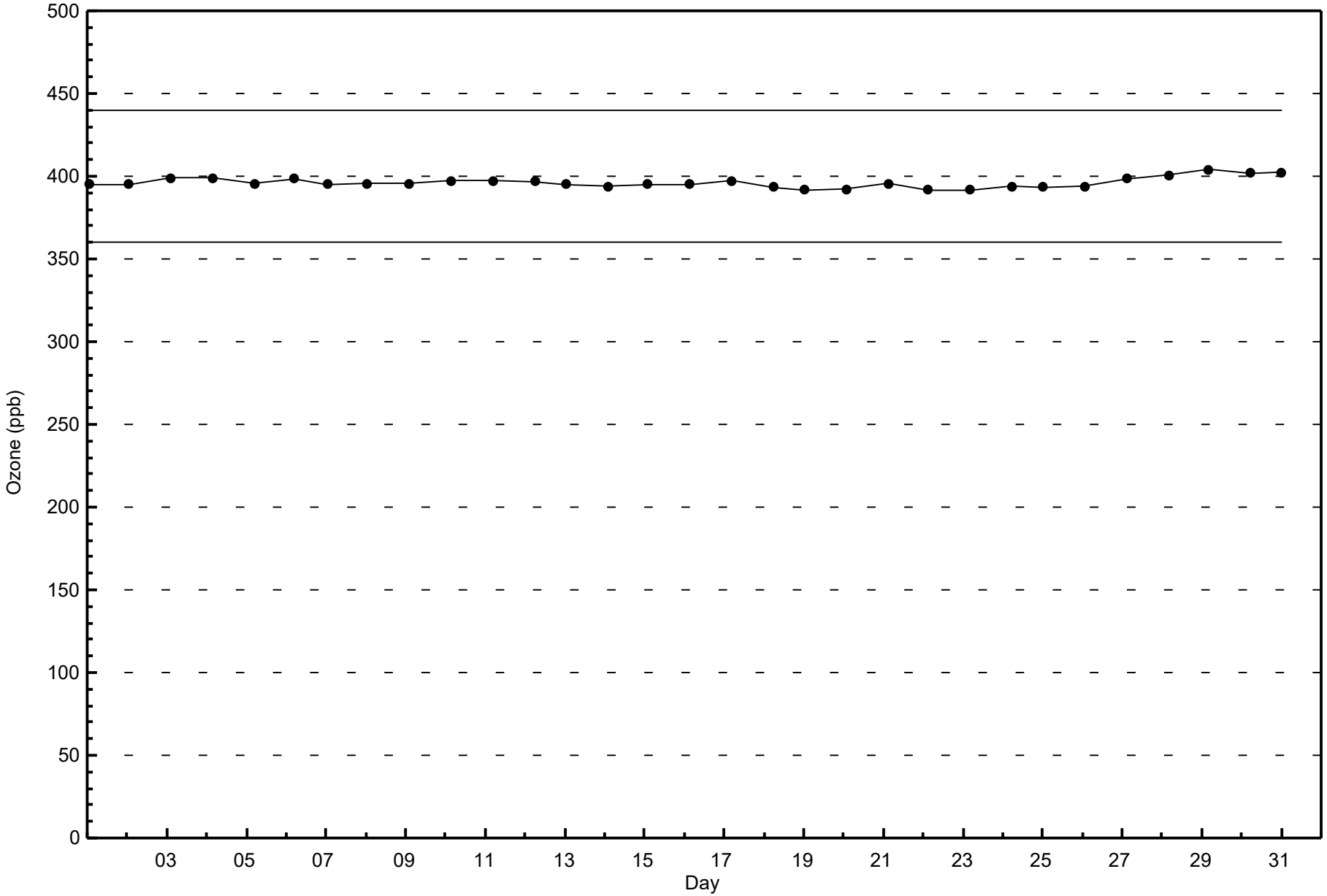


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Patricia McInnes - August 2026

Maximum Value: 11.5 ppb on Aug 14 09:00

Maximum Daily Average: 2.8 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 4 22:00

Minimum Daily Average: 0.1 ppb on Aug 28

Maximum Diurnal Average: 1.9 ppb at hour 10

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 0.75 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.3 $Q_3$ = 0.8 $P_{90}$ = 1.7 $P_{99}$ = 7.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.2 | Z | 0.2 | 0.8 | 1.0 | 0.9 | 2.7 | 2.3 | 0.6 | 1.5 | 0.7 | 0.9 | 0.3 | 0.5 | 0.5 | 0.4 | 0.3 | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.3 | 0.7 | 2.7 |
| 2-Aug | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 0.8 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.8 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.3 | 0.8 | 1.4 | 0.9 | 0.9 | 0.6 | 0.2 | 0.3 | 0.2 | 0.5 | 0.4 | 0.6 | 0.9 | 0.7 | 0.9 | 2.7 | 1.0 | 0.5 | 0.6 | 2.7 |
| 4-Aug | 0.4 | 0.6 | 0.3 | 0.5 | 2.5 | Z | 0.8 | 1.1 | 1.3 | 0.2 | 0.4 | 0.2 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.0 | 0.6 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 2.5 |
| 5-Aug | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 1.4 |
| 6-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 1.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.7 | 0.6 | 0.3 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.2 |
| 7-Aug | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 1.0 | 0.5 | 0.4 | 0.4 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 |
| 8-Aug | 0.2 | 0.4 | 0.2 | Z | 0.1 | 0.8 | 0.5 | 3.0 | 4.8 | 2.8 | 3.7 | 2.9 | 1.9 | 1.2 | 0.7 | 0.6 | 1.2 | 1.6 | 1.4 | 0.4 | 0.1 | 0.3 | 0.2 | 0.1 | 1.3 | 4.8 |
| 9-Aug | 0.1 | 0.2 | 0.1 | 0.1 | Z | 0.9 | 1.7 | 1.5 | 1.0 | 0.7 | 0.4 | 0.3 | 0.2 | 0.3 | 0.7 | 1.6 | 0.9 | 1.2 | 0.4 | 0.0 | 0.6 | 0.5 | 0.0 | 0.0 | 0.6 | 1.7 |
| 10-Aug | 0.3 | 0.2 | 0.7 | 0.3 | 0.5 | Z | 2.0 | 0.8 | 0.8 | 4.8 | 3.0 | 0.2 | 0.2 | 0.8 | 0.4 | 0.5 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 4.8 |
| 11-Aug | Z | 0.3 | 0.3 | 0.3 | 1.1 | 3.9 | 1.8 | 1.4 | 0.8 | 2.1 | 1.6 | 2.1 | 2.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 3.9 |
| 12-Aug | 0.3 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.5 | 1.0 | 1.7 | 1.8 | 1.3 | 0.8 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 1.8 |
| 13-Aug | 0.6 | 0.2 | Z | 0.3 | 0.3 | 0.9 | 2.7 | 4.6 | 5.9 | 5.8 | 2.6 | 2.5 | 1.2 | 1.0 | 1.0 | 0.7 | 1.3 | 0.3 | 0.1 | 0.6 | 0.2 | 1.4 | 0.6 | 0.6 | 1.5 | 5.9 |
| 14-Aug | 0.2 | 0.2 | 0.5 | Z | 3.6 | 2.8 | 5.4 | 5.7 | 11.5 | 10.0 | 7.4 | 4.6 | 2.7 | 1.8 | 1.0 | 0.6 | 0.4 | 0.2 | 0.2 | 0.2 | 1.4 | 0.5 | 1.4 | 0.4 | 2.7 | 11.5 |
| 15-Aug | 0.5 | 0.4 | 0.2 | 0.1 | Z | 0.5 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | 1.0 | 0.4 | 0.1 | 0.1 | 0.2 | 1.0 |
| 16-Aug | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.7 | 0.7 | 0.3 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.2 | 0.1 | 0.0 | 0.7 | 1.5 | 0.2 | 0.4 | 0.1 | 0.4 | 1.5 |
| 17-Aug | Z | 0.0 | 0.1 | 0.1 | 0.5 | 0.6 | 0.5 | 0.4 | 0.2 | 0.6 | 0.5 | 0.3 | 0.1 | 0.1 | 0.8 | 0.4 | 0.3 | 0.3 | 0.6 | 0.6 | 0.2 | 0.0 | 0.1 | 1.1 | 0.4 | 1.1 |
| 18-Aug | 0.2 | Z | 0.1 | 0.0 | 0.3 | 1.6 | 1.5 | 1.6 | 0.9 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.3 | 0.2 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.0 | 0.4 | 1.6 |
| 19-Aug | 0.0 | 0.2 | Z | 0.0 | 0.4 | 0.7 | 0.6 | 0.2 | 0.5 | 0.7 | 0.5 | 0.6 | 0.3 | 0.6 | 0.4 | 0.3 | 0.6 | 0.0 | 0.1 | 0.4 | 0.5 | 2.7 | 1.3 | 0.2 | 0.5 | 2.7 |
| 20-Aug | 0.0 | 0.3 | 0.0 | Z | 0.6 | 0.4 | 4.2 | 0.8 | 1.1 | 2.0 | 2.1 | 3.1 | 4.0 | 5.5 | 1.3 | 0.7 | 0.9 | 0.3 | 0.4 | 0.3 | 1.0 | 0.6 | 0.1 | 0.4 | 1.3 | 5.5 |
| 21-Aug | 0.1 | 0.2 | 0.1 | 0.3 | Z | 1.2 | 1.0 | 1.1 | 1.0 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 1.0 | 0.8 | 1.3 | 1.4 | 0.4 | 0.2 | 0.1 | 0.5 | 1.4 |
| 22-Aug | 0.4 | 0.0 | 0.0 | 0.2 | 0.5 | Z | 1.4 | 1.4 | 1.1 | 0.9 | 0.7 | 0.3 | 0.5 | 0.1 | 0.5 | 0.5 | 0.9 | 0.8 | 0.6 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.5 | 1.4 |
| 23-Aug | Z | 0.1 | 0.1 | 0.1 | 0.5 | 0.7 | 0.4 | 1.0 | 1.0 | 0.4 | 1.1 | 1.5 | 0.2 | 1.0 | 0.8 | 0.2 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.4 | 1.5 |
| 24-Aug | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 0.5 | 0.5 | 4.5 | 6.1 | 3.0 | 4.0 | 1.8 | 0.6 | 0.7 | 1.0 | 1.0 | 0.8 | 0.2 | 0.3 | 0.1 | 7.3 | 0.2 | 1.4 | 7.3 |
| 25-Aug | 0.1 | 0.1 | Z | 0.3 | 0.5 | 7.4 | 4.2 | 6.4 | 9.3 | 9.3 | 3.8 | 1.8 | 7.0 | 7.8 | 2.5 | 0.5 | 0.7 | 1.2 | 0.6 | 1.5 | 0.0 | 0.1 | 0.0 | 0.0 | 2.8 | 9.3 |
| 26-Aug | 0.0 | 0.0 | 0.0 | Z | 1.1 | 1.7 | 4.1 | 1.9 | 1.7 | 0.9 | 0.6 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.9 | 0.9 | 1.5 | 0.2 | 0.0 | 0.0 | 0.7 | 4.1 |
| 27-Aug | 0.0 | 0.0 | 0.3 | 0.0 | Z | 0.4 | 0.7 | 0.7 | 1.6 | C | C | C | C | C | C | 0.9 | 2.4 | 1.2 | 0.7 | 0.8 | 0.5 | 0.4 | 0.1 | 0.1 | -- | 2.4 |
| 28-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.0 | 0.2 | 1.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 1.0 |
| 29-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.1 | 0.5 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.8 |
| 30-Aug | 0.5 | Z | 0.3 | 0.2 | 1.5 | 0.4 | 0.7 | 0.9 | 0.5 | 0.3 | 0.9 | 0.0 | 0.2 | 0.4 | 0.3 | 0.3 | 0.4 | 1.8 | 1.0 | 0.9 | 0.7 | 0.4 | 0.3 | 0.1 | 0.6 | 1.8 |
| 31-Aug | 0.3 | 0.3 | Z | 0.0 | 0.1 | 0.4 | 3.8 | 2.5 | 2.7 | 2.6 | 2.0 | 0.7 | 2.6 | 0.4 | 1.3 | 1.9 | 0.0 | 0.0 | 0.0 | 0.4 | 0.8 | 0.7 | 0.0 | 0.6 | 1.0 | 3.8 |
| | 0.2 | 0.2 | 0.1 | 0.1 | 0.6 | 1.0 | 1.3 | 1.4 | 1.8 | 1.9 | 1.5 | 1.0 | 1.1 | 0.9 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.2 | Diurnal Average | |
| | 0.6 | 0.6 | 0.7 | 0.5 | 3.6 | 7.4 | 5.4 | 6.4 | 11.5 | 10.0 | 7.4 | 4.6 | 7.0 | 7.8 | 2.5 | 1.9 | 2.4 | 1.8 | 1.4 | 1.5 | 1.5 | 2.7 | 7.3 | 1.1 | Diurnal Maximum | |

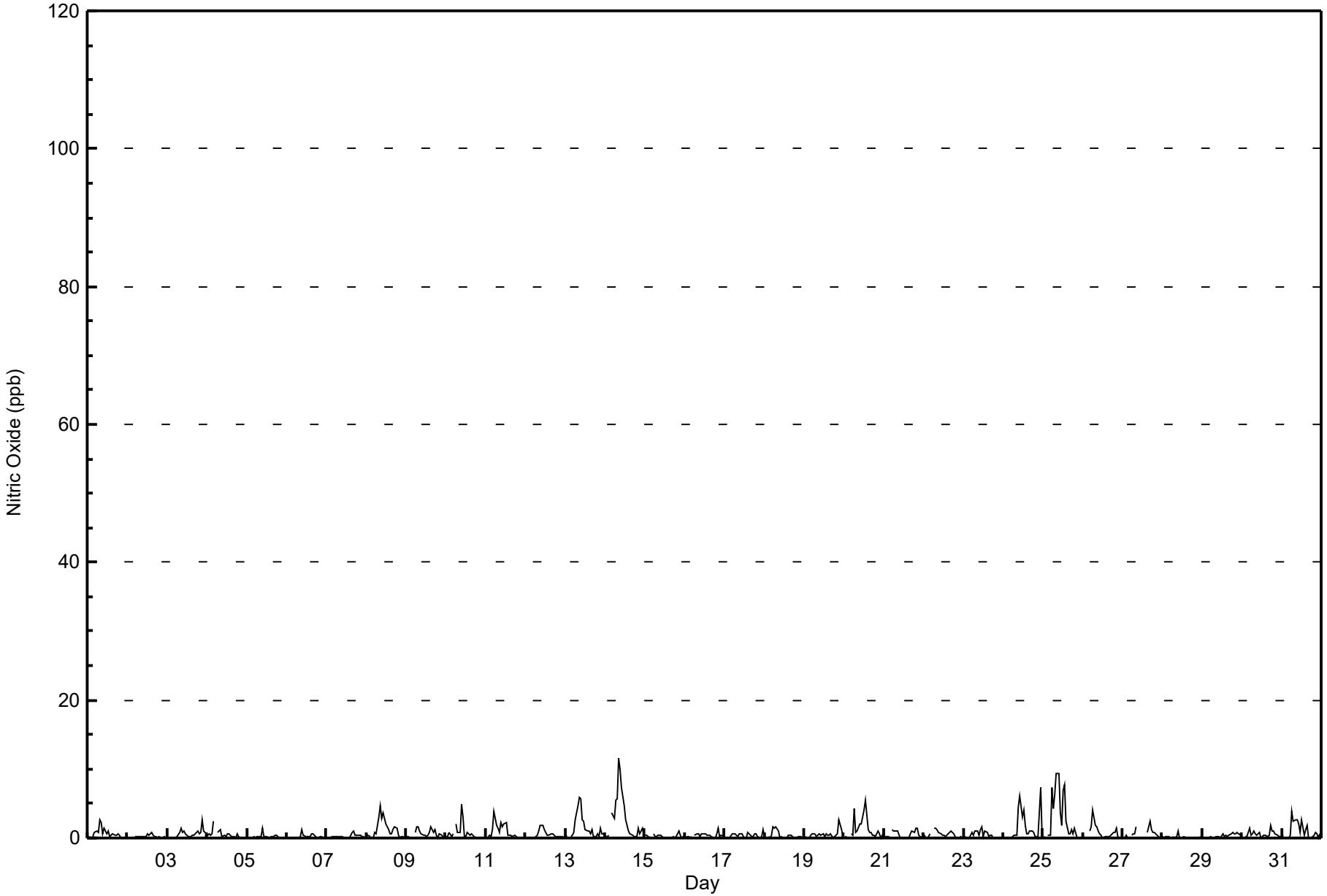
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 707 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

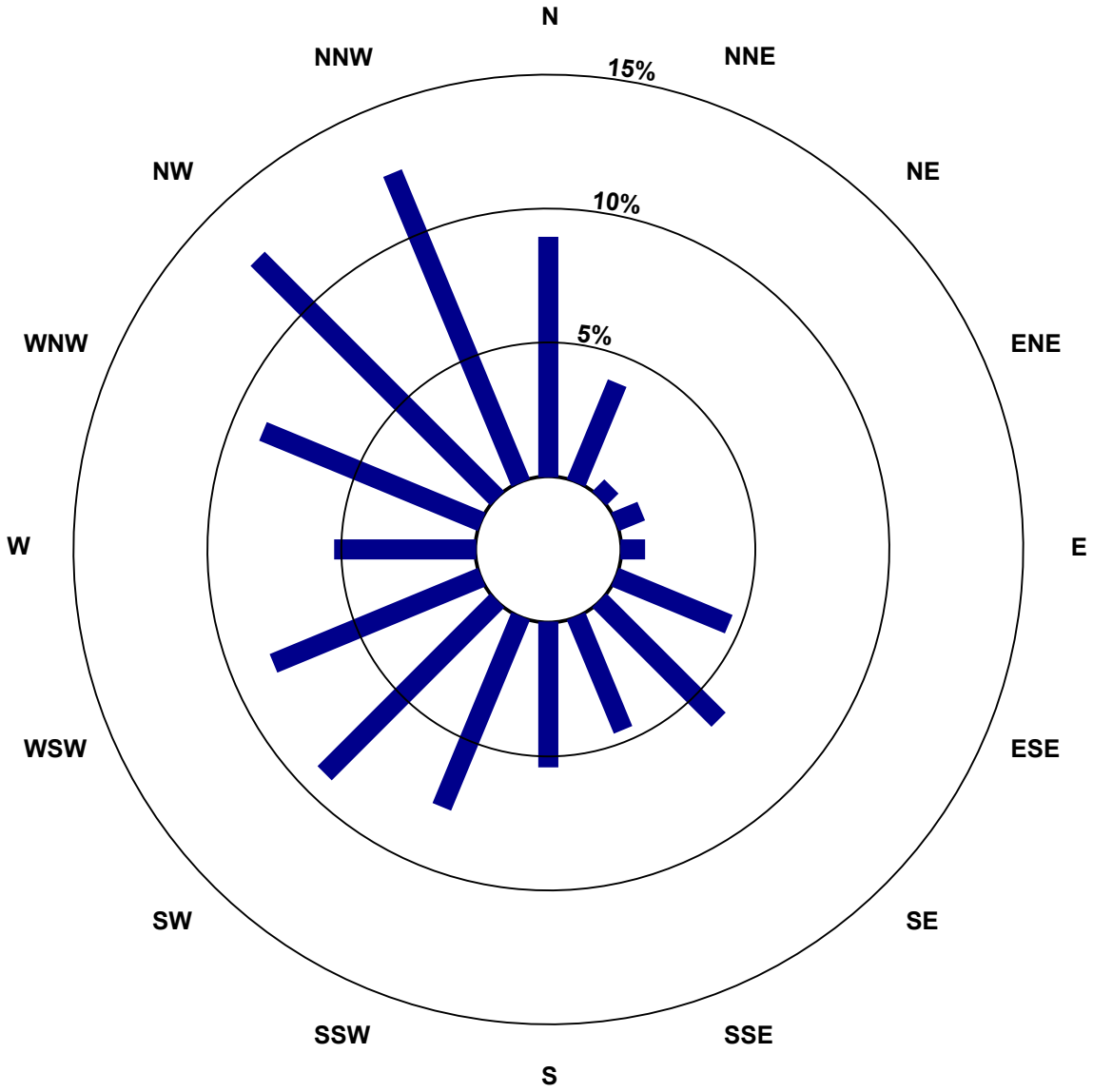
Total Number of Valid Hours: 707

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 63 | 28 | 4 | 7 | 6 | 32 | 44 | 32 | 38 | 54 | 64 | 59 | 37 | 62 | 89 | 88 | 707 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 63 | 28 | 4 | 7 | 6 | 32 | 44 | 32 | 38 | 54 | 64 | 59 | 37 | 62 | 89 | 88 | 707 |

Total Number of Valid Hours: 707

Total Number of Hours: 744




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

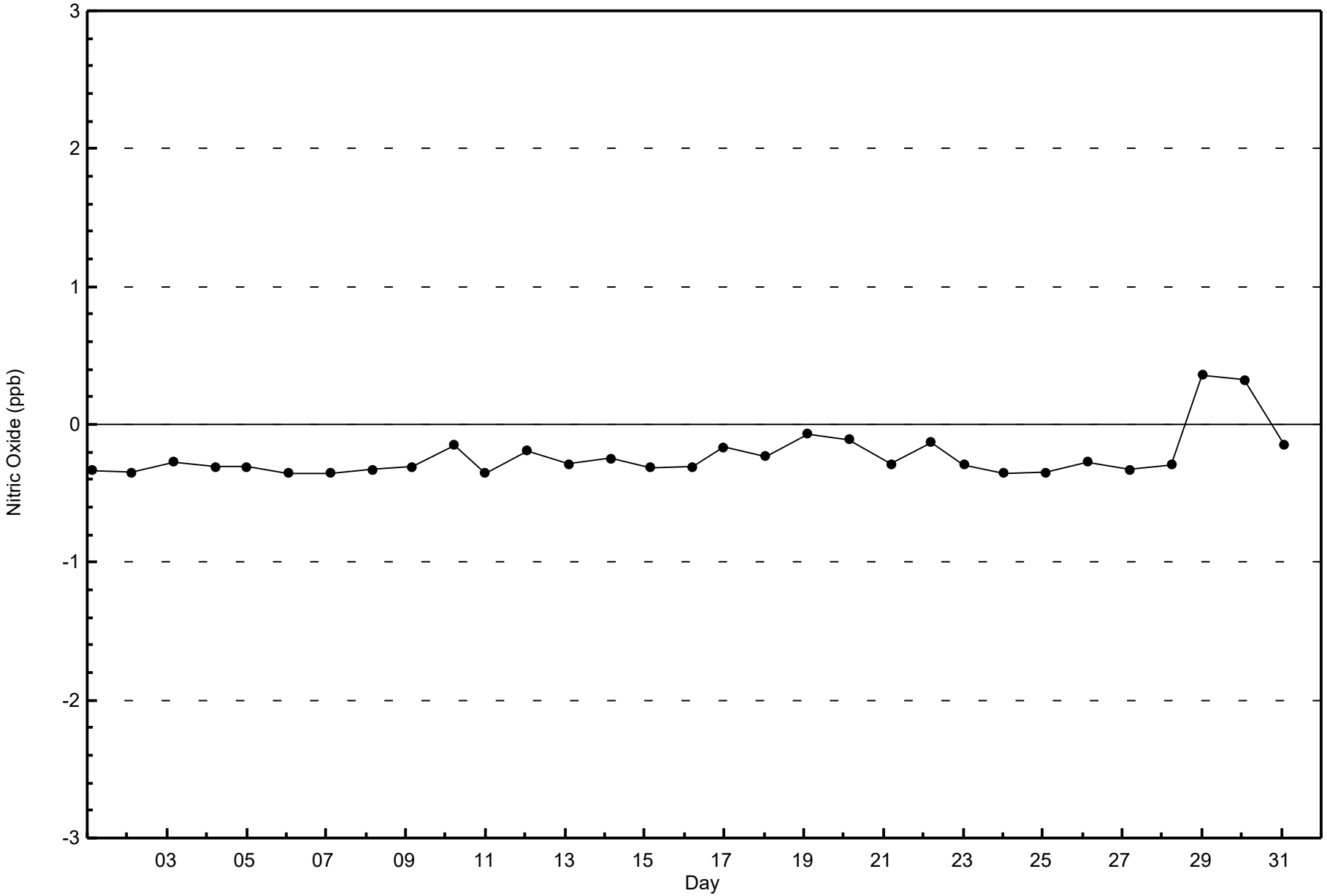
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Patricia McInnes - August 2026**

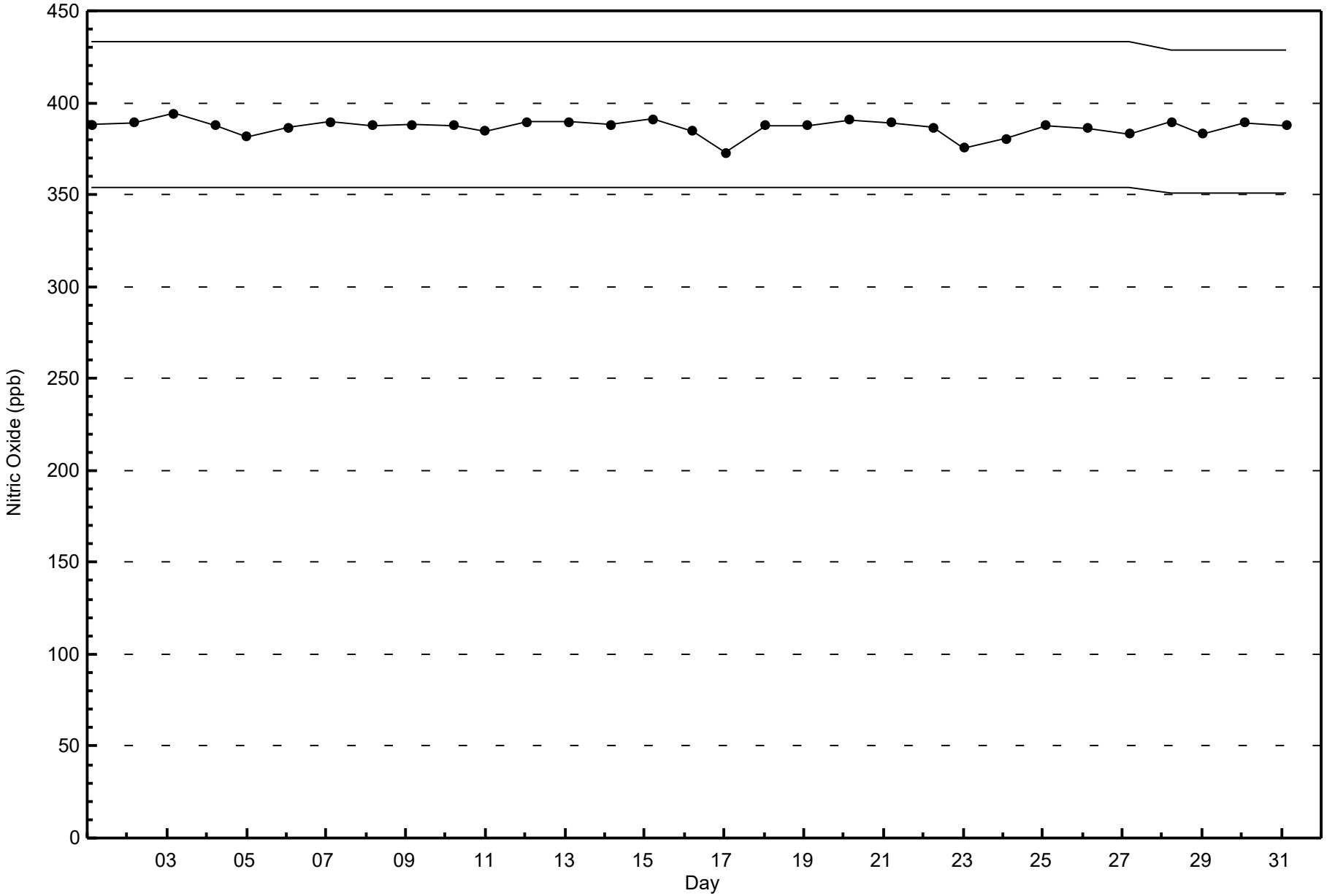


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Patricia McInnes - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 15.7 ppb on Aug 25 14:00

Maximum Daily Average: 7.3 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 3 04:00

Minimum Daily Average: 0.1 ppb on Aug 6

Maximum Diurnal Average: 3.7 ppb at hour 20

Minimum Diurnal Average: 1.7 ppb at hour 24

Monthly Average: 2.38 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.6 Median = 1.8 $Q_3$ = 3.4 $P_{90}$ = 5.5 $P_{99}$ = 10.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | 1.4 | Z | 1.4 | 2.6 | 2.4 | 2.6 | 5.7 | 4.4 | 2.1 | 2.1 | 1.7 | 2.1 | 1.0 | 0.9 | 0.9 | 1.4 | 1.7 | 3.1 | 2.9 | 4.2 | 3.3 | 1.8 | 5.5 | 2.5 | 5.7 |
| 2-Aug | 5.6 | 6.1 | 5.1 | Z | 3.6 | 2.9 | 3.3 | 2.3 | 1.9 | 2.5 | 1.9 | 1.3 | 2.1 | 1.7 | 3.1 | 1.8 | 0.9 | 0.8 | 0.5 | 1.9 | 0.6 | 1.3 | 0.3 | 0.1 | 2.2 | 6.1 |
| 3-Aug | 0.1 | 0.1 | 0.1 | 0.0 | Z | 0.0 | 0.1 | 0.5 | 1.6 | 0.4 | 1.5 | 1.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.5 | 2.0 | 4.6 | 5.9 | 6.2 | 4.6 | 3.0 | 2.4 | 1.5 | 6.2 |
| 4-Aug | 3.5 | 5.7 | 3.0 | 2.6 | 4.7 | Z | 1.1 | 1.1 | 1.2 | 0.4 | 0.7 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.7 | 4.0 | 3.7 | 0.5 | 0.0 | 0.2 | 0.1 | 1.5 | 5.7 |
| 5-Aug | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 | 0.1 | 0.2 | 0.1 | 0.0 | 0.5 | 0.5 | 0.9 | 4.1 | 4.8 | 3.0 | 2.0 | 0.3 | 0.0 | 0.0 | 0.8 | 4.8 |
| 6-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.8 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.8 |
| 7-Aug | 0.0 | 0.1 | Z | 0.5 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 4.7 | 4.0 | 4.0 | 3.9 | 4.9 | 9.5 | 5.2 | 3.7 | 2.6 | 1.9 | 9.5 |
| 8-Aug | 2.6 | 2.0 | 2.0 | Z | 2.3 | 2.8 | 1.2 | 2.3 | 5.0 | 3.2 | 3.8 | 3.8 | 3.8 | 3.0 | 2.3 | 2.1 | 4.7 | 5.7 | 7.2 | 5.9 | 4.9 | 3.1 | 2.5 | 2.4 | 3.4 | 7.2 |
| 9-Aug | 3.5 | 3.4 | 3.7 | 4.1 | Z | 4.7 | 4.1 | 4.0 | 2.9 | 1.9 | 1.3 | 1.3 | 1.5 | 2.2 | 3.7 | 7.2 | 7.2 | 8.4 | 7.8 | 5.9 | 8.4 | 7.6 | 2.8 | 3.2 | 4.4 | 8.4 |
| 10-Aug | 3.4 | 4.2 | 4.8 | 6.6 | 4.6 | Z | 5.2 | 1.9 | 2.9 | 6.6 | 6.3 | 1.6 | 1.8 | 3.5 | 2.7 | 3.2 | 2.9 | 2.6 | 1.4 | 1.0 | 1.5 | 0.7 | 1.1 | 2.9 | 3.2 | 6.6 |
| 11-Aug | Z | 12.4 | 9.2 | 6.8 | 5.8 | 4.5 | 2.9 | 3.1 | 2.4 | 3.7 | 3.9 | 5.1 | 4.9 | 2.2 | 2.0 | 1.9 | 1.8 | 2.5 | 1.9 | 2.9 | 3.3 | 2.0 | 1.5 | 0.7 | 3.8 | 12.4 |
| 12-Aug | 1.5 | Z | 7.8 | 3.0 | 0.5 | 0.7 | 0.9 | 1.9 | 3.0 | 3.0 | 3.2 | 2.7 | 2.1 | 1.2 | 1.4 | 1.8 | 1.5 | 1.2 | 1.7 | 2.1 | 1.4 | 2.9 | 3.1 | 5.0 | 2.3 | 7.8 |
| 13-Aug | 6.9 | 5.5 | Z | 6.9 | 6.0 | 4.6 | 4.3 | 4.2 | 4.3 | 4.5 | 4.3 | 3.7 | 2.4 | 2.2 | 1.7 | 1.3 | 2.9 | 1.2 | 1.3 | 5.2 | 2.6 | 2.0 | 2.7 | 4.1 | 3.7 | 6.9 |
| 14-Aug | 2.4 | 6.6 | 8.6 | Z | 7.4 | 5.4 | 6.6 | 7.2 | 8.4 | 8.5 | 8.8 | 7.2 | 6.1 | 4.4 | 4.9 | 3.3 | 2.9 | 1.9 | 1.6 | 1.8 | 5.9 | 4.0 | 6.1 | 2.4 | 5.3 | 8.8 |
| 15-Aug | 1.5 | 1.3 | 0.9 | 0.9 | Z | 0.9 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.5 | 0.4 | 2.0 | 3.8 | 2.1 | 0.4 | 0.5 | 0.8 | 3.8 |
| 16-Aug | 0.1 | 0.2 | 0.2 | 0.2 | 0.7 | Z | 0.6 | 3.2 | 3.0 | 2.7 | 2.7 | 2.0 | 2.0 | 1.8 | 2.1 | 2.1 | 1.9 | 0.9 | 1.7 | 6.7 | 5.4 | 3.4 | 3.0 | 2.6 | 2.1 | 6.7 |
| 17-Aug | Z | 1.9 | 2.2 | 1.0 | 2.2 | 2.6 | 1.2 | 0.9 | 0.6 | 0.7 | 0.9 | 0.6 | 0.3 | 0.3 | 1.4 | 0.5 | 0.5 | 1.0 | 1.6 | 4.7 | 4.3 | 3.1 | 3.0 | 1.8 | 1.6 | 4.7 |
| 18-Aug | 0.8 | Z | 1.0 | 1.9 | 4.8 | 5.8 | 3.1 | 2.8 | 1.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 0.1 | 0.0 | 0.7 | 1.9 | 1.9 | 1.4 | 1.0 | 1.4 | 5.8 |
| 19-Aug | 0.5 | 1.1 | Z | 0.7 | 1.1 | 2.4 | 0.7 | 0.5 | 0.9 | 0.9 | 0.3 | 0.6 | 0.1 | 0.5 | 0.4 | 0.5 | 1.1 | 0.3 | 1.0 | 2.2 | 5.1 | 6.1 | 3.7 | 2.1 | 1.4 | 6.1 |
| 20-Aug | 2.0 | 1.6 | 1.0 | Z | 1.7 | 2.1 | 6.5 | 1.2 | 1.3 | 2.5 | 2.5 | 6.4 | 9.8 | 10.5 | 3.0 | 2.2 | 3.8 | 3.6 | 4.9 | 5.1 | 3.5 | 2.1 | 1.1 | 2.6 | 3.5 | 10.5 |
| 21-Aug | 1.5 | 1.0 | 1.7 | 2.4 | Z | 5.0 | 2.4 | 1.8 | 1.3 | 1.1 | 0.8 | 0.4 | 0.1 | 0.3 | 0.3 | 0.3 | 1.3 | 1.8 | 3.2 | 5.9 | 9.2 | 5.4 | 1.1 | 0.9 | 2.1 | 9.2 |
| 22-Aug | 1.8 | 2.2 | 2.4 | 3.8 | 3.1 | Z | 4.0 | 2.9 | 2.6 | 2.1 | 2.2 | 2.4 | 2.5 | 1.7 | 1.5 | 1.7 | 2.3 | 3.0 | 3.1 | 2.8 | 1.0 | 1.9 | 2.1 | 1.5 | 2.4 | 4.0 |
| 23-Aug | Z | 2.0 | 1.5 | 1.4 | 2.4 | 3.7 | 3.6 | 3.8 | 2.9 | 1.3 | 1.7 | 2.0 | 0.5 | 1.4 | 2.8 | 0.7 | 0.4 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 3.8 |
| 24-Aug | 0.0 | Z | 0.0 | 0.0 | 1.1 | 0.2 | 0.4 | 0.4 | 0.6 | 4.0 | 5.6 | 2.8 | 2.8 | 1.0 | 0.8 | 1.0 | 3.2 | 4.7 | 4.9 | 4.1 | 1.9 | 1.2 | 4.1 | 2.0 | 2.0 | 5.6 |
| 25-Aug | 0.6 | 0.8 | Z | 5.4 | 6.0 | 8.0 | 7.2 | 8.3 | 10.5 | 10.5 | 7.1 | 6.0 | 13.7 | 15.7 | 11.0 | 7.9 | 7.4 | 6.5 | 7.7 | 12.8 | 4.4 | 5.7 | 2.4 | 2.6 | 7.3 | 15.7 |
| 26-Aug | 2.0 | 2.0 | 0.9 | Z | 5.0 | 4.5 | 4.1 | 3.1 | 2.8 | 2.2 | 1.7 | 1.7 | 0.9 | 0.6 | 0.7 | 0.8 | 1.5 | 1.5 | 3.6 | 3.8 | 8.3 | 4.2 | 1.3 | 0.8 | 2.5 | 8.3 |
| 27-Aug | 3.9 | 2.7 | 3.4 | 3.7 | Z | 3.6 | 2.5 | 1.6 | 2.0 | C | C | C | C | C | C | 3.4 | 6.5 | 2.9 | 1.5 | 1.6 | 1.0 | 0.7 | 0.5 | 0.5 | -- | 6.5 |
| 28-Aug | 0.5 | 0.5 | 0.8 | 0.6 | 1.2 | Z | 1.5 | 0.9 | 1.1 | 0.8 | 0.3 | 0.2 | 0.1 | 0.3 | 0.1 | 0.0 | 0.2 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.2 | 0.1 | 0.5 | 1.5 |
| 29-Aug | Z | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.6 | 1.8 | 5.2 | 3.7 | 3.9 | 1.4 | 1.6 | 0.9 | 5.2 |
| 30-Aug | 1.7 | Z | 3.2 | 3.2 | 4.3 | 2.0 | 2.8 | 1.6 | 1.0 | 0.7 | 2.2 | 1.6 | 1.0 | 1.1 | 1.0 | 0.9 | 1.2 | 2.5 | 3.7 | 6.4 | 6.6 | 3.9 | 3.4 | 0.4 | 2.5 | 6.6 |
| 31-Aug | 2.1 | 0.7 | Z | 1.9 | 2.3 | 1.8 | 3.1 | 3.5 | 3.1 | 3.7 | 3.1 | 0.9 | 3.7 | 0.7 | 3.0 | 3.7 | 0.4 | 0.2 | 0.5 | 1.6 | 1.6 | 2.0 | 0.7 | 1.6 | 2.0 | 3.7 |
| | 2.0 | 2.5 | 2.6 | 2.3 | 2.8 | 2.7 | 2.5 | 2.3 | 2.4 | 2.4 | 2.3 | 1.9 | 2.2 | 2.0 | 1.8 | 1.8 | 2.1 | 2.2 | 2.7 | 3.7 | 3.7 | 2.7 | 1.9 | 1.7 | Diurnal Average | |
| | 6.9 | 12.4 | 9.2 | 6.9 | 7.4 | 8.0 | 7.2 | 8.3 | 10.5 | 10.5 | 8.8 | 7.2 | 13.7 | 15.7 | 11.0 | 7.9 | 7.4 | 8.4 | 7.8 | 12.8 | 9.5 | 7.6 | 6.1 | 5.5 | Diurnal Maximum | |

Z - zerospan C - Calibration

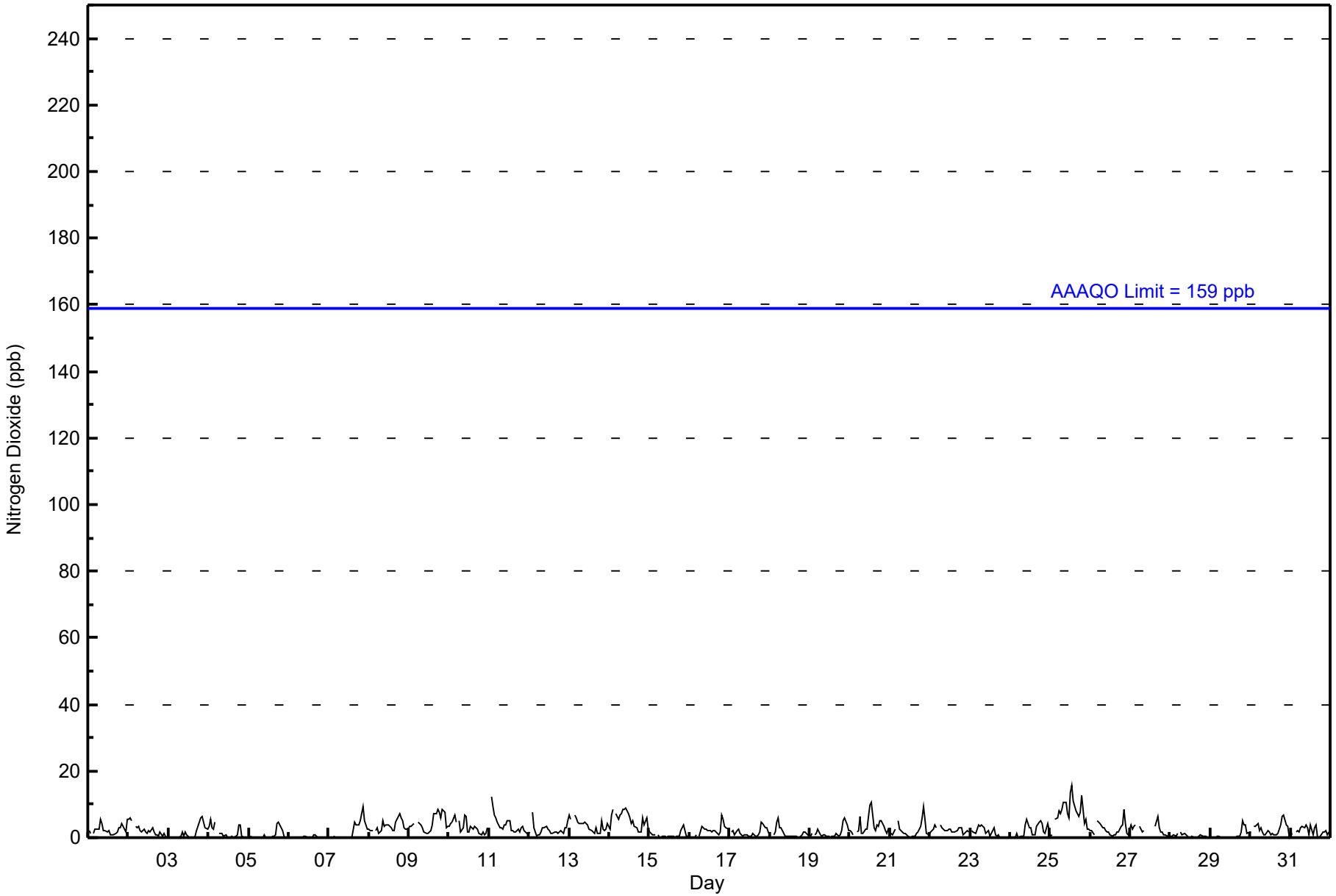
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Patricia McInnes - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb

Patricia McInnes - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 707 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

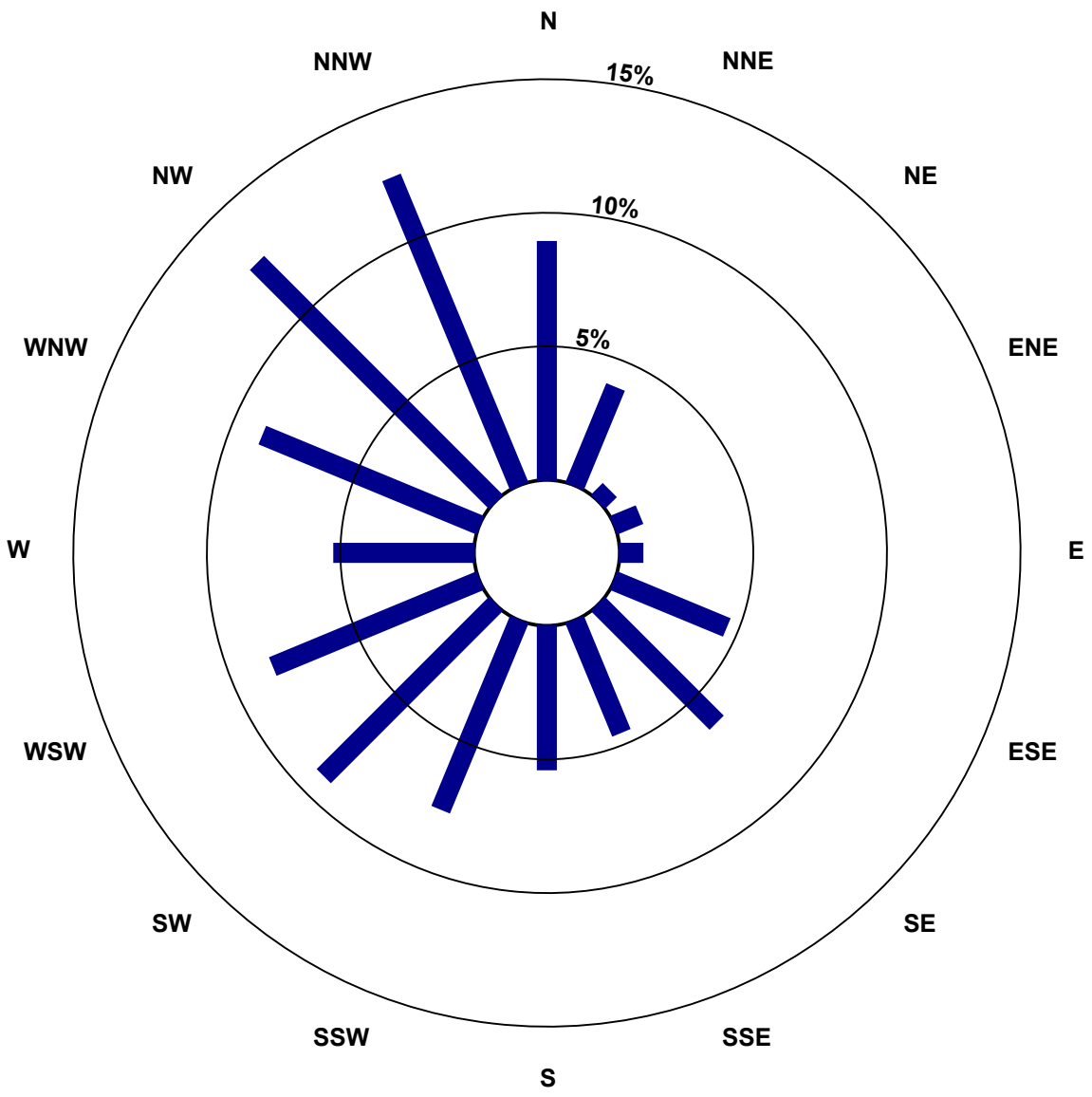
**Nitrogen Dioxide ($NO_2$) - ppb**

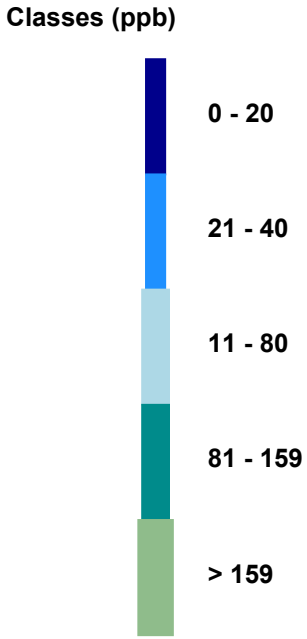
**Patricia McInnes - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 63 | 28 | 4 | 7 | 6 | 32 | 44 | 32 | 38 | 54 | 64 | 59 | 37 | 62 | 89 | 88 | 707 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 63 | 28 | 4 | 7 | 6 | 32 | 44 | 32 | 38 | 54 | 64 | 59 | 37 | 62 | 89 | 88 | 707 |

Total Number of Valid Hours: 707

Total Number of Hours: 744



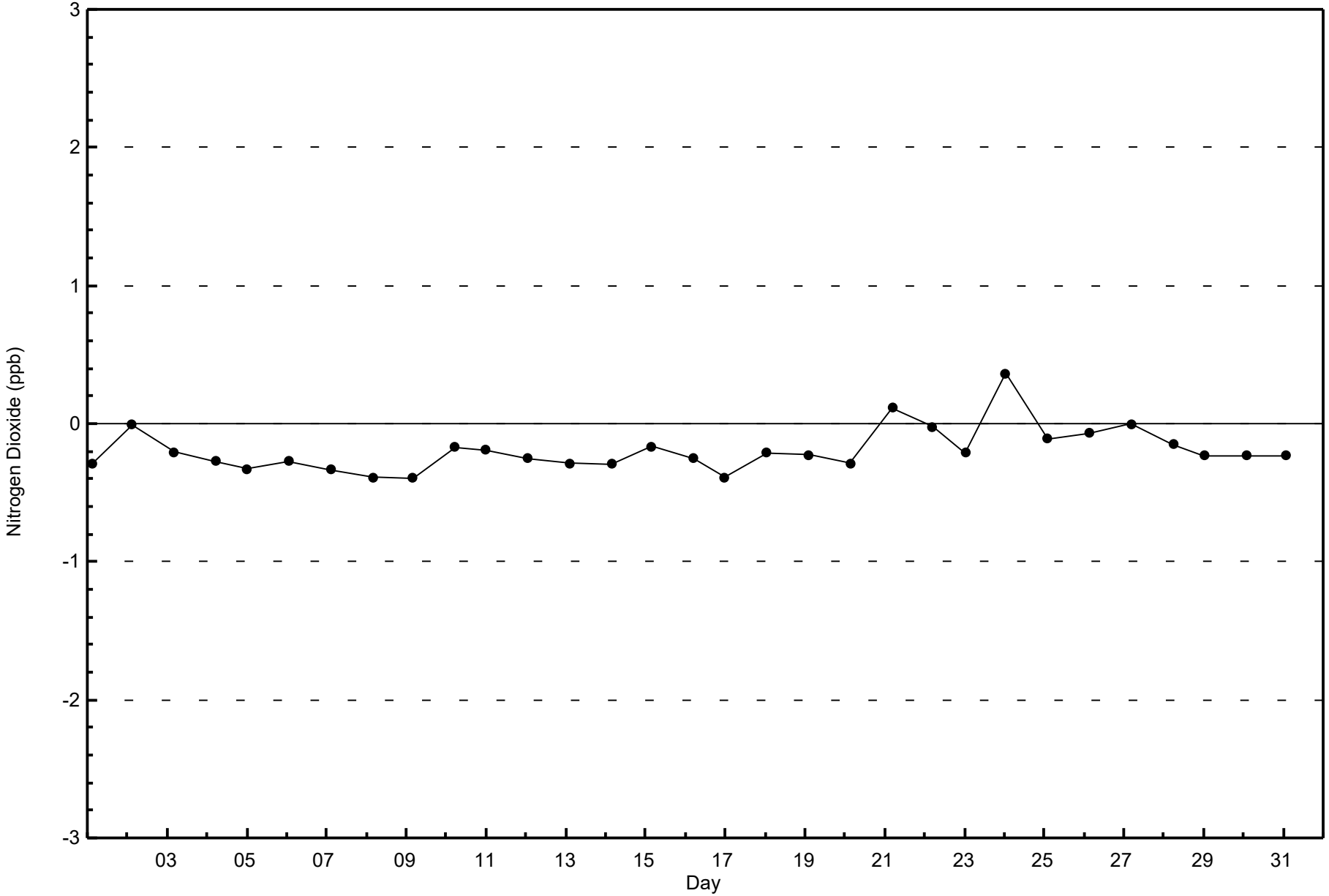

Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Patricia McInnes - August 2026**

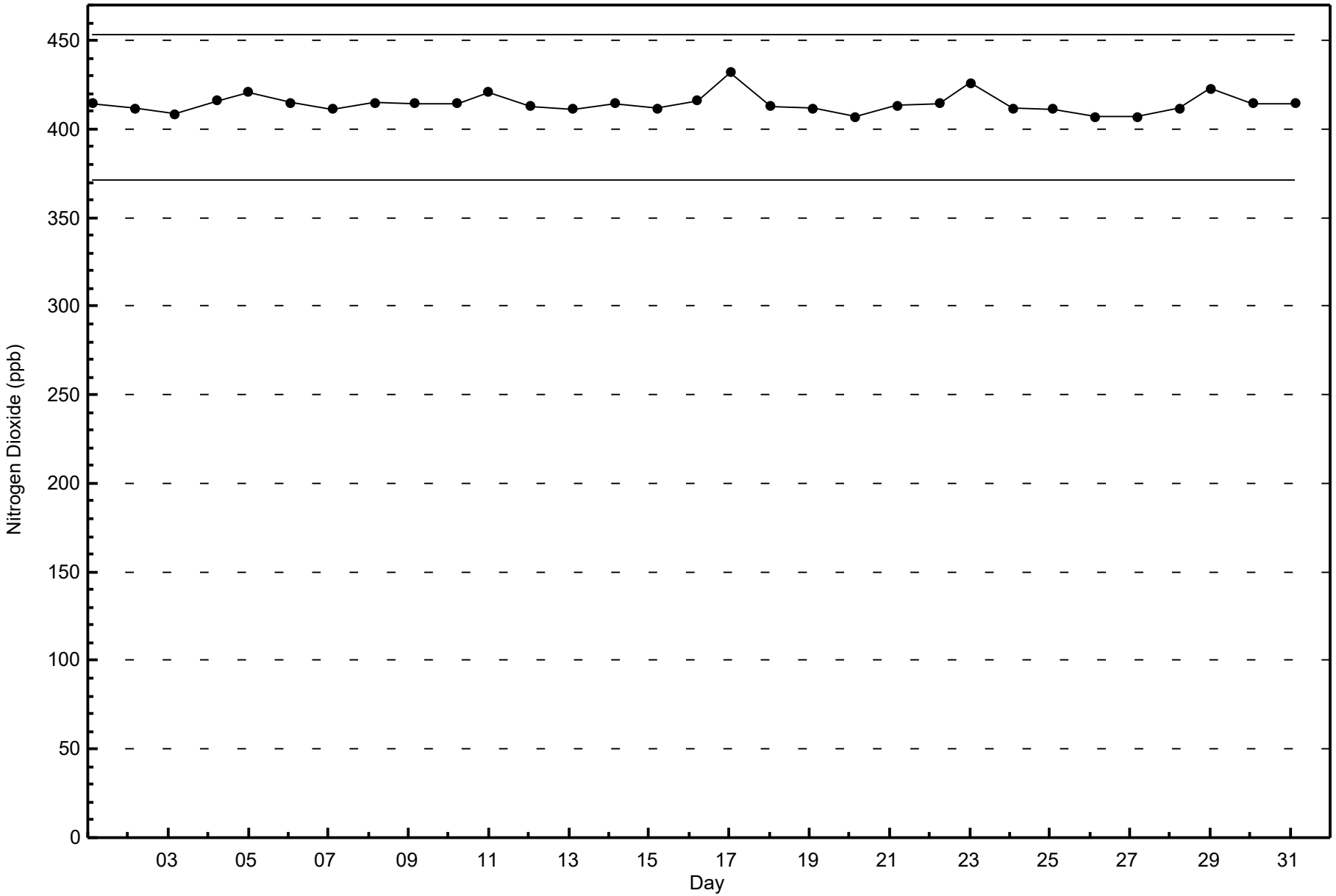


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Patricia McInnes - August 2026

Maximum Value: 23.5 ppb on Aug 25 14:00

Maximum Daily Average: 10.1 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 6 01:00

Minimum Daily Average: 0.3 ppb on Aug 6

Maximum Diurnal Average: 4.3 ppb at hour 10

Minimum Diurnal Average: 1.9 ppb at hour 24

Monthly Average: 3.13 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.3 $Q_1$ = 0.8 Median = 2.2 $Q_3$ = 4.3 $P_{90}$ = 7.2 $P_{99}$ = 15.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.3 | 1.6 | Z | 1.6 | 3.4 | 3.4 | 3.5 | 8.4 | 6.7 | 2.7 | 3.6 | 2.4 | 3.0 | 1.3 | 1.4 | 1.4 | 1.8 | 2.0 | 3.7 | 3.2 | 4.3 | 3.3 | 1.8 | 5.8 | 3.2 | 8.4 |
| 2-Aug | 5.6 | 6.2 | 5.1 | Z | 3.7 | 3.1 | 3.5 | 2.5 | 2.1 | 2.7 | 2.2 | 1.6 | 2.7 | 2.2 | 3.9 | 2.2 | 1.2 | 1.0 | 0.6 | 2.1 | 0.6 | 1.3 | 0.4 | 0.1 | 2.5 | 6.2 |
| 3-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.4 | 1.3 | 3.0 | 1.3 | 2.4 | 1.6 | 0.3 | 0.5 | 0.3 | 0.7 | 0.9 | 2.6 | 5.5 | 6.6 | 7.1 | 7.3 | 4.0 | 2.9 | 2.2 | 7.3 |
| 4-Aug | 3.9 | 6.3 | 3.3 | 3.1 | 7.2 | Z | 1.9 | 2.2 | 2.5 | 0.6 | 1.1 | 0.3 | 0.8 | 0.8 | 0.7 | 0.5 | 0.6 | 0.7 | 4.6 | 3.9 | 0.6 | 0.0 | 0.2 | 0.1 | 2.0 | 7.2 |
| 5-Aug | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 2.1 | 0.3 | 0.4 | 0.2 | 0.1 | 0.7 | 0.7 | 1.1 | 4.5 | 5.1 | 3.1 | 2.1 | 0.3 | 0.0 | 0.0 | 1.0 | 5.1 |
| 6-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.4 | 1.7 | 0.7 | 0.5 | 0.3 | 0.3 | 0.2 | 1.5 | 1.3 | 0.3 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 1.7 |
| 7-Aug | 0.1 | 0.1 | Z | 0.6 | 0.1 | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 5.5 | 5.0 | 4.5 | 4.3 | 5.3 | 9.9 | 5.3 | 3.8 | 2.7 | 2.1 | 9.9 |
| 8-Aug | 2.8 | 2.4 | 2.2 | Z | 2.4 | 3.6 | 1.7 | 5.3 | 9.8 | 6.0 | 7.5 | 6.7 | 5.7 | 4.2 | 3.0 | 2.7 | 5.9 | 7.3 | 8.6 | 6.3 | 5.0 | 3.4 | 2.7 | 2.5 | 4.7 | 9.8 |
| 9-Aug | 3.6 | 3.6 | 3.8 | 4.2 | Z | 5.6 | 5.8 | 5.5 | 3.9 | 2.6 | 1.7 | 1.6 | 1.7 | 2.5 | 4.4 | 8.8 | 8.1 | 9.6 | 8.2 | 5.9 | 9.0 | 8.1 | 2.8 | 3.2 | 5.0 | 9.6 |
| 10-Aug | 3.7 | 4.4 | 5.5 | 6.9 | 5.1 | Z | 7.2 | 2.7 | 3.7 | 11.4 | 9.3 | 1.8 | 2.0 | 4.3 | 3.1 | 3.7 | 3.4 | 2.9 | 1.4 | 1.0 | 1.5 | 0.7 | 1.1 | 2.9 | 3.9 | 11.4 |
| 11-Aug | Z | 12.7 | 9.5 | 7.1 | 6.9 | 8.4 | 4.7 | 4.5 | 3.2 | 5.8 | 5.5 | 7.2 | 7.2 | 2.6 | 2.4 | 2.2 | 2.1 | 2.9 | 2.1 | 3.0 | 3.3 | 2.0 | 1.5 | 0.7 | 4.7 | 12.7 |
| 12-Aug | 1.8 | Z | 7.8 | 3.0 | 0.5 | 0.7 | 1.2 | 2.4 | 4.0 | 4.7 | 5.0 | 4.0 | 2.9 | 1.7 | 1.9 | 2.4 | 2.0 | 1.6 | 2.0 | 2.3 | 1.5 | 3.0 | 3.3 | 5.1 | 2.8 | 7.8 |
| 13-Aug | 7.5 | 5.7 | Z | 7.2 | 6.3 | 5.5 | 7.0 | 8.8 | 10.2 | 10.3 | 6.9 | 6.2 | 3.6 | 3.2 | 2.7 | 2.0 | 4.2 | 1.5 | 1.4 | 5.8 | 2.8 | 3.4 | 3.3 | 4.7 | 5.2 | 10.3 |
| 14-Aug | 2.6 | 6.8 | 9.1 | Z | 11.0 | 8.2 | 12.0 | 12.9 | 19.9 | 18.5 | 16.2 | 11.8 | 8.8 | 6.2 | 5.9 | 3.9 | 3.3 | 2.1 | 1.8 | 2.0 | 7.3 | 4.5 | 7.5 | 2.8 | 8.1 | 19.9 |
| 15-Aug | 2.0 | 1.7 | 1.1 | 1.0 | Z | 1.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.5 | 0.4 | 0.3 | 0.5 | 0.4 | 0.2 | 0.3 | 0.7 | 0.5 | 2.2 | 4.8 | 2.5 | 0.5 | 0.6 | 1.0 | 4.8 |
| 16-Aug | 0.2 | 0.4 | 0.3 | 0.3 | 0.9 | Z | 0.9 | 3.9 | 3.7 | 3.0 | 3.2 | 2.5 | 2.5 | 2.2 | 2.6 | 2.5 | 2.1 | 1.0 | 1.7 | 7.4 | 6.9 | 3.6 | 3.4 | 2.7 | 2.5 | 7.4 |
| 17-Aug | Z | 1.9 | 2.3 | 1.1 | 2.7 | 3.2 | 1.7 | 1.3 | 0.8 | 1.3 | 1.4 | 0.9 | 0.4 | 0.4 | 2.2 | 0.9 | 0.8 | 1.3 | 2.2 | 5.3 | 4.5 | 3.1 | 3.1 | 2.9 | 2.0 | 5.3 |
| 18-Aug | 1.0 | Z | 1.1 | 1.9 | 5.1 | 7.4 | 4.6 | 4.4 | 2.2 | 0.6 | 0.6 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.9 | 0.3 | 0.0 | 0.7 | 2.0 | 2.2 | 1.6 | 1.0 | 1.7 | 7.4 |
| 19-Aug | 0.5 | 1.3 | Z | 0.7 | 1.5 | 3.1 | 1.3 | 0.7 | 1.4 | 1.6 | 0.8 | 1.2 | 0.4 | 1.1 | 0.8 | 0.8 | 1.7 | 0.3 | 1.1 | 2.6 | 5.6 | 8.8 | 5.0 | 2.3 | 1.9 | 8.8 |
| 20-Aug | 2.0 | 1.9 | 1.0 | Z | 2.3 | 2.5 | 10.7 | 2.0 | 2.4 | 4.5 | 4.6 | 9.5 | 13.8 | 16.0 | 4.3 | 2.9 | 4.7 | 3.9 | 5.3 | 5.4 | 4.5 | 2.7 | 1.2 | 3.0 | 4.8 | 16.0 |
| 21-Aug | 1.6 | 1.2 | 1.8 | 2.7 | Z | 6.2 | 3.4 | 2.9 | 2.3 | 1.5 | 0.9 | 0.4 | 0.1 | 0.3 | 0.3 | 0.4 | 1.9 | 2.8 | 4.0 | 7.2 | 10.6 | 5.8 | 1.3 | 1.0 | 2.6 | 10.6 |
| 22-Aug | 2.2 | 2.2 | 2.4 | 4.0 | 3.6 | Z | 5.4 | 4.3 | 3.7 | 3.0 | 2.9 | 2.7 | 3.0 | 1.8 | 2.0 | 2.2 | 3.2 | 3.8 | 3.7 | 2.9 | 1.0 | 2.0 | 2.3 | 1.5 | 2.9 | 5.4 |
| 23-Aug | Z | 2.1 | 1.6 | 1.5 | 2.9 | 4.4 | 4.0 | 4.8 | 3.9 | 1.7 | 2.8 | 3.5 | 0.7 | 2.4 | 3.6 | 0.9 | 0.8 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 1.9 | 4.8 |
| 24-Aug | 0.0 | Z | 0.0 | 0.1 | 1.1 | 0.2 | 0.7 | 0.9 | 1.1 | 8.5 | 11.7 | 5.8 | 6.8 | 2.8 | 1.4 | 1.7 | 4.2 | 5.7 | 5.7 | 4.3 | 2.2 | 1.3 | 11.4 | 2.2 | 3.5 | 11.7 |
| 25-Aug | 0.7 | 0.9 | Z | 5.7 | 6.5 | 15.4 | 11.4 | 14.7 | 19.8 | 19.8 | 10.9 | 7.8 | 20.7 | 23.5 | 13.5 | 8.4 | 8.1 | 7.7 | 8.3 | 14.3 | 4.4 | 5.8 | 2.4 | 2.6 | 10.1 | 23.5 |
| 26-Aug | 2.0 | 2.0 | 0.9 | Z | 6.1 | 6.2 | 8.2 | 5.0 | 4.5 | 3.1 | 2.3 | 2.1 | 1.0 | 0.7 | 0.9 | 1.0 | 1.8 | 1.8 | 4.5 | 4.7 | 9.8 | 4.4 | 1.3 | 0.8 | 3.3 | 9.8 |
| 27-Aug | 3.9 | 2.7 | 3.7 | 3.7 | Z | 4.0 | 3.2 | 2.3 | 3.6 | C | C | C | C | C | C | 4.3 | 8.9 | 4.1 | 2.2 | 2.4 | 1.5 | 1.1 | 0.6 | 0.6 | -- | 8.9 |
| 28-Aug | 0.6 | 0.6 | 0.9 | 0.7 | 1.4 | Z | 1.8 | 0.9 | 1.3 | 1.8 | 0.3 | 0.2 | 0.2 | 0.4 | 0.1 | 0.0 | 0.2 | 0.6 | 0.9 | 0.6 | 0.6 | 0.6 | 0.2 | 0.3 | 0.7 | 1.8 |
| 29-Aug | Z | 0.1 | 0.1 | 0.2 | 0.4 | 0.6 | 0.0 | 0.1 | 0.3 | 0.4 | 0.2 | 0.1 | 0.5 | 0.3 | 0.5 | 0.4 | 0.8 | 1.1 | 2.6 | 5.9 | 4.4 | 4.6 | 1.9 | 2.1 | 1.2 | 5.9 |
| 30-Aug | 2.2 | Z | 3.5 | 3.4 | 5.8 | 2.4 | 3.5 | 2.5 | 1.5 | 1.0 | 3.1 | 1.6 | 1.2 | 1.5 | 1.3 | 1.2 | 1.6 | 4.3 | 4.7 | 7.3 | 7.3 | 4.3 | 3.7 | 0.5 | 3.0 | 7.3 |
| 31-Aug | 2.4 | 1.0 | Z | 1.9 | 2.4 | 2.2 | 6.9 | 6.0 | 5.8 | 6.3 | 5.1 | 1.6 | 6.3 | 1.1 | 4.3 | 5.6 | 0.4 | 0.2 | 0.5 | 2.0 | 2.4 | 2.7 | 0.7 | 2.2 | 3.0 | 6.9 |
| | 2.1 | 2.7 | 2.7 | 2.4 | 3.4 | 3.8 | 3.8 | 3.7 | 4.2 | 4.3 | 3.8 | 2.9 | 3.3 | 2.9 | 2.3 | 2.3 | 2.7 | 2.7 | 3.1 | 4.1 | 4.1 | 3.2 | 2.4 | 1.9 | Diurnal Average | |
| | 7.5 | 12.7 | 9.5 | 7.2 | 11.0 | 15.4 | 12.0 | 14.7 | 19.9 | 19.8 | 16.2 | 11.8 | 20.7 | 23.5 | 13.5 | 8.8 | 8.9 | 9.6 | 8.6 | 14.3 | 10.6 | 8.8 | 11.4 | 5.8 | Diurnal Maximum | |

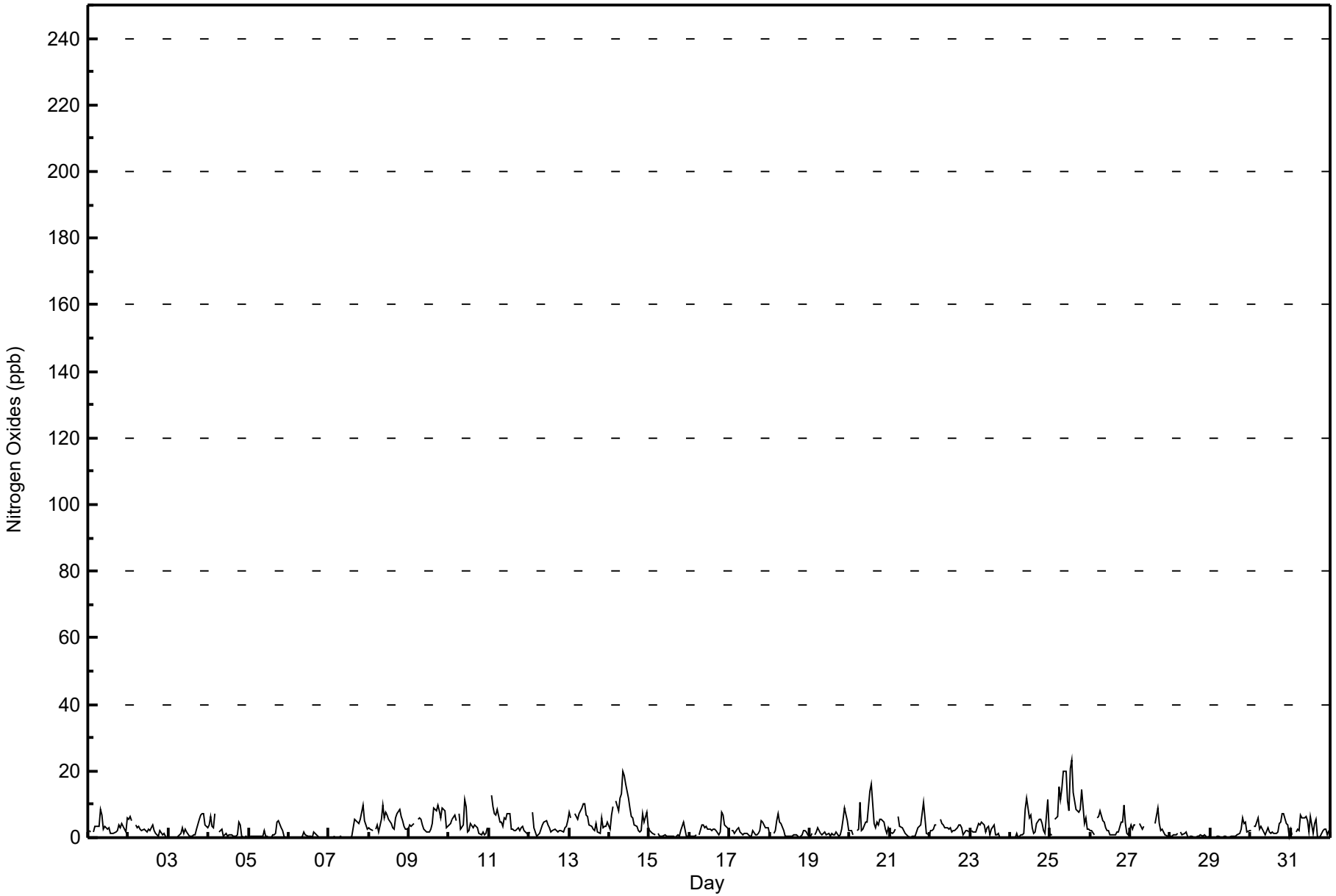
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Patricia McInnes - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 99.72 | 99.72 |
| 21 - 40 | 2 | 0.28 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 63 | 28 | 4 | 6 | 6 | 32 | 44 | 32 | 38 | 54 | 64 | 59 | 37 | 62 | 89 | 87 | 705 |
| 21 - 40 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 63 | 28 | 4 | 7 | 6 | 32 | 44 | 32 | 38 | 54 | 64 | 59 | 37 | 62 | 89 | 88 | 707 |

Total Number of Valid Hours: 707

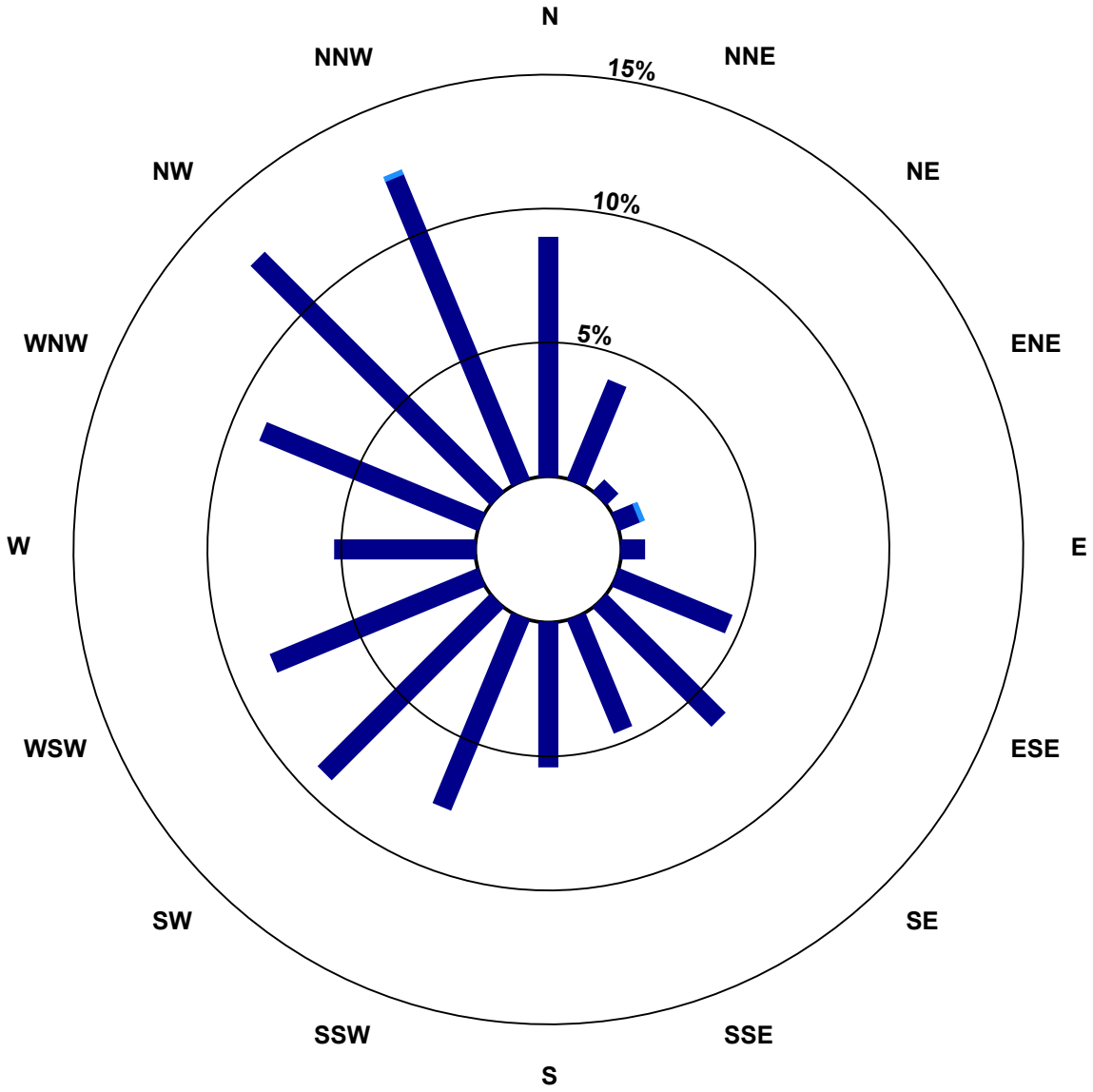
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Patricia McInnes




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

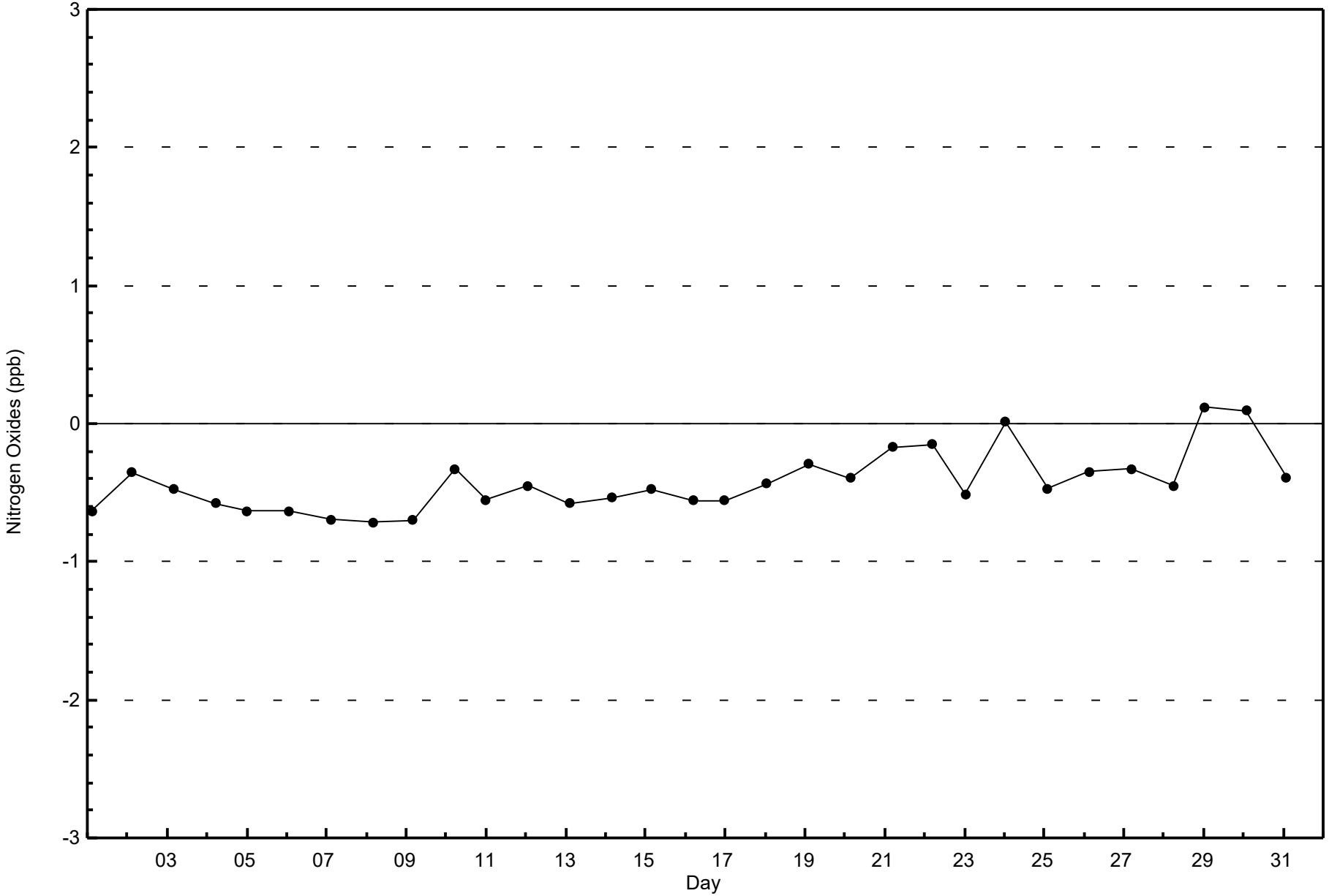
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Patricia McInnes - August 2026**

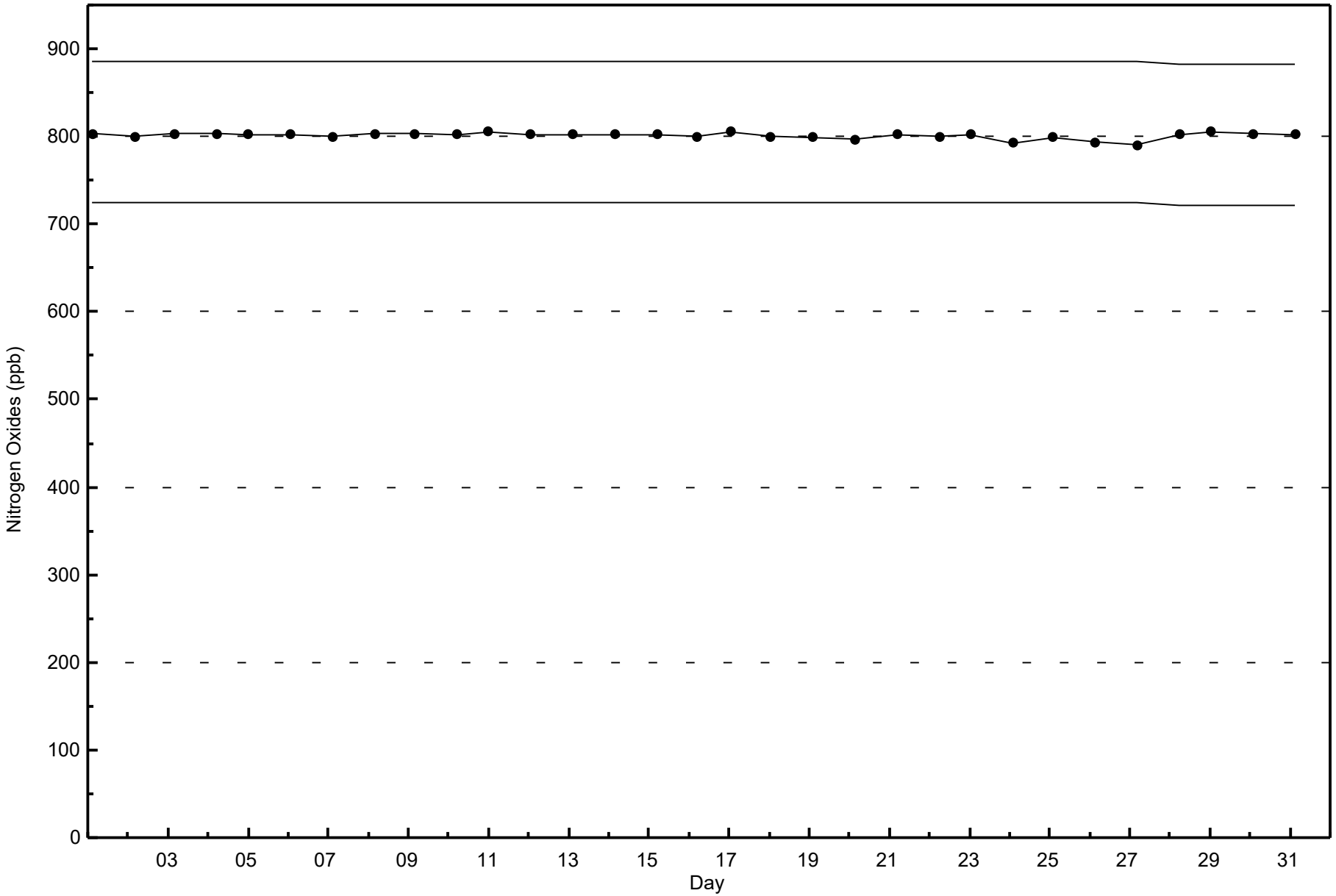


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ammonia ($NH_3$) - ppb

## Patricia McInnes - August 2026

Number of Exceedences (AAAQO): 1-hr: 0

Maximum Value: 0.0 ppb on Aug 1 01:00

Maximum Daily Average: 0.0 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 1 01:00

Minimum Daily Average: 0.0 ppb on Aug 1

Maximum Diurnal Average: 0.0 ppb at hour 1

Minimum Diurnal Average: 0.0 ppb at hour 1

Monthly Average: 0.00 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 622 |
| Hours of Missing Data: | 122 |
| Hours of Calibration: | 44 |
| Percent Operational Time: | 89.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2-Aug | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6-Aug | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8-Aug | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | C | C | C | C | C | C | C | C | C | C | RE | RE | 0.0 | -- | 0.0 |
| 13-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20-Aug | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24-Aug | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-Aug | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26-Aug | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27-Aug | 0.0 | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | Z | RE | RE | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31-Aug | 0.0 | Z | RE | RE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance RE - Recovery

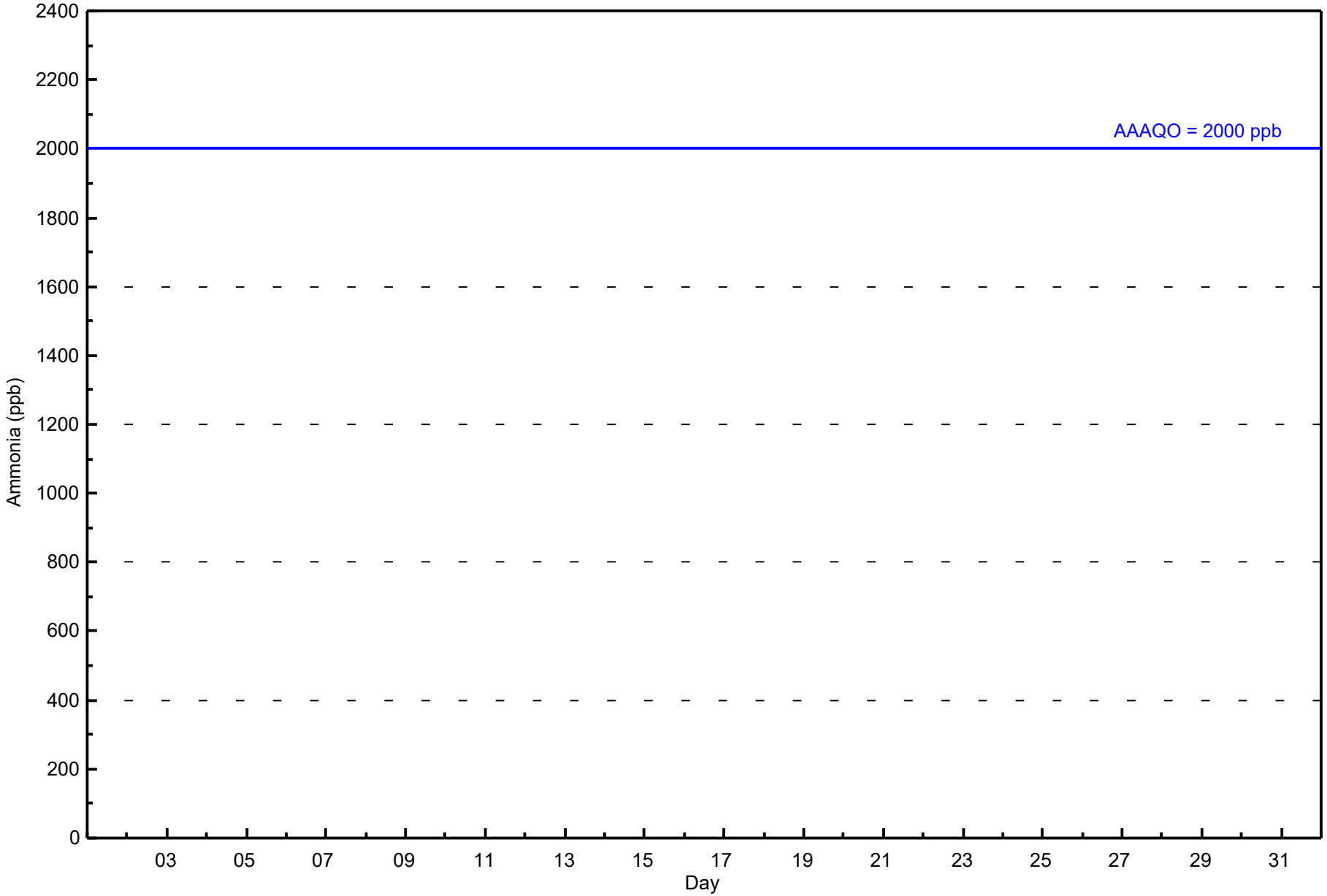
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 2000 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ammonia ($NH_3$) - ppb**

**Patricia McInnes - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 622 | 100.00 | 100.00 |
| 6 - 10 | 0 | 0.00 | 100.00 |
| 11 - 15 | 0 | 0.00 | 100.00 |
| 16 - 20 | 0 | 0.00 | 100.00 |
| 21 - 25 | 0 | 0.00 | 100.00 |
| > 26 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 622

Total Number of Hours: 744

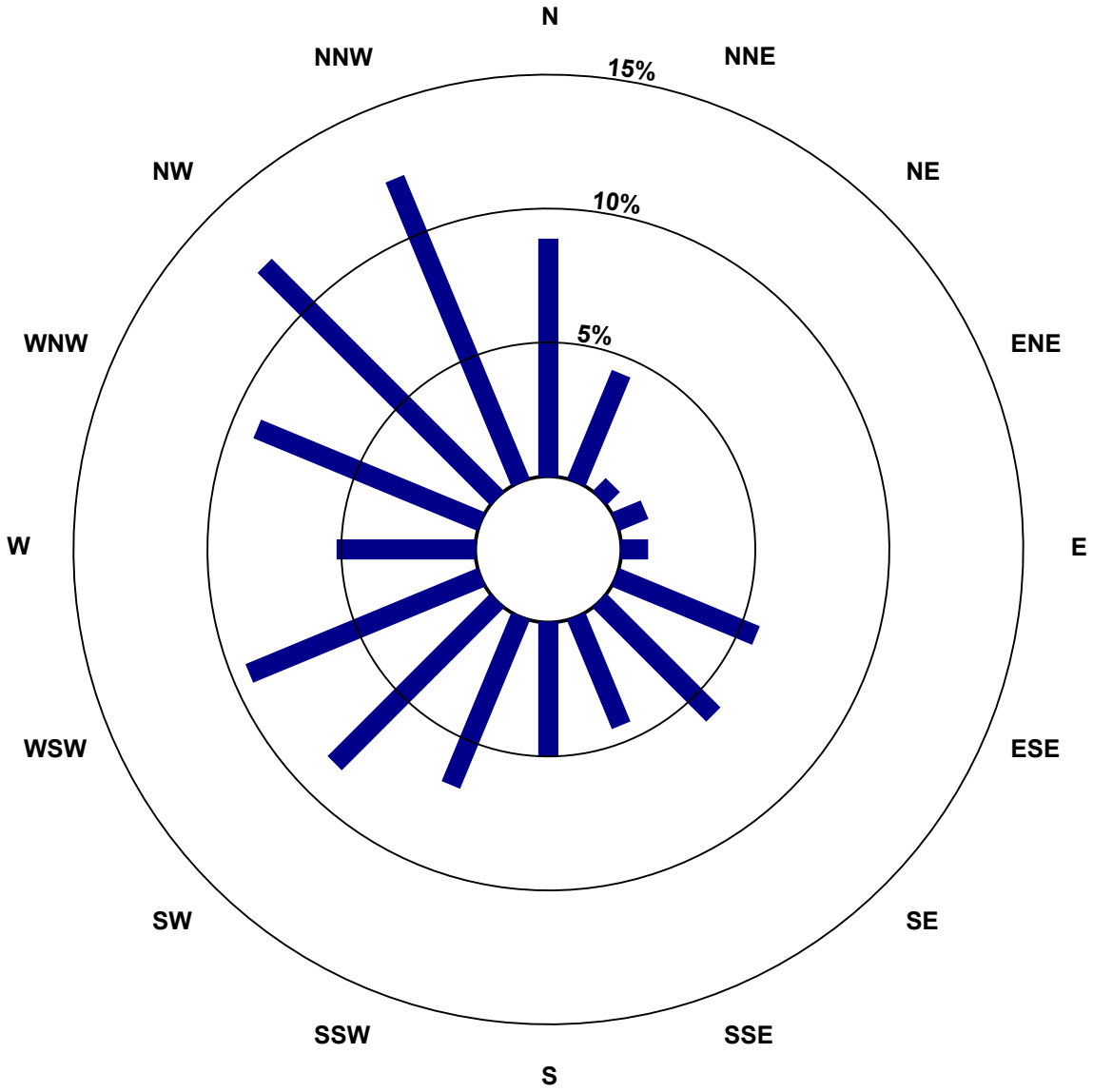
| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 55 | 27 | 4 | 7 | 6 | 35 | 37 | 27 | 31 | 42 | 53 | 58 | 32 | 56 | 76 | 76 | 622 |
| 6 - 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 55 | 27 | 4 | 7 | 6 | 35 | 37 | 27 | 31 | 42 | 53 | 58 | 32 | 56 | 76 | 76 | 622 |

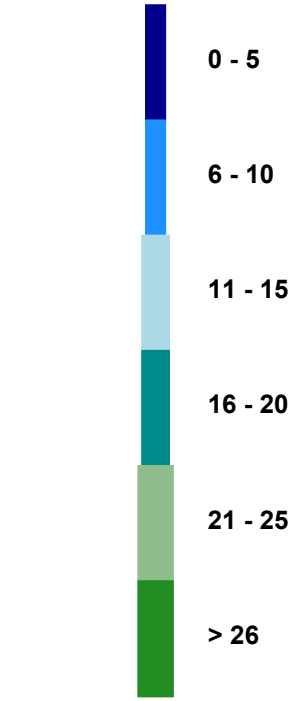
Total Number of Valid Hours: 622

Total Number of Hours: 744

# Ammonia ($NH_3$) - ppb

Patricia McInnes



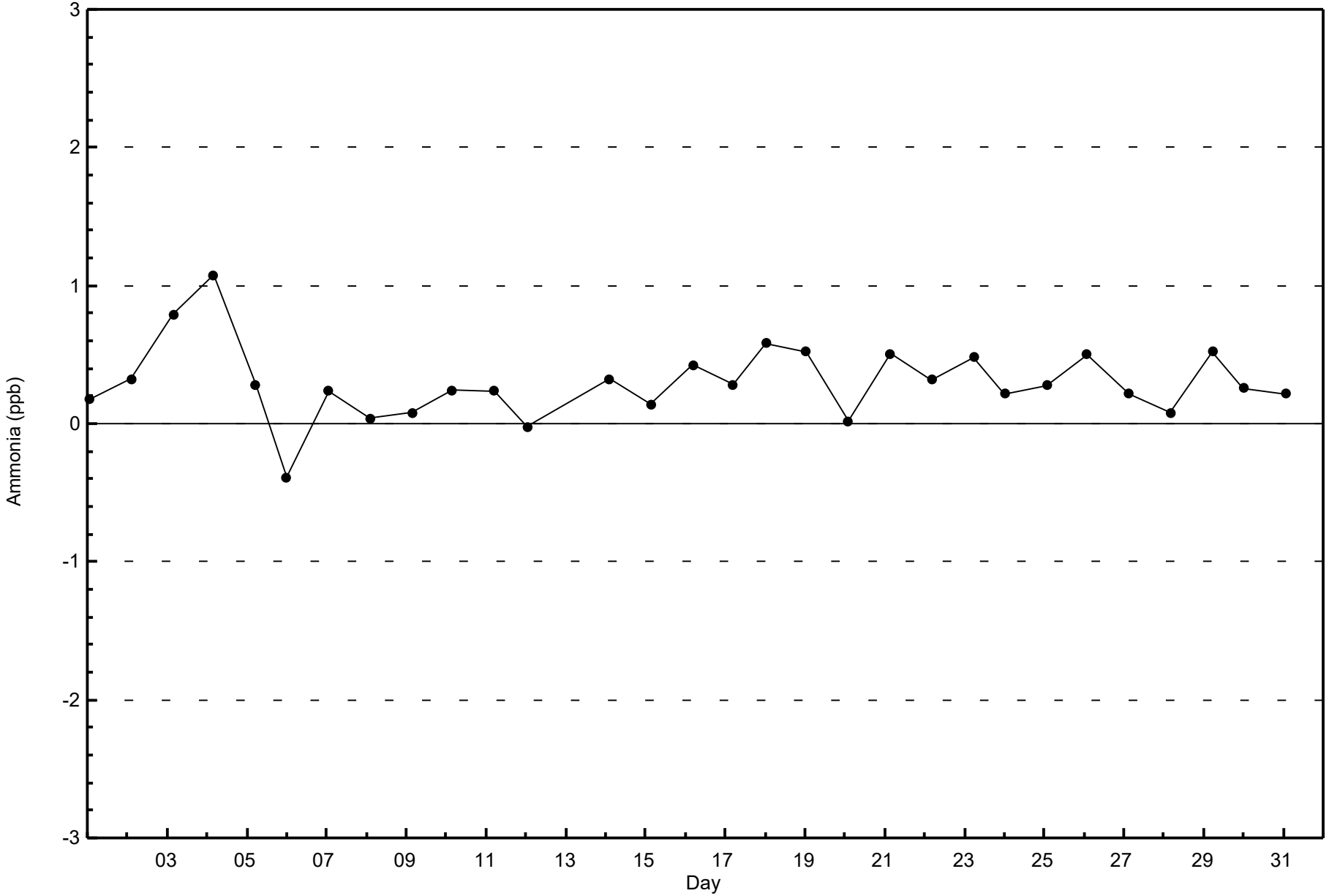

Total Number of Valid Hours: 622

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ammonia ($NH_3$) - ppb**

**Patricia McInnes - August 2026**

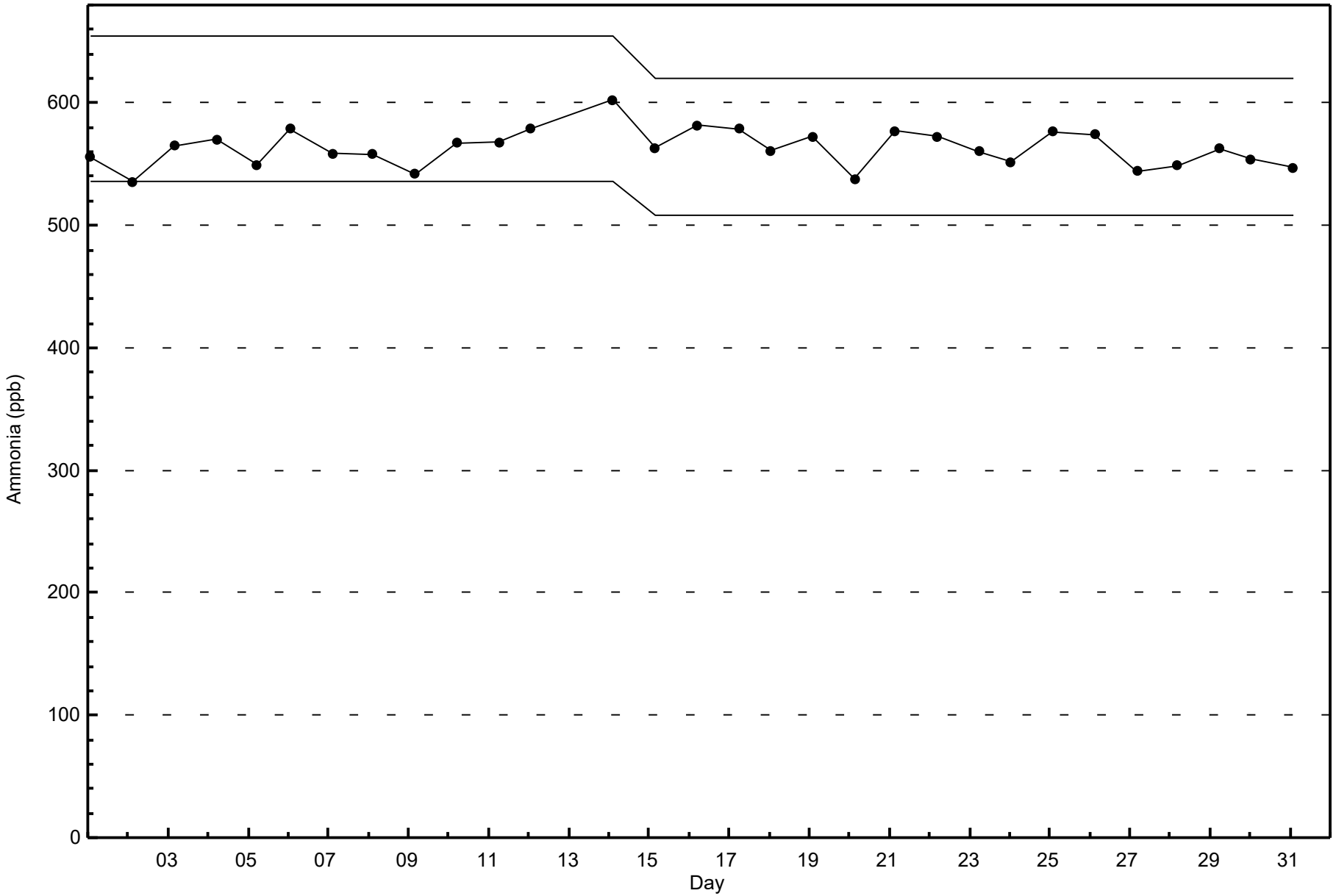


**Wood Buffalo Environmental Association**

**Span Responses**

**Ammonia ($NH_3$) - ppb**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Patricia McInnes - August 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 0

Maximum Value: 97.2 $\mu g/m^3$ on Aug 28 19:00

Maximum Daily Average: 27.9 $\mu g/m^3$ on Aug 25

Minimum Value: 0.7 $\mu g/m^3$ on Aug 6 09:00

Minimum Daily Average: 1.3 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 13.5 $\mu g/m^3$ at hour 19

Minimum Diurnal Average: 8.6 $\mu g/m^3$ at hour 14

Monthly Average: 10.37 $\mu g/m^3$

Percentiles: $P_1$ = 0.9 $P_{10}$ = 2.9 $Q_1$ = 4.4 Median = 7.4 $Q_3$ = 12.8 $P_{90}$ = 20.5 $P_{99}$ = 43.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 2 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 6.4 | 5.6 | 7.2 | 7.7 | 9.6 | 7.7 | 9.0 | 11.2 | 10.7 | 10.4 | 11.9 | 13.0 | 10.8 | 10.4 | 10.8 | 13.6 | 16.2 | 16.5 | 17.4 | 17.8 | 22.2 | 23.6 | 34.0 | 22.8 | 13.6 | 34.0 |
| 2-Aug | 23.5 | 20.9 | 17.8 | 16.0 | 15.3 | 13.7 | 14.8 | 13.2 | 9.0 | 6.6 | 5.8 | 5.5 | 4.2 | 3.8 | 5.9 | 5.3 | 4.4 | 4.6 | 3.8 | 4.4 | 4.1 | 3.2 | 1.8 | 1.5 | 8.7 | 23.5 |
| 3-Aug | 1.8 | 1.9 | 2.1 | 2.1 | 2.2 | 1.9 | 1.6 | 2.0 | 2.6 | 1.9 | 3.0 | 4.7 | 3.8 | 2.6 | 1.7 | 1.9 | 2.7 | 4.6 | 6.4 | 8.4 | 8.5 | 8.1 | 7.6 | 7.4 | 3.8 | 8.5 |
| 4-Aug | 7.5 | 8.4 | 6.3 | 4.1 | 4.2 | 4.3 | 4.2 | 7.4 | 9.1 | 12.7 | 11.3 | 6.9 | 5.4 | 4.3 | 4.9 | 5.1 | 5.2 | 9.6 | 9.5 | 8.9 | 6.6 | 6.8 | 8.1 | 11.1 | 7.1 | 12.7 |
| 5-Aug | 12.1 | 15.3 | 17.0 | 19.0 | 19.2 | 14.9 | 9.8 | 12.8 | 10.4 | 6.9 | 5.5 | 4.4 | 4.2 | 5.7 | 7.2 | 6.7 | 6.1 | 4.6 | 3.3 | 3.5 | 2.7 | 2.2 | 1.7 | 1.4 | 8.2 | 19.2 |
| 6-Aug | 1.2 | 1.2 | 1.0 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 1.1 | 1.0 | 0.9 | 1.1 | 2.2 | 2.5 | 1.9 | 1.6 | 1.5 | 1.6 | 1.9 | 2.0 | 2.2 | 1.3 | 2.5 |
| 7-Aug | 2.2 | 2.5 | 2.6 | 2.5 | 2.3 | 2.6 | 2.7 | 2.8 | 2.9 | 3.2 | 3.5 | 3.6 | 4.2 | 4.8 | 5.5 | 9.1 | 10.8 | 11.8 | 11.3 | 10.2 | 11.7 | 7.6 | 6.7 | 6.3 | 5.6 | 11.8 |
| 8-Aug | 6.8 | 6.5 | 6.1 | 6.9 | 6.3 | 5.6 | 4.1 | 3.9 | 4.2 | 3.6 | 3.8 | 3.4 | 3.6 | 4.0 | 4.2 | 4.0 | 6.0 | 5.5 | 8.1 | 6.3 | 6.5 | 5.5 | 5.3 | 4.6 | 5.2 | 8.1 |
| 9-Aug | 4.6 | 4.5 | 4.3 | 4.6 | 4.8 | 4.7 | 5.2 | 4.2 | 3.5 | 3.2 | 3.1 | 3.3 | 3.7 | 4.5 | 7.1 | 12.5 | 14.9 | 10.1 | 8.3 | 7.5 | 10.5 | 13.0 | 9.8 | 9.9 | 6.8 | 14.9 |
| 10-Aug | 10.1 | 10.8 | 12.4 | 12.0 | 9.0 | 8.3 | 9.6 | 7.9 | 7.7 | 8.3 | 9.2 | 4.8 | 5.6 | 6.9 | 8.5 | 9.1 | 8.0 | 6.1 | 4.5 | 4.1 | 4.4 | 4.1 | 4.5 | 6.2 | 7.6 | 12.4 |
| 11-Aug | 10.1 | 11.1 | 9.8 | 8.1 | 7.2 | 6.3 | 6.0 | 5.5 | 8.3 | 5.7 | 6.8 | 8.8 | 9.7 | 8.8 | 9.4 | 8.5 | 8.1 | 7.4 | 5.6 | 5.6 | 8.1 | 5.9 | 4.5 | 4.0 | 7.5 | 11.1 |
| 12-Aug | 3.9 | 5.3 | 6.2 | 4.6 | 3.0 | 2.8 | 3.2 | 3.2 | 3.2 | 3.2 | 3.0 | 4.0 | 2.4 | 1.6 | 1.8 | 2.5 | 1.7 | 1.5 | 1.7 | 1.8 | 2.5 | 3.1 | 3.9 | 3.6 | 3.1 | 6.2 |
| 13-Aug | 3.5 | 3.3 | 3.4 | 3.4 | 3.6 | 3.6 | 3.7 | 3.9 | 3.8 | 3.5 | 3.5 | 4.4 | 4.0 | 3.9 | 3.1 | 2.7 | 3.1 | 2.9 | 2.9 | 4.1 | 4.7 | 4.9 | 5.5 | 6.9 | 3.8 | 6.9 |
| 14-Aug | 5.3 | 6.2 | 6.8 | 6.5 | 6.5 | 5.8 | 5.8 | 5.6 | 6.2 | 6.1 | 8.0 | 8.9 | 9.0 | 9.3 | 9.6 | 7.6 | 6.3 | 5.7 | 7.1 | 7.7 | 11.3 | 10.3 | 12.0 | 9.9 | 7.6 | 12.0 |
| 15-Aug | 9.4 | 7.6 | 6.7 | 5.9 | 5.3 | 4.7 | 4.2 | 4.1 | 4.3 | 4.4 | 4.5 | 5.2 | 5.1 | 5.3 | 5.2 | 4.4 | 4.1 | 4.1 | 4.1 | 4.8 | 6.2 | 5.1 | 3.5 | 3.5 | 5.1 | 9.4 |
| 16-Aug | 3.6 | 3.8 | 4.2 | 4.4 | 4.3 | 4.4 | 4.9 | 5.2 | 9.5 | 16.6 | 19.2 | 20.8 | 24.7 | 17.1 | 15.8 | 18.5 | 24.5 | 44.0 | 52.4 | 43.3 | 42.7 | 42.6 | 41.6 | 41.1 | 21.2 | 52.4 |
| 17-Aug | 42.2 | 42.5 | 39.0 | 28.2 | 22.1 | 20.4 | 19.3 | 19.7 | 20.2 | 20.6 | 20.6 | 21.9 | 21.1 | 19.7 | 20.3 | 17.8 | 16.6 | 16.0 | 15.1 | 15.6 | 15.7 | 17.4 | 16.4 | 16.4 | 21.9 | 42.5 |
| 18-Aug | 13.6 | 13.4 | 12.5 | 11.9 | 11.8 | 12.9 | 12.6 | 11.0 | 8.6 | 7.2 | 7.1 | 6.9 | 6.2 | 5.7 | 5.2 | 5.2 | 4.5 | 4.1 | 4.3 | 4.3 | 5.4 | 5.8 | 6.0 | 6.2 | 8.0 | 13.6 |
| 19-Aug | 6.0 | 5.9 | 5.6 | 5.8 | 6.2 | 6.6 | 6.4 | 6.3 | 6.1 | 5.6 | 4.6 | 2.8 | 2.7 | 2.9 | 2.9 | 2.8 | 8.8 | 13.2 | 16.3 | 17.9 | 36.4 | 44.9 | 38.9 | 45.3 | 12.5 | 45.3 |
| 20-Aug | 36.9 | 27.1 | 28.2 | 26.3 | 24.9 | 24.6 | 24.5 | 27.3 | 28.1 | 27.2 | 23.2 | 24.9 | 28.8 | 27.6 | 18.8 | 20.5 | 23.8 | 23.3 | 16.6 | 12.3 | 11.8 | 12.8 | 11.8 | 13.7 | 22.7 | 36.9 |
| 21-Aug | 13.0 | 12.3 | 11.5 | 10.6 | 11.0 | 11.8 | 12.1 | 12.7 | 13.4 | 15.2 | 15.5 | 12.4 | 8.8 | 9.7 | 9.3 | 9.9 | 10.1 | 10.4 | 12.2 | 18.8 | 17.9 | 14.8 | 11.3 | 10.7 | 12.3 | 18.8 |
| 22-Aug | 10.9 | 12.2 | 12.1 | 20.5 | 13.3 | 11.2 | 10.6 | 7.6 | 7.2 | 7.5 | 8.1 | 8.8 | 9.3 | 8.8 | 9.5 | 9.9 | 11.0 | 13.9 | 16.3 | 17.7 | 13.9 | 13.6 | 14.2 | 12.7 | 11.7 | 20.5 |
| 23-Aug | 12.8 | 13.2 | 12.7 | 13.1 | 13.0 | 13.7 | 14.2 | 15.3 | 15.0 | 15.4 | 17.2 | 16.7 | 19.6 | 20.5 | 20.4 | 20.4 | 20.1 | 22.0 | 13.5 | 9.4 | 8.2 | 7.9 | 7.6 | 6.4 | 14.5 | 22.0 |
| 24-Aug | 4.2 | 3.3 | 3.2 | 3.0 | 3.4 | 3.0 | 2.8 | 5.4 | 3.2 | 3.1 | 2.9 | 3.0 | 5.1 | 3.1 | 7.9 | 5.9 | 7.2 | 7.3 | 7.2 | 6.3 | 7.7 | 6.4 | 7.7 | 10.4 | 5.1 | 10.4 |
| 25-Aug | 8.6 | 10.0 | 13.0 | 13.6 | 13.0 | 15.3 | 19.5 | 28.2 | 36.5 | 39.0 | 39.5 | 39.8 | 40.0 | 40.9 | 41.3 | 37.9 | 35.9 | 30.5 | 28.4 | 28.8 | 25.2 | 30.3 | 27.3 | 27.2 | 27.9 | 41.3 |
| 26-Aug | 26.5 | 25.8 | 24.9 | 22.7 | 22.9 | 18.5 | 16.1 | 14.7 | 13.3 | 11.8 | 8.9 | 7.8 | 5.5 | 4.5 | 4.8 | 4.8 | 4.8 | 5.0 | 7.9 | 5.3 | 7.2 | 7.1 | 6.0 | 5.6 | 11.7 | 26.5 |
| 27-Aug | 6.8 | 7.4 | 9.2 | 10.0 | 10.6 | 11.5 | 11.8 | 12.0 | 12.6 | 13.9 | 15.6 | 18.0 | C | C | 15.8 | 14.2 | 13.5 | 13.5 | 15.8 | 15.2 | 15.1 | 15.9 | 18.0 | 20.1 | 13.5 | 20.1 |
| 28-Aug | 20.2 | 20.1 | 20.4 | 16.9 | 14.4 | 15.4 | 15.4 | 14.8 | 16.2 | 13.6 | 7.9 | 5.3 | 4.2 | 3.6 | 3.6 | 4.9 | 8.4 | 56.9 | 97.2 | 79.3 | 48.4 | 36.9 | 21.8 | 8.1 | 23.1 | 97.2 |
| 29-Aug | 7.2 | 3.8 | 3.4 | 5.2 | 6.2 | 8.7 | 7.7 | 7.3 | 7.2 | 7.1 | 7.5 | 7.5 | 5.8 | 5.8 | 7.4 | 6.7 | 5.7 | 6.5 | 8.1 | 9.7 | 8.9 | 12.0 | 9.7 | 10.4 | 7.3 | 12.0 |
| 30-Aug | 10.8 | 11.2 | 11.6 | 12.1 | 12.1 | 11.1 | 11.4 | 11.3 | 9.8 | 8.2 | 9.2 | 7.4 | 7.3 | 7.3 | 7.4 | 8.1 | 8.0 | 8.6 | 8.4 | 9.6 | 10.6 | 8.5 | 8.8 | 4.2 | 9.3 | 12.1 |
| 31-Aug | 6.2 | 4.1 | 3.7 | 4.3 | 4.5 | 4.3 | 4.7 | 4.7 | 5.6 | 7.1 | 7.2 | 4.4 | 3.9 | 3.3 | 2.4 | 1.8 | 2.0 | 2.4 | 2.1 | 3.0 | 3.9 | 4.1 | 2.8 | 3.9 | 4.0 | 7.2 |
| | 10.9 | 10.6 | 10.5 | 10.1 | 9.5 | 9.1 | 9.0 | 9.4 | 9.7 | 9.7 | 9.6 | 9.4 | 9.0 | 8.6 | 9.0 | 9.2 | 9.8 | 12.1 | 13.5 | 12.7 | 12.6 | 12.5 | 11.6 | 11.1 | Diurnal Average | |
| | 42.2 | 42.5 | 39.0 | 28.2 | 24.9 | 24.6 | 24.5 | 28.2 | 36.5 | 39.0 | 39.5 | 39.8 | 40.0 | 40.9 | 41.3 | 37.9 | 35.9 | 56.9 | 97.2 | 79.3 | 48.4 | 44.9 | 41.6 | 45.3 | Diurnal Maximum | |

C - Calibration

Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Patricia McInnes - August 2026**



| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 258 | 34.77 | 34.77 |
| 6 - 15 | 350 | 47.17 | 81.94 |
| 16 - 25 | 86 | 11.59 | 93.53 |
| 26 - 80 | 47 | 6.33 | 99.87 |
| > 81.0 | 1 | 0.13 | 100.00 |

Total Number of Valid Hours: 742

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Patricia McInnes - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 23 | 10 | 1 | 3 | 0 | 2 | 2 | 3 | 10 | 7 | 10 | 28 | 16 | 37 | 63 | 43 | 258 |
| 6 - 15 | 24 | 16 | 2 | 3 | 6 | 22 | 28 | 27 | 27 | 36 | 44 | 21 | 13 | 26 | 23 | 32 | 350 |
| 16 - 25 | 11 | 1 | 0 | 0 | 0 | 4 | 17 | 3 | 5 | 13 | 8 | 4 | 2 | 4 | 3 | 11 | 86 |
| 26 - 80 | 5 | 1 | 1 | 1 | 0 | 6 | 2 | 1 | 0 | 2 | 4 | 8 | 6 | 2 | 4 | 4 | 47 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 63 | 28 | 4 | 7 | 6 | 34 | 49 | 34 | 42 | 58 | 66 | 62 | 37 | 69 | 93 | 90 | 742 |

Total Number of Valid Hours: 742

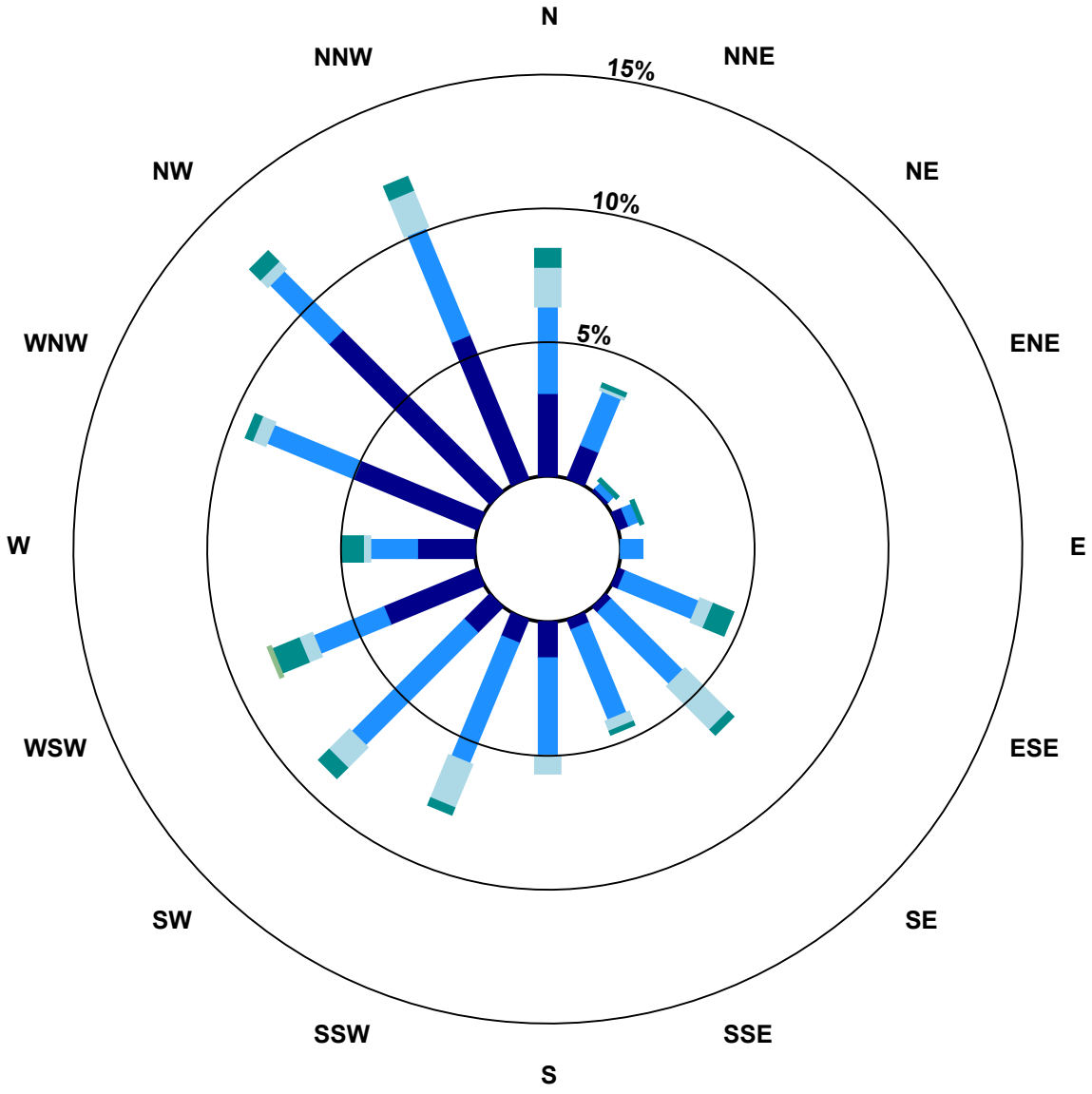
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Patricia McInnes




Classes ($\mu g/m^3$)

0 - 5

6 - 15

16 - 25

26 - 80

> 81.0

Total Number of Valid Hours: 742

Maximum Value: 29.9 C on Aug 26 17:00

Maximum Daily Average: 21.3 C on Aug 27

Minimum Value: 6.1 C on Aug 17 06:00

Minimum Daily Average: 13.0 C on Aug 12

Maximum Diurnal Average: 22.5 C at hour 16

Minimum Diurnal Average: 11.6 C at hour 6

Monthly Average: 16.86 C

Percentiles: $P_1$ = 7.3 $P_{10}$ = 10.3 $Q_1$ = 12.9 Median = 16.3 $Q_3$ = 20.6 $P_{90}$ = 24.0 $P_{99}$ = 29.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

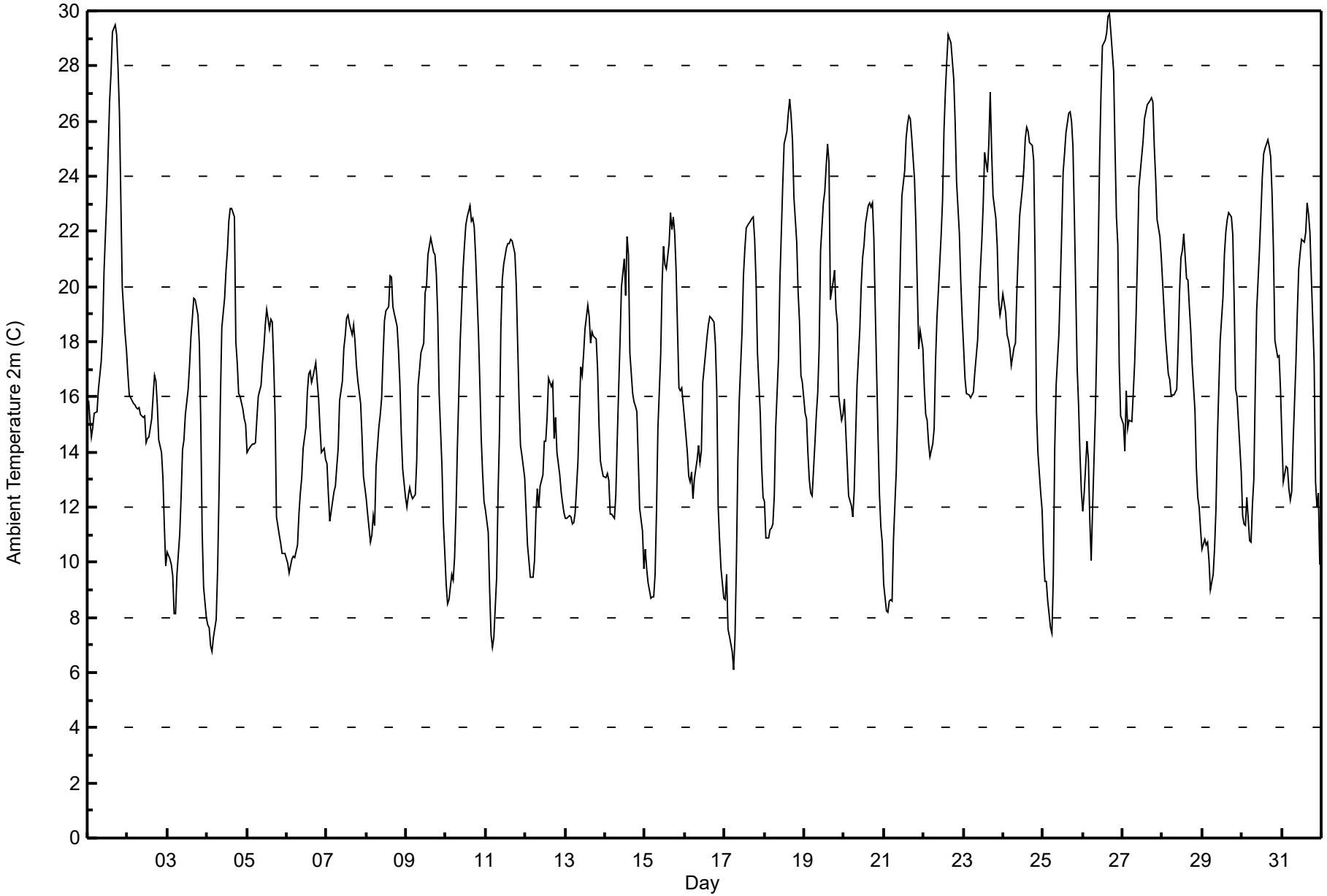
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.9 | 15.2 | 14.6 | 14.9 | 15.4 | 15.4 | 16.3 | 16.8 | 17.3 | 18.3 | 20.5 | 23.2 | 25.0 | 26.8 | 27.8 | 29.3 | 29.5 | 29.2 | 27.9 | 26.3 | 23.1 | 20.0 | 18.3 | 17.7 | 21.0 | 29.5 |
| 2-Aug | 16.8 | 16.1 | 16.0 | 15.8 | 15.7 | 15.6 | 15.6 | 15.6 | 15.4 | 15.3 | 15.3 | 14.3 | 14.5 | 14.6 | 15.2 | 16.0 | 16.8 | 16.6 | 15.7 | 14.4 | 14.0 | 13.1 | 11.4 | 9.9 | 15.0 | 16.8 |
| 3-Aug | 10.4 | 10.1 | 9.9 | 9.5 | 8.1 | 8.1 | 9.6 | 11.0 | 12.4 | 14.1 | 14.4 | 15.4 | 16.3 | 17.1 | 18.2 | 18.9 | 19.6 | 19.5 | 19.0 | 17.9 | 15.0 | 11.1 | 9.1 | 8.0 | 13.4 | 19.6 |
| 4-Aug | 7.7 | 7.6 | 7.0 | 6.8 | 7.3 | 7.9 | 9.7 | 12.5 | 15.9 | 18.5 | 19.6 | 20.6 | 21.3 | 22.4 | 22.8 | 22.8 | 22.5 | 18.0 | 17.2 | 16.1 | 16.0 | 15.6 | 15.2 | 15.0 | 15.3 | 22.8 |
| 5-Aug | 14.0 | 14.1 | 14.2 | 14.3 | 14.3 | 14.3 | 15.2 | 16.0 | 16.4 | 17.2 | 17.8 | 18.6 | 19.2 | 18.5 | 18.8 | 18.7 | 17.2 | 15.3 | 11.6 | 11.0 | 10.7 | 10.3 | 10.3 | 10.3 | 14.9 | 19.2 |
| 6-Aug | 10.0 | 9.6 | 9.9 | 10.1 | 10.2 | 10.2 | 10.6 | 11.8 | 12.5 | 13.1 | 14.1 | 14.9 | 16.2 | 16.8 | 16.9 | 16.5 | 16.7 | 17.2 | 16.6 | 15.9 | 14.9 | 14.0 | 14.2 | 13.7 | 13.6 | 17.2 |
| 7-Aug | 13.6 | 12.5 | 11.5 | 11.8 | 12.6 | 12.8 | 13.5 | 14.1 | 15.8 | 16.6 | 17.8 | 18.2 | 18.8 | 19.0 | 18.7 | 18.2 | 18.6 | 18.0 | 17.1 | 16.6 | 15.8 | 14.5 | 13.1 | 12.7 | 15.5 | 19.0 |
| 8-Aug | 12.3 | 11.7 | 10.7 | 11.0 | 11.7 | 11.3 | 13.5 | 14.9 | 15.4 | 16.0 | 17.5 | 18.7 | 19.1 | 19.3 | 20.4 | 20.3 | 19.3 | 19.0 | 18.6 | 17.7 | 16.5 | 14.7 | 13.4 | 12.3 | 15.6 | 20.4 |
| 9-Aug | 12.0 | 12.4 | 12.7 | 12.5 | 12.3 | 12.4 | 13.7 | 16.4 | 17.0 | 17.6 | 17.9 | 19.8 | 20.0 | 21.2 | 21.5 | 21.8 | 21.3 | 21.2 | 20.4 | 18.9 | 16.1 | 13.5 | 11.4 | 10.3 | 16.4 | 21.8 |
| 10-Aug | 9.2 | 8.5 | 8.7 | 9.6 | 9.4 | 10.1 | 11.8 | 14.2 | 18.0 | 19.3 | 20.6 | 21.5 | 22.2 | 22.5 | 22.9 | 22.4 | 22.5 | 22.2 | 21.1 | 18.4 | 16.5 | 14.5 | 13.2 | 12.2 | 16.3 | 22.9 |
| 11-Aug | 11.9 | 11.1 | 9.0 | 7.4 | 6.9 | 7.3 | 9.5 | 12.5 | 14.7 | 18.5 | 20.3 | 20.8 | 21.4 | 21.6 | 21.5 | 21.7 | 21.6 | 21.2 | 20.1 | 17.9 | 15.8 | 14.2 | 13.9 | 13.1 | 15.6 | 21.7 |
| 12-Aug | 11.8 | 10.7 | 10.1 | 9.5 | 9.5 | 10.1 | 11.7 | 12.7 | 12.0 | 12.8 | 13.2 | 14.4 | 14.4 | 15.3 | 16.7 | 16.4 | 16.6 | 14.5 | 15.2 | 14.0 | 13.2 | 12.6 | 12.2 | 11.8 | 13.0 | 16.7 |
| 13-Aug | 11.6 | 11.6 | 11.7 | 11.6 | 11.4 | 11.5 | 11.8 | 13.7 | 15.5 | 17.1 | 16.8 | 17.5 | 18.5 | 19.3 | 18.9 | 18.0 | 18.3 | 18.2 | 18.1 | 17.0 | 15.0 | 13.7 | 13.4 | 13.1 | 15.1 | 19.3 |
| 14-Aug | 13.1 | 13.2 | 12.9 | 11.7 | 11.8 | 11.6 | 12.5 | 14.5 | 16.3 | 18.0 | 20.0 | 21.0 | 19.7 | 21.8 | 21.2 | 17.6 | 16.1 | 15.8 | 15.7 | 15.4 | 13.8 | 12.0 | 11.1 | 9.8 | 15.3 | 21.8 |
| 15-Aug | 10.5 | 9.8 | 9.2 | 8.7 | 8.7 | 8.7 | 9.6 | 11.9 | 14.9 | 17.6 | 20.1 | 21.5 | 20.8 | 20.6 | 21.6 | 22.7 | 22.1 | 22.5 | 21.9 | 20.5 | 16.3 | 16.2 | 16.3 | 15.8 | 16.2 | 22.7 |
| 16-Aug | 15.2 | 14.0 | 13.1 | 12.9 | 13.3 | 12.3 | 13.0 | 13.7 | 14.2 | 13.6 | 14.0 | 16.5 | 17.6 | 18.2 | 18.6 | 18.9 | 18.8 | 18.7 | 17.9 | 16.2 | 12.0 | 10.8 | 9.7 | 8.7 | 14.7 | 18.9 |
| 17-Aug | 8.6 | 9.5 | 7.6 | 7.3 | 6.8 | 6.1 | 7.3 | 10.0 | 13.6 | 15.9 | 18.4 | 20.4 | 21.3 | 22.1 | 22.2 | 22.4 | 22.5 | 22.5 | 21.7 | 20.2 | 17.6 | 15.4 | 13.5 | 12.4 | 15.2 | 22.5 |
| 18-Aug | 12.2 | 10.9 | 10.9 | 11.2 | 11.2 | 11.4 | 12.4 | 14.9 | 17.4 | 20.2 | 21.9 | 23.6 | 25.1 | 25.6 | 26.3 | 26.8 | 26.2 | 25.3 | 23.3 | 21.6 | 19.8 | 18.7 | 16.8 | 16.5 | 18.8 | 26.8 |
| 19-Aug | 15.4 | 15.2 | 14.0 | 12.9 | 12.5 | 12.4 | 14.3 | 15.4 | 16.2 | 17.8 | 21.3 | 23.0 | 23.5 | 24.4 | 25.1 | 24.5 | 19.5 | 20.2 | 20.6 | 19.2 | 18.7 | 16.0 | 15.1 | 15.4 | 18.0 | 25.1 |
| 20-Aug | 15.9 | 14.7 | 13.6 | 12.4 | 12.1 | 11.7 | 12.6 | 14.5 | 16.4 | 18.5 | 20.1 | 21.1 | 21.5 | 22.3 | 22.9 | 23.1 | 22.9 | 23.0 | 21.8 | 19.2 | 14.6 | 12.5 | 11.3 | 10.7 | 17.1 | 23.1 |
| 21-Aug | 9.2 | 8.3 | 8.2 | 8.6 | 8.6 | 8.6 | 10.8 | 13.3 | 15.5 | 18.6 | 21.2 | 23.3 | 24.2 | 25.4 | 25.9 | 26.2 | 26.1 | 25.4 | 23.9 | 22.2 | 20.0 | 17.8 | 18.4 | 17.7 | 17.8 | 26.2 |
| 22-Aug | 16.3 | 15.4 | 15.2 | 14.4 | 13.8 | 14.3 | 14.8 | 17.3 | 18.9 | 19.9 | 21.9 | 23.1 | 25.6 | 27.1 | 28.2 | 29.1 | 28.8 | 28.1 | 27.5 | 25.9 | 23.8 | 21.9 | 20.2 | 18.8 | 21.3 | 29.1 |
| 23-Aug | 17.8 | 16.7 | 16.1 | 16.1 | 16.0 | 16.0 | 16.2 | 16.9 | 18.0 | 19.4 | 20.7 | 21.6 | 23.0 | 24.9 | 24.2 | 25.2 | 27.1 | 24.9 | 23.3 | 22.5 | 21.5 | 19.5 | 19.0 | 19.3 | 20.2 | 27.1 |
| 24-Aug | 19.7 | 19.1 | 18.2 | 18.0 | 17.8 | 17.1 | 17.8 | 17.9 | 19.8 | 21.2 | 22.6 | 23.6 | 24.3 | 25.4 | 25.8 | 25.6 | 25.2 | 25.1 | 24.6 | 21.0 | 15.5 | 14.0 | 12.5 | 11.9 | 20.2 | 25.8 |
| 25-Aug | 10.3 | 9.3 | 9.3 | 8.6 | 7.6 | 7.4 | 9.5 | 14.2 | 16.4 | 18.3 | 20.1 | 22.1 | 24.2 | 24.8 | 25.6 | 26.3 | 26.3 | 26.0 | 25.1 | 22.6 | 17.0 | 15.7 | 13.9 | 12.6 | 17.2 | 26.3 |
| 26-Aug | 11.9 | 12.5 | 14.4 | 13.7 | 11.5 | 10.1 | 11.9 | 15.5 | 18.1 | 21.3 | 24.6 | 27.0 | 28.7 | 28.9 | 29.2 | 29.8 | 29.9 | 29.2 | 27.8 | 25.0 | 22.5 | 21.5 | 17.1 | 15.3 | 20.7 | 29.9 |
| 27-Aug | 15.0 | 14.1 | 16.2 | 14.9 | 15.1 | 15.1 | 16.1 | 17.2 | 18.9 | 21.0 | 23.6 | 24.7 | 25.3 | 26.1 | 26.3 | 26.6 | 26.8 | 26.8 | 26.7 | 25.1 | 23.9 | 22.4 | 21.8 | 21.1 | 21.3 | 26.8 |
| 28-Aug | 20.1 | 19.1 | 18.2 | 16.8 | 16.6 | 16.0 | 16.1 | 16.1 | 16.3 | 17.8 | 19.8 | 21.1 | 21.3 | 21.9 | 20.3 | 20.2 | 19.3 | 18.4 | 17.2 | 15.5 | 13.4 | 12.3 | 12.0 | 11.2 | 17.4 | 21.9 |
| 29-Aug | 10.5 | 10.9 | 10.6 | 10.7 | 10.0 | 9.0 | 9.6 | 10.5 | 12.0 | 14.5 | 16.3 | 18.1 | 19.6 | 21.1 | 22.0 | 22.4 | 22.7 | 22.5 | 21.9 | 19.4 | 16.3 | 16.0 | 15.1 | 13.3 | 15.6 | 22.7 |
| 30-Aug | 11.7 | 11.4 | 11.3 | 12.3 | 10.8 | 10.7 | 12.1 | 13.0 | 16.3 | 19.1 | 21.3 | 22.6 | 24.0 | 24.8 | 25.0 | 25.3 | 25.1 | 24.7 | 23.3 | 21.2 | 18.1 | 17.4 | 17.5 | 16.3 | 18.2 | 25.3 |
| 31-Aug | 14.5 | 12.9 | 13.5 | 13.4 | 12.7 | 12.3 | 12.6 | 14.3 | 17.2 | 19.0 | 20.7 | 21.2 | 21.7 | 21.6 | 22.0 | 23.0 | 22.6 | 22.0 | 20.3 | 17.2 | 12.9 | 12.0 | 12.5 | 9.9 | 16.8 | 23.0 |
| | 13.1 | 12.5 | 12.2 | 11.9 | 11.7 | 11.6 | 12.6 | 14.3 | 16.0 | 17.6 | 19.2 | 20.4 | 21.2 | 22.0 | 22.3 | 22.5 | 22.2 | 21.7 | 20.7 | 19.1 | 16.8 | 15.3 | 14.3 | 13.4 | Diurnal Average | |
| | 20.1 | 19.1 | 18.2 | 18.0 | 17.8 | 17.1 | 17.8 | 17.9 | 19.8 | 21.3 | 24.6 | 27.0 | 28.7 | 28.9 | 29.2 | 29.8 | 29.9 | 29.2 | 27.9 | 26.3 | 23.9 | 22.4 | 21.8 | 21.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Patricia McInnes - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 61 | 8.20 | 8.20 |
| 10 - 20 | 473 | 63.58 | 71.77 |
| > 20 | 210 | 28.23 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Patricia McInnes - August 2026

Maximum Value: 100.0 % on Aug 2 05:00

Maximum Daily Average: 86.6 % on Aug 12

Minimum Value: 28.1 % on Aug 24 15:00

Minimum Daily Average: 51.0 % on Aug 24

Maximum Diurnal Average: 89.5 % at hour 6

Minimum Diurnal Average: 47.7 % at hour 15

Monthly Average: 69.83 %

Percentiles: $P_1$ = 31.4 $P_{10}$ = 44.2 $Q_1$ = 54.2 Median = 72.5 $Q_3$ = 86.0 $P_{90}$ = 93.9 $P_{99}$ = 99.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 735 |
| Hours of Missing Data: | 9 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 89.4 | 95.8 | 96.0 | 95.6 | 93.1 | 98.2 | 95.1 | 91.9 | 88.1 | 84.0 | 78.2 | 68.5 | 64.5 | 57.4 | 54.1 | 46.9 | 44.2 | 46.1 | 50.4 | 56.5 | 71.5 | 87.5 | 89.6 | 95.5 | 76.6 | 98.2 |
| 2-Aug | 99.5 | OR | OR | OR | 100.0 | 99.2 | 98.4 | 97.6 | 100.0 | OR | 96.2 | 90.7 | 80.8 | 75.2 | 70.2 | 63.0 | 56.5 | 54.0 | 54.5 | 56.9 | 59.9 | 60.0 | 65.9 | 71.9 | 77.5 | 100.0 |
| 3-Aug | 71.4 | 73.4 | 74.6 | 75.8 | 81.1 | 81.2 | 77.2 | 72.9 | 69.3 | 65.7 | 62.2 | 55.7 | 49.6 | 46.0 | 44.8 | 44.5 | 44.1 | 44.6 | 46.6 | 49.6 | 65.7 | 85.7 | 93.2 | 94.4 | 65.4 | 94.4 |
| 4-Aug | 93.5 | 91.9 | OR | OR | 98.1 | 97.8 | 87.7 | 77.6 | 67.4 | 59.3 | 60.7 | 58.8 | 55.2 | 49.2 | 48.7 | 53.4 | 57.0 | 78.5 | 84.0 | 91.3 | 92.3 | 90.7 | 90.9 | 89.7 | 76.1 | 98.1 |
| 5-Aug | 89.2 | 89.3 | 90.4 | 89.3 | 90.1 | 84.9 | 77.5 | 73.8 | 67.1 | 58.9 | 57.5 | 51.1 | 49.1 | 55.9 | 57.2 | 59.1 | 71.5 | 67.1 | 92.9 | 99.3 | 99.0 | 99.7 | 94.5 | 90.2 | 77.3 | 99.7 |
| 6-Aug | 88.7 | 92.3 | 89.1 | 86.9 | 85.8 | 85.8 | 84.2 | 80.3 | 78.0 | 77.0 | 74.7 | 71.2 | 65.9 | 65.0 | 65.0 | 73.1 | 72.5 | 65.0 | 66.4 | 68.7 | 75.3 | 78.4 | 80.5 | 83.3 | 77.2 | 92.3 |
| 7-Aug | 82.3 | 86.0 | 90.2 | 88.9 | 86.1 | 85.0 | 81.4 | 79.1 | 70.5 | 65.8 | 59.9 | 56.7 | 53.0 | 53.6 | 55.1 | 57.4 | 57.7 | 59.4 | 66.6 | 72.0 | 74.7 | 82.3 | 91.7 | 94.3 | 72.9 | 94.3 |
| 8-Aug | 95.7 | 98.7 | 99.3 | 97.1 | 91.7 | 91.1 | 80.7 | 76.5 | 76.1 | 72.0 | 65.8 | 57.2 | 55.8 | 55.1 | 51.9 | 52.0 | 56.7 | 55.7 | 56.9 | 64.3 | 73.3 | 86.3 | 90.0 | 92.7 | 74.7 | 99.3 |
| 9-Aug | 90.0 | 86.7 | 83.3 | 87.0 | 87.9 | 88.3 | 82.9 | 66.3 | 64.5 | 63.1 | 62.5 | 57.1 | 55.9 | 47.5 | 44.5 | 43.4 | 44.7 | 45.3 | 51.3 | 61.4 | 75.6 | 84.3 | 94.4 | 95.2 | 69.3 | 95.2 |
| 10-Aug | 97.7 | 98.2 | 98.4 | 95.3 | 98.1 | 96.4 | 87.1 | 77.1 | 60.3 | 60.0 | 53.1 | 45.3 | 43.9 | 43.8 | 40.9 | 42.9 | 40.9 | 39.0 | 44.5 | 54.2 | 60.8 | 70.3 | 73.3 | 77.7 | 66.6 | 98.4 |
| 11-Aug | 80.0 | 82.8 | 88.1 | 95.5 | 95.7 | 94.6 | 86.5 | 77.4 | 72.4 | 60.7 | 52.1 | 51.4 | 45.4 | 41.0 | 42.1 | 41.3 | 40.5 | 39.2 | 42.2 | 51.6 | 59.7 | 67.8 | 73.3 | 77.4 | 64.9 | 95.7 |
| 12-Aug | 82.8 | 88.5 | 92.3 | 93.4 | 90.9 | 90.1 | 86.4 | 86.4 | 96.9 | 94.5 | 95.3 | 84.8 | 86.4 | 78.1 | 68.0 | 70.6 | 70.8 | 83.0 | 78.2 | 85.9 | 93.7 | 93.5 | 94.3 | 94.4 | 86.6 | 96.9 |
| 13-Aug | 95.5 | 97.6 | 98.1 | 98.4 | 98.9 | 98.7 | 97.5 | 88.4 | 78.4 | 70.5 | 68.0 | 64.5 | 60.1 | 51.7 | 53.2 | 59.3 | 54.8 | 58.0 | 57.8 | 67.9 | 83.3 | 90.4 | 90.2 | 87.0 | 77.8 | 98.9 |
| 14-Aug | 86.7 | 86.8 | 92.7 | 97.3 | 96.2 | 96.3 | 91.3 | 81.0 | 77.2 | 70.4 | 59.1 | 51.5 | 54.8 | 43.5 | 45.4 | 65.5 | 73.5 | 76.2 | 72.8 | 76.9 | 86.0 | 93.1 | 96.5 | 98.7 | 77.9 | 98.7 |
| 15-Aug | 95.5 | 96.4 | 99.7 | OR | OR | OR | 95.8 | 89.3 | 80.4 | 74.3 | 63.3 | 53.5 | 52.6 | 52.9 | 47.2 | 44.6 | 48.2 | 46.8 | 52.4 | 57.5 | 78.4 | 72.6 | 65.9 | 69.2 | 68.4 | 99.7 |
| 16-Aug | 71.2 | 75.9 | 79.9 | 80.5 | 76.2 | 82.0 | 83.8 | 84.8 | 86.8 | 90.6 | 83.5 | 63.6 | 52.6 | 44.3 | 44.3 | 44.7 | 45.2 | 43.4 | 48.6 | 57.4 | 84.3 | 88.6 | 92.1 | 93.4 | 70.7 | 93.4 |
| 17-Aug | 89.2 | 82.0 | 87.6 | 85.9 | 88.5 | 91.5 | 89.7 | 84.6 | 75.1 | 69.8 | 61.9 | 48.9 | 44.3 | 41.3 | 42.5 | 40.4 | 39.7 | 37.4 | 40.0 | 46.5 | 55.2 | 61.9 | 69.1 | 74.8 | 64.5 | 91.5 |
| 18-Aug | 75.6 | 81.0 | 82.4 | 83.2 | 84.4 | 83.1 | 78.4 | 73.0 | 71.3 | 64.9 | 60.1 | 53.7 | 45.9 | 40.3 | 35.6 | 33.9 | 36.3 | 41.8 | 49.8 | 54.0 | 61.3 | 64.2 | 71.6 | 72.0 | 62.4 | 84.4 |
| 19-Aug | 77.2 | 79.4 | 85.4 | 90.2 | 91.3 | 93.3 | 89.4 | 85.7 | 83.0 | 77.5 | 55.4 | 46.1 | 45.1 | 41.5 | 38.8 | 42.4 | 75.8 | 74.8 | 73.5 | 78.4 | 72.6 | 84.6 | 89.5 | 87.8 | 73.3 | 93.3 |
| 20-Aug | 82.9 | 90.7 | 95.7 | 97.9 | 95.5 | 99.5 | 96.5 | 91.4 | 82.5 | 75.5 | 64.1 | 57.2 | 54.4 | 49.4 | 45.3 | 46.0 | 46.1 | 45.1 | 46.4 | 57.8 | 80.6 | 90.2 | 94.0 | 93.3 | 74.1 | 99.5 |
| 21-Aug | 96.6 | 96.5 | 93.9 | 90.6 | 90.8 | 92.0 | 85.4 | 80.3 | 76.9 | 65.4 | 55.8 | 43.1 | 38.1 | 36.7 | 34.7 | 33.9 | 35.6 | 38.6 | 44.2 | 50.1 | 58.2 | 68.3 | 63.5 | 67.2 | 64.0 | 96.6 |
| 22-Aug | 73.5 | 77.2 | 77.6 | 79.0 | 78.3 | 75.7 | 73.2 | 64.6 | 60.3 | 59.0 | 55.5 | 54.6 | 50.6 | 48.6 | 46.1 | 45.0 | 47.0 | 49.7 | 53.0 | 54.2 | 58.1 | 66.1 | 72.9 | 78.3 | 62.4 | 79.0 |
| 23-Aug | 82.7 | 88.4 | 92.2 | 92.5 | 93.3 | 93.1 | 92.5 | 89.3 | 86.4 | 85.1 | 80.7 | 78.8 | 74.1 | 67.7 | 72.3 | 70.9 | 66.0 | 68.8 | 66.7 | 66.9 | 67.7 | 74.8 | 78.1 | 75.0 | 79.3 | 93.3 |
| 24-Aug | 61.0 | 60.2 | 61.9 | 60.9 | 61.0 | 61.9 | 59.2 | 57.6 | 51.2 | 39.3 | 37.4 | 33.0 | 30.4 | 29.5 | 28.1 | 28.7 | 29.7 | 31.2 | 32.1 | 49.5 | 78.3 | 79.8 | 81.4 | 81.5 | 51.0 | 81.5 |
| 25-Aug | 87.2 | 88.7 | 90.8 | 96.1 | 97.1 | 97.2 | 93.9 | 76.5 | 69.2 | 63.0 | 57.0 | 52.0 | 46.2 | 45.0 | 42.8 | 40.6 | 40.2 | 39.9 | 42.8 | 52.6 | 81.9 | 83.5 | 92.9 | 95.5 | 69.7 | 97.2 |
| 26-Aug | 96.5 | 91.1 | 80.1 | 82.2 | 90.5 | 97.8 | 90.0 | 73.6 | 65.7 | 56.2 | 48.8 | 45.3 | 33.3 | 31.7 | 32.1 | 30.8 | 30.9 | 32.4 | 38.3 | 47.3 | 54.5 | 55.9 | 76.8 | 86.0 | 61.2 | 97.8 |
| 27-Aug | 81.3 | 86.0 | 76.6 | 82.5 | 82.4 | 81.3 | 76.8 | 71.3 | 65.7 | 59.4 | 51.2 | 46.9 | 46.9 | 46.2 | 47.1 | 46.0 | 45.1 | 46.7 | 48.0 | 53.1 | 54.7 | 59.0 | 58.9 | 60.8 | 61.4 | 86.0 |
| 28-Aug | 64.4 | 67.5 | 70.0 | 79.7 | 81.3 | 84.8 | 83.1 | 82.9 | 83.6 | 73.2 | 59.6 | 50.7 | 50.3 | 48.6 | 53.2 | 50.2 | 57.6 | 63.7 | 66.4 | 73.0 | 76.2 | 79.4 | 78.1 | 79.0 | 69.0 | 84.8 |
| 29-Aug | 82.4 | 77.8 | 76.9 | 77.1 | 81.1 | 84.0 | 80.4 | 75.8 | 69.8 | 60.5 | 55.1 | 49.2 | 42.3 | 39.0 | 39.8 | 39.0 | 38.7 | 39.8 | 44.3 | 54.7 | 67.5 | 66.8 | 72.0 | 79.8 | 62.2 | 84.0 |
| 30-Aug | 87.1 | 89.8 | 89.5 | 87.4 | 94.9 | 96.2 | 90.2 | 87.2 | 73.1 | 62.9 | 55.6 | 53.1 | 46.6 | 43.8 | 42.0 | 39.1 | 38.5 | 40.1 | 48.1 | 59.2 | 73.8 | 76.6 | 71.8 | 64.6 | 67.1 | 96.2 |
| 31-Aug | 72.3 | 78.8 | 79.0 | 80.9 | 83.8 | 84.3 | 82.4 | 76.0 | 65.0 | 56.6 | 50.7 | 50.0 | 48.5 | 47.6 | 44.6 | 37.9 | 40.0 | 43.8 | 48.3 | 63.3 | 81.5 | 79.3 | 73.8 | 84.9 | 64.7 | 84.9 |
| | 84.5 | 85.8 | 86.6 | 87.4 | 88.8 | 89.5 | 85.6 | 79.7 | 74.6 | 67.8 | 62.6 | 56.3 | 52.3 | 48.9 | 47.7 | 47.9 | 49.9 | 51.4 | 55.1 | 62.3 | 72.8 | 78.1 | 81.3 | 83.4 | Diurnal Average | |
| | 99.5 | 98.7 | 99.7 | 98.4 | 100.0 | 99.5 | 98.4 | 97.6 | 100.0 | 94.5 | 96.2 | 90.7 | 86.4 | 78.1 | 72.3 | 73.1 | 75.8 | 83.0 | 92.9 | 99.3 | 99.0 | 99.7 | 96.5 | 98.7 | Diurnal Maximum | |

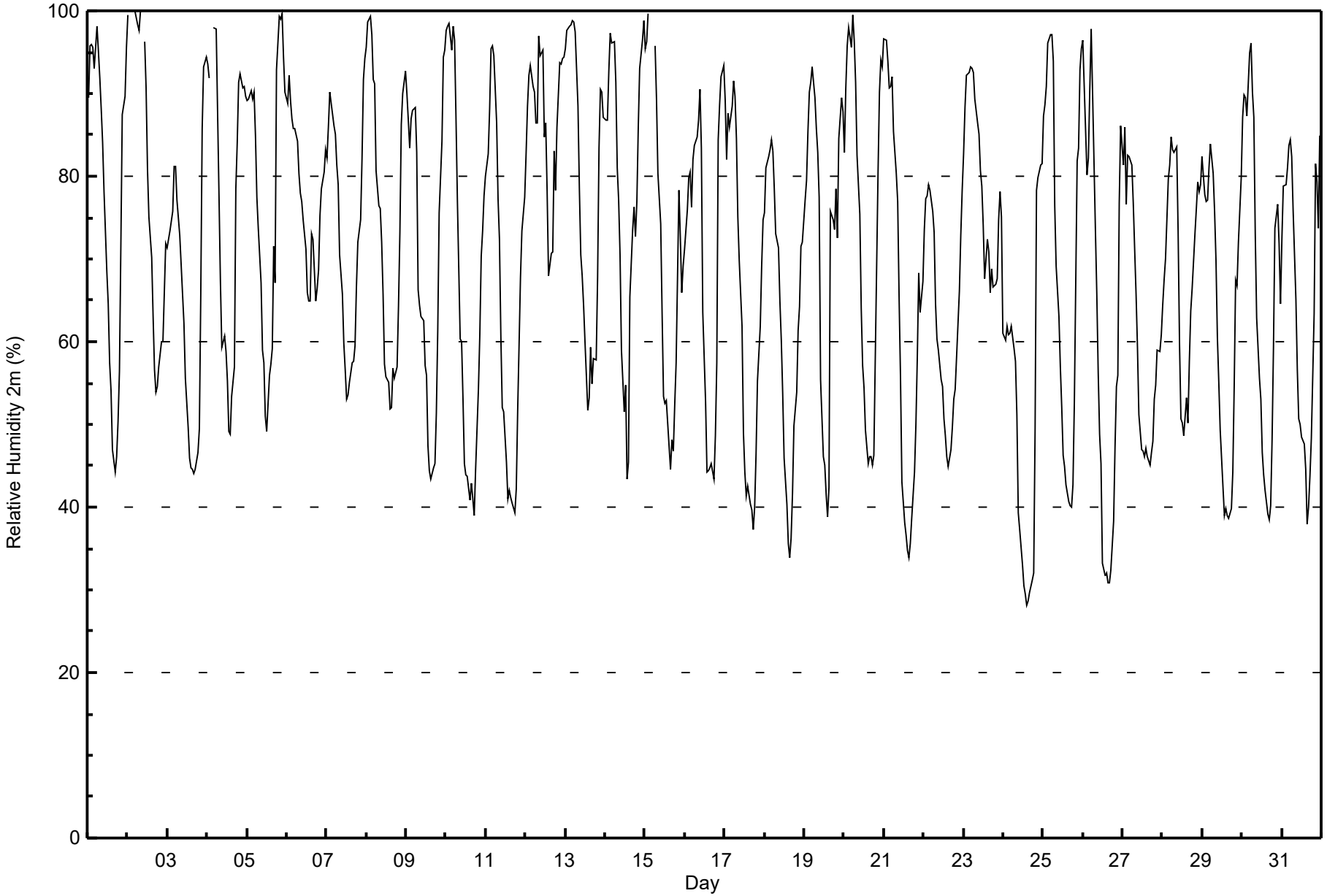
OR - Out of Range

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Patricia McInnes - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Patricia McInnes - August 2026

Maximum Speed: 30 km/h on Aug 2 14:00

Maximum Daily Speed Average: 18.8 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 10 06:00

Minimum Daily Speed Average: 0.7 km/h on Aug 25

Maximum Diurnal Speed Average: 6.3 km/h at hour 13

Minimum Diurnal Speed Average: 2.3 km/h at hour 20

Monthly Average Velocity: 3.4 km/h 296.2 deg

Percentiles: $P_1 = 1$ $P_{10} = 3$ $Q_1 = 5$ Median = 8 $Q_3 = 13$ $P_{90} = 17$ $P_{99} = 25$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSW5 | SSW8 | S6 | S4 | S5 | SSE5 | SSE4 | SSW2 | E5 | ESE4 | ENE9 | E11 | ESE15 | ESE17 | ESE15 | ESE16 | SE17 | SE14 | ESE8 | SE8 | WNW16 | SSW1 | WNW6 | W5 | SE5.1 | ESE17 |
| 2-Aug | NW11 | NNW13 | N16 | NNW17 | NNW12 | NNW10 | NNW14 | NNW14 | NNW15 | N17 | N21 | N29 | N27 | N30 | NNW28 | NNW27 | NNW25 | NNW26 | NNW22 | NNW18 | NNW20 | NNW20 | NW13 | NW14 | NNW18.8 | N30 |
| 3-Aug | NW14 | NW13 | NW11 | NW12 | WNW11 | NW11 | NW11 | NW14 | NNW16 | NNW15 | NNW15 | NNW16 | NW19 | NW15 | NW14 | NNW10 | NNW12 | N11 | N9 | NNE9 | NNE4 | WSW2 | WSW3 | SW4 | NW10.2 | NW19 |
| 4-Aug | SSW3 | SSE4 | S4 | S4 | S5 | S6 | SSW8 | S7 | SSE7 | SW10 | SW10 | W15 | WSW16 | WSW18 | WSW15 | SW14 | WSW14 | W9 | NNE4 | W6 | WNW13 | NW16 | NW12 | NW15 | WSW7.2 | WSW18 |
| 5-Aug | WNW12 | WNW11 | W12 | WNW14 | WNW16 | WNW16 | NW16 | NW20 | NW20 | NW24 | NW20 | NW24 | NW24 | WNW18 | NW13 | NNW8 | NNW7 | N19 | N14 | NNW13 | NW11 | WNW11 | WNW16 | WNW20 | NW14.7 | NW24 |
| 6-Aug | WNW19 | WNW16 | WNW21 | WNW24 | NW23 | NW19 | WNW22 | NW25 | NW23 | NW20 | NW15 | NW13 | NW13 | WNW17 | NW15 | N11 | NNW11 | NW15 | WNW17 | WNW18 | WNW14 | WNW12 | WNW11 | WNW10 | NW16.4 | NW25 |
| 7-Aug | WNW10 | W7 | WNW6 | W5 | WNW10 | WNW12 | WNW11 | W7 | WNW13 | WNW16 | NW17 | NW16 | NW14 | NW15 | NNW11 | NNE9 | NNW7 | NNW7 | NNW6 | NNW6 | N8 | NNW4 | W4 | WNW4 | NW8.5 | NW17 |
| 8-Aug | SW2 | W3 | W5 | WNW5 | NW5 | N2 | N7 | N9 | NNE11 | NNE11 | NNE9 | NNE8 | N6 | N6 | NNW8 | N11 | NNW13 | N11 | NNE7 | N6 | NNW4 | WNW4 | WNW3 | NW4 | N5.6 | NNW13 |
| 9-Aug | WNW4 | NW3 | WSW1 | NNW1 | W2 | NNW2 | NW3 | ENE2 | ESE3 | SSE3 | WSW5 | N2 | NNW7 | NNE4 | NNW7 | NNE7 | NNE11 | NE7 | NNW4 | NW3 | N4 | WNW3 | WNW4 | WNW2 | NNW2.5 | NNE11 |
| 10-Aug | N1 | SW3 | SSE2 | SSE3 | SSW3 | S0 | SSE5 | WSW2 | NNE2 | ENE5 | NE8 | NNE9 | NNE7 | NNE10 | N13 | NNE16 | N13 | N11 | NNW9 | NNW9 | NW8 | NW7 | NW8 | NW6 | N4.4 | NNE16 |
| 11-Aug | NW8 | WNW3 | SW3 | WSW2 | SW2 | SW3 | SW3 | SSW1 | NW2 | NNW4 | NNW11 | NNW15 | NNW14 | N17 | N16 | N18 | N16 | N15 | N13 | NNW9 | N9 | NNW7 | NW6 | NW7 | NNW7.2 | N18 |
| 12-Aug | NW7 | NW6 | NW6 | WNW7 | NW8 | NW8 | NW8 | NNW8 | NNW9 | NW10 | NNW11 | NNW13 | N14 | N15 | N15 | N16 | N17 | N15 | NNE12 | NNW7 | NW7 | NNW9 | NNW9 | NNW10 | NNW9.7 | N17 |
| 13-Aug | NNW10 | NNW10 | NNW9 | NNW9 | NNW9 | NNW10 | N9 | N11 | N11 | N11 | NNE12 | NNE9 | NE11 | NNE10 | ENE15 | ESE10 | ENE9 | N5 | NNW6 | SE2 | WNW4 | WNW4 | NW5 | NW5 | N6.7 | ENE15 |
| 14-Aug | NW5 | WNW1 | WNW1 | WNW2 | S2 | W2 | WSW2 | NNW3 | WNW3 | WNW2 | NNE5 | NNW7 | NW8 | SSW3 | NNW6 | SSE12 | SSW11 | SW10 | WSW5 | W3 | S4 | SW3 | SSW3 | S3 | WSW2.0 | SSE12 |
| 15-Aug | SW8 | S5 | S5 | S5 | SSW8 | SSW7 | SSW8 | SW8 | SSW8 | S7 | S10 | SSW12 | W8 | WSW6 | WSW5 | WSW7 | W4 | WSW3 | W4 | SW2 | SSW4 | WSW7 | WSW10 | SW11 | SW6.1 | SSW12 |
| 16-Aug | WSW13 | WSW13 | WSW13 | WSW11 | WSW4 | WSW7 | NW10 | NNW9 | N15 | N13 | N15 | N19 | N19 | N18 | N15 | NNW13 | NW10 | NW11 | NNW7 | NE6 | NW3 | W3 | W4 | WSW4 | NW7.3 | N19 |
| 17-Aug | SW6 | WSW9 | SSW5 | SW8 | SSW5 | SW4 | SW6 | SW6 | SSW6 | SSE6 | SSW3 | NNW12 | NNW8 | NNW5 | E7 | SSW7 | SW8 | SSW10 | SSW7 | S5 | SSW6 | SSW6 | SSW5 | S5 | SW4.2 | NNW12 |
| 18-Aug | S7 | SSW6 | SSW6 | S5 | SSE6 | SE7 | SSE7 | SSE8 | S9 | SSW12 | SW13 | WSW12 | WSW11 | SW14 | SW15 | SW19 | WSW17 | W17 | W12 | WSW8 | WSW8 | SW7 | SW7 | SW8 | SW8.4 | SW19 |
| 19-Aug | SW6 | SSW2 | SSW5 | SW6 | SW7 | SSW5 | SW9 | SW8 | SW8 | WSW8 | NW8 | NW14 | WNW15 | NW16 | NW14 | NW13 | WNW13 | WNW11 | WNW8 | NNW7 | N7 | WNW5 | WSW5 | NW7 | WNW6.2 | NW16 |
| 20-Aug | W3 | SW6 | W5 | WSW6 | NW4 | N2 | SW3 | SSW6 | SW5 | N6 | N10 | N13 | NNW15 | N14 | NNW13 | NNW14 | N11 | NNW11 | NNE11 | N5 | W4 | W4 | WNW4 | WSW1 | NNW5.0 | NNW15 |
| 21-Aug | WSW3 | SW3 | SW4 | SW5 | SSW4 | SSW4 | SSW5 | SSE6 | S7 | S8 | SSW8 | SSW9 | SSW9 | SSE8 | S9 | S9 | SE11 | SE13 | SE11 | SE7 | SE4 | SSW5 | SSW8 | SSW7 | S5.9 | SE13 |
| 22-Aug | S5 | SSE6 | SSE7 | SE6 | SE8 | SE7 | SE8 | SE8 | SE7 | E6 | ESE5 | ESE5 | ESE8 | SE9 | ESE12 | ESE13 | ESE16 | ESE13 | SSE8 | SSW9 | SSW11 | S8 | S7 | S7 | SE7.2 | ESE16 |
| 23-Aug | SSE7 | S4 | SSE7 | SE5 | SE4 | SE6 | SE6 | SSE4 | SSE5 | SW7 | S4 | SSW7 | SW8 | SE2 | SE5 | WSW4 | WSW3 | WSW5 | WNW12 | NW10 | NW12 | WNW8 | NW7 | NW6 | SW2.5 | WNW12 |
| 24-Aug | NW12 | NW10 | NW12 | NW11 | NW12 | NNW12 | NNW15 | NW13 | NW12 | NW18 | NW17 | NNW18 | NW23 | NNW20 | NNW20 | NNW17 | N14 | NNE11 | NNE9 | N4 | WNW6 | WNW6 | W3 | SW1 | NNW11.4 | NW23 |
| 25-Aug | WNW3 | W4 | NW2 | WNW1 | WNW3 | SW2 | SW4 | WSW1 | N7 | N5 | NNW5 | NW4 | NNW3 | ENE6 | ESE4 | SE6 | ESE8 | ESE8 | ESE6 | ESE4 | NNW3 | W2 | NNE2 | SSE1 | NE0.7 | ESE8 |
| 26-Aug | ESE3 | SE5 | SE9 | SE7 | S4 | SSW2 | S2 | SE7 | SE6 | SE7 | SE9 | SE9 | S12 | S13 | S12 | SSE13 | S13 | SSE11 | SE8 | SE9 | SE6 | SSE5 | SW2 | ESE2 | SSE6.8 | SSE13 |
| 27-Aug | SE6 | SE6 | ESE6 | ESE3 | SE8 | SE7 | SE9 | SE12 | ESE11 | ESE12 | ESE13 | SE15 | ESE15 | ESE15 | SE11 | ESE13 | ESE9 | ESE13 | ESE15 | ESE14 | SE16 | SE17 | SE16 | SE15 | ESE11.4 | SE17 |
| 28-Aug | SE11 | SE12 | SSE12 | SW12 | SW4 | SSE7 | SSE10 | SSW11 | SSW10 | SW19 | SW21 | WSW25 | WSW23 | SW23 | WSW27 | W25 | WSW20 | WSW21 | WSW20 | W16 | WSW14 | WSW11 | WSW15 | WSW11 | SW13.0 | WSW27 |
| 29-Aug | SW10 | WSW18 | WSW16 | SW14 | SSW10 | SW12 | SW18 | SW19 | WSW18 | WSW17 | WSW17 | WSW18 | SW21 | WSW20 | WSW18 | SW16 | SW15 | SW11 | SSW6 | S4 | SW5 | SSW6 | SSW7 | SSW5 | SW13.0 | SW21 |
| 30-Aug | SW4 | S4 | SSE4 | SSE4 | S2 | WSW3 | SSW3 | SW3 | SW3 | SSW1 | E5 | ESE1 | N3 | ENE6 | E1 | NNE4 | NNE4 | E7 | SSE7 | SSE5 | SSW3 | SSW3 | W2 | NNW3 | SSE1.2 | E7 |
| 31-Aug | SSE2 | SW7 | WSW10 | WNW7 | WNW5 | W6 | WNW3 | W1 | NNW7 | NNW9 | NNW8 | WNW8 | NW7 | NW9 | W12 | W14 | W12 | WSW12 | W10 | WNW5 | W3 | SW5 | WNW2 | S2 | W5.8 | W14 |
| | W3.6 | WSW3.8 | WSW3.2 | W3.7 | W3.1 | W2.7 | W3.1 | W2.9 | NW2.8 | NW3.8 | NW4.3 | NW5.9 | NW6.3 | NW4.9 | NW4.7 | NW3.2 | NW3.2 | NNW3.3 | NW3.0 | NW2.3 | WNW3.8 | W3.7 | W4.1 | W3.6 | Diurnal Average | |
| | WNW19 | WSW18 | WNW21 | WNW24 | NW23 | NW19 | WNW22 | NW25 | NW23 | NW24 | N21 | N29 | N27 | N30 | NNW28 | NNW27 | NNW25 | NNW26 | NNW22 | NNW18 | NNW20 | NNW20 | WNW16 | WNW20 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 12 km/h on Aug 1 21:00

Minimum Value: 0 km/h on Aug 20 22:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

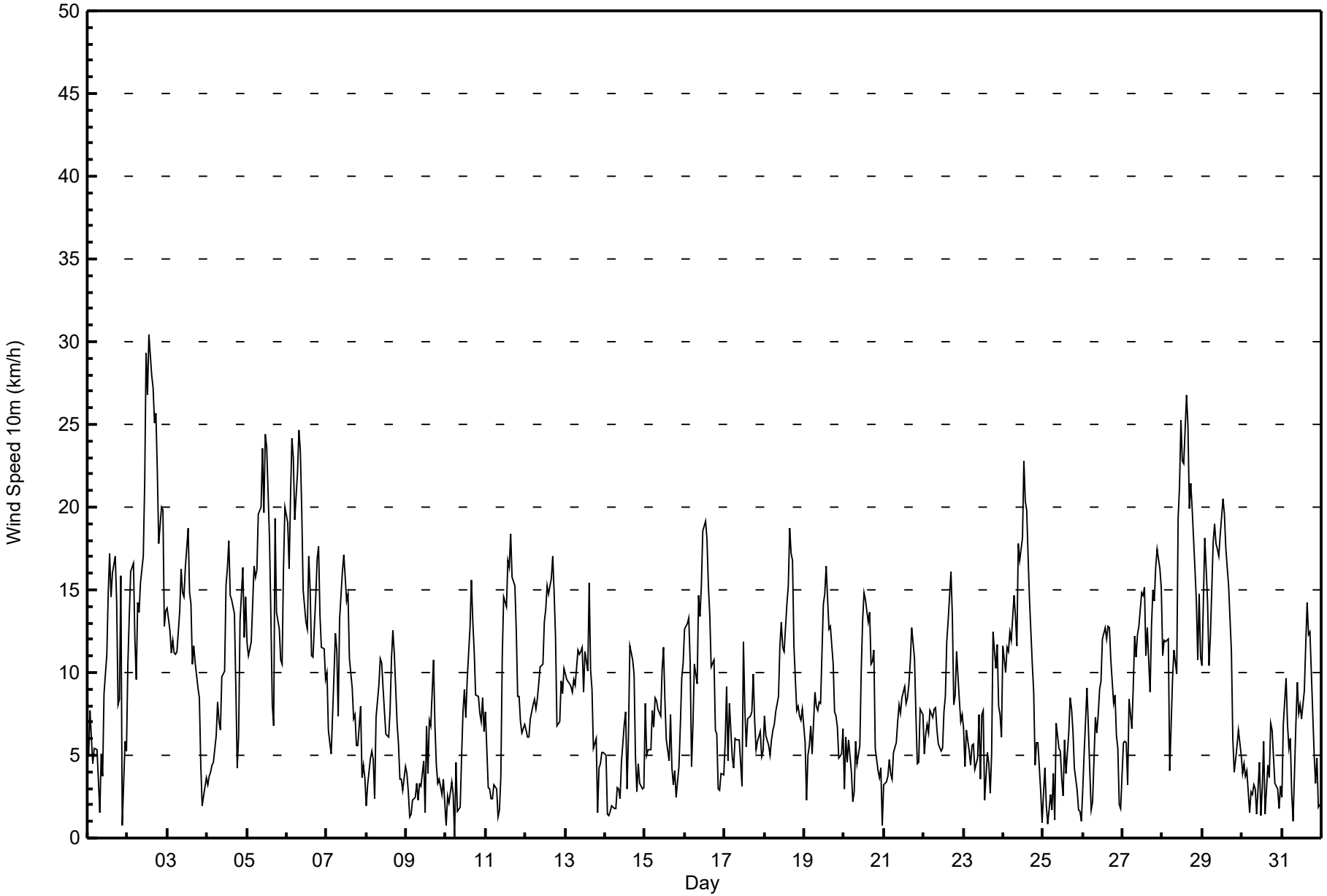
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 12 | 7 | 4 | 3 | 12 |
| 2-Aug | 4 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 7 | 5 | 4 | 5 | 5 | 2 | 2 | 8 |
| 3-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 5 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 7 | 7 | 3 | 1 | 4 | 3 | 2 | 3 | 7 |
| 5-Aug | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | 3 | 4 | 6 |
| 6-Aug | 4 | 3 | 4 | 6 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 6 |
| 7-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 4 |
| 8-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 9-Aug | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 11-Aug | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 1 | 1 | 1 | 4 |
| 12-Aug | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 5 |
| 13-Aug | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 14-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 2 | 2 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 15-Aug | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 4 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 4 |
| 16-Aug | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 4 |
| 17-Aug | 2 | 2 | 2 | 4 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 18-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 3 | 5 |
| 19-Aug | 2 | 2 | 2 | 2 | 4 | 1 | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 4 | 4 | 3 | 5 | 2 | 1 | 1 | 2 | 1 | 3 | 4 | 5 |
| 20-Aug | 3 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 0 | 1 | 1 | 4 |
| 21-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 3 |
| 22-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 4 |
| 23-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 4 |
| 24-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 5 |
| 25-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 3 |
| 26-Aug | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 4 |
| 27-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 |
| 28-Aug | 3 | 3 | 3 | 4 | 5 | 3 | 2 | 4 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 2 | 3 | 3 | 6 |
| 29-Aug | 3 | 4 | 4 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 30-Aug | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 |
| 31-Aug | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 0 | 2 | 2 | 1 | 3 |
| | 4 | 4 | 4 | 6 | 5 | 4 | 5 | 5 | 5 | 5 | 8 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 4 | 12 | 7 | 4 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Patricia McInnes - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 222 | 29.84 | 29.84 |
| 6 - 11 | 293 | 39.38 | 69.22 |
| 12 - 19 | 190 | 25.54 | 94.76 |
| 20 - 28 | 37 | 4.97 | 99.73 |
| 29 - 38 | 2 | 0.27 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Patricia McInnes - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 10 | 8 | 0 | 2 | 3 | 10 | 7 | 15 | 24 | 26 | 25 | 20 | 21 | 26 | 13 | 12 | 222 |
| 6 - 11 | 21 | 17 | 4 | 4 | 3 | 10 | 32 | 16 | 14 | 30 | 25 | 16 | 7 | 18 | 33 | 43 | 293 |
| 12 - 19 | 28 | 3 | 0 | 1 | 0 | 16 | 10 | 3 | 4 | 2 | 13 | 19 | 8 | 21 | 36 | 26 | 190 |
| 20 - 28 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 1 | 4 | 11 | 9 | 37 |
| 29 - 38 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 63 | 28 | 4 | 7 | 6 | 36 | 49 | 34 | 42 | 58 | 66 | 62 | 37 | 69 | 93 | 90 | 744 |

Total Number of Valid Hours: 744

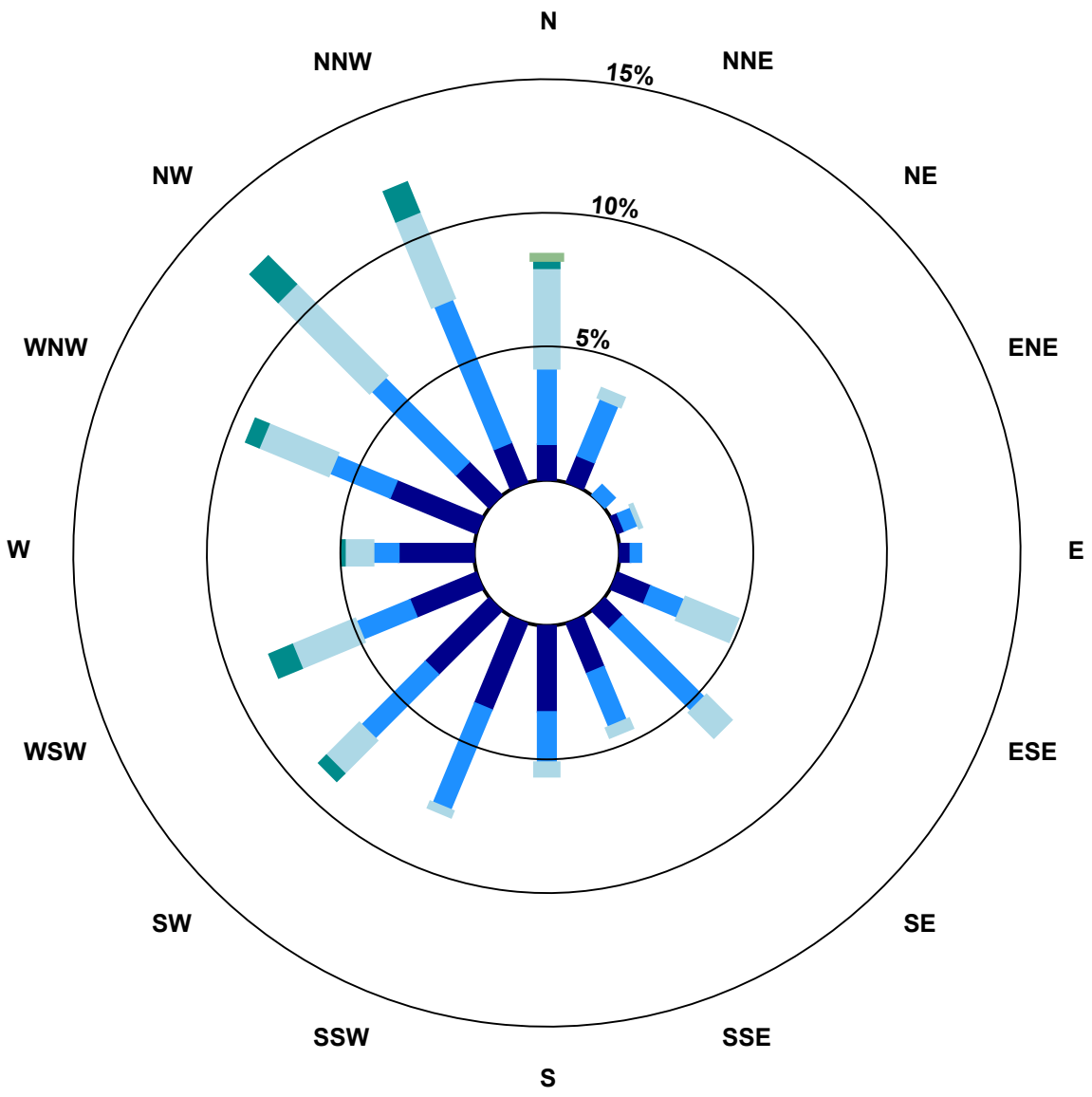
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

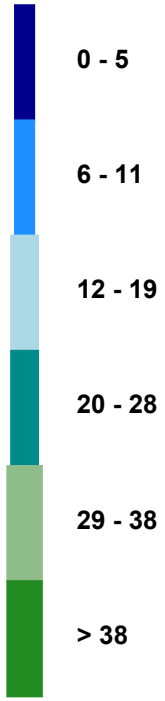
**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Patricia McInnes**




**Classes (km/h)**




**Total Number of Valid Hours: 744**

Direction of Maximum Speed: 352 deg on Aug 2 14:00
Direction of Maximum Daily Speed Average: 343.2 deg on Aug 2

Direction of Minimum Speed: 181 deg on Aug 10 06:00

Direction of Minimum Daily Speed Average: 0.7 deg on Aug 25

Monthly Average Direction: 296.2 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 200 | 209 | 188 | 169 | 180 | 159 | 164 | 203 | 97 | 105 | 66 | 93 | 116 | 112 | 103 | 122 | 128 | 127 | 119 | 137 | 302 | 204 | 299 | 280 | 129.3 |
| 2-Aug | 325 | 337 | 353 | 342 | 346 | 343 | 343 | 344 | 347 | 353 | 350 | 354 | 354 | 352 | 344 | 344 | 346 | 342 | 339 | 341 | 338 | 333 | 315 | 308 | 343.2 |
| 3-Aug | 312 | 310 | 314 | 311 | 298 | 304 | 309 | 315 | 332 | 336 | 345 | 330 | 326 | 323 | 324 | 342 | 337 | 2 | 355 | 31 | 17 | 252 | 246 | 228 | 326.0 |
| 4-Aug | 213 | 167 | 189 | 190 | 182 | 189 | 201 | 182 | 159 | 230 | 219 | 260 | 240 | 240 | 238 | 233 | 256 | 276 | 28 | 263 | 290 | 305 | 311 | 309 | 247.9 |
| 5-Aug | 301 | 292 | 273 | 283 | 293 | 295 | 306 | 312 | 322 | 317 | 316 | 316 | 319 | 291 | 307 | 334 | 340 | 4 | 356 | 341 | 308 | 291 | 297 | 298 | 311.3 |
| 6-Aug | 300 | 292 | 296 | 298 | 305 | 306 | 298 | 307 | 309 | 308 | 326 | 309 | 305 | 300 | 312 | 349 | 345 | 304 | 300 | 301 | 301 | 298 | 298 | 295 | 305.4 |
| 7-Aug | 285 | 280 | 300 | 265 | 292 | 296 | 300 | 278 | 298 | 302 | 311 | 324 | 325 | 315 | 338 | 12 | 343 | 346 | 331 | 342 | 7 | 329 | 279 | 294 | 313.1 |
| 8-Aug | 232 | 265 | 263 | 291 | 316 | 353 | 350 | 359 | 13 | 17 | 20 | 15 | 4 | 357 | 345 | 7 | 336 | 353 | 21 | 354 | 336 | 286 | 293 | 307 | 349.3 |
| 9-Aug | 302 | 309 | 245 | 331 | 281 | 339 | 323 | 75 | 111 | 153 | 255 | 359 | 335 | 15 | 348 | 20 | 30 | 43 | 335 | 316 | 351 | 300 | 303 | 298 | 347.3 |
| 10-Aug | 5 | 217 | 150 | 156 | 211 | 181 | 164 | 247 | 15 | 77 | 37 | 27 | 24 | 13 | 350 | 19 | 359 | 358 | 331 | 331 | 322 | 311 | 312 | 305 | 355.1 |
| 11-Aug | 305 | 299 | 218 | 243 | 222 | 224 | 224 | 203 | 304 | 345 | 342 | 348 | 343 | 2 | 1 | 355 | 358 | 9 | 356 | 348 | 354 | 336 | 320 | 324 | 344.8 |
| 12-Aug | 315 | 307 | 308 | 300 | 307 | 304 | 316 | 334 | 331 | 325 | 339 | 348 | 355 | 6 | 349 | 350 | 352 | 356 | 12 | 344 | 325 | 335 | 336 | 337 | 339.0 |
| 13-Aug | 336 | 340 | 342 | 344 | 341 | 346 | 352 | 357 | 6 | 1 | 19 | 30 | 35 | 29 | 70 | 108 | 66 | 349 | 335 | 136 | 287 | 300 | 326 | 310 | 5.7 |
| 14-Aug | 310 | 288 | 289 | 285 | 184 | 264 | 249 | 337 | 288 | 296 | 19 | 337 | 322 | 198 | 335 | 157 | 200 | 236 | 249 | 278 | 182 | 220 | 199 | 191 | 252.3 |
| 15-Aug | 229 | 186 | 180 | 185 | 200 | 196 | 210 | 214 | 204 | 185 | 173 | 207 | 260 | 255 | 239 | 248 | 263 | 253 | 264 | 218 | 207 | 238 | 244 | 233 | 218.6 |
| 16-Aug | 241 | 239 | 237 | 243 | 251 | 240 | 325 | 348 | 5 | 349 | 350 | 349 | 353 | 352 | 350 | 339 | 323 | 318 | 344 | 36 | 317 | 270 | 266 | 237 | 323.6 |
| 17-Aug | 235 | 251 | 204 | 224 | 195 | 220 | 214 | 216 | 207 | 151 | 194 | 336 | 335 | 329 | 101 | 193 | 229 | 213 | 210 | 184 | 204 | 213 | 204 | 189 | 218.1 |
| 18-Aug | 190 | 199 | 198 | 183 | 161 | 144 | 152 | 168 | 183 | 206 | 224 | 239 | 256 | 230 | 230 | 232 | 240 | 270 | 266 | 256 | 248 | 221 | 218 | 225 | 223.8 |
| 19-Aug | 218 | 207 | 199 | 220 | 218 | 192 | 219 | 223 | 219 | 238 | 304 | 309 | 296 | 309 | 320 | 310 | 291 | 286 | 301 | 328 | 11 | 292 | 251 | 315 | 281.5 |
| 20-Aug | 274 | 231 | 259 | 253 | 305 | 359 | 215 | 209 | 215 | 11 | 351 | 3 | 340 | 350 | 348 | 346 | 3 | 347 | 13 | 9 | 267 | 265 | 292 | 239 | 334.0 |
| 21-Aug | 248 | 230 | 219 | 215 | 192 | 198 | 194 | 168 | 174 | 185 | 194 | 213 | 211 | 162 | 181 | 171 | 139 | 139 | 136 | 132 | 138 | 206 | 205 | 198 | 178.4 |
| 22-Aug | 170 | 153 | 148 | 128 | 130 | 138 | 140 | 142 | 134 | 97 | 104 | 120 | 123 | 133 | 115 | 115 | 114 | 120 | 160 | 193 | 205 | 190 | 187 | 174 | 141.0 |
| 23-Aug | 164 | 179 | 161 | 141 | 130 | 126 | 130 | 152 | 167 | 217 | 186 | 193 | 218 | 142 | 131 | 245 | 237 | 251 | 294 | 312 | 308 | 283 | 306 | 308 | 223.8 |
| 24-Aug | 326 | 308 | 314 | 318 | 326 | 329 | 330 | 322 | 323 | 320 | 318 | 328 | 318 | 333 | 345 | 345 | 9 | 22 | 27 | 3 | 297 | 293 | 276 | 232 | 330.3 |
| 25-Aug | 296 | 271 | 310 | 299 | 297 | 217 | 228 | 253 | 349 | 7 | 331 | 320 | 340 | 69 | 119 | 132 | 113 | 110 | 120 | 116 | 327 | 275 | 28 | 149 | 54.7 |
| 26-Aug | 120 | 125 | 129 | 142 | 174 | 207 | 173 | 138 | 130 | 129 | 129 | 125 | 179 | 178 | 182 | 165 | 175 | 161 | 146 | 131 | 146 | 156 | 232 | 114 | 153.4 |
| 27-Aug | 130 | 130 | 117 | 121 | 132 | 139 | 126 | 130 | 118 | 111 | 117 | 130 | 123 | 120 | 124 | 122 | 108 | 105 | 110 | 119 | 128 | 127 | 128 | 131 | 122.5 |
| 28-Aug | 133 | 128 | 149 | 216 | 227 | 157 | 155 | 204 | 196 | 234 | 234 | 243 | 241 | 229 | 251 | 261 | 251 | 247 | 245 | 269 | 253 | 248 | 253 | 240 | 233.2 |
| 29-Aug | 229 | 248 | 243 | 232 | 212 | 222 | 231 | 233 | 239 | 237 | 239 | 237 | 236 | 244 | 242 | 233 | 231 | 214 | 197 | 190 | 216 | 200 | 197 | 204 | 231.7 |
| 30-Aug | 214 | 188 | 167 | 157 | 187 | 243 | 205 | 232 | 222 | 193 | 84 | 118 | 353 | 75 | 94 | 14 | 27 | 89 | 158 | 148 | 209 | 202 | 275 | 329 | 156.1 |
| 31-Aug | 164 | 233 | 239 | 293 | 283 | 260 | 289 | 273 | 334 | 330 | 338 | 287 | 310 | 304 | 269 | 276 | 260 | 257 | 264 | 291 | 260 | 230 | 287 | 179 | 277.2 |
| | 269.2 | 257.0 | 250.0 | 262.2 | 268.5 | 266.8 | 270.2 | 276.4 | 306.2 | 304.6 | 321.8 | 318.5 | 313.0 | 318.7 | 322.0 | 321.7 | 322.3 | 326.3 | 326.1 | 323.1 | 294.9 | 274.1 | 275.2 | 273.4 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 100 deg on Aug 10 06:00

Minimum Value: 5 deg on Aug 11 00:00

Percentiles: $P_1 = 7$ $P_{10} = 11$ $Q_1 = 14$ Median = 19 $Q_3 = 29$ $P_{90} = 51$ $P_{99} = 89$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

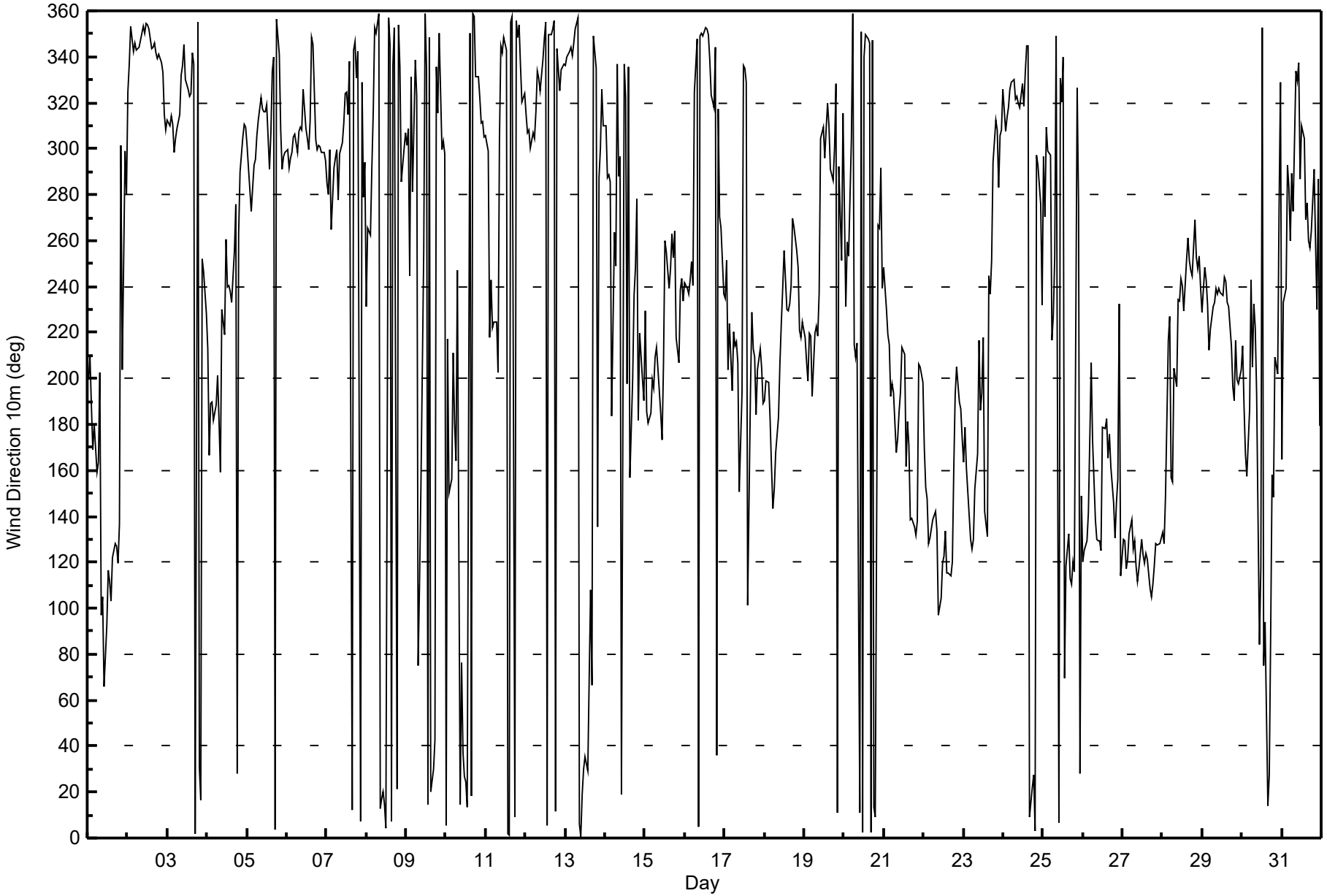
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 19 | 14 | 29 | 22 | 17 | 14 | 26 | 63 | 35 | 31 | 20 | 19 | 18 | 18 | 18 | 16 | 15 | 15 | 20 | 16 | 68 | 97 | 51 | 59 | 97 |
| 2-Aug | 23 | 13 | 17 | 12 | 14 | 14 | 13 | 13 | 14 | 16 | 16 | 18 | 16 | 17 | 14 | 15 | 17 | 13 | 12 | 13 | 11 | 11 | 13 | 10 | 23 |
| 3-Aug | 10 | 10 | 11 | 11 | 8 | 9 | 12 | 12 | 14 | 17 | 16 | 17 | 19 | 22 | 20 | 31 | 22 | 25 | 23 | 17 | 18 | 63 | 12 | 14 | 63 |
| 4-Aug | 36 | 16 | 15 | 20 | 20 | 17 | 21 | 27 | 33 | 23 | 24 | 18 | 18 | 17 | 22 | 16 | 28 | 58 | 79 | 33 | 16 | 12 | 13 | 12 | 79 |
| 5-Aug | 11 | 14 | 12 | 11 | 10 | 10 | 12 | 12 | 15 | 15 | 16 | 16 | 15 | 12 | 14 | 33 | 24 | 17 | 15 | 18 | 18 | 15 | 10 | 11 | 33 |
| 6-Aug | 12 | 11 | 10 | 11 | 12 | 11 | 11 | 12 | 12 | 13 | 15 | 20 | 20 | 15 | 17 | 38 | 20 | 15 | 11 | 11 | 11 | 10 | 9 | 12 | 38 |
| 7-Aug | 12 | 14 | 17 | 33 | 12 | 10 | 10 | 17 | 16 | 14 | 17 | 17 | 17 | 18 | 26 | 17 | 18 | 19 | 31 | 26 | 14 | 32 | 9 | 20 | 33 |
| 8-Aug | 30 | 22 | 14 | 15 | 17 | 56 | 14 | 20 | 19 | 20 | 24 | 48 | 44 | 47 | 47 | 24 | 16 | 17 | 26 | 19 | 31 | 22 | 29 | 12 | 56 |
| 9-Aug | 16 | 32 | 93 | 51 | 70 | 28 | 29 | 54 | 36 | 48 | 57 | 83 | 38 | 88 | 38 | 40 | 17 | 33 | 28 | 16 | 52 | 43 | 17 | 26 | 93 |
| 10-Aug | 76 | 43 | 47 | 22 | 29 | 100 | 43 | 87 | 78 | 38 | 36 | 31 | 56 | 40 | 26 | 19 | 22 | 19 | 14 | 8 | 14 | 9 | 8 | 5 | 100 |
| 11-Aug | 7 | 71 | 20 | 43 | 15 | 21 | 34 | 76 | 48 | 78 | 25 | 20 | 23 | 22 | 23 | 18 | 25 | 18 | 17 | 17 | 14 | 7 | 11 | 14 | 78 |
| 12-Aug | 12 | 11 | 11 | 7 | 8 | 9 | 12 | 15 | 18 | 13 | 16 | 16 | 17 | 23 | 23 | 17 | 16 | 17 | 19 | 11 | 10 | 9 | 9 | 9 | 23 |
| 13-Aug | 8 | 11 | 11 | 12 | 12 | 11 | 13 | 15 | 18 | 26 | 22 | 24 | 25 | 25 | 31 | 24 | 22 | 40 | 11 | 89 | 24 | 11 | 9 | 9 | 89 |
| 14-Aug | 10 | 62 | 64 | 76 | 32 | 66 | 50 | 35 | 46 | 77 | 57 | 49 | 52 | 77 | 47 | 35 | 38 | 14 | 28 | 59 | 20 | 21 | 27 | 29 | 77 |
| 15-Aug | 16 | 21 | 19 | 16 | 16 | 20 | 17 | 17 | 23 | 27 | 23 | 28 | 26 | 14 | 33 | 44 | 29 | 43 | 17 | 26 | 14 | 12 | 9 | 11 | 44 |
| 16-Aug | 9 | 9 | 9 | 10 | 71 | 30 | 20 | 15 | 15 | 16 | 15 | 17 | 20 | 20 | 17 | 19 | 19 | 15 | 26 | 18 | 26 | 38 | 14 | 17 | 71 |
| 17-Aug | 9 | 7 | 26 | 24 | 22 | 23 | 19 | 18 | 32 | 27 | 69 | 26 | 42 | 55 | 41 | 41 | 47 | 21 | 20 | 16 | 14 | 11 | 25 | 16 | 69 |
| 18-Aug | 15 | 14 | 15 | 14 | 12 | 11 | 17 | 18 | 20 | 24 | 19 | 21 | 22 | 21 | 21 | 20 | 14 | 13 | 13 | 13 | 11 | 14 | 18 | 44 | 44 |
| 19-Aug | 33 | 75 | 24 | 26 | 30 | 24 | 18 | 16 | 19 | 19 | 41 | 18 | 24 | 21 | 27 | 19 | 14 | 12 | 11 | 13 | 24 | 20 | 21 | 41 | 75 |
| 20-Aug | 85 | 24 | 24 | 13 | 39 | 51 | 24 | 23 | 46 | 38 | 25 | 22 | 22 | 24 | 21 | 19 | 30 | 17 | 15 | 23 | 16 | 10 | 14 | 76 | 85 |
| 21-Aug | 13 | 16 | 14 | 16 | 26 | 34 | 27 | 20 | 20 | 20 | 28 | 38 | 31 | 38 | 40 | 37 | 20 | 16 | 14 | 10 | 19 | 25 | 18 | 18 | 40 |
| 22-Aug | 16 | 7 | 6 | 12 | 11 | 10 | 13 | 18 | 22 | 33 | 39 | 41 | 31 | 29 | 18 | 17 | 14 | 14 | 19 | 22 | 20 | 16 | 17 | 16 | 41 |
| 23-Aug | 13 | 34 | 17 | 23 | 24 | 18 | 15 | 22 | 31 | 24 | 66 | 47 | 40 | 76 | 38 | 33 | 56 | 63 | 13 | 13 | 12 | 19 | 13 | 21 | 76 |
| 24-Aug | 10 | 12 | 10 | 9 | 10 | 10 | 9 | 10 | 13 | 13 | 15 | 18 | 17 | 17 | 16 | 15 | 26 | 22 | 20 | 37 | 5 | 7 | 25 | 89 | 89 |
| 25-Aug | 39 | 30 | 29 | 50 | 43 | 49 | 18 | 74 | 20 | 35 | 51 | 67 | 84 | 54 | 71 | 40 | 26 | 21 | 16 | 29 | 40 | 55 | 44 | 66 | 84 |
| 26-Aug | 20 | 16 | 12 | 14 | 20 | 43 | 28 | 16 | 20 | 21 | 22 | 24 | 33 | 23 | 23 | 22 | 20 | 18 | 16 | 9 | 12 | 23 | 32 | 54 | 54 |
| 27-Aug | 9 | 11 | 17 | 34 | 12 | 12 | 14 | 15 | 19 | 16 | 19 | 19 | 16 | 17 | 19 | 13 | 16 | 16 | 13 | 13 | 13 | 12 | 14 | 13 | 34 |
| 28-Aug | 16 | 18 | 18 | 22 | 73 | 32 | 24 | 33 | 25 | 14 | 15 | 18 | 15 | 19 | 17 | 16 | 17 | 13 | 13 | 16 | 13 | 14 | 11 | 15 | 73 |
| 29-Aug | 15 | 12 | 12 | 13 | 17 | 16 | 12 | 13 | 15 | 18 | 18 | 19 | 17 | 18 | 20 | 18 | 17 | 19 | 23 | 19 | 15 | 13 | 17 | 16 | 23 |
| 30-Aug | 23 | 19 | 36 | 33 | 62 | 58 | 42 | 48 | 59 | 87 | 54 | 96 | 69 | 52 | 92 | 69 | 66 | 27 | 19 | 26 | 37 | 57 | 78 | 53 | 96 |
| 31-Aug | 70 | 17 | 15 | 17 | 16 | 17 | 88 | 92 | 27 | 22 | 41 | 40 | 35 | 28 | 15 | 20 | 15 | 12 | 10 | 8 | 9 | 11 | 76 | 59 | 92 |
| | 85 | 75 | 93 | 76 | 73 | 100 | 88 | 92 | 78 | 87 | 69 | 96 | 84 | 88 | 92 | 69 | 66 | 63 | 79 | 89 | 68 | 97 | 78 | 89 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Patricia McInnes - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS07
## ATHABASCA VALLEY
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 708 | 35 | 36 | 99.87 | - | - | 10.9 | 0 | 1.6 | 0 |
| TRS (ppb) Average | 706 | 36 | 38 | 99.73 | 2.9 | 0 | 2.3 | 0 | 1 | 0 |
| THC (ppm) Average | 708 | 35 | 36 | 99.87 | - | - | 2.6 | - | 2.3 | - |
| NMHC (ppm) Average | 708 | 35 | 36 | 99.87 | - | - | 0.074 | - | 0.009 | - |
| CH4(ppm) Average | 708 | 35 | 36 | 99.87 | - | - | 2.6 | - | 2.3 | - |
| O3 (ppb) Average | 707 | 35 | 37 | 99.73 | - | - | 60 | 0 | 25 | - |
| NO2 (ppb) Average | 705 | 35 | 39 | 99.46 | - | - | 13.3 | 0 | 7.5 | - |
| NO (ppb) Average | 705 | 35 | 39 | 99.46 | - | - | 15.3 | - | 3.7 | - |
| NOX (ppb) Average | 705 | 35 | 39 | 99.46 | - | - | 25.1 | - | 11.3 | - |
| PM2.5 (ug/m3) Average | 726 | 0 | 18 | 97.58 | - | - | 96.5 | 2 | 24.8 | 0 |
| CO(ppm) Average | 703 | 36 | 41 | 99.33 | - | - | 1 | 0 | 0.3 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 30.7 | - | 21.8 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 98.2 | - | 86.1 | - |
| Barometric Pressure (inHg) Average | 744 | 0 | 0 | 100 | - | - | 29.3 | - | 29.3 | - |
| Wind Speed 10 m (km/h) Average | 744 | 0 | 0 | 100 | - | - | 36 | - | 23 | - |
| Wind Direction 10 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 708 | 0.47 | 1.1 | - | 0 | 0 | 0.1 | 0.1 | 0.3 | 1.1 | 10.9 |
| TRS (ppb) Average | 706 | 0.33 | 0.3 | - | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 2.3 |
| THC (ppm) Average | 708 | 2.15 | 0.1 | - | 2 | 2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.6 |
| NMHC (ppm) Average | 708 | 0.001 | 0.006 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.074 |
| CH4(ppm) Average | 708 | 2.15 | 0.1 | - | 2 | 2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.6 |
| O3 (ppb) Average | 707 | 17.32 | 10.1 | - | 1.8 | 4.9 | 8.7 | 16.3 | 24.3 | 31.4 | 60 |
| NO2 (ppb) Average | 705 | 3.88 | 2.4 | - | 0.3 | 1.2 | 2.1 | 3.5 | 5.3 | 7 | 13.3 |
| NO (ppb) Average | 705 | 1.51 | 2.2 | - | 0 | 0.1 | 0.3 | 0.7 | 1.9 | 4 | 15.3 |
| NOX (ppb) Average | 705 | 5.38 | 3.7 | - | 0.3 | 1.4 | 2.5 | 4.5 | 7.2 | 10.1 | 25.1 |
| PM2.5 (ug/m3) Average | 726 | 10.3 | 9.3 | - | 0.7 | 3.2 | 5 | 7.2 | 12.8 | 21 | 96.5 |
| CO(ppm) Average | 703 | 0.14 | 0.1 | - | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1 |
| Temperature 2 m (C) Average | 744 | 17.6 | 4.8 | - | 7.2 | 11.8 | 14.1 | 17 | 20.9 | 24 | 30.7 |
| Relative Humidity (%) Average | 744 | 70.69 | 17 | - | 30 | 45.6 | 56.7 | 73.9 | 85.8 | 90.6 | 98.2 |
| Barometric Pressure (inHg) Average | 744 | 29 | 0.2 | - | 28.5 | 28.8 | 28.8 | 29.1 | 29.1 | 29.2 | 29.3 |
| Wind Speed 10 m (km/h) Average | 744 | 8.7 | 6 | - | 0 | 3 | 4 | 7 | 11 | 17 | 36 |
| Wind Direction 10 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| CO | 06 Aug 2026 15:00 | 06 Aug 2026 16:00 | 2 | Stabilization after a routine calibration |
| SO2 | 20 Aug 2026 13:00 | 20 Aug 2026 13:00 | 1 | Maintenance - WBEA internal audit |
| TRS | 20 Aug 2026 11:00 | 20 Aug 2026 12:00 | 2 | Maintenance - WBEA internal audit |
| NO2 | 20 Aug 2026 11:00 | 20 Aug 2026 14:00 | 4 | Maintenance - WBEA internal audit |
| THC/NMHC/CH4 | 20 Aug 2026 14:00 | 20 Aug 2026 14:00 | 1 | Maintenance - WBEA internal audit |
| CO | 21 Aug 2026 10:00 | 21 Aug 2026 12:00 | 3 | Maintenance - WBEA internal audit |
| O3 | 21 Aug 2026 11:00 | 21 Aug 2026 12:00 | 2 | Maintenance - WBEA internal audit |
| PM2.5 | 21 Aug 2026 13:00 | 21 Aug 2026 13:00 | 1 | Maintenance - WBEA internal audit |
| PM2.5 | 19 Aug 2026 18:00 | 20 Aug 2026 10:00 | 17 | DAS Failure - data not recorded |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Athabasca Valley - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 10.9 ppb on Aug 31 12:00

Maximum Daily Average: 1.6 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 7 14:00

Minimum Daily Average: 0.0 ppb on Aug 29

Maximum Diurnal Average: 1.3 ppb at hour 12

Minimum Diurnal Average: 0.1 ppb at hour 5

Monthly Average: 0.47 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 1.1 $P_{99}$ = 5.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.2 | 0.5 | 0.2 | 0.5 |
| 2-Aug | 0.7 | 1.0 | 0.4 | 0.2 | Z | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.7 | 1.2 | 0.2 | 0.1 | 0.5 | 1.5 | 3.6 | 0.2 | 1.1 | 0.7 | 0.1 | 0.1 | 0.6 | 3.6 |
| 3-Aug | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.5 | 4.1 | 6.3 | 4.4 | 3.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 2.2 | 4.2 | 1.0 | 0.4 | 0.2 | 0.1 | 0.1 | 1.2 | 6.3 |
| 4-Aug | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.8 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 |
| 5-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 1.3 | 0.5 | 0.1 | 0.1 | 0.2 | 1.3 |
| 6-Aug | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 | 1.0 | 0.2 | 0.1 | 0.1 | 1.0 | 1.6 | 1.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 | 1.6 |
| 7-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | C | 0.0 | 0.0 | 0.8 | 3.5 | 4.2 | 4.0 | 2.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.8 | 4.2 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 2.3 | 0.9 | 0.4 | 0.1 | 0.2 | 1.4 | 1.0 | 1.6 | 1.5 | 3.4 | 2.3 | 1.0 | 0.6 | 0.5 | 0.7 | 0.5 | 0.8 | 3.4 |
| 9-Aug | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 2.1 | 3.7 | 8.8 | 6.9 | 2.5 | 1.0 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 1.3 | 8.8 |
| 10-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 | 1.1 | 1.0 | 1.5 | 2.2 | 1.5 | 2.1 | 1.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.6 | 2.2 |
| 11-Aug | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 3.1 | 3.3 | 2.0 | 1.5 | 1.8 | 0.9 | 0.5 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 3.3 |
| 12-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.6 |
| 13-Aug | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 3.7 | 8.2 | 3.0 | 2.5 | 2.1 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 1.0 | 8.2 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 16-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 1.4 | 1.4 | 2.1 | 1.4 | 2.4 | 2.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.5 | 2.4 |
| 17-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| 18-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 19-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| 20-Aug | 0.1 | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 1.4 | M | 2.5 | 3.1 | 3.4 | 3.0 | 2.9 | 1.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.9 | 3.4 |
| 21-Aug | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 22-Aug | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.5 | 0.8 | 1.0 | 0.9 | 0.7 | 0.6 | 0.4 | 0.2 | 0.2 | 0.5 | 0.5 | 1.0 |
| 23-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 24-Aug | 0.3 | 0.7 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 1.1 | 0.4 | 0.2 | 0.2 | 0.2 | 1.9 | 1.3 | 1.3 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 1.9 |
| 25-Aug | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 | 3.6 | 2.8 | 2.4 | 5.6 | 7.1 | 5.9 | 3.1 | 2.2 | 1.5 | 1.0 | 0.4 | 0.2 | 0.2 | 0.2 | 1.6 | 7.1 |
| 26-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.5 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.8 | 1.0 | 0.9 | 1.2 | 1.0 | 0.8 | 0.8 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 1.2 |
| 28-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 29-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 |
| 30-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 31-Aug | 0.1 | 0.2 | 0.4 | Z | 0.1 | 0.3 | 0.1 | 0.2 | 0.5 | 1.7 | 5.1 | 10.9 | 2.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.0 | 10.9 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.5 | 0.9 | 1.3 | 0.6 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 | 0.7 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | Diurnal Average | |
| | 0.7 | 1.0 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.7 | 4.1 | 6.3 | 5.1 | 10.9 | 3.0 | 5.6 | 7.1 | 8.8 | 6.9 | 4.2 | 4.2 | 2.6 | 1.3 | 0.7 | 0.7 | 0.5 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

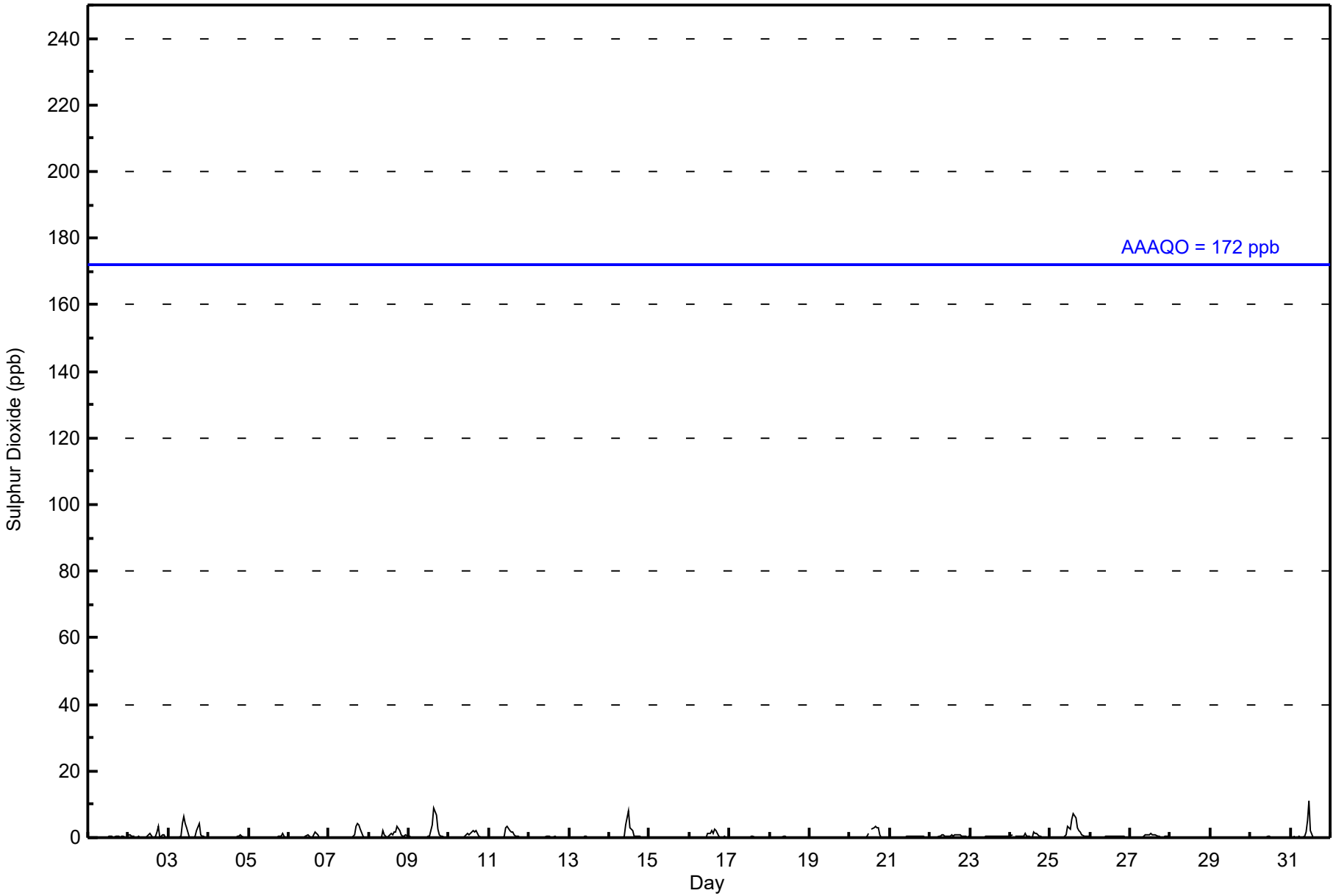
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Athabasca Valley - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 707 | 99.86 | 99.86 |
| 11 - 20 | 1 | 0.14 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 10 | 4 | 11 | 21 | 38 | 133 | 55 | 25 | 25 | 55 | 44 | 26 | 34 | 41 | 110 | 75 | 707 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 11 | 21 | 38 | 133 | 55 | 25 | 25 | 55 | 44 | 26 | 34 | 41 | 110 | 76 | 708 |

Total Number of Valid Hours: 708

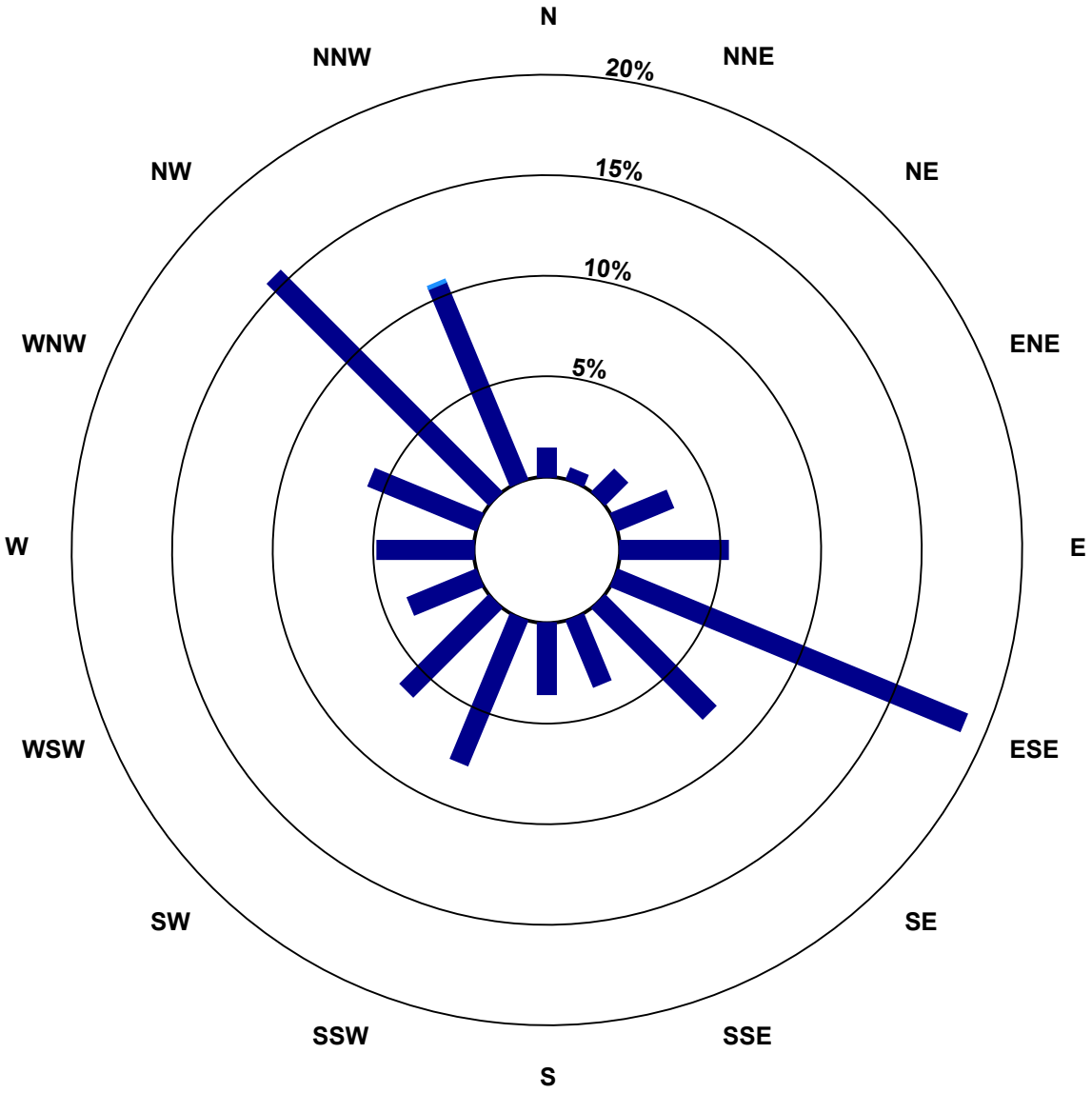
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Athabasca Valley




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

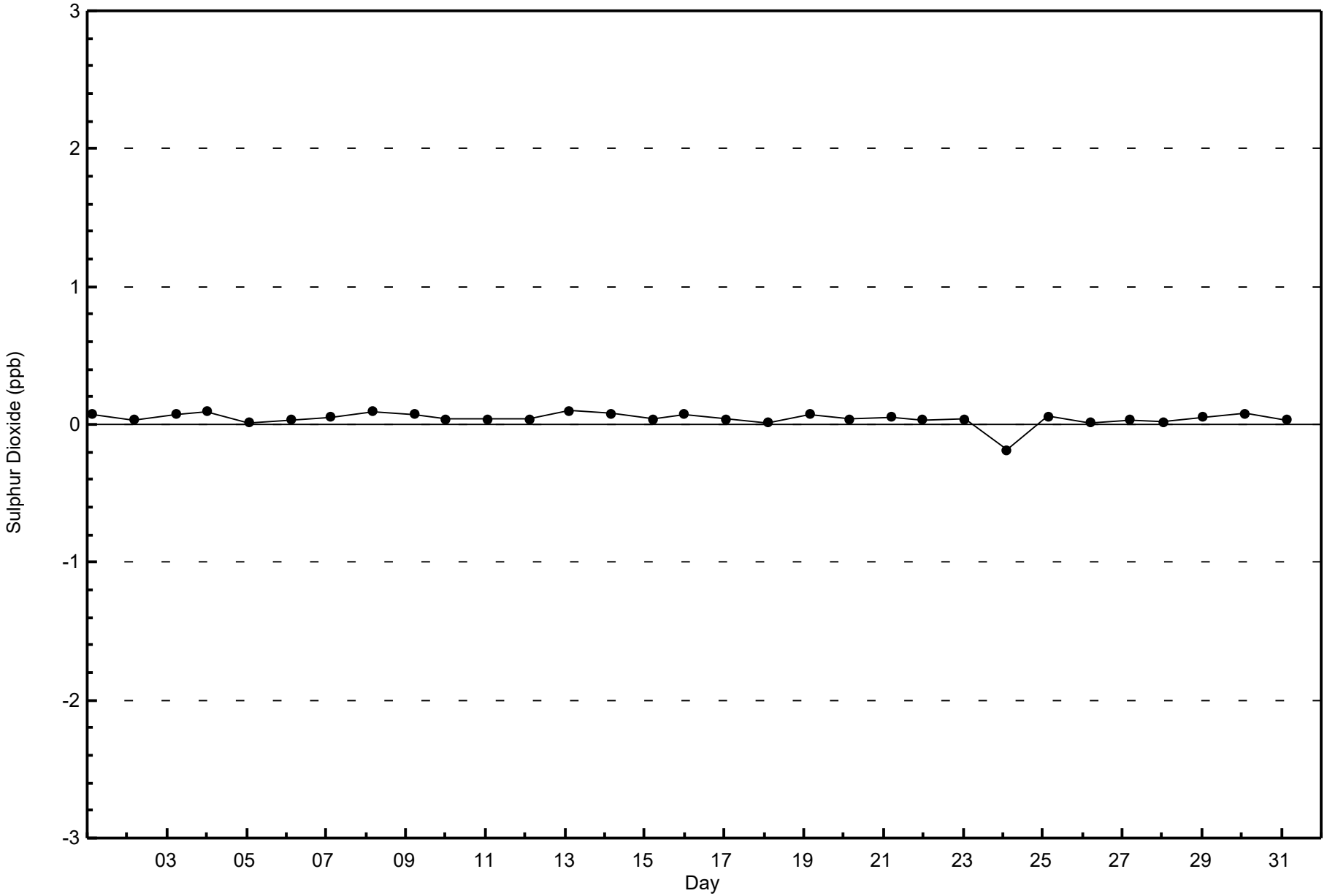
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Athabasca Valley - August 2026**

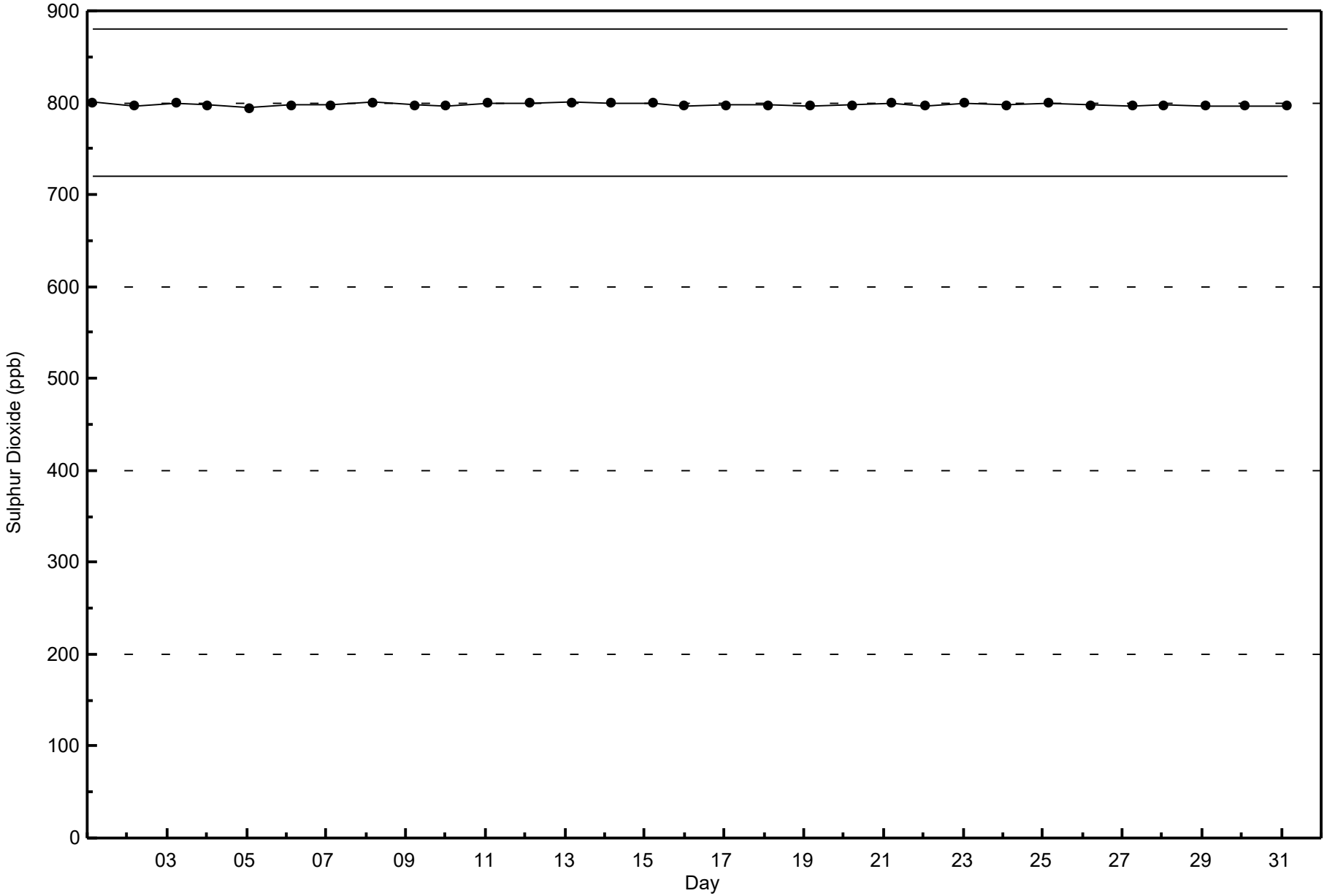


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Athabasca Valley - August 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 2.9 ppb on Aug 13 08:00

Maximum Daily Average: 1.0 ppb on Aug 13

Minimum Value: 0.0 ppb on Aug 26 16:30

Minimum Daily Average: 0.2 ppb on Aug 17

Maximum Diurnal Average: 0.4 ppb at hour 10

Minimum Diurnal Average: 0.2 ppb at hour 16

Monthly Average: 0.33 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.3 $Q_3$ = 0.4 $P_{90}$ = 0.5 $P_{99}$ = 1.9

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1410 |
| Periods of Invalid Data: | 78 |
| Periods of Calibration: | 73 |
| Percent Operational Time: | 99.7 |

Period Ending At (MST)

| Day | 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | 0.5 | 0.3 | 0.6 |
| | 0.2 | 0.2 | 0.2 | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.6 | | |
| 2-Aug | 0.6 | 1.1 | 1.4 | 0.4 | 0.5 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.9 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.4 | 1.4 |
| | 0.6 | 1.4 | 0.6 | 0.4 | 0.5 | SP | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | | |
| 3-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 4-Aug | 0.3 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 1.8 | 0.7 | 0.2 | 0.2 | 0.1 | 0.3 | 1.8 |
| | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 1.3 | 0.7 | 0.9 | 0.3 | 0.2 | 0.2 | 0.2 | | |
| 5-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.7 | 2.0 | 0.4 | 0.7 | 0.2 | 0.1 | 0.1 | 0.2 | 2.0 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.8 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | | |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 |
| | 0.1 | 0.1 | 0.1 | SP | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | | |
| 7-Aug | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.8 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.8 |
| | 0.2 | 0.2 | 0.1 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.7 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.8 | | |
| 8-Aug | 1.2 | 0.9 | 0.9 | 0.6 | 0.6 | Z | 0.7 | 0.2 | 1.2 | 1.4 | 0.8 | 0.6 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 1.4 |
| | 0.8 | 1.0 | 0.7 | 0.6 | 0.6 | SP | 0.3 | 0.4 | 1.4 | 1.0 | 0.4 | 0.6 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.5 | 0.6 | 0.5 | 0.3 | | |
| 9-Aug | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 |
| | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | | |
| 10-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | C | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | -- | 0.7 |
| | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | 0.4 | 0.7 | 0.3 | 0.5 | 0.5 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 11-Aug | 0.3 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.8 | 0.6 | 0.3 | 0.4 | 0.5 | 0.4 | 0.6 | 0.4 | 0.2 | 0.1 | 0.7 | 0.7 | 0.5 | 0.4 | 0.8 |
| | 0.3 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.8 | 0.8 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 | 0.6 | 0.3 | 0.2 | 0.4 | 0.7 | 0.5 | 0.7 | | |
| 12-Aug | 1.2 | 0.6 | 0.6 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.3 | 1.4 | 0.8 | 0.4 | 0.3 | 1.0 | 1.9 | 0.3 | 0.4 | 0.3 | 0.2 | 1.5 | 0.6 | 1.9 |
| | 0.7 | 0.5 | 0.5 | SP | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.4 | 0.8 | 0.2 | 1.0 | 1.0 | 1.1 | 0.5 | 0.5 | 0.4 | 0.4 | 1.9 | | |
| 13-Aug | 0.6 | 2.3 | 2.4 | 1.9 | Z | 1.0 | 1.7 | 1.7 | 2.4 | 1.7 | 1.5 | 2.1 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 1.0 | 2.9 |
| | 1.2 | 2.1 | 2.3 | 1.5 | SP | 1.4 | 1.5 | 2.9 | 1.4 | 2.0 | 2.0 | 1.7 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | | |
| 14-Aug | 0.3 | 0.5 | 0.5 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 1.2 | 0.9 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 2.5 |
| | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | SP | 0.2 | 0.3 | 0.3 | 2.5 | 1.0 | 0.6 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 15-Aug | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 |
| | SP | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Athabasca Valley - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.8 | 1.4 | 1.9 | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 1.9 |
| | 0.2 | SP | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 1.1 | 1.5 | 1.3 | 1.1 | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | | |
| 17-Aug | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.3 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 18-Aug | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | | |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | DF | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.2 | 0.9 |
| | 0.2 | 0.2 | 0.2 | 0.3 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.4 | 0.4 | 0.9 | | |
| 20-Aug | 1.0 | 0.4 | 0.3 | 0.3 | 0.2 | Z | 0.4 | 0.3 | 0.2 | 0.2 | M | M | 1.8 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.7 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 1.8 |
| | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | SP | 0.4 | 0.3 | 0.2 | M | M | 1.2 | 1.1 | 0.4 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 21-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 22-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| | 0.3 | SP | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 23-Aug | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.4 |
| | 0.3 | 0.3 | SP | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | | |
| 24-Aug | 0.4 | 0.5 | 0.3 | Z | 0.6 | 0.3 | 0.5 | 0.3 | 0.6 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.8 |
| | 0.8 | 0.4 | 0.3 | SP | 0.3 | 0.8 | 0.7 | 0.5 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | | |
| 25-Aug | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 1.0 | 1.2 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 1.2 |
| | 0.4 | 0.3 | 0.3 | 0.4 | SP | 0.3 | 0.3 | 0.3 | 0.4 | 1.0 | 1.1 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 26-Aug | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 |
| | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | SP | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | | |
| 27-Aug | Z | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 1.0 |
| | SP | 0.3 | 0.3 | 1.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 28-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.2 | 0.3 | 0.5 |
| | 0.3 | SP | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | | |
| 29-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | | |
| 30-Aug | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| | 0.3 | 0.3 | 0.3 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 31-Aug | 0.3 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.5 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 |
| | 0.2 | 0.2 | 0.1 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Diurnal Average | |
| | 1.2 | 2.3 | 2.4 | 1.9 | 0.6 | 1.4 | 1.7 | 2.9 | 2.4 | 2.5 | 2.0 | 2.1 | 1.8 | 1.4 | 0.8 | 0.7 | 1.0 | 1.3 | 2.0 | 1.8 | 0.7 | 0.7 | 0.7 | 1.9 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance DF - DAS Failure SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Reduced Sulphur (TRS) - ppb

## Athabasca Valley - August 2026

Maximum Value: 2.3 ppb on Aug 13 03:00

Maximum Daily Average: 1.0 ppb on Aug 13

Minimum Value: 0.0 ppb on Aug 26 16:00

Minimum Daily Average: 0.2 ppb on Aug 17

Maximum Diurnal Average: 0.4 ppb at hour 10

Minimum Diurnal Average: 0.2 ppb at hour 16

Monthly Average: 0.33 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.3 $Q_3$ = 0.4 $P_{90}$ = 0.5 $P_{99}$ = 1.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 706 |
| Hours of Missing Data: | 38 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | 0.5 | 0.3 | 0.5 |
| 2-Aug | 0.6 | 1.3 | 1.0 | 0.4 | 0.5 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.4 | 1.3 |
| 3-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 |
| 4-Aug | 0.3 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.8 | 0.6 | 1.3 | 0.5 | 0.2 | 0.2 | 0.2 | 0.3 | 1.3 |
| 5-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 1.4 | 0.5 | 0.5 | 0.2 | 0.1 | 0.1 | 0.2 | 1.4 |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 |
| 7-Aug | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.8 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.6 | 0.3 | 0.8 |
| 8-Aug | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | Z | 0.5 | 0.3 | 1.3 | 1.2 | 0.6 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 1.3 |
| 9-Aug | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 |
| 10-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | 0.4 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 |
| 11-Aug | 0.3 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.6 | 0.8 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.3 | 0.2 | 0.3 | 0.7 | 0.6 | 0.6 | 0.4 | 0.8 |
| 12-Aug | 1.0 | 0.6 | 0.5 | Z | 0.4 | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.9 | 0.8 | 0.3 | 0.6 | 1.0 | 1.5 | 0.4 | 0.5 | 0.4 | 0.3 | 1.7 | 0.6 | 1.7 |
| 13-Aug | 0.9 | 2.2 | 2.3 | 1.7 | Z | 1.2 | 1.6 | 2.3 | 1.9 | 1.9 | 1.8 | 1.9 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 1.0 | 2.3 |
| 14-Aug | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 1.4 | 1.1 | 0.7 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 1.4 |
| 15-Aug | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 |
| 16-Aug | 0.2 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.7 | 1.1 | 1.4 | 1.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 1.5 |
| 17-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 18-Aug | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 0.6 | 0.2 | 0.6 |
| 20-Aug | 0.7 | 0.4 | 0.3 | 0.3 | 0.2 | Z | 0.4 | 0.3 | 0.2 | 0.2 | M | M | 1.4 | 0.4 | 0.4 | 0.3 | 0.5 | 0.4 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 1.4 |
| 21-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 22-Aug | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 23-Aug | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.4 |
| 24-Aug | 0.6 | 0.4 | 0.3 | Z | 0.5 | 0.5 | 0.6 | 0.4 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 |
| 25-Aug | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 1.0 | 1.2 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 1.2 |
| 26-Aug | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 |
| 27-Aug | Z | 0.3 | 0.3 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 |
| 28-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.5 |
| 29-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 30-Aug | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 31-Aug | 0.3 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Diurnal Average | |
| | 1.0 | 2.2 | 2.3 | 1.7 | 0.6 | 1.2 | 1.6 | 2.3 | 1.9 | 1.9 | 1.8 | 1.9 | 1.4 | 0.9 | 0.8 | 0.6 | 0.8 | 1.0 | 1.5 | 1.3 | 0.5 | 0.7 | 0.6 | 1.7 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

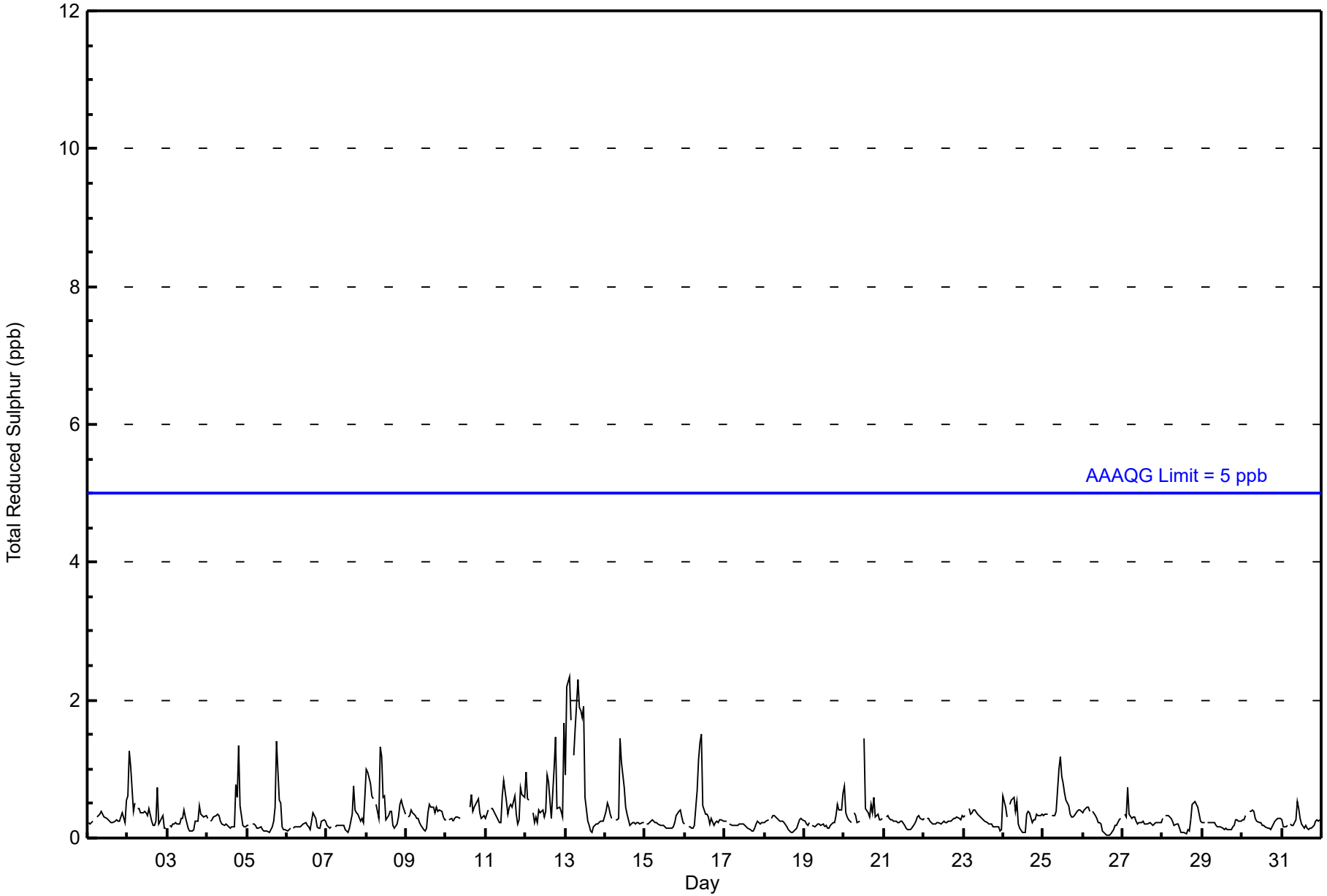
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Athabasca Valley - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 706 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 706

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 9 | 4 | 10 | 22 | 38 | 134 | 52 | 27 | 28 | 53 | 43 | 25 | 35 | 41 | 109 | 76 | 706 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 9 | 4 | 10 | 22 | 38 | 134 | 52 | 27 | 28 | 53 | 43 | 25 | 35 | 41 | 109 | 76 | 706 |

Total Number of Valid Hours: 706

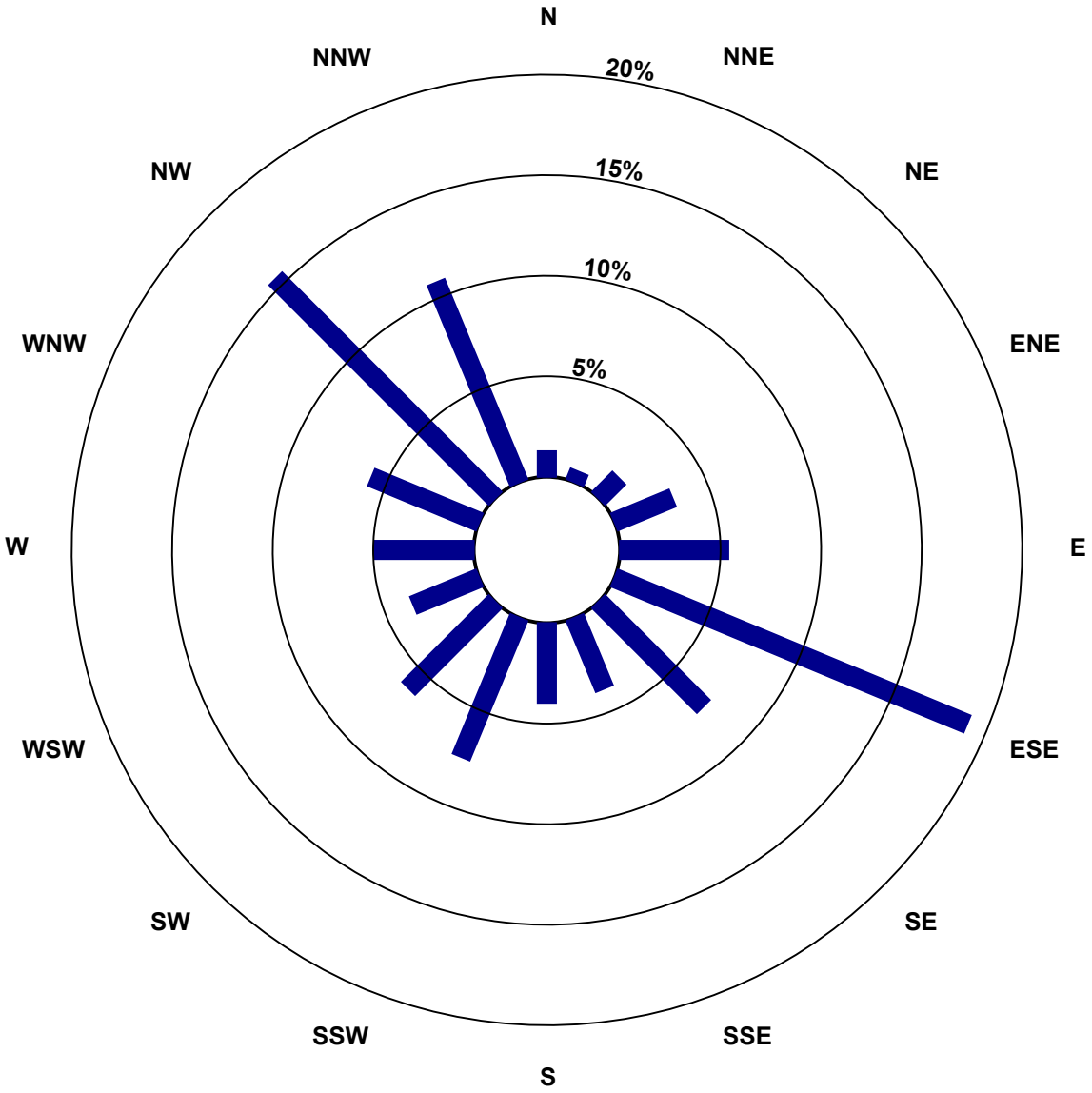
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

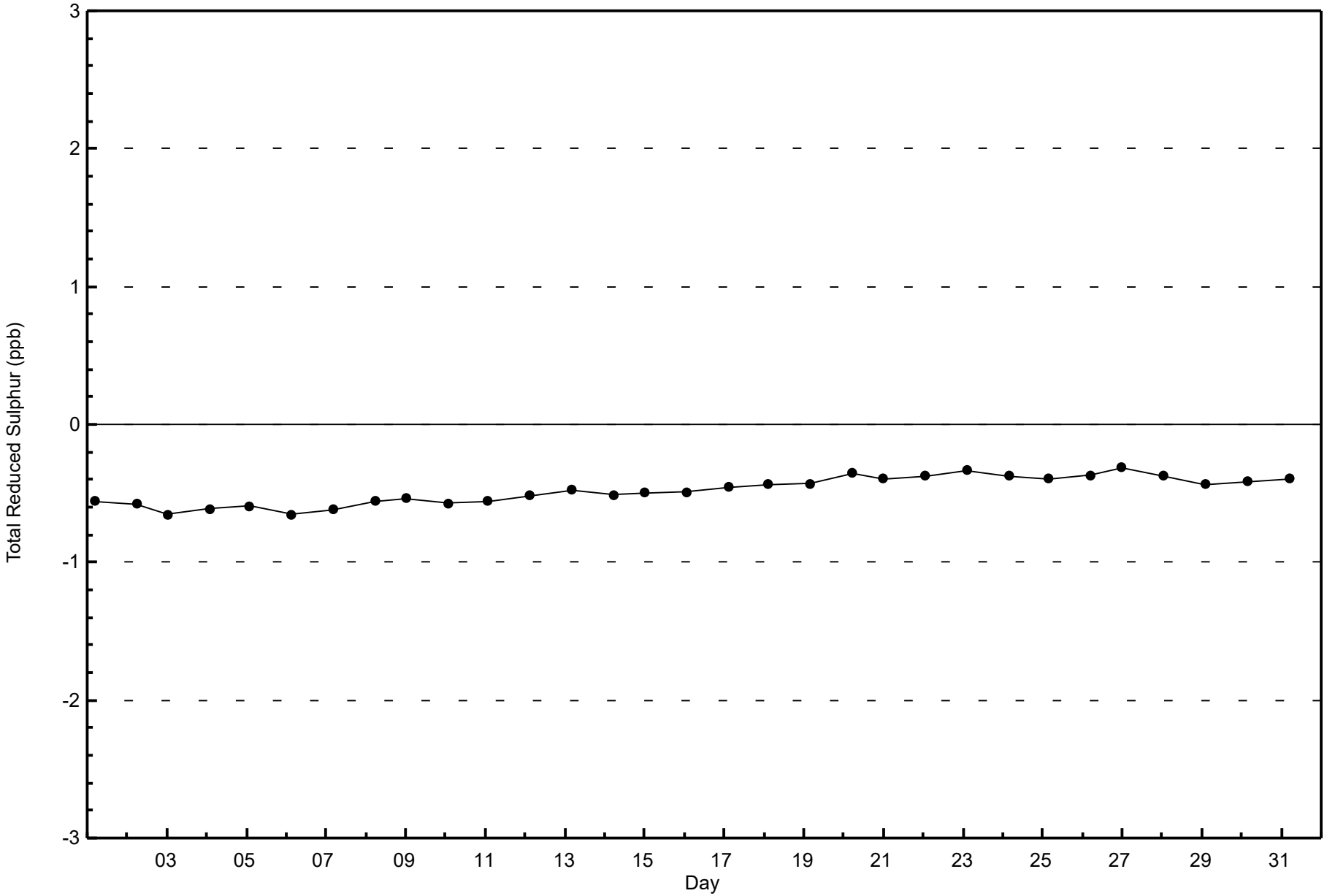
Total Number of Valid Hours: 706

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Athabasca Valley - August 2026**

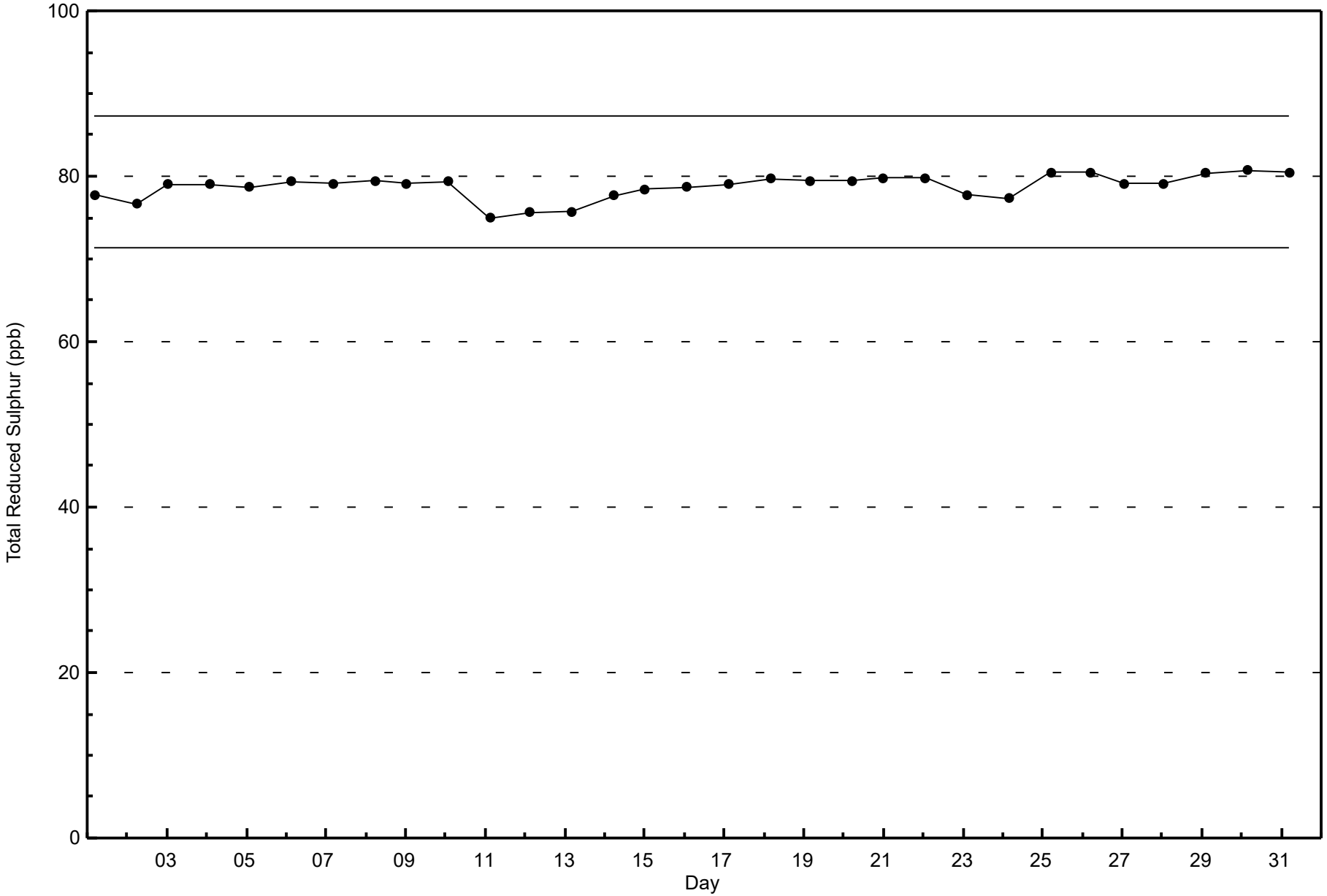


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Athabasca Valley - August 2026

Maximum Value: 2.6 ppm on Aug 11 05:00

Maximum Daily Average: 2.3 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 24 14:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.2 ppm at hour 3

Minimum Diurnal Average: 2.1 ppm at hour 16

Monthly Average: 2.15 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.3 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | 2.3 | 2.5 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.5 |
| 2-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 3-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.0 | 2.2 |
| 4-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 |
| 5-Aug | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.0 | 2.0 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | C | C | C | C | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 8-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 9-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.2 | 2.4 |
| 10-Aug | Z | 2.4 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 11-Aug | 2.2 | Z | 2.4 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.6 |
| 12-Aug | 2.1 | 2.2 | Z | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 13-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 14-Aug | 2.1 | 2.2 | 2.2 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 2.2 | 2.5 |
| 15-Aug | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 |
| 16-Aug | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 17-Aug | 2.2 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.4 |
| 18-Aug | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 19-Aug | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.3 |
| 20-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | M | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 21-Aug | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.4 |
| 22-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 |
| 23-Aug | 2.3 | Z | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.3 | 2.4 |
| 24-Aug | 2.1 | 2.1 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 25-Aug | 2.2 | 2.3 | 2.3 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 |
| 26-Aug | 2.2 | 2.2 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 27-Aug | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 28-Aug | Z | 2.2 | 2.1 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 30-Aug | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 31-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.3 |
| | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | Diurnal Average | |
| | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.5 | Diurnal Maximum | |

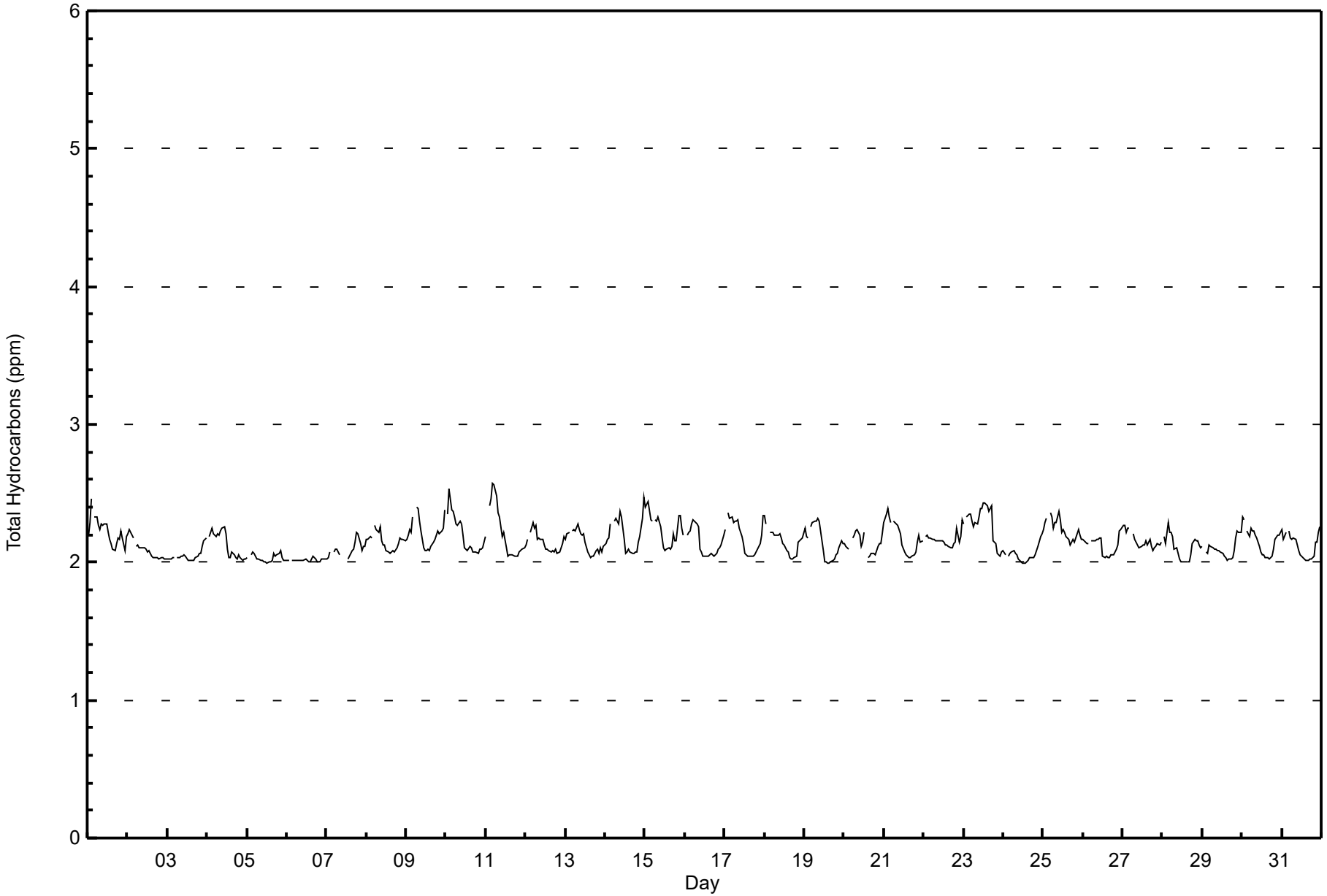
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Athabasca Valley - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 157 | 22.18 | 22.18 |
| 2.1 - 3.0 | 551 | 77.82 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 3 | 0 | 1 | 2 | 0 | 3 | 5 | 7 | 1 | 3 | 15 | 10 | 19 | 29 | 37 | 22 | 157 |
| 2.1 - 3.0 | 7 | 4 | 10 | 19 | 38 | 130 | 50 | 18 | 24 | 52 | 29 | 16 | 15 | 12 | 73 | 54 | 551 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 11 | 21 | 38 | 133 | 55 | 25 | 25 | 55 | 44 | 26 | 34 | 41 | 110 | 76 | 708 |

Total Number of Valid Hours: 708

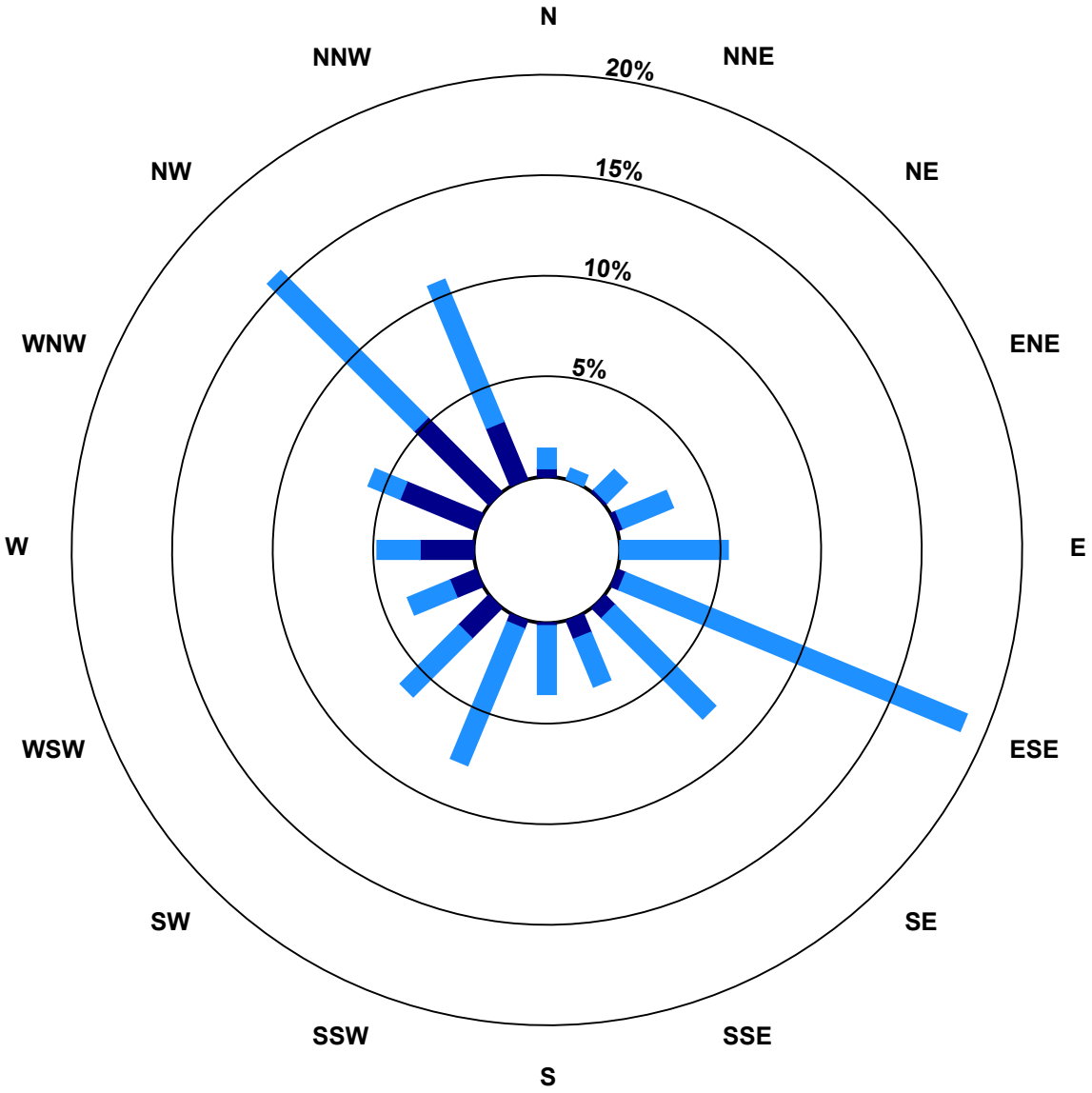
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Athabasca Valley




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

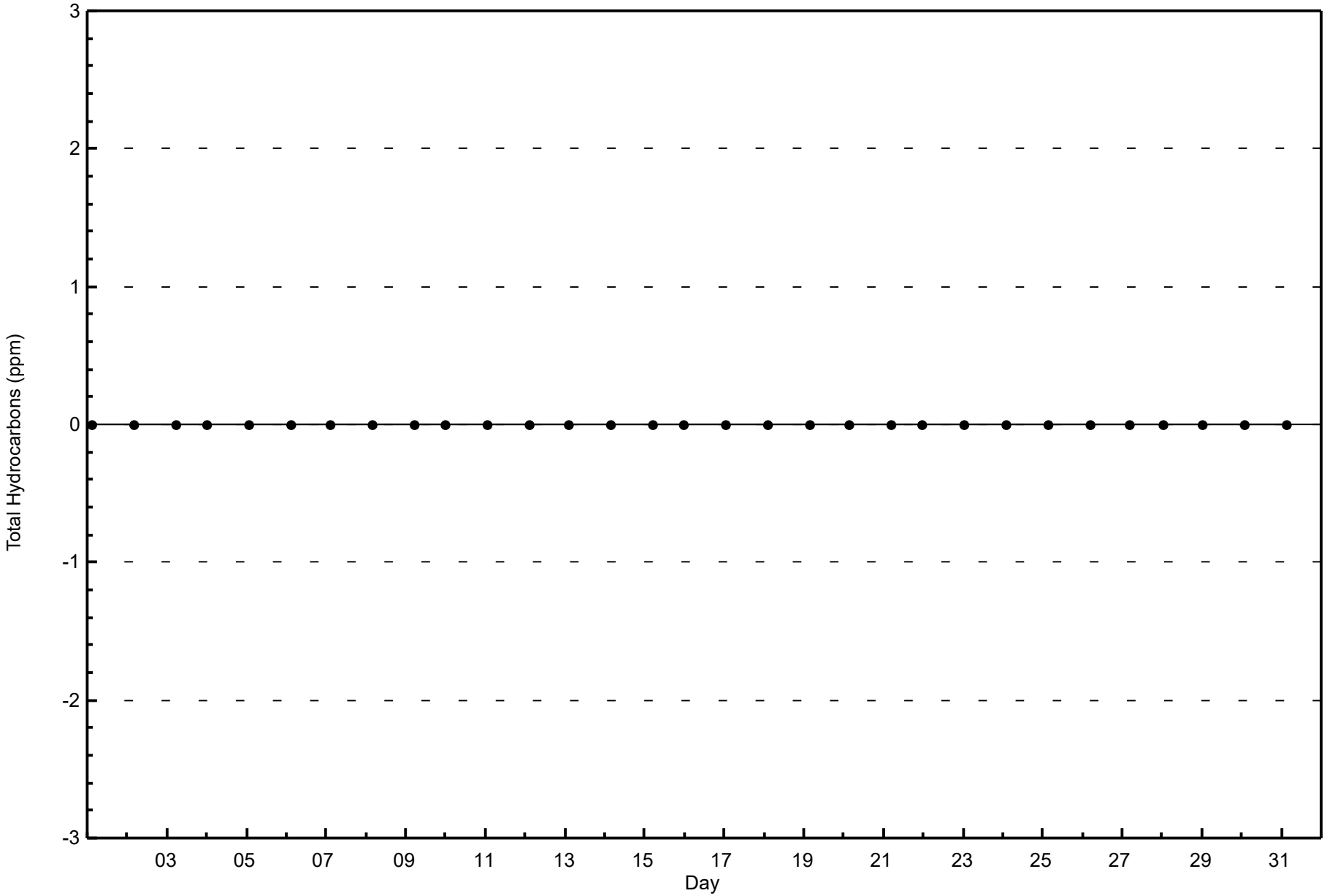
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Athabasca Valley - August 2026**

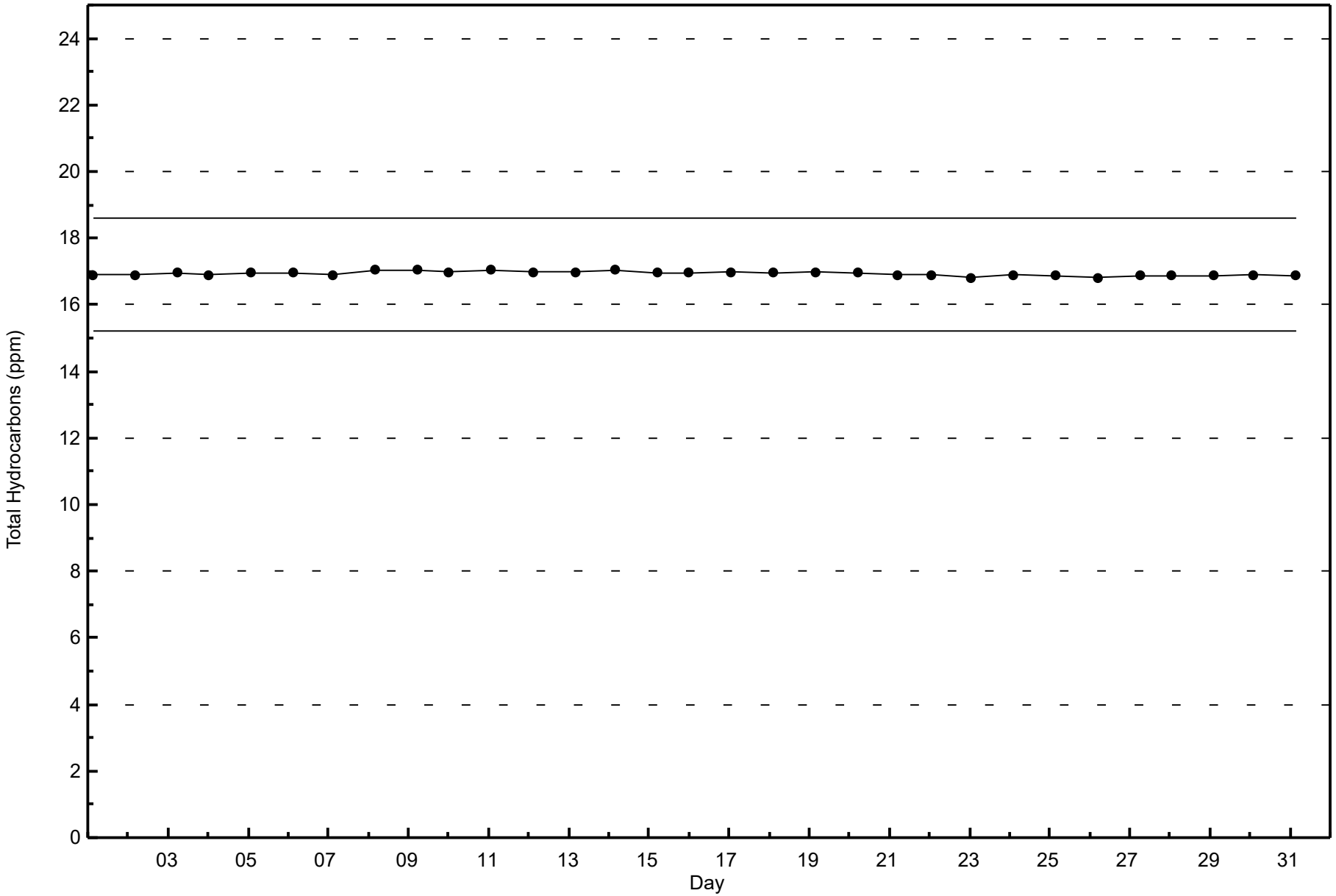


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Non Methane Hydrocarbons (NMHC) - ppm

## Athabasca Valley - August 2026

Maximum Value: 0.074 ppm on Aug 1 19:00

Maximum Daily Average: 0.009 ppm on Aug 1

Minimum Value: 0.000 ppm on Aug 1 05:00

Minimum Daily Average: 0.000 ppm on Aug 2

Maximum Diurnal Average: 0.005 ppm at hour 20

Minimum Diurnal Average: 0.000 ppm at hour 6

Monthly Average: 0.001 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.002 | 0.001 | 0.001 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.001 | 0.058 | 0.074 | 0.059 | 0.011 | 0.000 | 0.000 | 0.000 | 0.009 | 0.074 |
| 2-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.031 | 0.025 | 0.018 | 0.001 | 0.002 | 0.004 | 0.031 |
| 10-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 11-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.006 | 0.004 | 0.034 | 0.022 | 0.006 | 0.000 | 0.003 | 0.034 |
| 16-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 |
| 18-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | M | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 |
| 21-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.002 | 0.001 | 0.004 | 0.000 | 0.000 | 0.000 | 0.004 |
| 22-Aug | Z | 0.002 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.002 | 0.000 | 0.001 | 0.001 | 0.000 | 0.021 | 0.012 | 0.002 | 0.002 | 0.005 | 0.003 | 0.002 | 0.021 |
| 23-Aug | 0.003 | Z | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.014 | 0.033 | 0.001 | 0.006 | 0.013 | 0.044 | 0.002 | 0.003 | 0.002 | 0.003 | 0.002 | 0.000 | 0.006 | 0.044 |
| 24-Aug | 0.001 | 0.001 | Z | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.007 | 0.001 | 0.001 | 0.001 | 0.007 |
| 25-Aug | 0.002 | 0.001 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.002 | 0.001 | 0.006 | 0.016 | 0.010 | 0.008 | 0.005 | 0.002 | 0.016 |
| 26-Aug | 0.002 | 0.001 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.002 | 0.045 | 0.010 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.008 | 0.007 | 0.004 | 0.008 | 0.008 | 0.002 | 0.004 | 0.045 |
| 27-Aug | 0.000 | 0.002 | 0.001 | 0.002 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.007 | 0.053 | 0.001 | 0.010 | 0.022 | 0.002 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.053 |
| 28-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.013 | 0.004 | 0.000 | 0.000 | 0.000 | 0.001 | 0.013 |
| 29-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.012 | 0.008 | 0.003 | 0.000 | 0.001 | 0.012 |
| 30-Aug | 0.001 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 |
| 31-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.001 | 0.002 | 0.000 | 0.001 | 0.004 | 0.004 | 0.005 | 0.004 | 0.003 | 0.001 | 0.000 | Diurnal Average | |
| | 0.003 | 0.002 | 0.002 | 0.002 | 0.000 | 0.000 | 0.001 | 0.001 | 0.002 | 0.000 | 0.002 | 0.045 | 0.014 | 0.033 | 0.053 | 0.006 | 0.013 | 0.058 | 0.074 | 0.059 | 0.034 | 0.022 | 0.008 | 0.005 | Diurnal Maximum | |

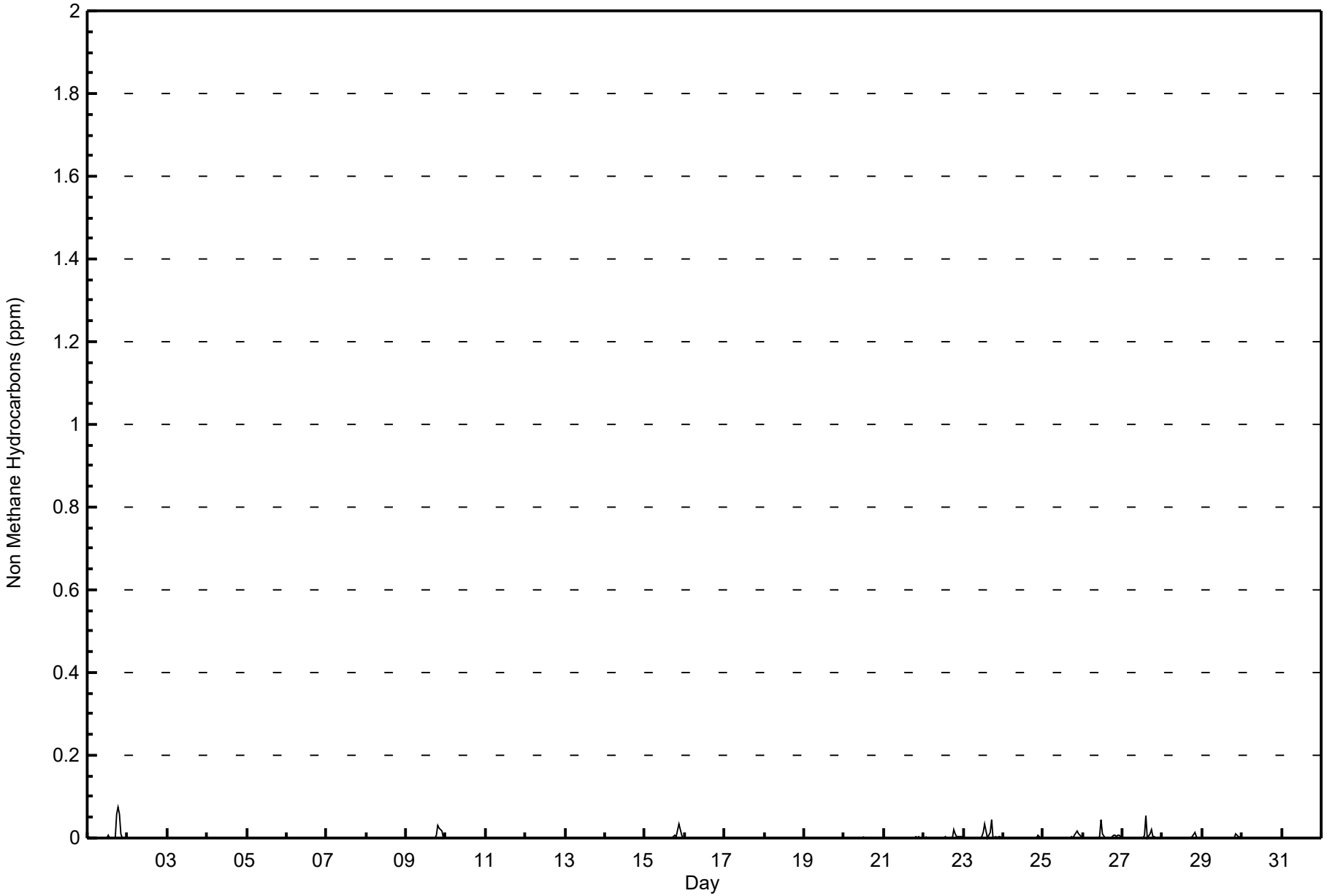
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**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Athabasca Valley - August 2026**



# Non Methane Hydrocarbons (NMHC) - ppm
## Athabasca Valley - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 671 | 94.77 | 94.77 |
| 0.006 - 0.05 | 34 | 4.80 | 99.58 |
| 0.06 - 0.1 | 3 | 0.42 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 10 | 4 | 10 | 20 | 31 | 120 | 51 | 24 | 24 | 55 | 40 | 24 | 32 | 41 | 109 | 76 | 671 |
| 0.006 - 0.05 | 0 | 0 | 1 | 1 | 7 | 10 | 4 | 1 | 1 | 0 | 4 | 2 | 2 | 0 | 1 | 0 | 34 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 11 | 21 | 38 | 133 | 55 | 25 | 25 | 55 | 44 | 26 | 34 | 41 | 110 | 76 | 708 |

Total Number of Valid Hours: 708

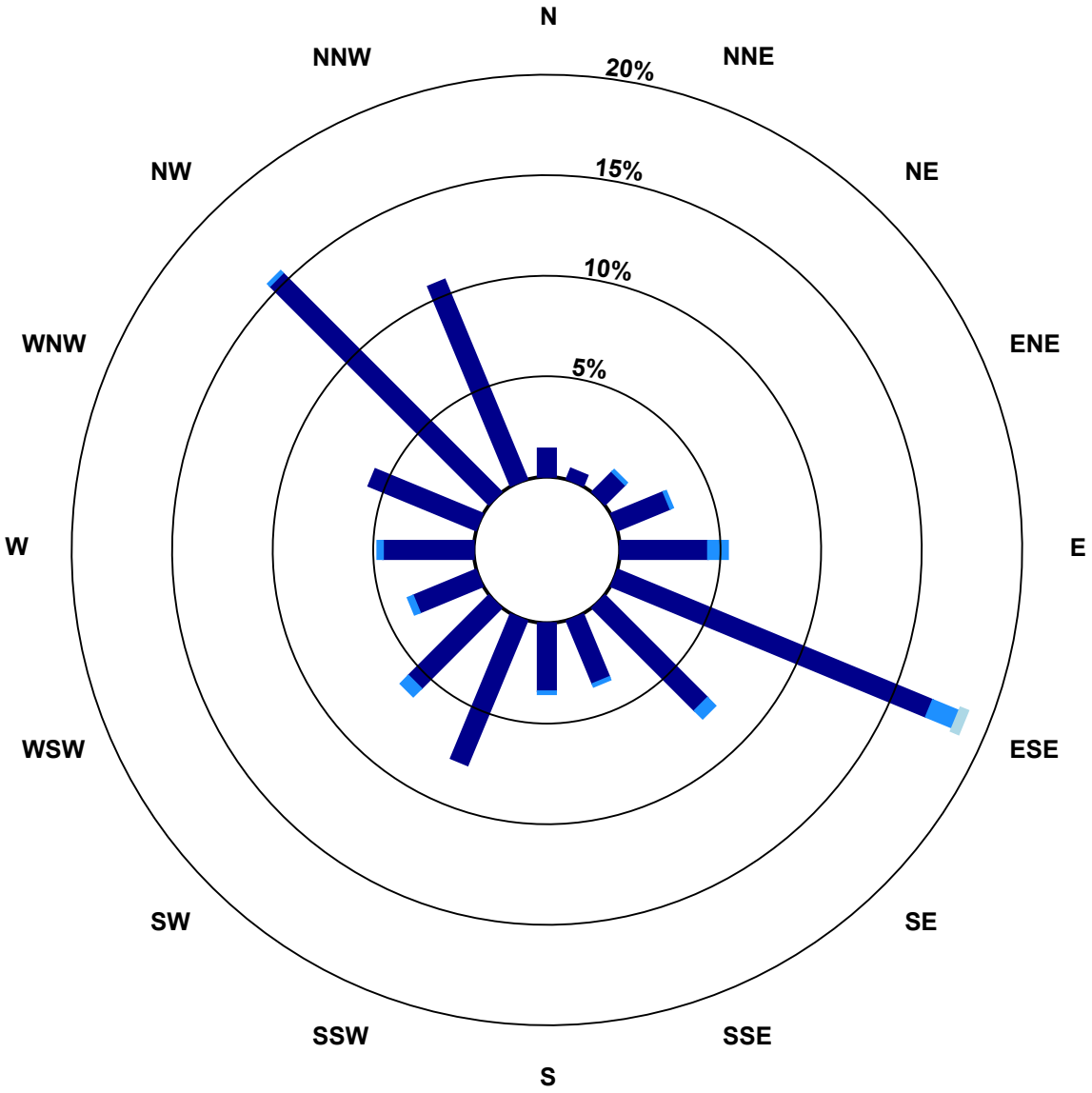
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

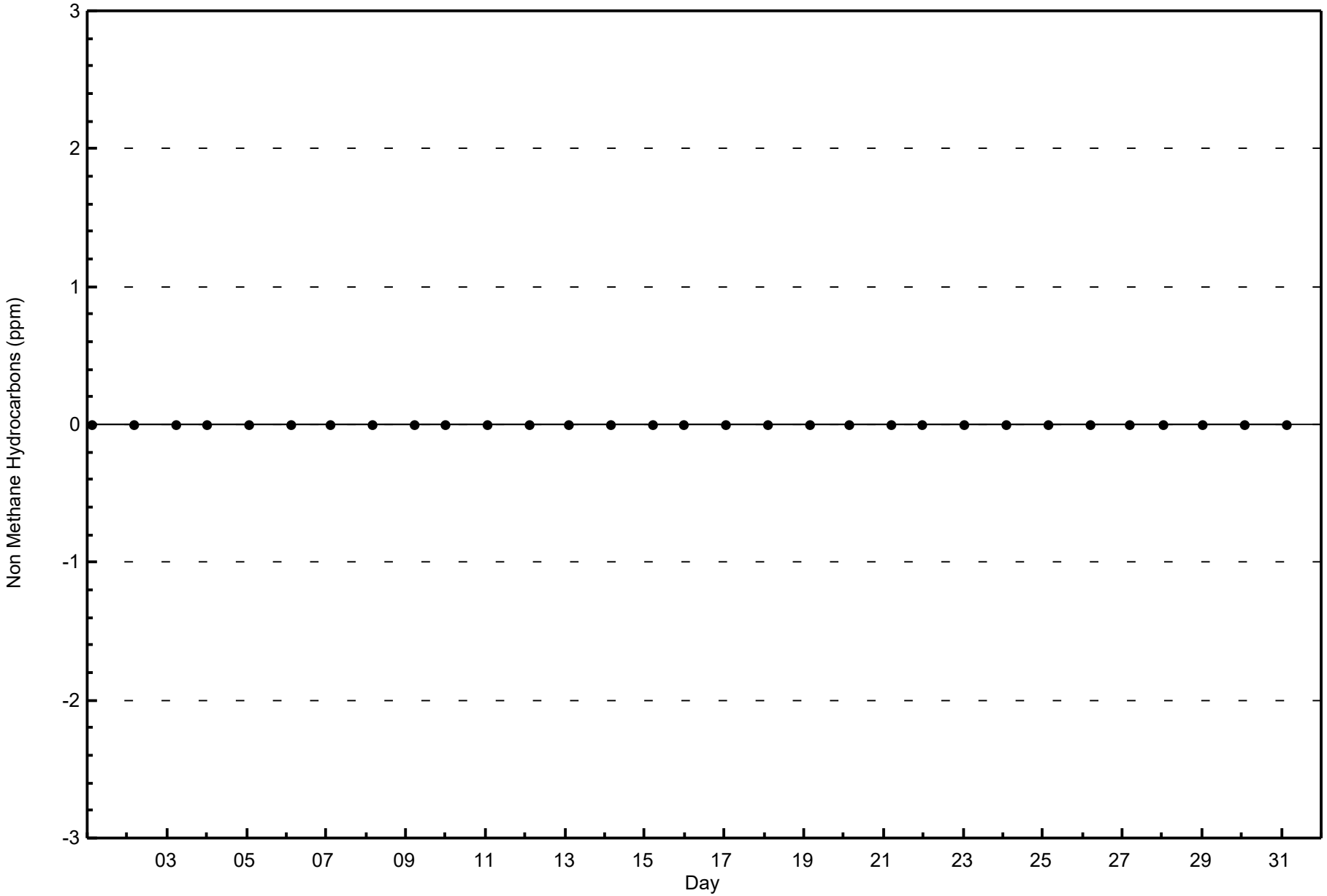
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Athabasca Valley - August 2026**

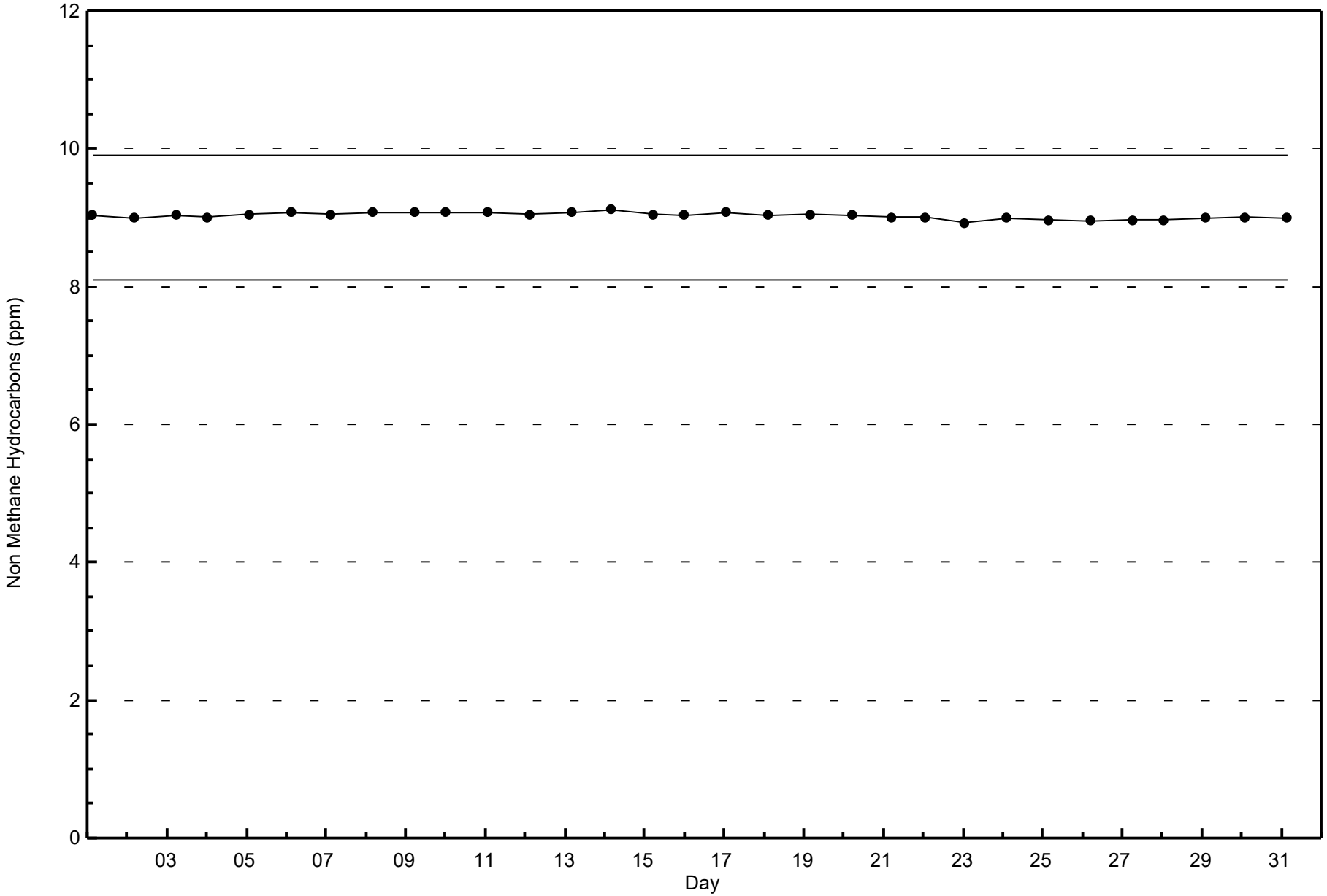


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Athabasca Valley - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.6 ppm on Aug 11 05:00

Maximum Daily Average: 2.3 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 24 14:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.2 ppm at hour 3

Minimum Diurnal Average: 2.1 ppm at hour 16

Monthly Average: 2.15 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.3 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | 2.3 | 2.5 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.5 |
| 2-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 3-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.0 | 2.2 |
| 4-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 |
| 5-Aug | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.0 | 2.0 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | C | C | C | C | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 8-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 9-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.2 | 2.4 |
| 10-Aug | Z | 2.4 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 11-Aug | 2.2 | Z | 2.4 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.6 |
| 12-Aug | 2.1 | 2.2 | Z | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 13-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 14-Aug | 2.1 | 2.2 | 2.2 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 2.2 | 2.5 |
| 15-Aug | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 |
| 16-Aug | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 17-Aug | 2.2 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.4 |
| 18-Aug | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 19-Aug | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.3 |
| 20-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | M | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 21-Aug | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.4 |
| 22-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 |
| 23-Aug | 2.3 | Z | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.3 | 2.4 |
| 24-Aug | 2.1 | 2.1 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 25-Aug | 2.2 | 2.3 | 2.3 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 |
| 26-Aug | 2.2 | 2.2 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 27-Aug | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 28-Aug | Z | 2.2 | 2.1 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 30-Aug | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 31-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.3 |
| | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | Diurnal Average | |
| | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.5 | Diurnal Maximum | |

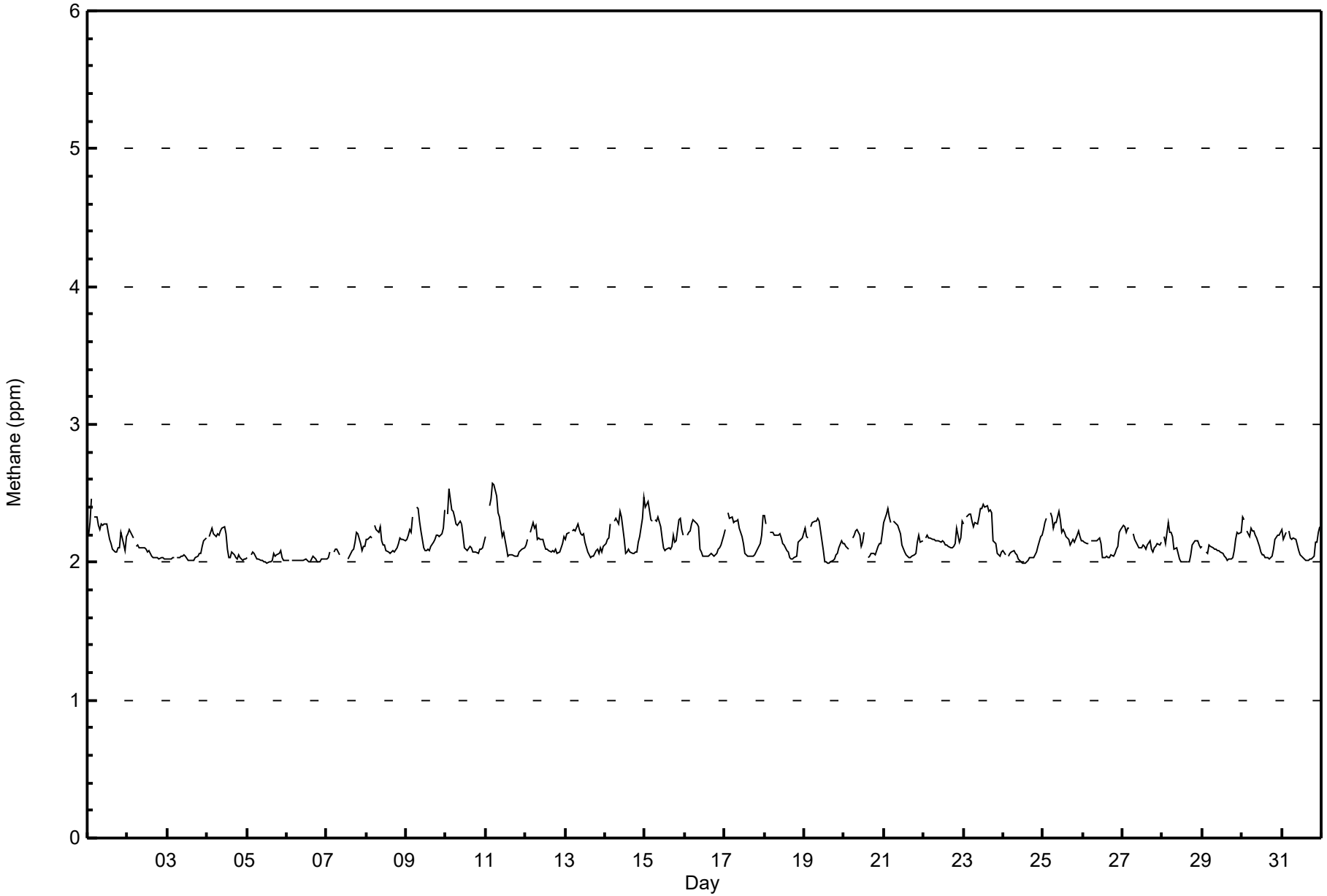
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Athabasca Valley - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 158 | 22.32 | 22.32 |
| 2.1 - 3.0 | 550 | 77.68 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 3 | 0 | 1 | 2 | 0 | 4 | 5 | 7 | 1 | 3 | 15 | 10 | 19 | 29 | 37 | 22 | 158 |
| 2.1 - 3.0 | 7 | 4 | 10 | 19 | 38 | 129 | 50 | 18 | 24 | 52 | 29 | 16 | 15 | 12 | 73 | 54 | 550 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 11 | 21 | 38 | 133 | 55 | 25 | 25 | 55 | 44 | 26 | 34 | 41 | 110 | 76 | 708 |

Total Number of Valid Hours: 708

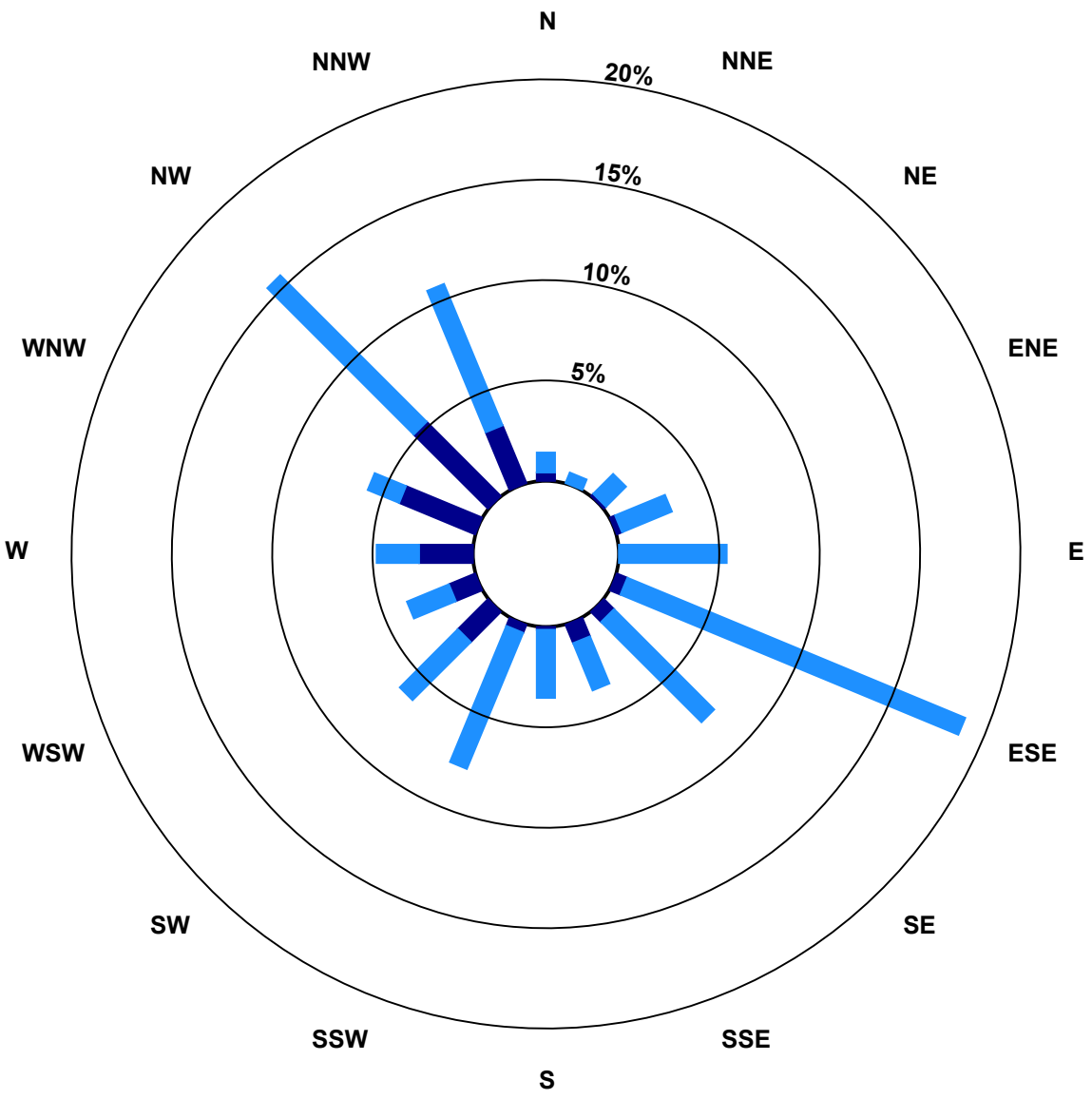
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Athabasca Valley




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

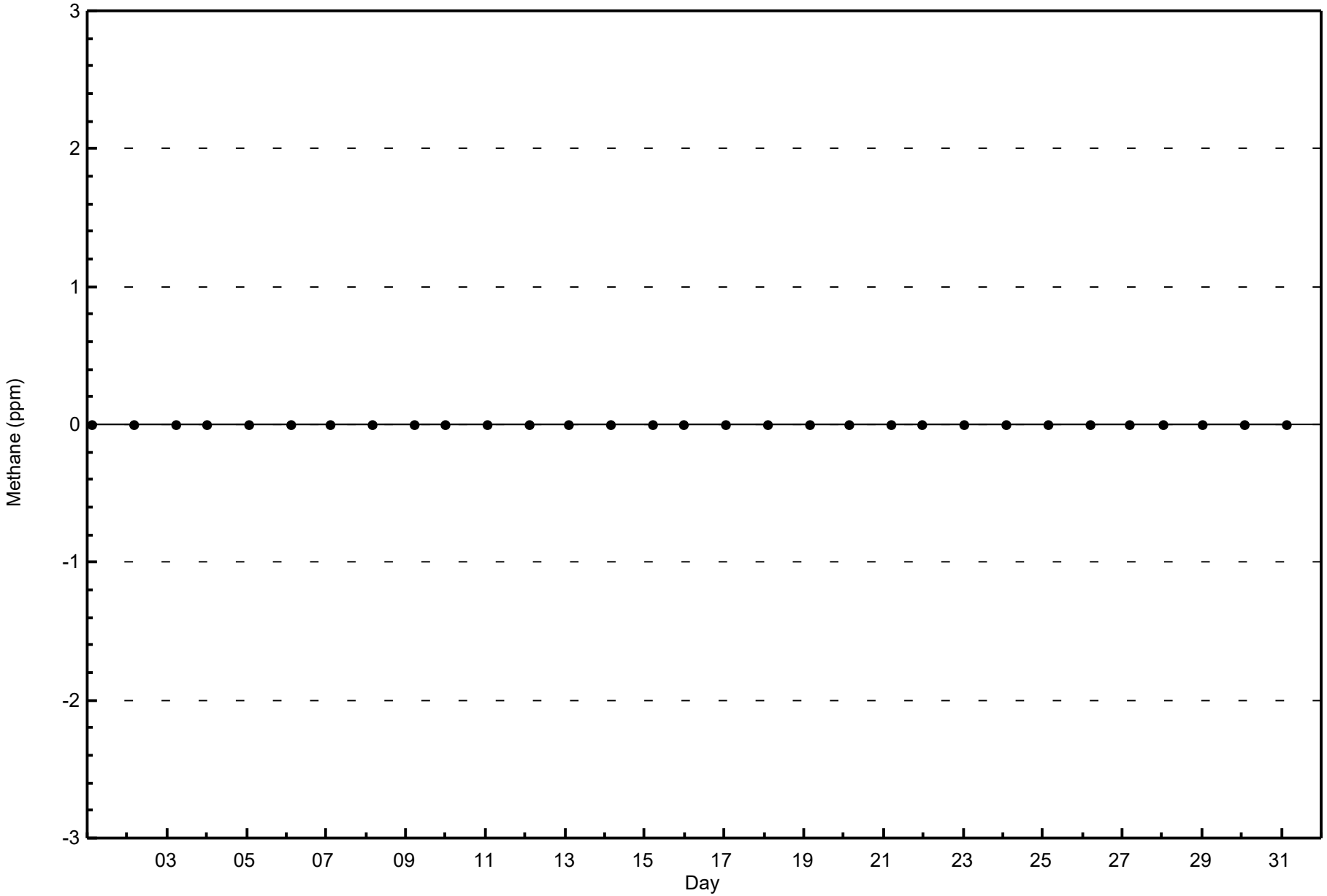
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Athabasca Valley - August 2026**

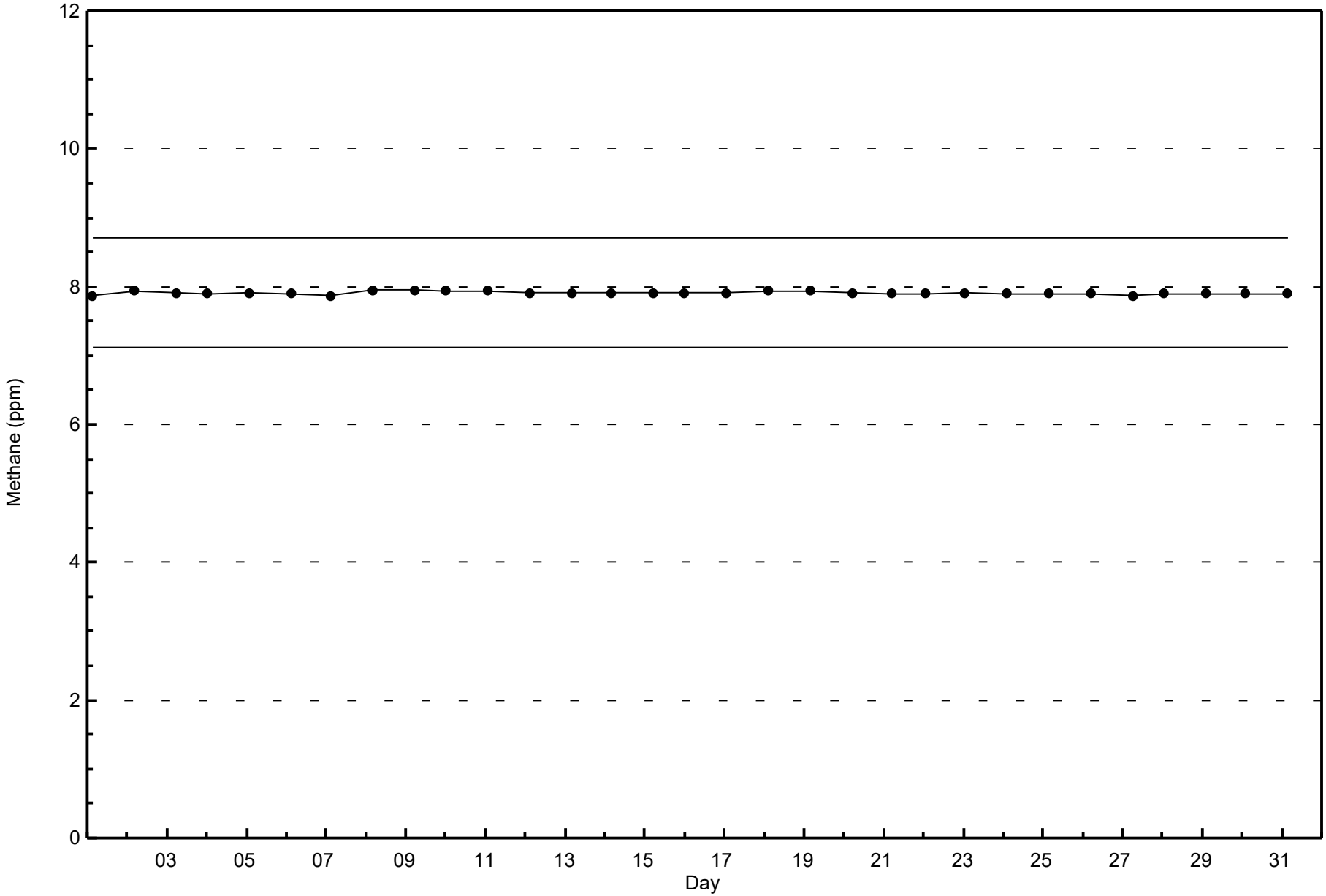


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Athabasca Valley - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 60.0 ppb on Aug 25 16:00 Maximum Daily Average: 25.0 ppb on Aug 28

Minimum Value: 1.8 ppb on Aug 25 05:00 Minimum Daily Average: 11.5 ppb on Aug 15
Maximum Diurnal Average: 29.9 ppb at hour 16 Minimum Diurnal Average: 8.5 ppb at hour 5
Monthly Average: 17.32 ppb Percentiles: $P_1$ = 2.2 $P_{10}$ = 4.9 $Q_1$ = 8.7 Median = 16.3 $Q_3$ = 24.3 $P_{90}$ = 31.4 $P_{99}$ = 39.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 8.2 | 6.4 | 4.4 | 5.0 | 4.3 | Z | 5.6 | 4.7 | 4.2 | 5.5 | 8.4 | 13.8 | 23.5 | 28.4 | 27.5 | 32.9 | 37.0 | 36.1 | 32.7 | 25.9 | 25.1 | 27.5 | 33.1 | 24.4 | 18.5 | 37.0 |
| 2-Aug | Z | 26.0 | 26.7 | 24.1 | 24.5 | 24.0 | 22.4 | 22.8 | 19.1 | 16.7 | 15.6 | 15.4 | 17.8 | 17.7 | 20.4 | 23.9 | 26.1 | 26.0 | 24.8 | 25.1 | 20.8 | 21.8 | 21.1 | 21.8 | 21.9 | 26.7 |
| 3-Aug | 20.5 | Z | 20.6 | 18.7 | 17.4 | 16.3 | 16.2 | 16.2 | 15.9 | 16.7 | 16.8 | 21.7 | 24.4 | 27.1 | 27.7 | 27.7 | 27.9 | 28.3 | 25.8 | 21.9 | 16.4 | 9.4 | 4.9 | 2.4 | 19.2 | 28.3 |
| 4-Aug | 4.5 | 6.1 | Z | 5.4 | 4.2 | 4.0 | 4.5 | 5.6 | 9.6 | 13.0 | 15.2 | 19.5 | 23.7 | 27.7 | 27.0 | 22.7 | 21.3 | 26.1 | 23.3 | 19.4 | 17.9 | 22.5 | 24.8 | 21.2 | 16.1 | 27.7 |
| 5-Aug | 20.6 | 21.3 | 17.4 | Z | 16.6 | 18.4 | 20.9 | 20.0 | 22.2 | 24.0 | C | C | C | C | 23.8 | 22.0 | 20.7 | 21.4 | 24.1 | 20.7 | 18.6 | 21.1 | 22.5 | 22.1 | 21.0 | 24.1 |
| 6-Aug | 21.7 | 20.3 | 19.2 | 17.9 | Z | 14.7 | 12.9 | 12.4 | 12.4 | 12.0 | 12.0 | 14.6 | 16.9 | 20.2 | 23.8 | 23.5 | 22.7 | 20.3 | 21.3 | 23.3 | 22.0 | 17.3 | 15.9 | 15.7 | 18.0 | 23.8 |
| 7-Aug | 16.2 | 14.9 | 11.1 | 10.9 | 10.9 | Z | 8.1 | 10.0 | 13.1 | 15.7 | 18.7 | 21.0 | 24.5 | 24.6 | 22.0 | 19.8 | 21.7 | 21.1 | 16.6 | 13.1 | 11.6 | 12.5 | 8.7 | 7.4 | 15.4 | 24.6 |
| 8-Aug | Z | 5.7 | 5.7 | 5.2 | 3.0 | 3.6 | 5.8 | 8.2 | 11.0 | 14.0 | 14.7 | 16.2 | 19.4 | 22.0 | 24.7 | 23.3 | 22.4 | 20.1 | 19.2 | 16.5 | 8.9 | 7.2 | 7.4 | 6.6 | 12.6 | 24.7 |
| 9-Aug | 6.3 | Z | 5.4 | 4.3 | 3.1 | 3.5 | 4.9 | 5.9 | 9.3 | 11.9 | 18.8 | 21.8 | 26.9 | 30.3 | 36.2 | 36.1 | 35.0 | 30.9 | 20.2 | 15.2 | 10.5 | 8.8 | 8.0 | 5.2 | 15.6 | 36.2 |
| 10-Aug | 3.9 | 3.7 | Z | 3.3 | 4.5 | 4.3 | 5.4 | 7.1 | 8.9 | 14.1 | 27.2 | 33.9 | 31.2 | 34.7 | 38.1 | 35.3 | 34.6 | 34.1 | 29.4 | 22.9 | 15.3 | 11.7 | 10.2 | 7.8 | 18.3 | 38.1 |
| 11-Aug | 6.3 | 6.9 | 3.9 | Z | 2.0 | 2.1 | 2.9 | 4.5 | 5.7 | 10.0 | 19.0 | 24.4 | 29.1 | 33.0 | 32.5 | 31.6 | 31.0 | 31.8 | 30.3 | 27.3 | 21.5 | 15.6 | 14.9 | 9.5 | 17.2 | 33.0 |
| 12-Aug | 9.3 | 7.6 | 6.4 | 4.7 | Z | 6.9 | 5.0 | 8.5 | 6.0 | 6.5 | 9.4 | 16.0 | 20.0 | 21.6 | 22.7 | 24.0 | 22.4 | 21.0 | 18.5 | 17.4 | 14.5 | 10.7 | 12.0 | 10.3 | 13.1 | 24.0 |
| 13-Aug | 8.2 | 7.5 | 7.5 | 6.9 | 3.9 | Z | 8.0 | 8.2 | 11.0 | 13.5 | 11.7 | 13.2 | 15.3 | 22.1 | 23.2 | 21.1 | 21.7 | 18.5 | 15.9 | 10.4 | 7.3 | 5.7 | 7.1 | 6.9 | 12.0 | 23.2 |
| 14-Aug | Z | 6.1 | 5.7 | 2.6 | 2.7 | 2.1 | 2.5 | 3.3 | 4.6 | 8.2 | 12.4 | 20.5 | 28.6 | 32.5 | 29.5 | 31.4 | 27.9 | 27.6 | 27.2 | 19.6 | 17.7 | 9.7 | 6.7 | 2.6 | 14.4 | 32.5 |
| 15-Aug | 7.6 | Z | 4.4 | 4.1 | 3.5 | 2.9 | 3.8 | 4.8 | 6.6 | 12.0 | 16.5 | 22.1 | 24.3 | 22.8 | 23.2 | 23.7 | 20.7 | 18.8 | 14.2 | 8.7 | 5.3 | 2.9 | 3.6 | 8.4 | 11.5 | 24.3 |
| 16-Aug | 11.5 | 9.5 | Z | 8.5 | 12.8 | 11.8 | 10.3 | 7.9 | 11.3 | 24.1 | 28.3 | 36.4 | 39.3 | 36.4 | 32.8 | 33.0 | 33.1 | 31.4 | 28.5 | 23.7 | 19.2 | 10.9 | 9.2 | 5.0 | 20.6 | 39.3 |
| 17-Aug | 3.8 | 3.7 | 6.5 | Z | 2.8 | 4.0 | 6.2 | 7.7 | 9.6 | 12.4 | 14.5 | 21.1 | 27.6 | 30.9 | 32.6 | 30.2 | 29.7 | 26.8 | 21.8 | 16.0 | 13.8 | 14.4 | 12.9 | 9.2 | 15.6 | 32.6 |
| 18-Aug | 9.2 | 8.9 | 7.1 | 6.9 | Z | 6.1 | 8.1 | 8.8 | 10.9 | 13.1 | 17.2 | 18.1 | 20.6 | 24.3 | 25.5 | 29.1 | 29.3 | 28.8 | 25.5 | 22.3 | 12.8 | 10.0 | 6.4 | 7.9 | 15.5 | 29.3 |
| 19-Aug | 7.4 | 10.1 | 8.7 | 4.6 | 3.0 | Z | 7.7 | 6.1 | 6.4 | 9.1 | 13.4 | 20.6 | 20.7 | 22.0 | 23.7 | 26.0 | 20.4 | 18.0 | 17.2 | 10.7 | 10.0 | 10.1 | 7.6 | 6.2 | 12.6 | 26.0 |
| 20-Aug | Z | 16.4 | 12.4 | 9.0 | 9.0 | 2.8 | 3.2 | 4.9 | 8.7 | 15.4 | 20.5 | 25.8 | 28.3 | 29.1 | 31.2 | 34.3 | 35.9 | 33.8 | 27.8 | 21.0 | 11.3 | 8.7 | 6.8 | 3.1 | 17.4 | 35.9 |
| 21-Aug | 1.9 | Z | 2.4 | 2.3 | 2.1 | 2.0 | 3.7 | 5.0 | 8.3 | 10.5 | M | M | 30.4 | 28.9 | 29.8 | 29.9 | 29.4 | 24.6 | 25.0 | 18.0 | 13.1 | 11.1 | 13.3 | 13.2 | 14.5 | 30.4 |
| 22-Aug | 12.6 | 10.8 | Z | 13.6 | 13.7 | 13.4 | 12.6 | 14.1 | 16.1 | 18.0 | 23.4 | 27.1 | 31.3 | 34.4 | 34.9 | 38.7 | 38.4 | 38.6 | 31.5 | 27.3 | 25.4 | 20.6 | 21.2 | 17.3 | 23.3 | 38.7 |
| 23-Aug | 12.9 | 11.8 | 12.8 | Z | 13.5 | 11.0 | 10.6 | 9.9 | 11.2 | 10.1 | 8.7 | 11.2 | 14.2 | 16.5 | 17.8 | 20.0 | 14.8 | 11.7 | 14.3 | 12.9 | 14.8 | 16.7 | 16.9 | 14.0 | 13.4 | 20.0 |
| 24-Aug | 12.3 | 16.2 | 18.2 | 17.6 | Z | 14.8 | 11.8 | 16.8 | 17.5 | 24.9 | 29.3 | 32.4 | 32.6 | 32.1 | 33.5 | 32.7 | 33.7 | 32.3 | 28.4 | 15.5 | 11.8 | 9.9 | 5.3 | 4.0 | 21.0 | 33.7 |
| 25-Aug | 3.3 | 3.4 | 3.3 | 2.0 | 1.8 | Z | 3.6 | 4.3 | 7.3 | 13.6 | 18.7 | 27.4 | 35.1 | 42.2 | 50.8 | 60.0 | 58.8 | 52.5 | 41.8 | 31.0 | 16.9 | 12.5 | 10.1 | 10.5 | 22.2 | 60.0 |
| 26-Aug | Z | 9.8 | 8.2 | 7.9 | 7.5 | 6.4 | 7.2 | 9.1 | 12.0 | 14.8 | 17.1 | 25.9 | 38.3 | 38.4 | 37.6 | 36.8 | 34.6 | 30.7 | 28.9 | 26.0 | 22.9 | 19.1 | 17.3 | 16.3 | 20.6 | 38.4 |
| 27-Aug | 15.5 | Z | 17.2 | 11.9 | 12.4 | 10.5 | 12.9 | 15.6 | 18.5 | 25.3 | 31.4 | 33.0 | 33.0 | 32.9 | 32.6 | 31.0 | 24.5 | 18.4 | 25.3 | 22.5 | 23.3 | 24.7 | 27.3 | 28.7 | 23.0 | 33.0 |
| 28-Aug | 26.4 | 25.9 | Z | 22.3 | 25.0 | 19.5 | 18.7 | 26.6 | 25.2 | 29.1 | 35.8 | 37.5 | 35.0 | 34.1 | 33.5 | 35.8 | 34.4 | 25.6 | 20.9 | 17.9 | 12.5 | 11.1 | 11.5 | 11.7 | 25.0 | 37.5 |
| 29-Aug | 11.6 | 11.0 | 14.3 | Z | 10.4 | 9.9 | 11.0 | 13.4 | 14.5 | 14.9 | 17.3 | 19.5 | 21.4 | 22.4 | 23.2 | 24.3 | 24.5 | 24.1 | 18.2 | 16.4 | 8.2 | 7.5 | 7.5 | 8.0 | 15.4 | 24.5 |
| 30-Aug | 4.6 | 4.1 | 5.4 | 5.3 | Z | 2.3 | 3.4 | 5.6 | 9.3 | 15.6 | 23.3 | 29.3 | 34.3 | 35.9 | 39.3 | 39.0 | 38.6 | 34.4 | 23.0 | 15.4 | 11.4 | 8.6 | 8.7 | 6.3 | 17.5 | 39.3 |
| 31-Aug | 7.0 | 15.4 | 14.3 | 8.4 | 7.8 | Z | 8.7 | 8.7 | 9.9 | 16.1 | 21.3 | 24.4 | 24.8 | 21.5 | 21.9 | 26.1 | 25.9 | 21.7 | 21.1 | 14.9 | 9.8 | 7.1 | 4.0 | 3.4 | 15.0 | 26.1 |
| | 10.5 | 11.1 | 10.3 | 9.0 | 8.5 | 8.7 | 8.7 | 9.9 | 11.5 | 14.9 | 18.5 | 22.9 | 26.4 | 28.2 | 29.1 | 29.9 | 29.0 | 26.9 | 23.9 | 19.3 | 15.2 | 13.1 | 12.5 | 10.9 | Diurnal Average | |
| | 26.4 | 26.0 | 26.7 | 24.1 | 25.0 | 24.0 | 22.4 | 26.6 | 25.2 | 29.1 | 35.8 | 37.5 | 39.3 | 42.2 | 50.8 | 60.0 | 58.8 | 52.5 | 41.8 | 31.0 | 25.4 | 27.5 | 33.1 | 28.7 | Diurnal Maximum | |

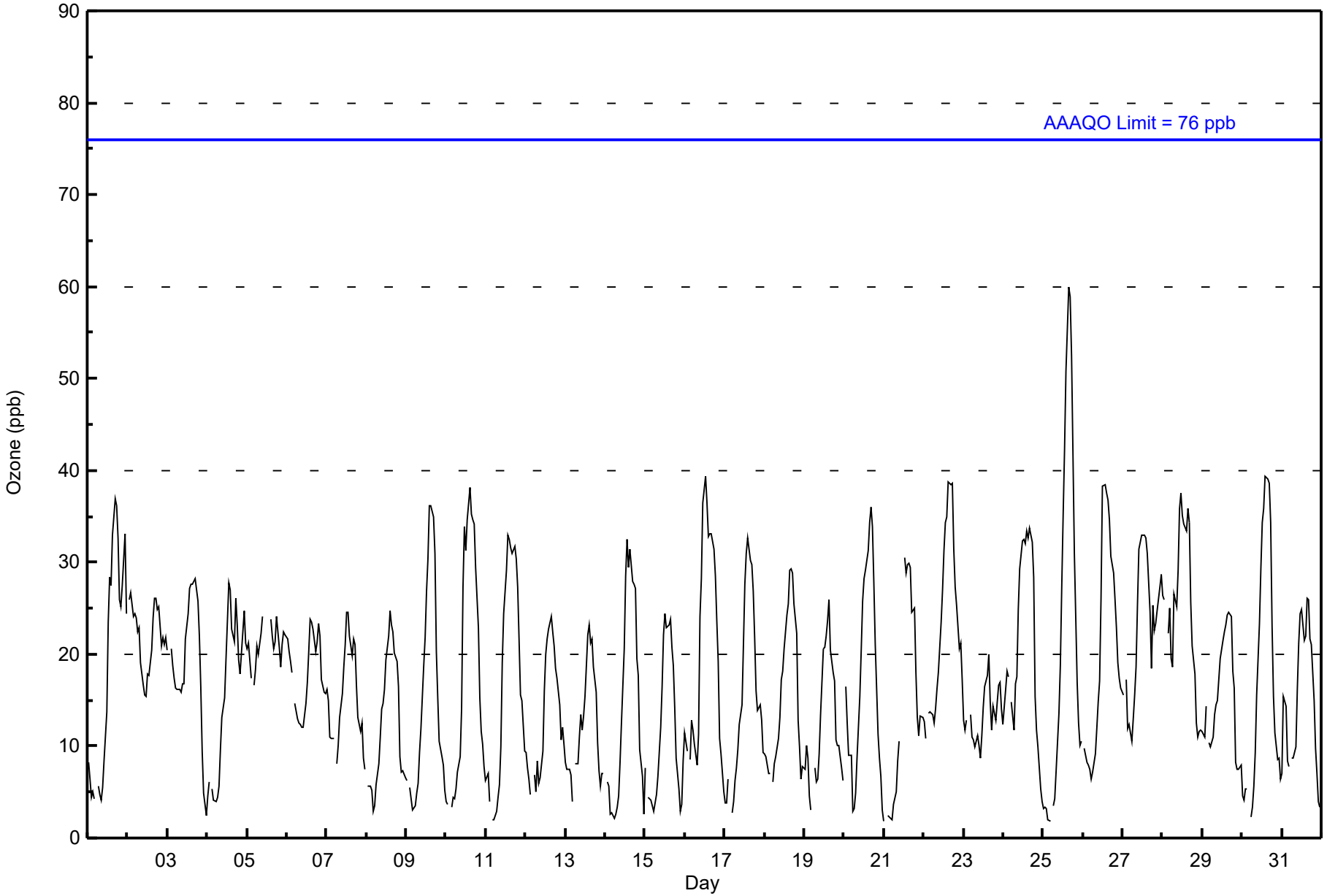
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Athabasca Valley - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 433 | 61.24 | 61.24 |
| 21 - 50 | 270 | 38.19 | 99.43 |
| 51 - 82 | 4 | 0.57 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 4 | 3 | 6 | 15 | 31 | 105 | 43 | 15 | 21 | 37 | 23 | 16 | 17 | 21 | 50 | 26 | 433 |
| 21 - 50 | 6 | 1 | 3 | 4 | 9 | 30 | 9 | 10 | 5 | 16 | 19 | 10 | 19 | 16 | 63 | 50 | 270 |
| 51 - 82 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 10 | 21 | 40 | 135 | 52 | 25 | 26 | 53 | 42 | 26 | 36 | 37 | 114 | 76 | 707 |

Total Number of Valid Hours: 707

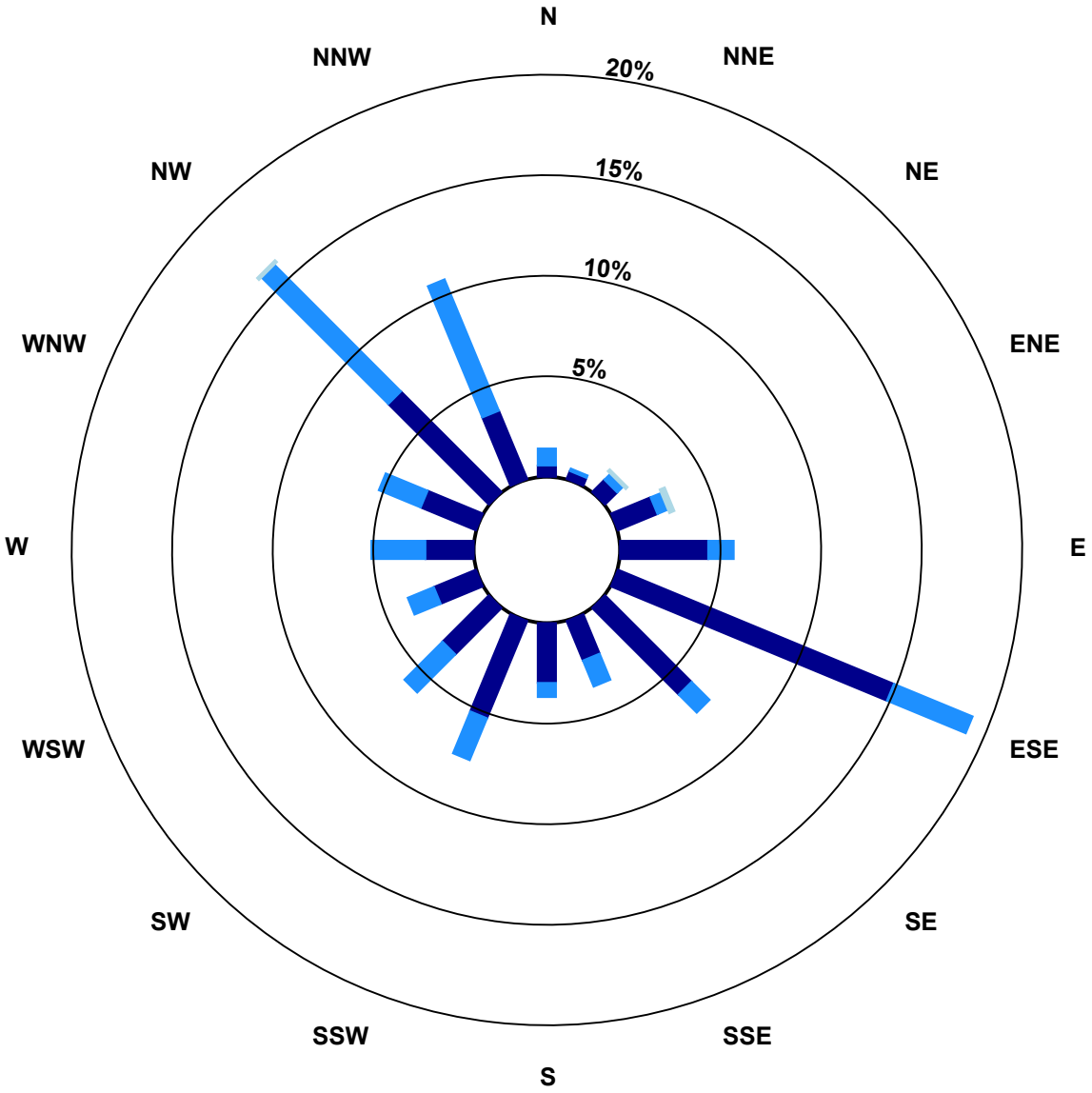
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ozone ($O_3$) - ppb

Athabasca Valley




Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

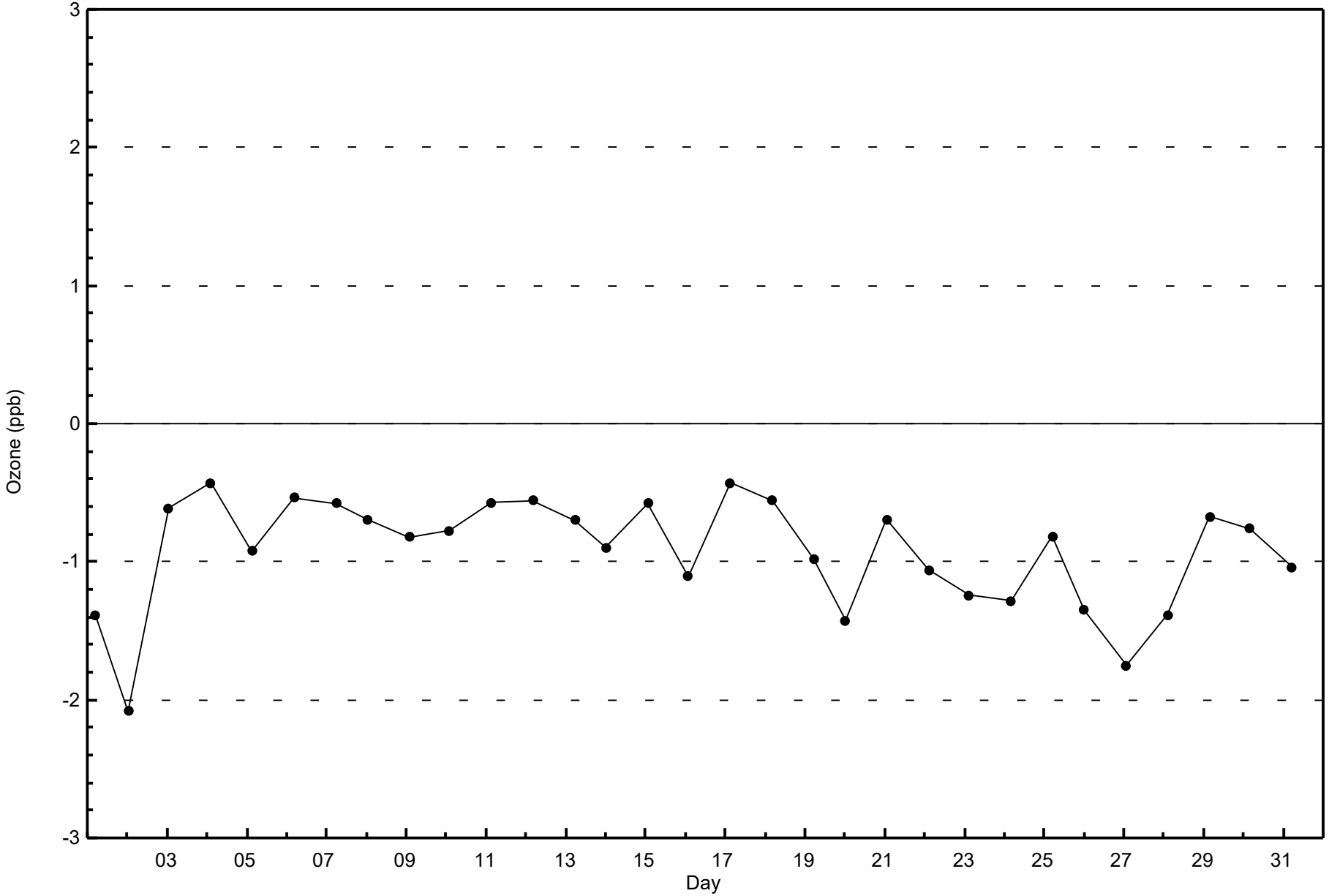
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Athabasca Valley - August 2026**

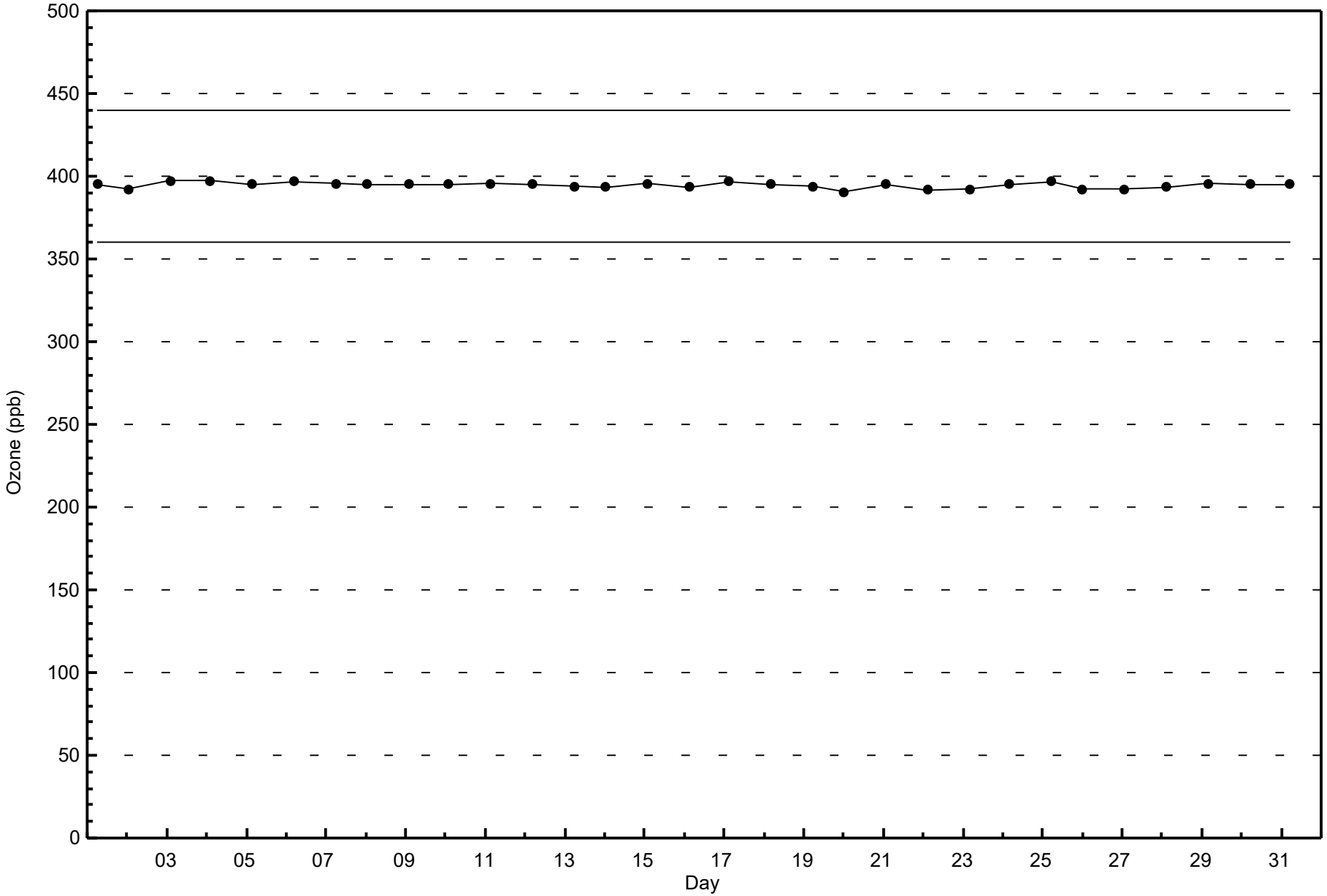


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Athabasca Valley - August 2026

Maximum Value: 15.3 ppb on Aug 19 05:00

Maximum Daily Average: 3.7 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 2 02:00

Minimum Daily Average: 0.2 ppb on Aug 2

Maximum Diurnal Average: 4.2 ppb at hour 8

Minimum Diurnal Average: 0.5 ppb at hour 2

Monthly Average: 1.51 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.3 Median = 0.7 $Q_3$ = 1.9 $P_{90}$ = 4.0 $P_{99}$ = 10.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.4 | Z | 2.1 | 0.8 | 1.3 | 2.7 | 1.7 | 2.5 | 6.7 | 3.9 | 2.6 | 2.1 | 0.5 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | 1.3 | 6.7 |
| 2-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.7 | 0.4 | 0.2 | 0.4 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.2 | 0.4 | 1.4 | 2.4 | 1.7 | 1.0 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 1.0 | 0.7 | 0.5 | 0.7 | 2.3 | 4.9 | 0.8 | 4.9 |
| 4-Aug | 1.1 | 0.5 | 0.4 | 0.7 | Z | 2.9 | 4.0 | 5.3 | 4.3 | 3.9 | 3.5 | 2.9 | 2.2 | 1.0 | 1.3 | 1.9 | 1.4 | 0.4 | 0.5 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 1.7 | 5.3 |
| 5-Aug | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | Z | 0.3 | 0.2 | 0.5 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 |
| 6-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.6 | 0.7 | 0.4 | 0.2 | 0.1 | 0.8 | 1.0 | 0.7 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.3 | 1.0 |
| 7-Aug | 0.0 | Z | 0.5 | 0.6 | 1.1 | 2.3 | 2.7 | 1.6 | 1.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.4 | 0.0 | 0.4 | 0.3 | 0.7 | 2.7 |
| 8-Aug | 0.3 | 0.7 | Z | 1.3 | 1.1 | 2.0 | 4.1 | 5.1 | 5.9 | 2.7 | 3.2 | 3.1 | 1.6 | 0.9 | 0.4 | 0.5 | 0.5 | 0.7 | 0.4 | 0.5 | 0.9 | 1.1 | 0.4 | 0.4 | 1.6 | 5.9 |
| 9-Aug | 0.4 | 0.2 | 0.5 | Z | 1.0 | 1.2 | 4.6 | 5.6 | 2.2 | 3.0 | 1.6 | 0.9 | 0.2 | 0.5 | 0.5 | 1.1 | 0.6 | 0.9 | 2.0 | 1.1 | 1.3 | 0.6 | 0.0 | 0.2 | 1.3 | 5.6 |
| 10-Aug | 1.4 | 1.3 | 2.1 | 2.8 | Z | 2.3 | 4.0 | 5.9 | 5.4 | 4.0 | 2.0 | 0.3 | 1.0 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.5 | 0.4 | 0.5 | 0.8 | 0.6 | 0.3 | 1.6 | 5.9 |
| 11-Aug | 0.0 | 0.1 | 0.2 | 3.3 | 5.9 | Z | 13.2 | 9.8 | 8.3 | 8.4 | 3.8 | 3.9 | 2.0 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 2.7 | 13.2 |
| 12-Aug | Z | 0.2 | 0.4 | 0.9 | 1.2 | 2.4 | 4.8 | 2.4 | 3.9 | 4.9 | 3.7 | 1.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 1.3 | 4.9 |
| 13-Aug | 0.0 | Z | 0.0 | 0.1 | 0.8 | 4.4 | 2.4 | 4.8 | 4.4 | 4.4 | 3.5 | 4.2 | 2.8 | 1.1 | 0.5 | 1.4 | 0.9 | 0.8 | 2.3 | 1.4 | 1.2 | 1.1 | 0.5 | 0.6 | 1.9 | 4.8 |
| 14-Aug | 0.2 | 0.8 | Z | 2.0 | 2.5 | 5.1 | 8.3 | 9.6 | 9.4 | 10.9 | 9.0 | 4.3 | 1.1 | 1.2 | 1.9 | 0.6 | 1.7 | 0.5 | 0.5 | 1.2 | 1.5 | 2.8 | 1.4 | 3.9 | 3.5 | 10.9 |
| 15-Aug | 2.0 | 1.9 | 1.6 | Z | 2.1 | 4.0 | 4.9 | 6.4 | 6.3 | 2.6 | 1.2 | 1.4 | 1.3 | 0.5 | 0.5 | 1.1 | 1.6 | 1.0 | 1.0 | 2.5 | 2.5 | 5.0 | 5.3 | 1.5 | 2.5 | 6.4 |
| 16-Aug | 0.4 | 0.9 | 0.5 | 2.0 | Z | 1.9 | 1.5 | 1.7 | 2.7 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.6 | 0.7 | 0.4 | 0.2 | 0.2 | 0.7 | 0.4 | 0.8 | 0.2 | 0.3 | 0.8 | 2.7 |
| 17-Aug | 1.9 | 1.6 | 0.9 | 2.3 | 5.7 | Z | 5.8 | 7.0 | 4.9 | 3.3 | 1.6 | 0.7 | 0.2 | 0.3 | 0.6 | 1.0 | 0.8 | 1.8 | 2.2 | 1.9 | 3.0 | 0.9 | 0.6 | 0.2 | 2.1 | 7.0 |
| 18-Aug | Z | 0.3 | 0.5 | 0.7 | 1.0 | 2.1 | 2.6 | 5.3 | 4.0 | 4.2 | 2.2 | 1.6 | 1.4 | 1.1 | 0.6 | 0.8 | 0.6 | 0.3 | 0.3 | 0.5 | 5.0 | 0.6 | 3.0 | 1.2 | 1.7 | 5.3 |
| 19-Aug | 0.4 | Z | 1.2 | 8.7 | 15.3 | 7.2 | 3.2 | 5.9 | 6.7 | C | C | C | C | 0.1 | 0.1 | 0.0 | 0.5 | 0.2 | 0.3 | 1.0 | 0.4 | 0.7 | 0.3 | 0.2 | 2.8 | 15.3 |
| 20-Aug | 0.1 | 0.0 | Z | 3.6 | 0.9 | 9.3 | 10.7 | 10.5 | 2.6 | 1.1 | M | M | M | M | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.9 | 0.2 | 0.1 | 0.6 | 2.3 | 10.7 |
| 21-Aug | 2.5 | 1.7 | 2.7 | Z | 3.2 | 6.8 | 5.7 | 8.5 | 5.7 | 5.3 | 3.0 | 1.3 | 0.5 | 0.3 | 0.4 | 1.0 | 1.2 | 1.9 | 0.7 | 1.4 | 0.4 | 0.1 | 0.3 | 0.2 | 2.4 | 8.5 |
| 22-Aug | 0.2 | 0.3 | 0.3 | 0.3 | Z | 0.4 | 1.5 | 2.9 | 4.0 | 1.9 | 0.5 | 0.2 | 0.3 | 0.8 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 1.1 | 0.6 | 0.3 | 0.8 | 4.0 |
| 23-Aug | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | Z | 1.3 | 2.0 | 2.0 | 2.9 | 4.5 | 3.8 | 2.0 | 1.9 | 1.5 | 0.8 | 1.0 | 1.6 | 0.5 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 1.2 | 4.5 |
| 24-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 | 0.9 | 1.9 | 0.6 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.4 | 0.6 | 0.5 | 0.3 | 0.7 | 0.7 | 0.4 | 0.4 | 1.3 | 0.5 | 1.9 |
| 25-Aug | 1.2 | Z | 0.9 | 4.2 | 6.9 | 11.4 | 10.8 | 12.6 | 9.1 | 8.9 | 6.1 | 2.7 | 2.1 | 2.0 | 1.4 | 0.7 | 0.3 | 0.5 | 0.6 | 0.1 | 0.5 | 0.6 | 1.3 | 0.8 | 3.7 | 12.6 |
| 26-Aug | 0.1 | 0.1 | Z | 0.4 | 0.6 | 1.7 | 2.4 | 2.9 | 2.7 | 2.3 | 4.0 | 1.4 | 0.8 | 1.4 | 1.0 | 1.4 | 2.0 | 2.5 | 0.9 | 0.4 | 0.5 | 0.2 | 0.1 | 0.0 | 1.3 | 4.0 |
| 27-Aug | 0.4 | 0.0 | 0.0 | Z | 0.9 | 3.0 | 1.8 | 2.1 | 1.8 | 1.3 | 0.9 | 0.8 | 0.9 | 0.9 | 0.6 | 0.9 | 0.9 | 2.2 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.9 | 3.0 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.2 | Z | 0.7 | 2.6 | 0.8 | 0.9 | 0.8 | 0.8 | 0.5 | 0.7 | 0.6 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 2.6 |
| 29-Aug | 0.1 | 0.6 | 0.0 | 0.2 | 1.0 | Z | 1.9 | 1.1 | 1.4 | 1.5 | 0.9 | 1.1 | 1.1 | 1.1 | 0.9 | 0.8 | 1.0 | 1.2 | 2.3 | 1.1 | 2.4 | 1.3 | 2.2 | 0.4 | 1.1 | 2.4 |
| 30-Aug | Z | 1.0 | 0.7 | 1.1 | 2.7 | 15.2 | 8.1 | 3.8 | 3.4 | 2.1 | 0.4 | 0.4 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 1.2 | 0.8 | 1.3 | 1.1 | 1.6 | 1.1 | 2.0 | 15.2 |
| 31-Aug | 0.7 | Z | 0.3 | 1.1 | 0.6 | 1.5 | 3.7 | 3.4 | 3.7 | 3.2 | 2.1 | 1.8 | 0.3 | 0.5 | 0.3 | 0.4 | 0.5 | 1.1 | 0.3 | 0.4 | 0.6 | 0.9 | 1.4 | 2.2 | 1.4 | 3.7 |
| | 0.5 | 0.5 | 0.6 | 1.5 | 2.2 | 3.5 | 3.9 | 4.2 | 3.8 | 3.1 | 2.2 | 1.5 | 0.9 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.8 | 0.7 | 0.8 | 0.7 | Diurnal Average | |
| | 2.5 | 1.9 | 2.7 | 8.7 | 15.3 | 15.2 | 13.2 | 12.6 | 9.4 | 10.9 | 9.0 | 4.3 | 2.8 | 2.0 | 1.9 | 1.9 | 2.0 | 2.5 | 2.3 | 2.5 | 5.0 | 5.0 | 5.3 | 4.9 | Diurnal Maximum | |

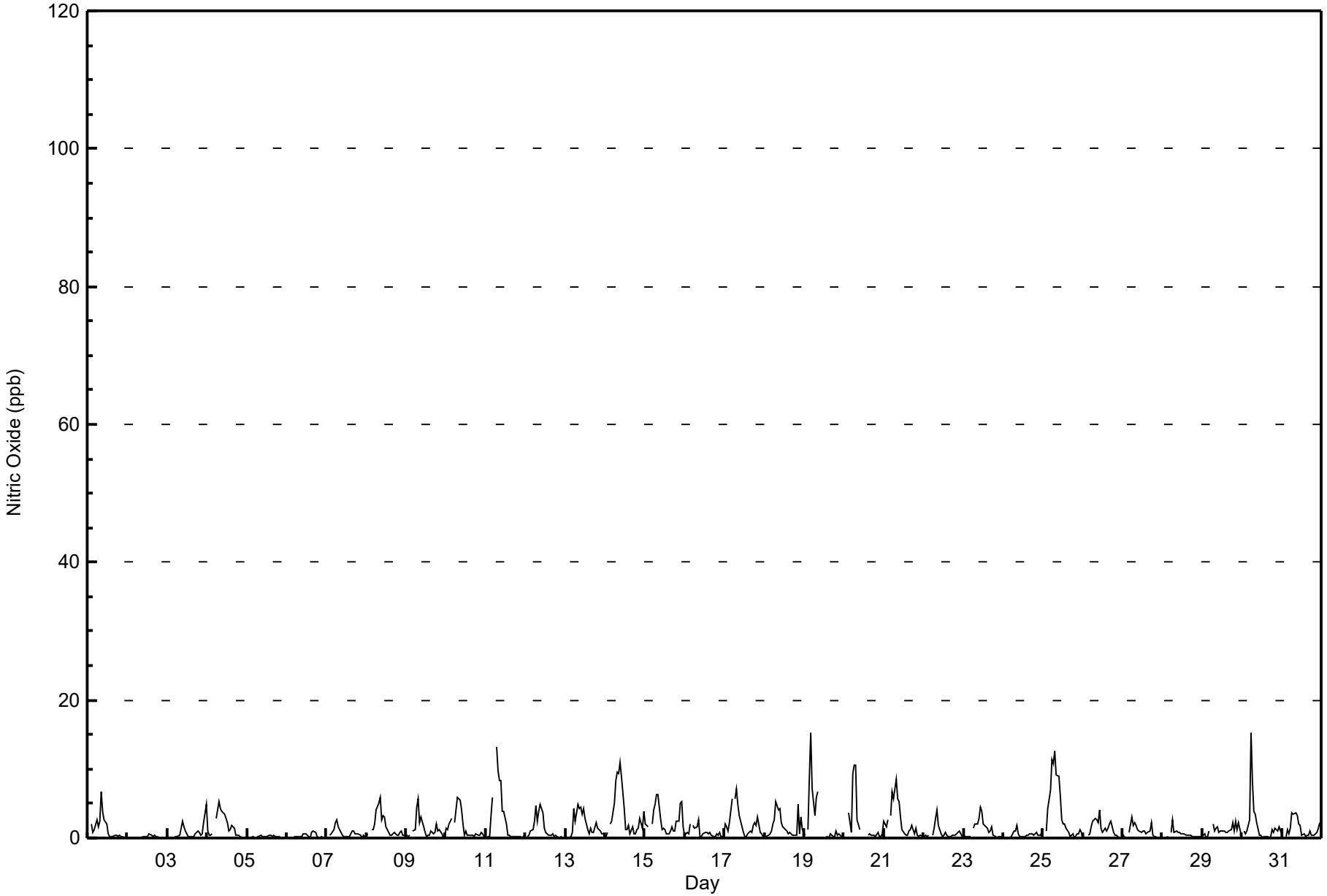
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Athabasca Valley - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 10 | 4 | 10 | 23 | 37 | 136 | 56 | 26 | 25 | 50 | 43 | 26 | 32 | 41 | 114 | 72 | 705 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 10 | 23 | 37 | 136 | 56 | 26 | 25 | 50 | 43 | 26 | 32 | 41 | 114 | 72 | 705 |

Total Number of Valid Hours: 705

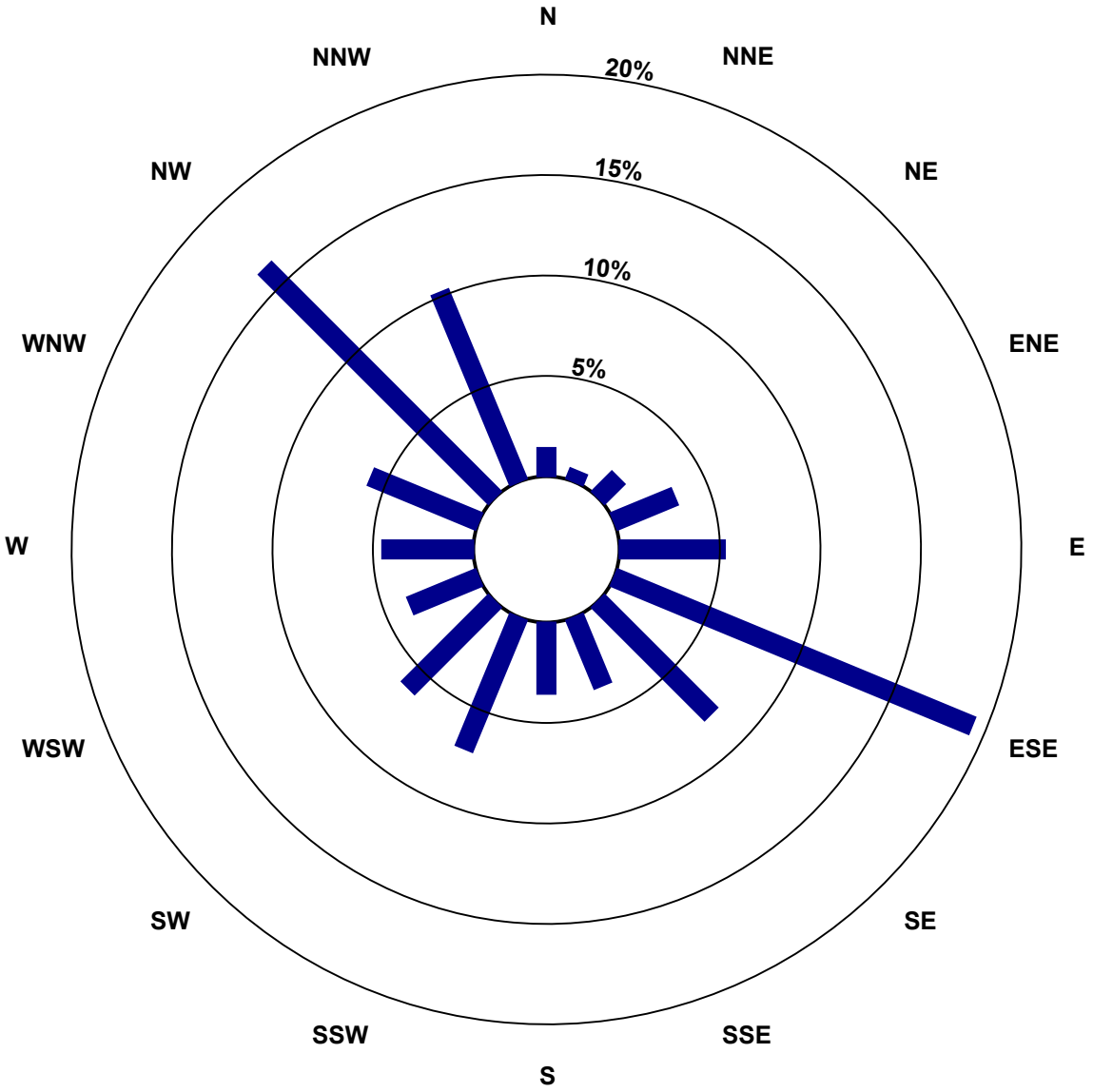
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Athabasca Valley




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

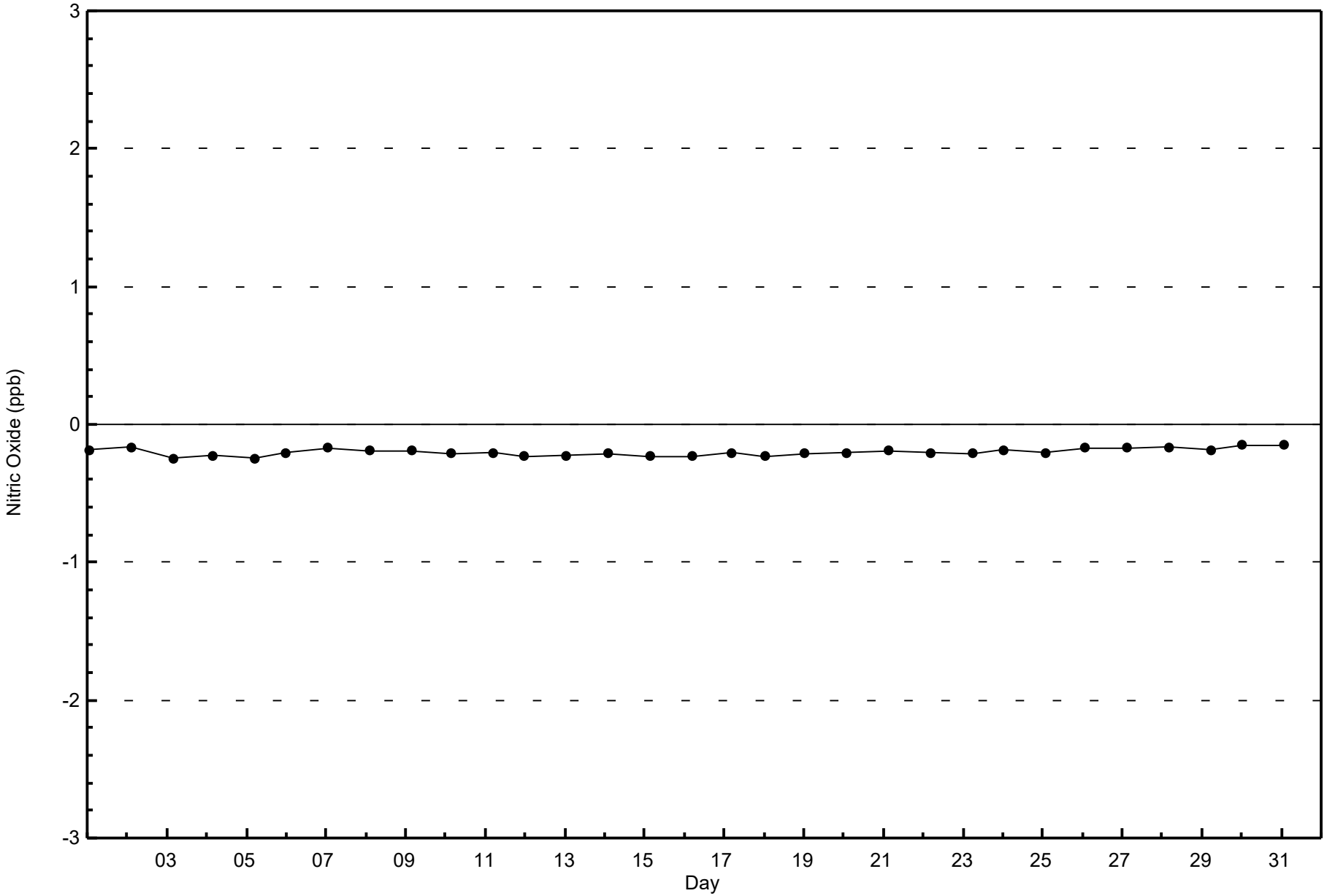
Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Athabasca Valley - August 2026**

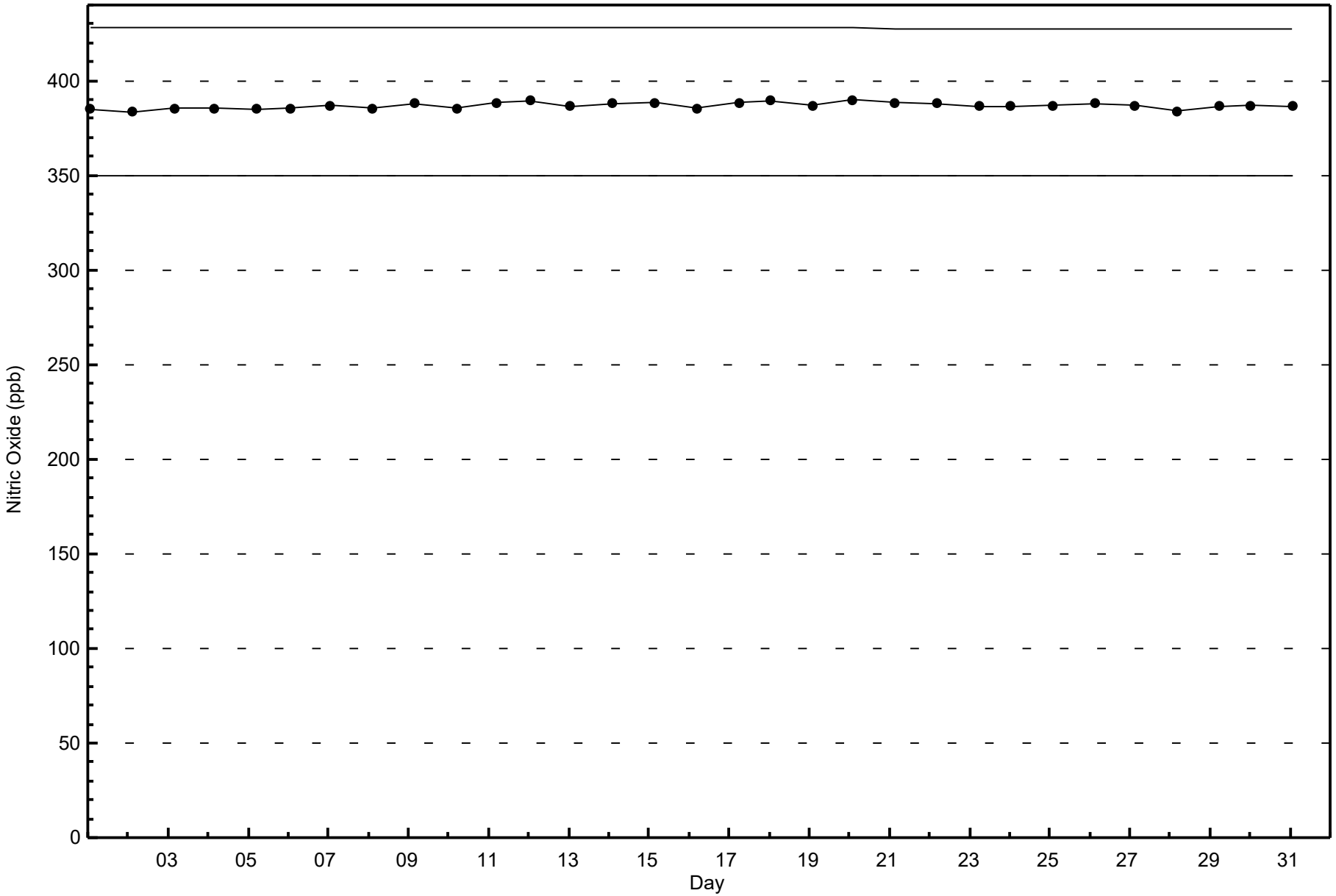


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Athabasca Valley - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 13.3 ppb on Aug 9 19:00

Maximum Daily Average: 7.5 ppb on Aug 25

Minimum Value: 0.3 ppb on Aug 6 03:00

Minimum Daily Average: 1.3 ppb on Aug 6

Maximum Diurnal Average: 5.9 ppb at hour 20

Minimum Diurnal Average: 2.2 ppb at hour 15

Monthly Average: 3.88 ppb

Percentiles: $P_1 = 0.5$ $P_{10} = 1.2$ $Q_1 = 2.1$ Median = 3.5 $Q_3 = 5.3$ $P_{90} = 7.0$ $P_{99} = 10.4$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 3.1 | Z | 5.7 | 4.1 | 3.3 | 3.9 | 3.2 | 4.1 | 4.6 | 3.9 | 2.4 | 4.0 | 2.4 | 1.2 | 0.9 | 1.5 | 2.5 | 3.3 | 4.3 | 6.3 | 4.3 | 4.4 | 2.3 | 5.3 | 3.5 | 6.3 |
| 2-Aug | 6.8 | 6.8 | Z | 4.3 | 2.8 | 3.0 | 3.6 | 2.5 | 2.3 | 2.3 | 2.9 | 2.1 | 1.6 | 3.4 | 2.1 | 1.4 | 2.2 | 2.4 | 2.9 | 1.2 | 2.6 | 1.7 | 2.5 | 0.7 | 2.8 | 6.8 |
| 3-Aug | 0.7 | 0.5 | 0.5 | Z | 1.5 | 1.8 | 1.4 | 1.4 | 2.9 | 3.0 | 4.2 | 2.3 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 2.2 | 4.8 | 5.6 | 7.4 | 5.5 | 7.2 | 9.0 | 2.8 | 9.0 |
| 4-Aug | 4.9 | 2.8 | 2.5 | 2.1 | Z | 2.9 | 2.4 | 2.8 | 3.1 | 4.2 | 3.2 | 2.8 | 2.4 | 1.7 | 2.1 | 3.2 | 2.8 | 2.3 | 6.3 | 6.3 | 3.3 | 0.7 | 0.9 | 0.7 | 2.9 | 6.3 |
| 5-Aug | 0.8 | 0.7 | 0.6 | 0.8 | 1.2 | Z | 1.1 | 0.8 | 1.2 | 0.6 | 0.8 | 0.7 | 0.7 | 1.3 | 1.2 | 1.3 | 1.8 | 3.4 | 4.5 | 5.0 | 5.4 | 2.0 | 0.6 | 0.4 | 1.6 | 5.4 |
| 6-Aug | Z | 0.5 | 0.3 | 0.4 | 0.5 | 1.0 | 0.8 | 0.6 | 0.5 | 0.6 | 1.0 | 1.3 | 0.9 | 0.7 | 0.6 | 2.6 | 3.1 | 2.4 | 1.8 | 1.2 | 1.0 | 3.4 | 3.1 | 1.2 | 1.3 | 3.4 |
| 7-Aug | 0.7 | Z | 0.9 | 1.3 | 2.6 | 4.0 | 4.4 | 2.4 | 1.6 | 0.9 | 0.6 | 0.7 | 0.8 | 0.7 | 1.4 | 4.8 | 4.5 | 4.9 | 7.4 | 8.5 | 6.5 | 3.8 | 4.3 | 5.0 | 3.2 | 8.5 |
| 8-Aug | 4.1 | 3.5 | Z | 3.7 | 4.2 | 3.3 | 3.2 | 3.9 | 5.8 | 3.3 | 3.7 | 3.7 | 2.6 | 2.3 | 1.7 | 1.9 | 3.0 | 3.8 | 4.0 | 5.3 | 7.8 | 6.2 | 4.5 | 3.4 | 3.9 | 7.8 |
| 9-Aug | 2.8 | 3.1 | 3.0 | Z | 4.0 | 4.3 | 4.6 | 4.1 | 3.1 | 4.2 | 2.5 | 1.9 | 1.6 | 2.6 | 3.1 | 5.4 | 5.5 | 6.7 | 13.3 | 10.4 | 8.5 | 5.9 | 3.6 | 4.8 | 4.7 | 13.3 |
| 10-Aug | 5.0 | 4.4 | 5.4 | 4.2 | Z | 4.1 | 3.9 | 4.0 | 3.7 | 4.4 | 5.6 | 2.9 | 3.5 | 2.2 | 3.1 | 2.6 | 3.2 | 2.4 | 4.8 | 8.0 | 7.1 | 3.7 | 2.6 | 3.0 | 4.1 | 8.0 |
| 11-Aug | 4.5 | 2.9 | 5.0 | 6.5 | 7.3 | Z | 6.6 | 5.5 | 5.7 | 5.3 | 6.2 | 8.4 | 5.1 | 2.0 | 1.8 | 1.5 | 1.5 | 1.4 | 1.4 | 2.1 | 4.2 | 8.5 | 5.2 | 5.2 | 4.5 | 8.5 |
| 12-Aug | Z | 3.0 | 3.8 | 4.5 | 5.0 | 4.6 | 6.0 | 4.6 | 6.7 | 5.8 | 4.8 | 3.1 | 2.1 | 1.5 | 1.4 | 1.8 | 2.0 | 1.7 | 2.6 | 4.2 | 6.0 | 5.6 | 4.6 | 5.4 | 3.9 | 6.7 |
| 13-Aug | 6.1 | Z | 5.4 | 5.8 | 8.4 | 9.0 | 4.5 | 4.3 | 4.0 | 4.8 | 6.6 | 5.8 | 4.5 | 2.5 | 1.3 | 2.9 | 3.1 | 3.2 | 4.2 | 5.6 | 4.3 | 4.0 | 2.4 | 2.2 | 4.6 | 9.0 |
| 14-Aug | 2.2 | 3.2 | Z | 4.9 | 5.2 | 5.8 | 5.4 | 4.3 | 4.0 | 6.5 | 8.5 | 6.4 | 3.0 | 3.7 | 5.0 | 3.4 | 6.4 | 3.8 | 4.8 | 7.6 | 8.9 | 12.5 | 10.1 | 10.6 | 5.9 | 12.5 |
| 15-Aug | 6.7 | 6.8 | 6.7 | Z | 3.6 | 4.3 | 3.3 | 2.9 | 3.4 | 2.1 | 1.6 | 2.0 | 2.7 | 2.5 | 2.4 | 2.6 | 4.4 | 3.1 | 3.4 | 6.0 | 4.5 | 7.7 | 7.5 | 4.9 | 4.1 | 7.7 |
| 16-Aug | 3.5 | 4.6 | 2.8 | 6.5 | Z | 2.3 | 3.7 | 5.4 | 6.5 | 2.5 | 1.8 | 2.1 | 3.0 | 2.9 | 2.4 | 3.0 | 2.6 | 1.9 | 2.9 | 2.5 | 3.5 | 3.9 | 3.0 | 4.5 | 3.4 | 6.5 |
| 17-Aug | 6.7 | 5.6 | 4.5 | 5.8 | 8.8 | Z | 5.3 | 5.4 | 3.9 | 3.5 | 2.4 | 1.6 | 0.8 | 0.9 | 1.7 | 2.3 | 2.1 | 4.9 | 7.9 | 11.9 | 9.1 | 7.8 | 6.1 | 6.8 | 5.0 | 11.9 |
| 18-Aug | Z | 3.6 | 2.9 | 2.3 | 3.2 | 4.2 | 3.2 | 4.6 | 4.0 | 4.2 | 3.5 | 2.0 | 1.9 | 2.1 | 1.6 | 2.1 | 2.6 | 1.6 | 1.9 | 3.4 | 8.3 | 5.8 | 9.1 | 6.5 | 3.7 | 9.1 |
| 19-Aug | 4.3 | Z | 4.3 | 7.2 | 9.8 | 7.8 | 4.7 | 6.0 | 6.5 | C | C | C | C | 0.5 | 0.6 | 0.5 | 3.5 | 2.5 | 2.6 | 5.8 | 5.7 | 4.2 | 3.6 | 5.0 | 4.5 | 9.8 |
| 20-Aug | 3.8 | 2.6 | Z | 5.0 | 3.4 | 7.3 | 6.1 | 5.4 | 1.9 | 2.1 | M | M | M | M | 2.3 | 2.9 | 3.9 | 4.3 | 4.3 | 5.6 | 7.6 | 2.0 | 3.3 | 6.6 | 4.2 | 7.6 |
| 21-Aug | 8.2 | 6.8 | 6.6 | Z | 4.9 | 5.3 | 3.9 | 4.1 | 3.6 | 4.2 | 4.8 | 3.9 | 2.2 | 1.5 | 1.4 | 2.9 | 3.3 | 6.8 | 5.5 | 8.8 | 7.3 | 4.4 | 5.1 | 3.7 | 4.7 | 8.8 |
| 22-Aug | 4.3 | 5.6 | 5.0 | 3.5 | Z | 4.3 | 5.2 | 4.9 | 4.3 | 4.0 | 2.2 | 1.8 | 2.2 | 2.8 | 2.0 | 2.0 | 2.5 | 3.5 | 6.2 | 10.4 | 7.1 | 8.9 | 6.2 | 6.9 | 4.6 | 10.4 |
| 23-Aug | 8.1 | 6.9 | 4.6 | 4.5 | 3.7 | Z | 2.9 | 3.9 | 3.2 | 4.7 | 6.2 | 4.7 | 4.9 | 4.6 | 4.6 | 3.4 | 3.3 | 4.5 | 2.6 | 2.8 | 1.9 | 1.6 | 1.0 | 1.3 | 3.9 | 8.1 |
| 24-Aug | Z | 1.8 | 1.1 | 2.3 | 3.9 | 6.4 | 8.7 | 4.3 | 4.4 | 1.9 | 1.0 | 0.7 | 0.6 | 0.6 | 1.5 | 1.8 | 3.3 | 3.5 | 3.8 | 9.2 | 5.3 | 3.2 | 5.9 | 6.9 | 3.6 | 9.2 |
| 25-Aug | 6.3 | Z | 5.9 | 6.8 | 6.7 | 6.8 | 5.5 | 5.2 | 5.6 | 9.5 | 8.8 | 7.0 | 8.0 | 9.7 | 9.8 | 8.8 | 5.5 | 6.4 | 10.0 | 10.1 | 9.6 | 6.1 | 8.4 | 7.1 | 7.5 | 10.1 |
| 26-Aug | 4.8 | 2.4 | Z | 2.3 | 3.3 | 4.3 | 3.2 | 2.6 | 2.5 | 2.9 | 4.8 | 3.6 | 2.9 | 3.9 | 3.4 | 4.3 | 6.6 | 10.1 | 8.4 | 7.4 | 8.3 | 5.3 | 2.2 | 1.8 | 4.4 | 10.1 |
| 27-Aug | 2.6 | 1.6 | 2.0 | Z | 3.6 | 6.4 | 6.2 | 4.4 | 3.5 | 2.7 | 3.0 | 3.1 | 3.6 | 3.3 | 4.4 | 5.6 | 7.0 | 10.1 | 2.8 | 4.2 | 2.9 | 2.5 | 2.4 | 1.8 | 3.9 | 10.1 |
| 28-Aug | 2.0 | 1.4 | 1.8 | 2.3 | Z | 8.2 | 10.9 | 4.2 | 3.8 | 1.6 | 1.7 | 1.5 | 1.4 | 1.6 | 1.1 | 1.3 | 1.8 | 1.5 | 1.7 | 1.6 | 1.5 | 1.3 | 0.8 | 0.7 | 2.4 | 10.9 |
| 29-Aug | 1.1 | 1.8 | 0.5 | 0.6 | 2.0 | Z | 2.4 | 1.1 | 1.2 | 1.2 | 1.0 | 1.2 | 1.3 | 1.4 | 1.3 | 1.3 | 2.0 | 3.4 | 8.7 | 5.6 | 9.6 | 10.7 | 10.1 | 6.5 | 3.3 | 10.7 |
| 30-Aug | Z | 6.1 | 4.2 | 5.1 | 6.8 | 8.3 | 5.5 | 4.4 | 3.4 | 3.3 | 1.6 | 1.9 | 1.1 | 1.2 | 1.6 | 1.5 | 0.8 | 1.1 | 7.9 | 7.3 | 5.8 | 4.5 | 4.8 | 5.0 | 4.1 | 8.3 |
| 31-Aug | 4.9 | Z | 1.4 | 4.8 | 4.6 | 3.3 | 2.7 | 2.0 | 3.0 | 4.2 | 3.9 | 4.0 | 1.5 | 1.2 | 1.0 | 0.9 | 1.4 | 2.1 | 1.9 | 4.0 | 3.3 | 4.6 | 6.8 | 6.6 | 3.2 | 6.8 |
| | 4.2 | 3.6 | 3.4 | 3.9 | 4.4 | 4.9 | 4.3 | 3.7 | 3.7 | 3.5 | 3.5 | 3.0 | 2.4 | 2.2 | 2.2 | 2.6 | 3.2 | 3.7 | 4.8 | 5.9 | 5.8 | 4.9 | 4.5 | 4.5 | Diurnal Average | |
| | 8.2 | 6.9 | 6.7 | 7.2 | 9.8 | 9.0 | 10.9 | 6.0 | 6.7 | 9.5 | 8.8 | 8.4 | 8.0 | 9.7 | 9.8 | 8.8 | 7.0 | 10.1 | 13.3 | 11.9 | 9.6 | 12.5 | 10.1 | 10.6 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

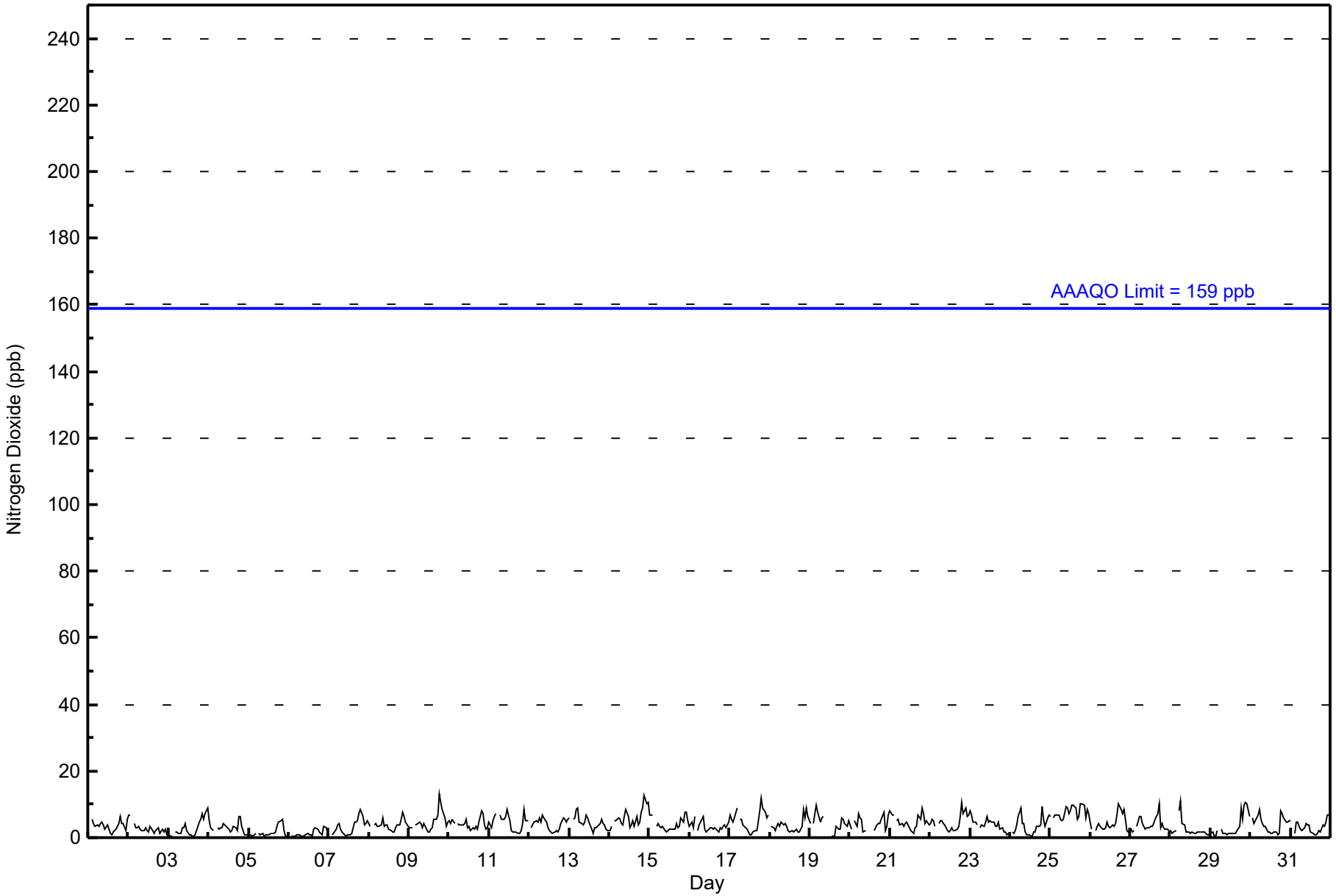
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Athabasca Valley - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Athabasca Valley - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 10 | 4 | 10 | 23 | 37 | 136 | 56 | 26 | 25 | 50 | 43 | 26 | 32 | 41 | 114 | 72 | 705 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 10 | 23 | 37 | 136 | 56 | 26 | 25 | 50 | 43 | 26 | 32 | 41 | 114 | 72 | 705 |

Total Number of Valid Hours: 705

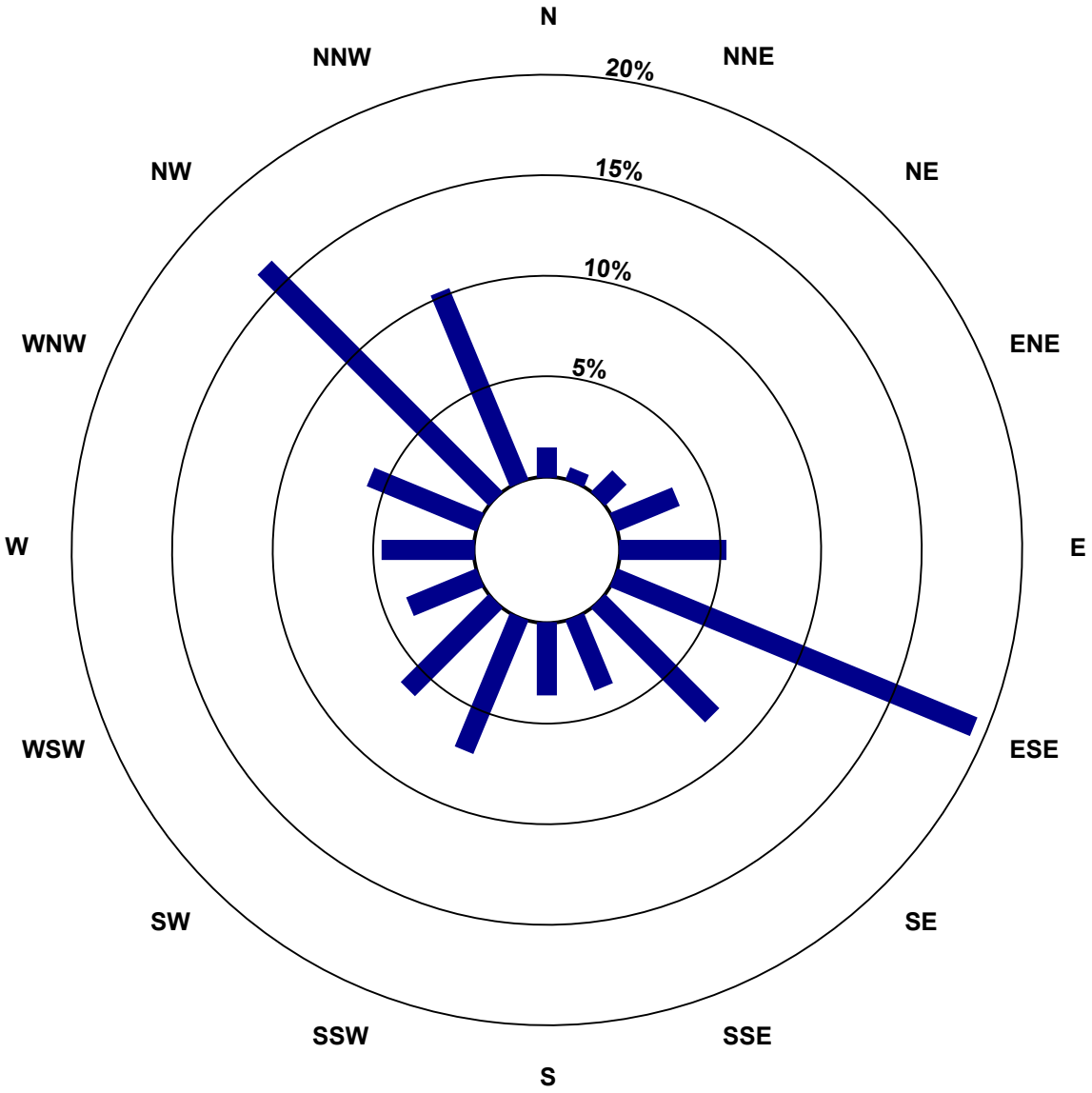
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Athabasca Valley




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

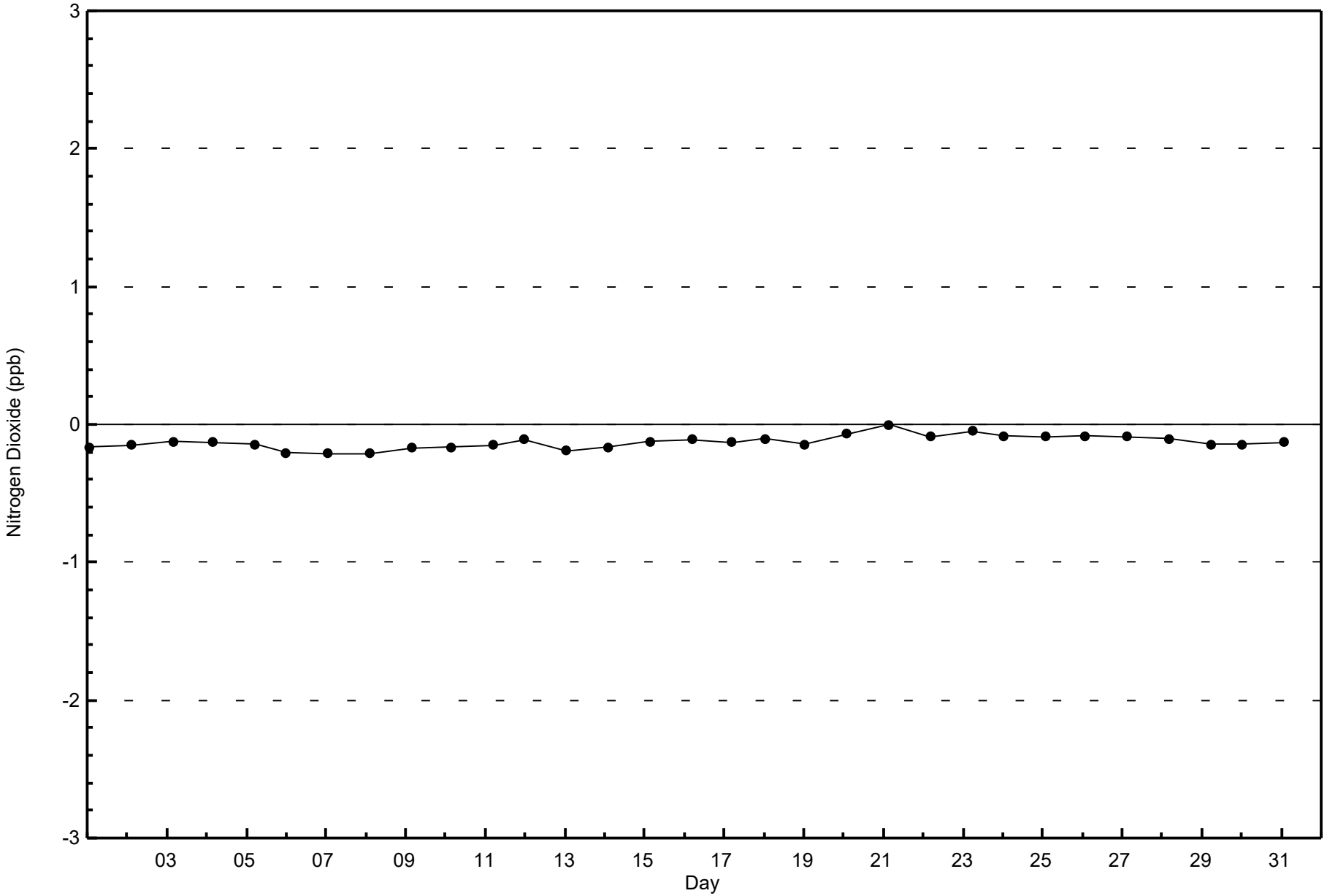
Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Athabasca Valley - August 2026**

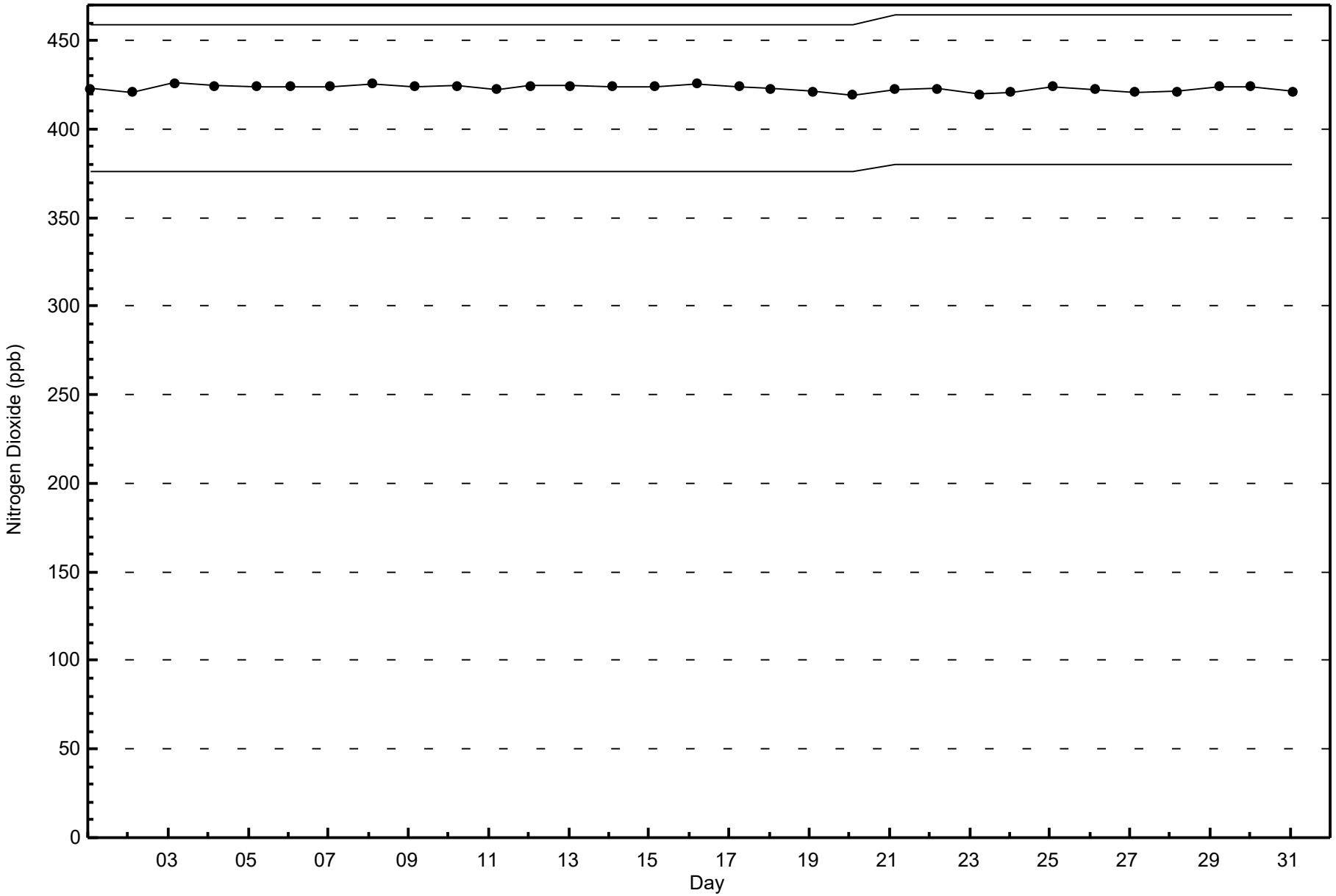


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Athabasca Valley - August 2026

Maximum Value: 25.1 ppb on Aug 19 05:00

Maximum Daily Average: 11.3 ppb on Aug 25

Minimum Value: 0.3 ppb on Aug 6 03:00

Minimum Daily Average: 1.5 ppb on Aug 6

Maximum Diurnal Average: 8.4 ppb at hour 6

Minimum Diurnal Average: 2.8 ppb at hour 15

Monthly Average: 5.38 ppb

Percentiles: $P_1$ = 0.5 $P_{10}$ = 1.4 $Q_1$ = 2.5 Median = 4.5 $Q_3$ = 7.2 $P_{90}$ = 10.1 $P_{99}$ = 17.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 3.5 | Z | 7.8 | 4.9 | 4.6 | 6.6 | 4.9 | 6.6 | 11.3 | 7.8 | 5.0 | 6.1 | 2.9 | 1.4 | 1.1 | 1.7 | 2.9 | 3.7 | 4.6 | 6.7 | 4.4 | 4.5 | 2.3 | 5.4 | 4.8 | 11.3 |
| 2-Aug | 6.8 | 6.8 | Z | 4.3 | 2.8 | 3.0 | 3.6 | 2.5 | 2.4 | 2.4 | 3.2 | 2.4 | 1.9 | 4.1 | 2.5 | 1.6 | 2.6 | 2.7 | 3.2 | 1.2 | 2.6 | 1.7 | 2.5 | 0.7 | 2.9 | 6.8 |
| 3-Aug | 0.7 | 0.5 | 0.5 | Z | 1.5 | 2.0 | 1.6 | 1.8 | 4.3 | 5.4 | 5.9 | 3.3 | 1.1 | 0.9 | 0.8 | 0.8 | 1.1 | 2.7 | 5.8 | 6.3 | 7.9 | 6.2 | 9.5 | 13.9 | 3.7 | 13.9 |
| 4-Aug | 6.0 | 3.3 | 2.9 | 2.8 | Z | 5.8 | 6.4 | 8.1 | 7.4 | 8.1 | 6.7 | 5.7 | 4.6 | 2.7 | 3.4 | 5.1 | 4.2 | 2.7 | 6.8 | 6.7 | 3.5 | 0.7 | 0.9 | 0.7 | 4.6 | 8.1 |
| 5-Aug | 0.8 | 0.7 | 0.7 | 1.0 | 1.3 | Z | 1.4 | 1.0 | 1.7 | 0.8 | 1.0 | 1.0 | 1.0 | 1.6 | 1.5 | 1.5 | 2.2 | 3.7 | 4.6 | 5.1 | 5.4 | 2.0 | 0.6 | 0.4 | 1.8 | 5.4 |
| 6-Aug | Z | 0.5 | 0.3 | 0.4 | 0.5 | 1.1 | 1.1 | 0.9 | 0.7 | 0.8 | 1.6 | 2.0 | 1.3 | 0.9 | 0.7 | 3.4 | 4.1 | 3.1 | 2.0 | 1.2 | 1.1 | 3.6 | 3.1 | 1.2 | 1.5 | 4.1 |
| 7-Aug | 0.7 | Z | 1.4 | 1.9 | 3.7 | 6.3 | 7.1 | 4.0 | 2.8 | 1.4 | 0.8 | 0.9 | 1.0 | 0.9 | 1.7 | 5.8 | 5.5 | 5.6 | 8.0 | 9.1 | 6.9 | 3.8 | 4.7 | 5.3 | 3.9 | 9.1 |
| 8-Aug | 4.4 | 4.2 | Z | 5.0 | 5.3 | 5.3 | 7.3 | 9.0 | 11.7 | 6.0 | 6.9 | 6.8 | 4.2 | 3.2 | 2.1 | 2.4 | 3.5 | 4.5 | 4.4 | 5.8 | 8.7 | 7.3 | 4.9 | 3.8 | 5.5 | 11.7 |
| 9-Aug | 3.2 | 3.3 | 3.5 | Z | 5.0 | 5.5 | 9.2 | 9.7 | 5.3 | 7.2 | 4.1 | 2.8 | 1.8 | 3.1 | 3.6 | 6.5 | 6.1 | 7.6 | 15.3 | 11.5 | 9.8 | 6.5 | 3.6 | 5.0 | 6.0 | 15.3 |
| 10-Aug | 6.4 | 5.7 | 7.5 | 7.0 | Z | 6.4 | 7.9 | 9.9 | 9.1 | 8.4 | 7.6 | 3.2 | 4.5 | 2.5 | 3.6 | 2.9 | 3.7 | 2.7 | 5.3 | 8.4 | 7.6 | 4.5 | 3.2 | 3.3 | 5.7 | 9.9 |
| 11-Aug | 4.5 | 3.0 | 5.2 | 9.8 | 13.2 | Z | 19.8 | 15.3 | 14.0 | 13.7 | 10.0 | 12.3 | 7.1 | 2.4 | 2.1 | 1.8 | 1.8 | 1.6 | 1.5 | 2.2 | 4.3 | 8.6 | 5.3 | 5.7 | 7.2 | 19.8 |
| 12-Aug | Z | 3.2 | 4.2 | 5.4 | 6.2 | 7.0 | 10.8 | 7.0 | 10.6 | 10.7 | 8.5 | 4.5 | 2.9 | 2.1 | 1.9 | 2.2 | 2.5 | 2.0 | 3.0 | 4.4 | 6.1 | 5.7 | 4.6 | 5.4 | 5.3 | 10.8 |
| 13-Aug | 6.1 | Z | 5.4 | 5.9 | 9.2 | 13.4 | 6.9 | 9.1 | 8.4 | 9.2 | 10.1 | 10.0 | 7.3 | 3.6 | 1.8 | 4.3 | 4.0 | 4.0 | 6.5 | 7.0 | 5.5 | 5.1 | 2.9 | 2.8 | 6.5 | 13.4 |
| 14-Aug | 2.4 | 4.0 | Z | 6.9 | 7.7 | 10.9 | 13.7 | 13.9 | 13.4 | 17.4 | 17.5 | 10.7 | 4.1 | 4.9 | 6.9 | 4.0 | 8.1 | 4.3 | 5.3 | 8.8 | 10.4 | 15.3 | 11.5 | 14.5 | 9.4 | 17.5 |
| 15-Aug | 8.7 | 8.7 | 8.3 | Z | 5.7 | 8.3 | 8.2 | 9.3 | 9.7 | 4.7 | 2.8 | 3.4 | 4.0 | 3.0 | 2.9 | 3.7 | 6.0 | 4.1 | 4.4 | 8.5 | 7.0 | 12.7 | 12.8 | 6.4 | 6.7 | 12.8 |
| 16-Aug | 3.9 | 5.5 | 3.3 | 8.5 | Z | 4.2 | 5.2 | 7.1 | 9.2 | 2.8 | 2.1 | 2.6 | 3.7 | 3.7 | 3.0 | 3.7 | 3.0 | 2.1 | 3.1 | 3.2 | 3.9 | 4.7 | 3.2 | 4.8 | 4.2 | 9.2 |
| 17-Aug | 8.6 | 7.2 | 5.4 | 8.1 | 14.5 | Z | 11.1 | 12.4 | 8.8 | 6.8 | 4.0 | 2.3 | 1.0 | 1.2 | 2.3 | 3.3 | 2.9 | 6.7 | 10.1 | 13.8 | 12.1 | 8.7 | 6.7 | 7.0 | 7.2 | 14.5 |
| 18-Aug | Z | 3.9 | 3.4 | 3.0 | 4.2 | 6.3 | 5.8 | 9.9 | 8.0 | 8.4 | 5.7 | 3.6 | 3.3 | 3.2 | 2.2 | 2.9 | 3.2 | 1.9 | 2.2 | 3.9 | 13.3 | 6.4 | 12.1 | 7.7 | 5.4 | 13.3 |
| 19-Aug | 4.7 | Z | 5.5 | 15.9 | 25.1 | 15.0 | 7.9 | 11.9 | 13.2 | C | C | C | C | 0.6 | 0.7 | 0.5 | 4.0 | 2.7 | 2.9 | 6.8 | 6.1 | 4.9 | 3.9 | 5.2 | 7.2 | 25.1 |
| 20-Aug | 3.9 | 2.6 | Z | 8.6 | 4.3 | 16.6 | 16.8 | 15.9 | 4.5 | 3.2 | M | M | M | M | 2.8 | 3.4 | 4.4 | 4.8 | 4.8 | 5.9 | 8.5 | 2.2 | 3.4 | 7.2 | 6.5 | 16.8 |
| 21-Aug | 10.7 | 8.5 | 9.3 | Z | 8.1 | 12.1 | 9.6 | 12.6 | 9.3 | 9.5 | 7.8 | 5.2 | 2.7 | 1.8 | 1.8 | 3.9 | 4.5 | 8.7 | 6.2 | 10.2 | 7.7 | 4.5 | 5.4 | 3.9 | 7.1 | 12.6 |
| 22-Aug | 4.5 | 5.9 | 5.3 | 3.8 | Z | 4.7 | 6.7 | 7.8 | 8.3 | 5.9 | 2.7 | 2.0 | 2.5 | 3.6 | 2.4 | 2.3 | 2.8 | 3.9 | 6.6 | 10.8 | 7.7 | 10.0 | 6.8 | 7.2 | 5.4 | 10.8 |
| 23-Aug | 8.4 | 7.1 | 4.7 | 4.7 | 3.9 | Z | 4.2 | 5.9 | 5.2 | 7.6 | 10.7 | 8.5 | 6.9 | 6.5 | 6.1 | 4.2 | 4.3 | 6.1 | 3.1 | 2.9 | 1.9 | 1.8 | 1.1 | 1.5 | 5.1 | 10.7 |
| 24-Aug | Z | 1.8 | 1.1 | 2.3 | 3.9 | 6.6 | 9.8 | 5.2 | 6.3 | 2.5 | 1.2 | 0.9 | 0.7 | 0.7 | 1.8 | 2.2 | 3.9 | 4.0 | 4.1 | 9.9 | 6.0 | 3.6 | 6.3 | 8.2 | 4.0 | 9.9 |
| 25-Aug | 7.5 | Z | 6.8 | 11.0 | 13.6 | 18.2 | 16.3 | 17.8 | 14.7 | 18.4 | 14.9 | 9.7 | 10.1 | 11.7 | 11.2 | 9.5 | 5.8 | 6.9 | 10.6 | 10.2 | 10.1 | 6.7 | 9.7 | 7.9 | 11.3 | 18.4 |
| 26-Aug | 4.9 | 2.5 | Z | 2.7 | 3.9 | 6.0 | 5.6 | 5.5 | 5.2 | 5.2 | 8.8 | 5.0 | 3.7 | 5.3 | 4.4 | 5.7 | 8.6 | 12.6 | 9.3 | 7.8 | 8.8 | 5.5 | 2.3 | 1.8 | 5.7 | 12.6 |
| 27-Aug | 3.0 | 1.6 | 2.0 | Z | 4.5 | 9.4 | 8.0 | 6.5 | 5.3 | 4.0 | 3.9 | 3.9 | 4.5 | 4.2 | 5.0 | 6.5 | 7.9 | 12.3 | 3.1 | 4.5 | 3.0 | 2.5 | 2.4 | 1.8 | 4.8 | 12.3 |
| 28-Aug | 2.0 | 1.4 | 1.8 | 2.5 | Z | 8.9 | 13.5 | 5.0 | 4.7 | 2.4 | 2.5 | 2.0 | 2.1 | 2.2 | 1.4 | 1.7 | 2.1 | 1.8 | 1.9 | 1.7 | 1.7 | 1.4 | 0.9 | 0.8 | 2.9 | 13.5 |
| 29-Aug | 1.2 | 2.4 | 0.5 | 0.8 | 3.0 | Z | 4.3 | 2.2 | 2.6 | 2.7 | 1.9 | 2.3 | 2.4 | 2.5 | 2.2 | 2.1 | 3.0 | 4.6 | 11.0 | 6.7 | 12.0 | 12.0 | 12.3 | 6.9 | 4.4 | 12.3 |
| 30-Aug | Z | 7.1 | 4.9 | 6.2 | 9.5 | 23.5 | 13.6 | 8.2 | 6.8 | 5.4 | 2.0 | 2.3 | 1.2 | 1.3 | 1.8 | 1.6 | 0.8 | 1.2 | 9.1 | 8.1 | 7.1 | 5.6 | 6.4 | 6.1 | 6.1 | 23.5 |
| 31-Aug | 5.6 | Z | 1.7 | 5.9 | 5.2 | 4.8 | 6.4 | 5.4 | 6.7 | 7.4 | 6.0 | 5.8 | 1.8 | 1.7 | 1.3 | 1.3 | 1.9 | 3.2 | 2.2 | 4.4 | 3.9 | 5.5 | 8.2 | 8.8 | 4.6 | 8.8 |
| | 4.7 | 4.1 | 4.0 | 5.4 | 6.6 | 8.4 | 8.2 | 8.0 | 7.5 | 6.5 | 5.7 | 4.5 | 3.3 | 2.9 | 2.8 | 3.3 | 3.9 | 4.5 | 5.5 | 6.6 | 6.6 | 5.6 | 5.3 | 5.2 | Diurnal Average | |
| | 10.7 | 8.7 | 9.3 | 15.9 | 25.1 | 23.5 | 19.8 | 17.8 | 14.7 | 18.4 | 17.5 | 12.3 | 10.1 | 11.7 | 11.2 | 9.5 | 8.6 | 12.6 | 15.3 | 13.8 | 13.3 | 15.3 | 12.8 | 14.5 | Diurnal Maximum | |

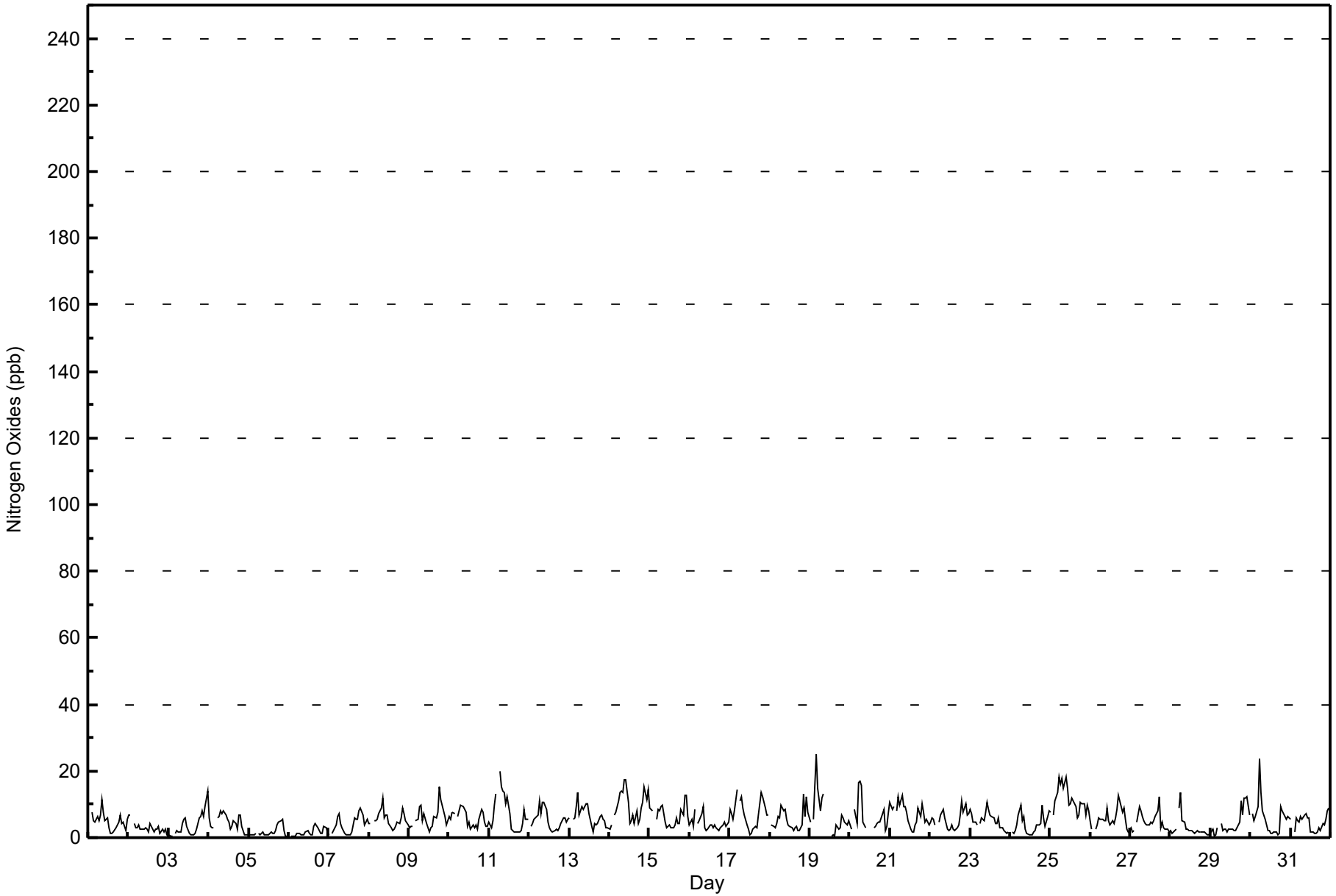
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Athabasca Valley - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Athabasca Valley - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 703 | 99.72 | 99.72 |
| 21 - 40 | 2 | 0.28 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Athabasca Valley - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 10 | 4 | 10 | 23 | 37 | 135 | 55 | 26 | 25 | 50 | 43 | 26 | 32 | 41 | 114 | 72 | 703 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 10 | 23 | 37 | 136 | 56 | 26 | 25 | 50 | 43 | 26 | 32 | 41 | 114 | 72 | 705 |

Total Number of Valid Hours: 705

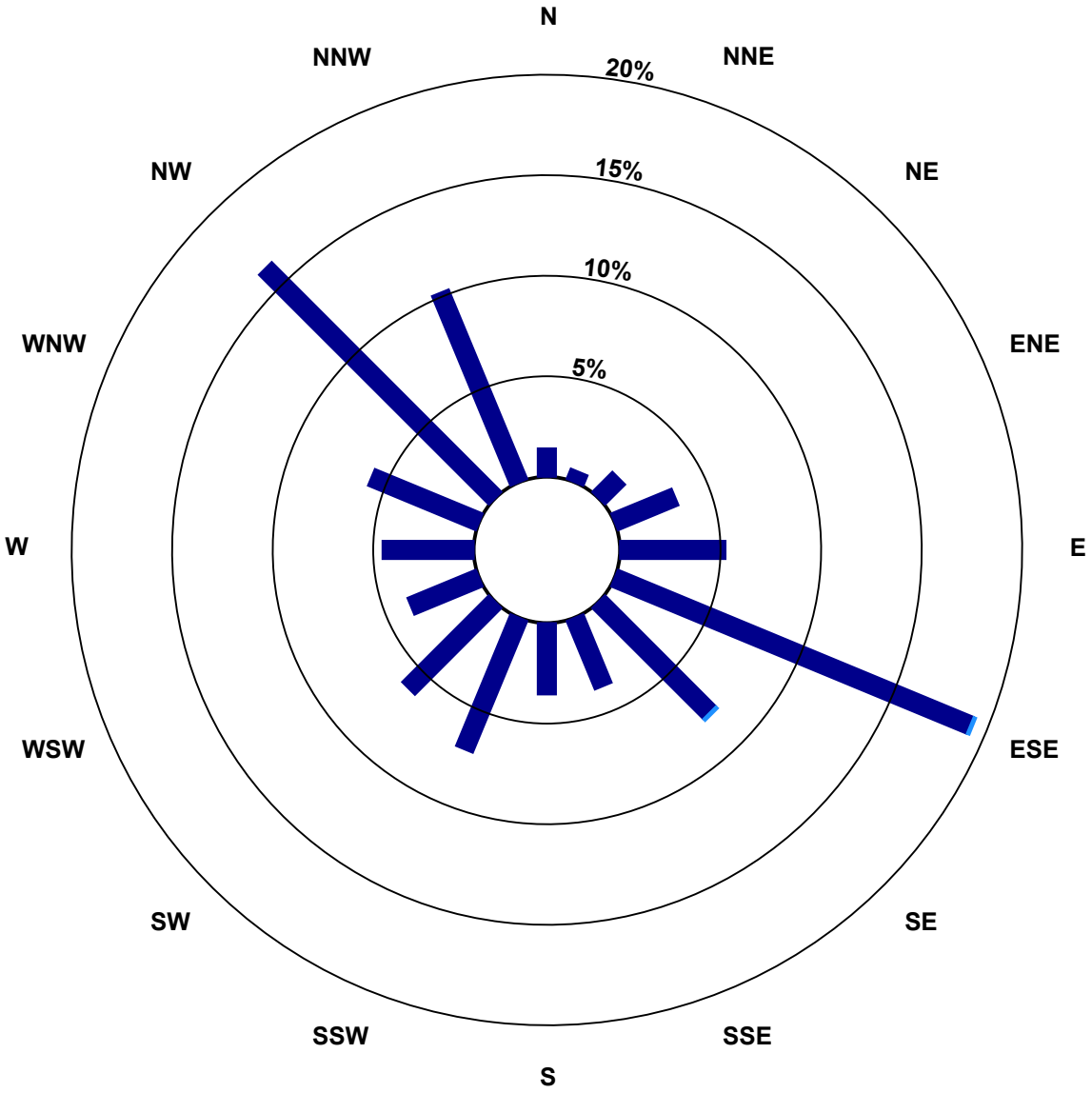
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Athabasca Valley




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

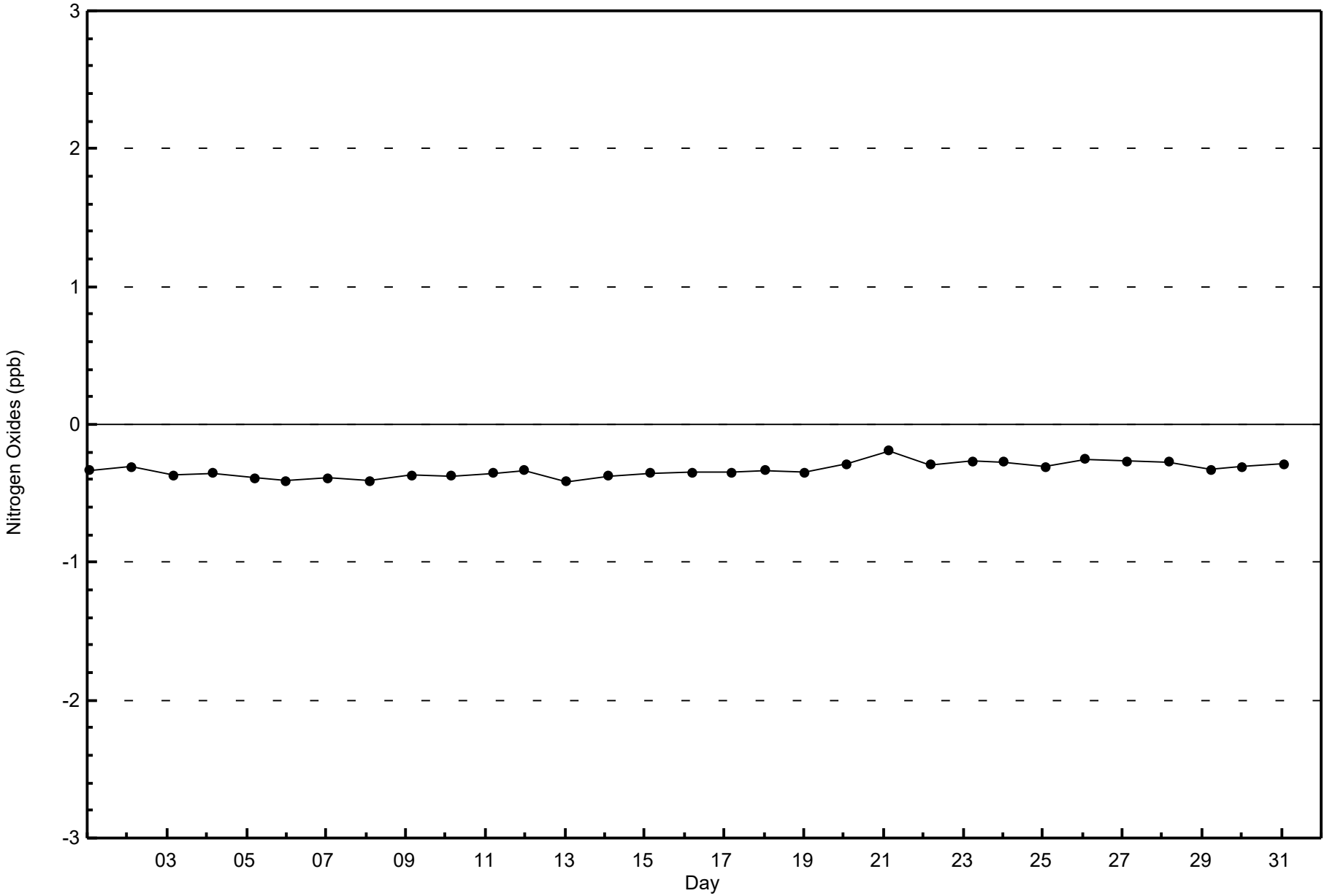
Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Athabasca Valley - August 2026**

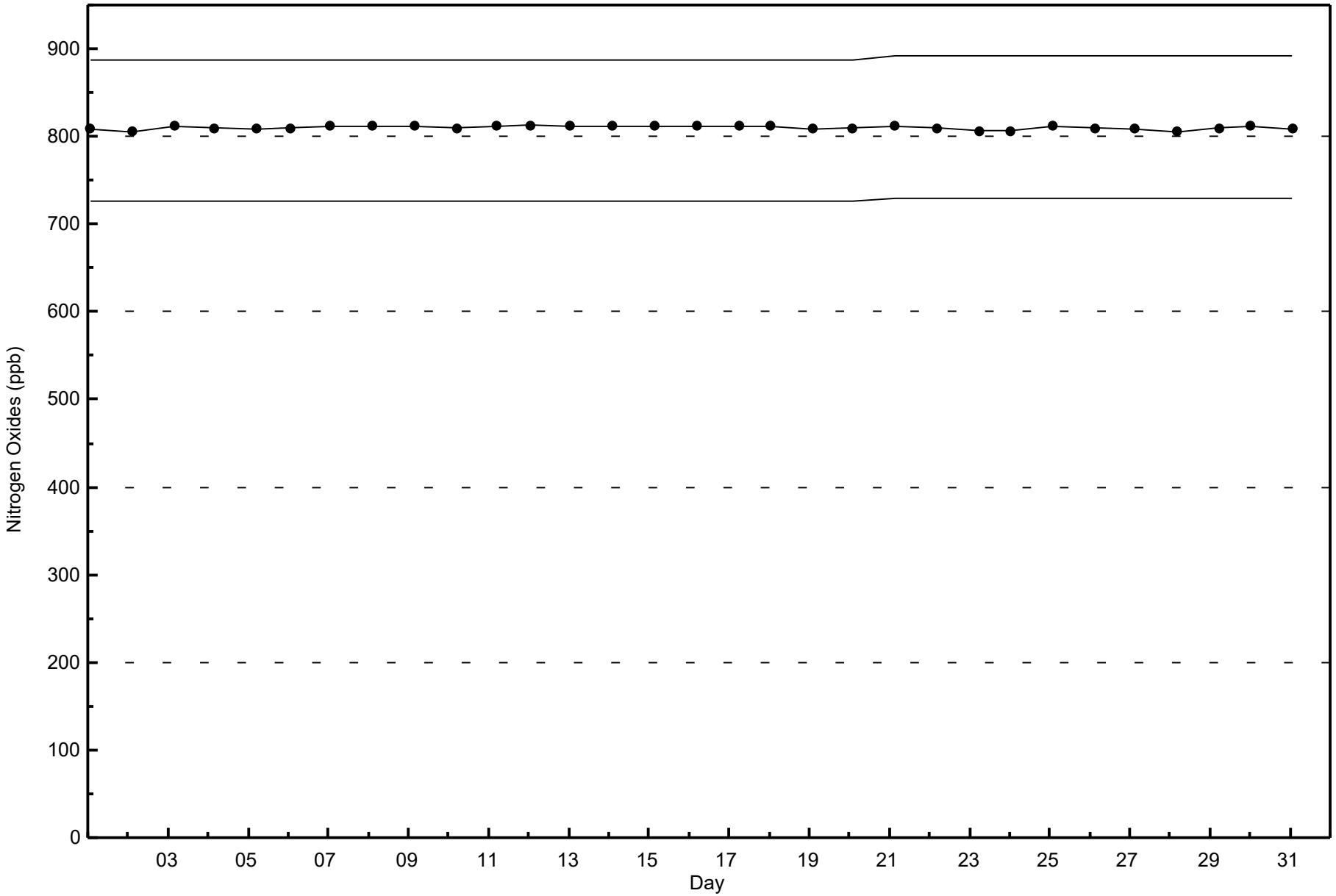


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Athabasca Valley - August 2026

Number of Exceedances (AAAQO): 1-hr: 2 24-hr: 0

Maximum Value: 96.5 $\mu g/m^3$ on Aug 28 19:00

Maximum Daily Average: 24.8 $\mu g/m^3$ on Aug 17

Minimum Value: 0.7 $\mu g/m^3$ on Aug 6 10:00

Minimum Daily Average: 1.7 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 13.5 $\mu g/m^3$ at hour 19

Minimum Diurnal Average: 8.8 $\mu g/m^3$ at hour 8

Monthly Average: 10.30 $\mu g/m^3$

Percentiles: $P_1$ = 1.0 $P_{10}$ = 3.2 $Q_1$ = 5.0 Median = 7.2 $Q_3$ = 12.8 $P_{90}$ = 21.0 $P_{99}$ = 40.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 726 |
| Hours of Missing Data: | 18 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 97.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 5.5 | 5.9 | 6.7 | 7.4 | 6.5 | 6.7 | 6.5 | 7.0 | 7.0 | 7.1 | 7.7 | 9.4 | 11.0 | 10.9 | 11.4 | 14.2 | 16.7 | 17.4 | 18.3 | 18.4 | 21.0 | 29.6 | 40.9 | 26.8 | 13.3 | 40.9 |
| 2-Aug | 24.7 | 21.9 | 16.6 | 15.1 | 13.7 | 12.4 | 13.7 | 12.6 | 8.7 | 7.3 | 5.7 | 5.7 | 4.3 | 3.8 | 4.0 | 4.0 | 4.3 | 4.5 | 4.9 | 3.5 | 4.6 | 3.4 | 2.9 | 1.9 | 8.5 | 24.7 |
| 3-Aug | 2.0 | 2.1 | 2.3 | 2.4 | 2.4 | 2.3 | 2.0 | 2.2 | 3.6 | 3.8 | 5.0 | 5.2 | 5.2 | 3.6 | 2.6 | 2.7 | 2.8 | 4.6 | 5.9 | 7.3 | 7.9 | 7.0 | 7.5 | 7.6 | 4.2 | 7.9 |
| 4-Aug | 6.5 | 5.8 | 5.7 | 5.1 | 4.7 | 4.6 | 4.9 | 5.3 | 7.0 | 12.0 | 13.6 | 9.0 | 6.2 | 4.8 | 5.1 | 5.4 | 5.4 | 8.8 | 10.0 | 10.3 | 8.1 | 6.6 | 7.9 | 8.8 | 7.2 | 13.6 |
| 5-Aug | 11.2 | 15.4 | 16.4 | 18.8 | 19.1 | 16.1 | 9.9 | 11.5 | 10.1 | 7.4 | 5.8 | 4.8 | 4.4 | 5.4 | 7.0 | 6.2 | 5.8 | 5.1 | 3.0 | 3.4 | 4.3 | 2.9 | 1.8 | 1.4 | 8.2 | 19.1 |
| 6-Aug | 1.1 | 1.2 | 1.0 | 0.8 | 0.8 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 1.3 | 2.2 | 1.6 | 1.3 | 1.2 | 2.7 | 4.3 | 3.5 | 2.3 | 1.7 | 1.9 | 2.5 | 2.6 | 2.5 | 1.7 | 4.3 |
| 7-Aug | 2.5 | 2.6 | 3.0 | 3.1 | 3.0 | 3.4 | 3.4 | 3.4 | 3.6 | 3.5 | 3.5 | 3.6 | 4.6 | 5.2 | 5.4 | 8.9 | 11.4 | 11.5 | 12.4 | 11.8 | 8.2 | 4.9 | 5.6 | 6.7 | 5.6 | 12.4 |
| 8-Aug | 6.7 | 7.5 | 7.6 | 7.9 | 8.3 | 8.2 | 6.0 | 5.3 | 5.4 | 4.2 | 3.6 | 3.3 | 3.3 | 3.5 | 4.0 | 3.5 | 4.0 | 3.5 | 4.1 | 5.1 | 6.4 | 7.1 | 7.0 | 7.2 | 5.5 | 8.3 |
| 9-Aug | 6.6 | 6.7 | 6.4 | 6.3 | 6.6 | 6.5 | 6.2 | 6.0 | 4.8 | 4.4 | 3.2 | 3.0 | 3.6 | 4.4 | 4.6 | 8.8 | 12.4 | 10.5 | 12.2 | 10.6 | 10.0 | 9.8 | 7.9 | 8.8 | 7.1 | 12.4 |
| 10-Aug | 7.4 | 6.3 | 6.5 | 5.4 | 5.3 | 5.3 | 5.0 | 5.7 | 6.1 | 6.7 | 11.0 | 10.6 | 6.9 | 5.6 | 7.9 | 8.4 | 7.2 | 5.9 | 6.0 | 7.0 | 6.5 | 5.9 | 6.1 | 6.8 | 6.7 | 11.0 |
| 11-Aug | 8.2 | 6.8 | 7.8 | 7.0 | 7.2 | 7.2 | 9.4 | 10.1 | 9.5 | 8.5 | 7.8 | 9.0 | 8.7 | 8.0 | 8.4 | 8.3 | 7.9 | 6.6 | 5.5 | 4.6 | 5.7 | 6.6 | 6.5 | 6.7 | 7.6 | 10.1 |
| 12-Aug | 6.3 | 5.9 | 5.8 | 5.8 | 6.3 | 5.1 | 6.1 | 3.9 | 4.3 | 4.3 | 3.8 | 2.4 | 2.5 | 1.9 | 2.0 | 2.3 | 1.9 | 1.6 | 1.9 | 2.2 | 2.6 | 3.1 | 3.2 | 3.6 | 3.7 | 6.3 |
| 13-Aug | 3.6 | 3.6 | 3.5 | 3.5 | 3.7 | 3.9 | 3.7 | 3.9 | 3.8 | 3.8 | 4.2 | 5.2 | 4.0 | 3.9 | 3.0 | 2.8 | 2.8 | 3.3 | 3.4 | 4.7 | 5.3 | 5.0 | 5.4 | 5.2 | 4.0 | 5.4 |
| 14-Aug | 5.6 | 6.1 | 5.8 | 6.2 | 5.8 | 5.9 | 5.7 | 5.8 | 6.4 | 7.3 | 7.9 | 5.9 | 4.6 | 6.7 | 8.4 | 6.4 | 7.1 | 7.9 | 7.8 | 8.9 | 10.3 | 11.7 | 13.3 | 12.3 | 7.5 | 13.3 |
| 15-Aug | 10.3 | 9.7 | 9.9 | 8.8 | 7.8 | 7.1 | 6.4 | 6.0 | 6.1 | 5.3 | 4.9 | 5.9 | 6.0 | 5.7 | 6.1 | 5.5 | 5.1 | 5.6 | 5.3 | 6.5 | 6.7 | 9.2 | 7.2 | 5.5 | 6.8 | 10.3 |
| 16-Aug | 4.6 | 4.7 | 4.6 | 4.7 | 4.7 | 4.7 | 4.5 | 4.7 | 7.4 | 18.3 | 21.6 | 20.8 | 24.0 | 18.7 | 13.8 | 21.3 | 27.6 | 39.2 | 50.2 | 40.8 | 35.8 | 40.3 | 37.1 | 38.8 | 20.5 | 50.2 |
| 17-Aug | 41.4 | 39.4 | 43.8 | 40.3 | 35.6 | 29.2 | 24.8 | 23.2 | 22.7 | 21.8 | 22.1 | 23.2 | 22.8 | 21.3 | 21.4 | 19.6 | 18.7 | 17.2 | 18.5 | 20.5 | 17.4 | 16.6 | 16.7 | 16.7 | 24.8 | 43.8 |
| 18-Aug | 16.5 | 17.1 | 16.7 | 16.9 | 16.9 | 16.5 | 16.1 | 15.0 | 14.5 | 13.8 | 10.3 | 7.8 | 7.1 | 6.4 | 6.0 | 6.7 | 5.6 | 4.5 | 4.1 | 4.6 | 5.7 | 6.5 | 7.8 | 6.9 | 10.4 | 17.1 |
| 19-Aug | 6.7 | 6.3 | 6.2 | 6.6 | 7.0 | 7.2 | 7.1 | 7.2 | 7.4 | 6.8 | 6.6 | 4.2 | 2.8 | 2.8 | 2.8 | 3.3 | 7.5 | DF | DF | DF | DF | DF | DF | DF | -- | 7.5 |
| 20-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 27.6 | 28.3 | 28.5 | 24.5 | 17.5 | 21.5 | 24.0 | 23.7 | 16.1 | 10.2 | 10.7 | 9.7 | 10.5 | 14.0 | -- | 28.5 |
| 21-Aug | 12.8 | 13.5 | 13.8 | 13.3 | 12.4 | 13.9 | 11.5 | 11.7 | 11.0 | 11.5 | 14.8 | 16.8 | M | 9.9 | 10.0 | 10.4 | 11.2 | 11.6 | 12.0 | 14.5 | 15.3 | 14.7 | 13.2 | 13.2 | 12.8 | 16.8 |
| 22-Aug | 13.3 | 13.8 | 12.8 | 12.1 | 10.5 | 9.3 | 8.6 | 8.5 | 7.9 | 8.1 | 7.6 | 8.0 | 8.7 | 10.0 | 9.8 | 10.4 | 11.7 | 15.2 | 15.5 | 20.4 | 18.8 | 15.1 | 13.8 | 14.4 | 11.9 | 20.4 |
| 23-Aug | 15.0 | 14.3 | 14.1 | 14.1 | 14.3 | 14.4 | 14.4 | 14.1 | 14.3 | 14.6 | 15.8 | 16.3 | 16.5 | 19.7 | 21.4 | 20.6 | 20.9 | 22.1 | 15.5 | 13.2 | 9.1 | 9.1 | 9.3 | 8.9 | 15.1 | 22.1 |
| 24-Aug | 7.7 | 5.1 | 3.9 | 3.4 | 3.7 | 4.0 | 4.4 | 4.2 | 4.7 | 3.6 | 2.7 | 2.5 | 2.7 | 2.8 | 6.2 | 5.0 | 6.6 | 7.1 | 6.6 | 7.5 | 7.2 | 6.4 | 8.6 | 9.8 | 5.3 | 9.8 |
| 25-Aug | 8.1 | 7.3 | 7.2 | 7.0 | 6.6 | 6.7 | 7.4 | 9.2 | 11.1 | 31.4 | 33.7 | 37.6 | 38.7 | 40.2 | 39.6 | 40.9 | 31.8 | 28.5 | 26.0 | 26.9 | 27.9 | 24.7 | 27.0 | 24.2 | 22.9 | 40.9 |
| 26-Aug | 26.2 | 26.2 | 26.0 | 27.3 | 25.8 | 25.3 | 26.0 | 24.1 | 21.5 | 18.9 | 17.2 | 12.6 | 6.9 | 5.3 | 5.8 | 5.4 | 5.3 | 5.1 | 6.6 | 7.2 | 7.2 | 7.7 | 6.5 | 6.5 | 14.7 | 27.3 |
| 27-Aug | 6.5 | 6.9 | 8.0 | 8.4 | 9.6 | 11.3 | 12.9 | 12.9 | 14.7 | 16.4 | 18.6 | 20.8 | 21.9 | 19.7 | 19.1 | 16.8 | 15.0 | 14.7 | 16.1 | 16.9 | 17.1 | 17.4 | 18.3 | 19.7 | 15.0 | 21.9 |
| 28-Aug | 19.9 | 20.3 | 21.1 | 16.3 | 14.6 | 15.3 | 16.5 | 16.0 | 17.1 | 14.6 | 9.4 | 5.8 | 5.0 | 3.9 | 4.1 | 4.2 | 4.5 | 38.3 | 96.5 | 88.9 | 55.7 | 46.9 | 31.3 | 9.8 | 24.0 | 96.5 |
| 29-Aug | 9.5 | 6.8 | 4.4 | 5.3 | 7.3 | 9.4 | 8.4 | 7.4 | 7.5 | 7.4 | 7.6 | 8.4 | 6.5 | 6.8 | 7.8 | 6.4 | 6.1 | 6.4 | 8.1 | 8.9 | 11.4 | 12.6 | 11.9 | 11.9 | 8.1 | 12.6 |
| 30-Aug | 12.4 | 11.6 | 10.0 | 10.2 | 10.4 | 11.1 | 10.6 | 10.4 | 11.5 | 11.5 | 9.5 | 8.0 | 7.1 | 7.2 | 7.5 | 7.8 | 7.7 | 7.5 | 8.4 | 9.6 | 8.7 | 9.1 | 8.8 | 9.3 | 9.4 | 12.4 |
| 31-Aug | 8.3 | 4.7 | 4.1 | 4.7 | 5.2 | 4.4 | 4.3 | 4.5 | 4.8 | 5.6 | 7.0 | 9.1 | 5.4 | 3.6 | 2.9 | 1.7 | 1.9 | 2.5 | 2.6 | 3.2 | 3.4 | 5.6 | 5.5 | 5.7 | 4.6 | 9.1 |
| | 10.6 | 10.2 | 10.1 | 9.8 | 9.5 | 9.3 | 8.9 | 8.8 | 8.8 | 9.7 | 10.4 | 10.2 | 9.4 | 8.9 | 8.9 | 9.4 | 9.8 | 11.5 | 13.5 | 13.3 | 12.0 | 11.9 | 11.7 | 10.7 | Diurnal Average | |
| | 41.4 | 39.4 | 43.8 | 40.3 | 35.6 | 29.2 | 26.0 | 24.1 | 22.7 | 31.4 | 33.7 | 37.6 | 38.7 | 40.2 | 39.6 | 40.9 | 31.8 | 39.2 | 96.5 | 88.9 | 55.7 | 46.9 | 40.9 | 38.8 | Diurnal Maximum | |

M - Maintenance DF - DAS Failure

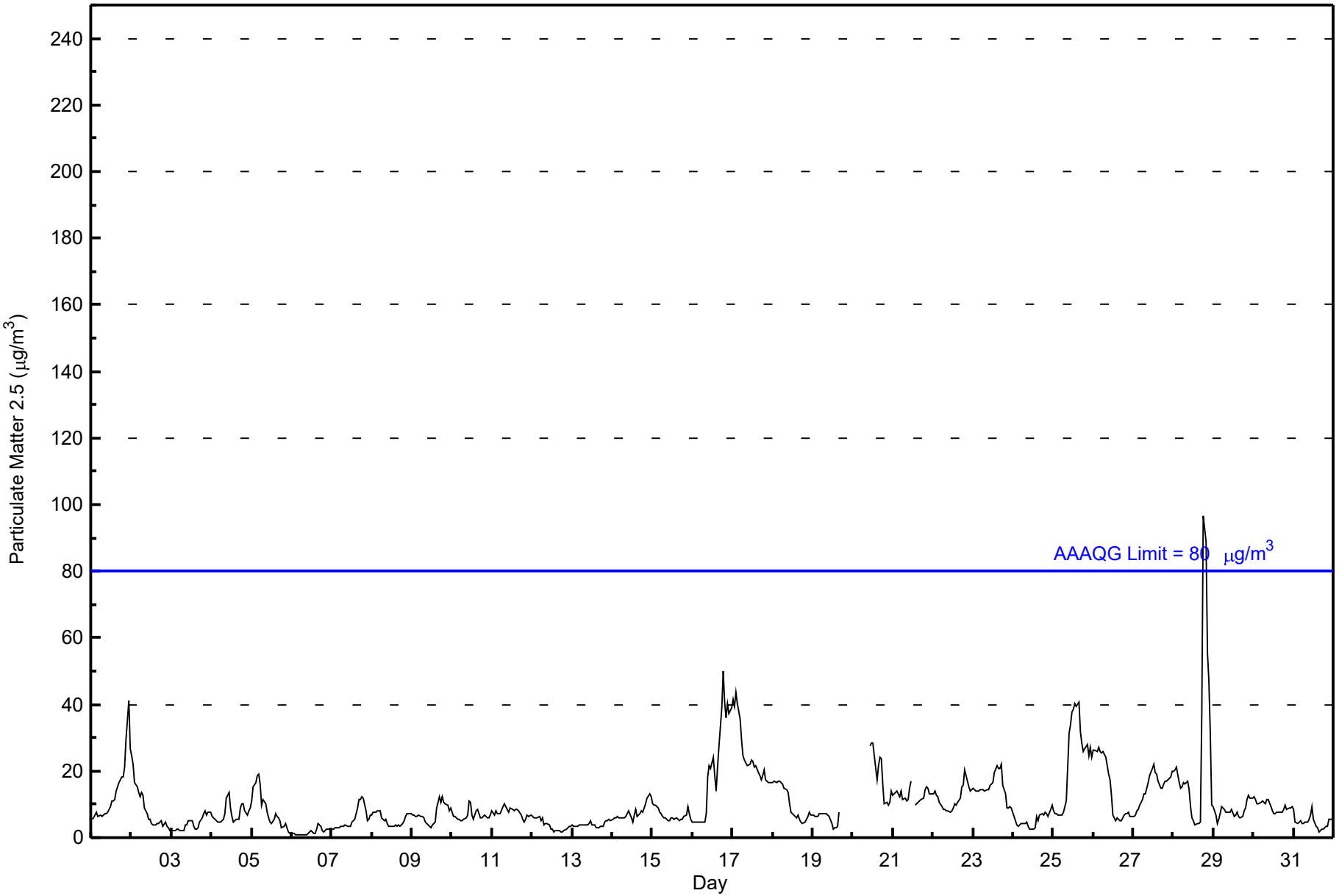
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Athabasca Valley - August 2026**



| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 221 | 30.44 | 30.44 |
| 6 - 15 | 372 | 51.24 | 81.68 |
| 16 - 25 | 88 | 12.12 | 93.80 |
| 26 - 80 | 43 | 5.92 | 99.72 |
| > 81.0 | 2 | 0.28 | 100.00 |

Total Number of Valid Hours: 726

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Athabasca Valley - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 3 | 0 | 2 | 2 | 2 | 12 | 4 | 4 | 6 | 18 | 14 | 9 | 16 | 29 | 73 | 27 | 221 |
| 6 - 15 | 4 | 3 | 4 | 16 | 26 | 89 | 43 | 14 | 16 | 35 | 23 | 10 | 14 | 10 | 32 | 33 | 372 |
| 16 - 25 | 3 | 0 | 2 | 3 | 8 | 33 | 7 | 7 | 3 | 0 | 3 | 1 | 3 | 0 | 2 | 13 | 88 |
| 26 - 80 | 0 | 1 | 2 | 2 | 2 | 10 | 4 | 0 | 0 | 1 | 3 | 3 | 1 | 2 | 8 | 4 | 43 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| **Totals** | 10 | 4 | 10 | 23 | 38 | 144 | 58 | 25 | 25 | 54 | 43 | 25 | 34 | 41 | 115 | 77 | 726 |

Total Number of Valid Hours: 726

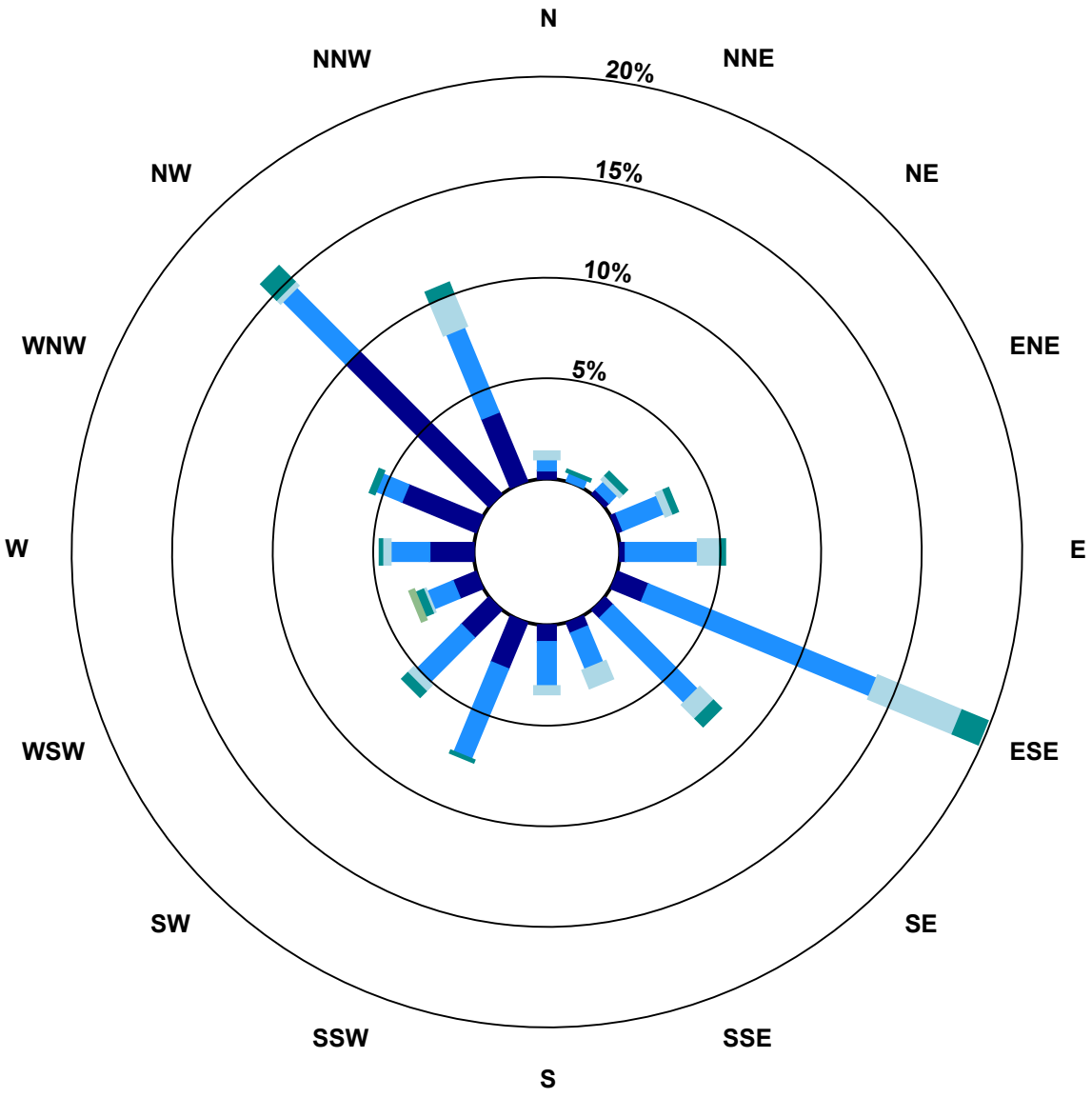
Total Number of Hours: 744

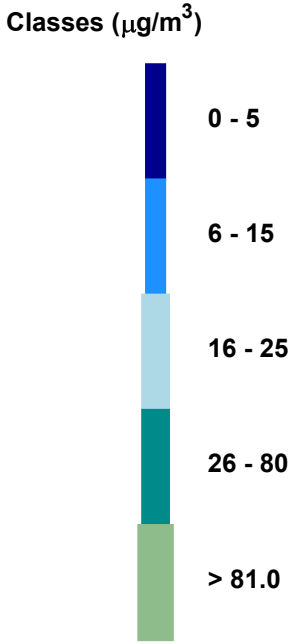
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Athabasca Valley




Total Number of Valid Hours: 726

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Carbon Monoxide (CO) - ppm

## Athabasca Valley - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 1.0 ppm on Aug 28 20:00

Maximum Daily Average: 0.3 ppm on Aug 28

Minimum Value: 0.0 ppm on Aug 14 05:00

Minimum Daily Average: 0.0 ppm on Aug 24

Maximum Diurnal Average: 0.2 ppm at hour 21

Minimum Diurnal Average: 0.1 ppm at hour 14

Monthly Average: 0.14 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.2 $P_{99}$ = 0.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 703 |
| Hours of Missing Data: | 41 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.3 |
| 2-Aug | 0.2 | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 3-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 4-Aug | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 5-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | C | C | C | C | C | RE | RE | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | -- | 0.2 |
| 7-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 8-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.3 |
| 9-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 10-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.5 |
| 11-Aug | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 12-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 13-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 14-Aug | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 |
| 15-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 |
| 16-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 |
| 17-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 18-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 19-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.1 | 0.3 |
| 20-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 21-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | M | M | M | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 |
| 22-Aug | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 23-Aug | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 24-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| 25-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 26-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 28-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 0.9 | 1.0 | 1.0 | 0.9 | 0.7 | 0.5 | 0.3 | 1.0 |
| 29-Aug | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 30-Aug | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 31-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.9 | 1.0 | 1.0 | 0.9 | 0.7 | 0.5 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance RE - Recovery

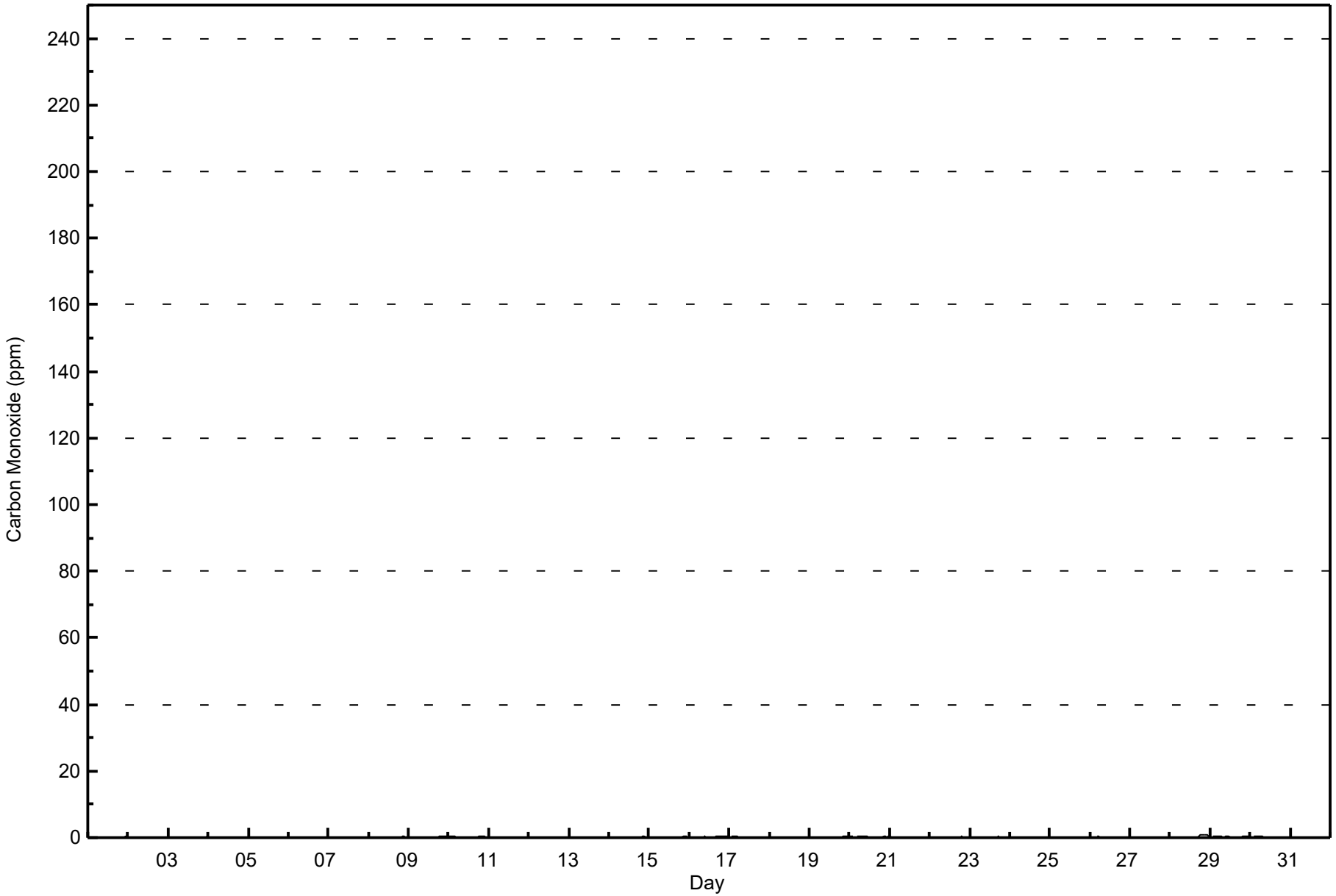
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Carbon Monoxide (CO) - ppm**

**Athabasca Valley - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 692 | 98.44 | 98.44 |
| 0.4 - 0.5 | 6 | 0.85 | 99.29 |
| 0.6 - 0.7 | 1 | 0.14 | 99.43 |
| 0.8 - 1.4 | 4 | 0.57 | 100.00 |
| 1.5 - 10 | 0 | 0.00 | 100.00 |
| > 10 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 703

Total Number of Hours: 744

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.3 | 10 | 4 | 10 | 20 | 38 | 133 | 56 | 26 | 24 | 53 | 40 | 22 | 34 | 36 | 109 | 77 | 692 |
| 0.4 - 0.5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 6 |
| 0.6 - 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 0.8 - 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| 1.5 - 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 10 | 20 | 39 | 133 | 56 | 26 | 25 | 53 | 42 | 26 | 35 | 36 | 111 | 77 | 703 |

Total Number of Valid Hours: 703

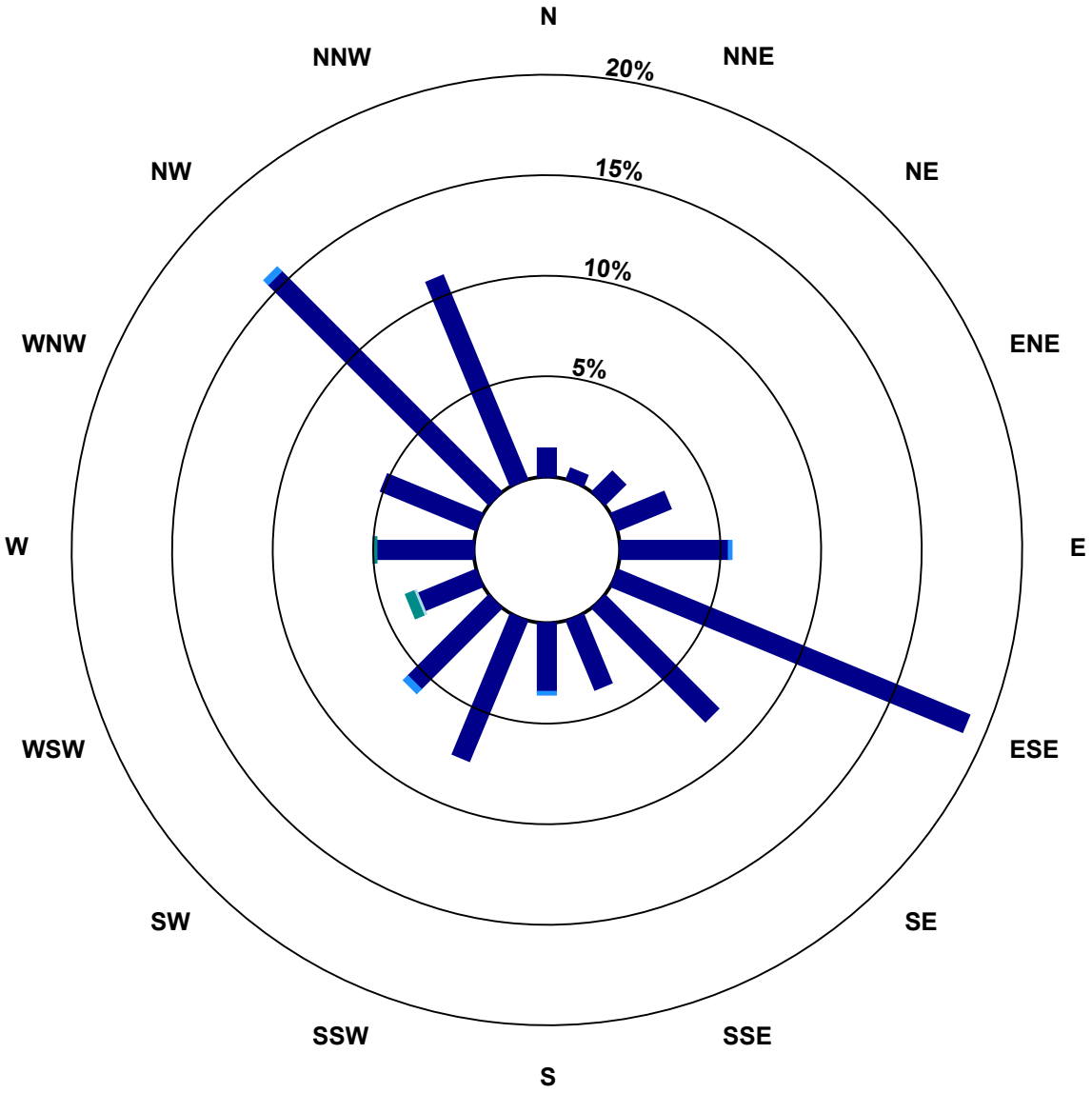
Total Number of Hours: 744

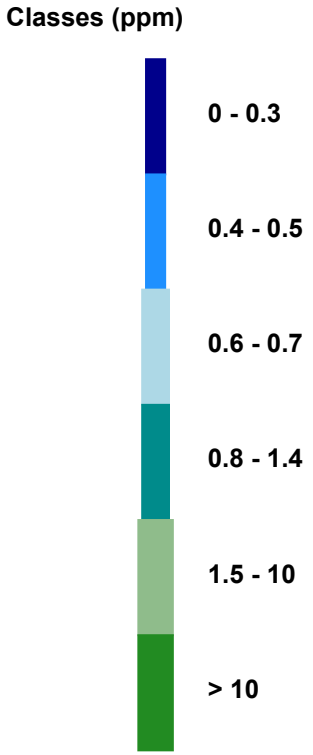
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Carbon Monoxide (CO) - ppm

Athabasca Valley



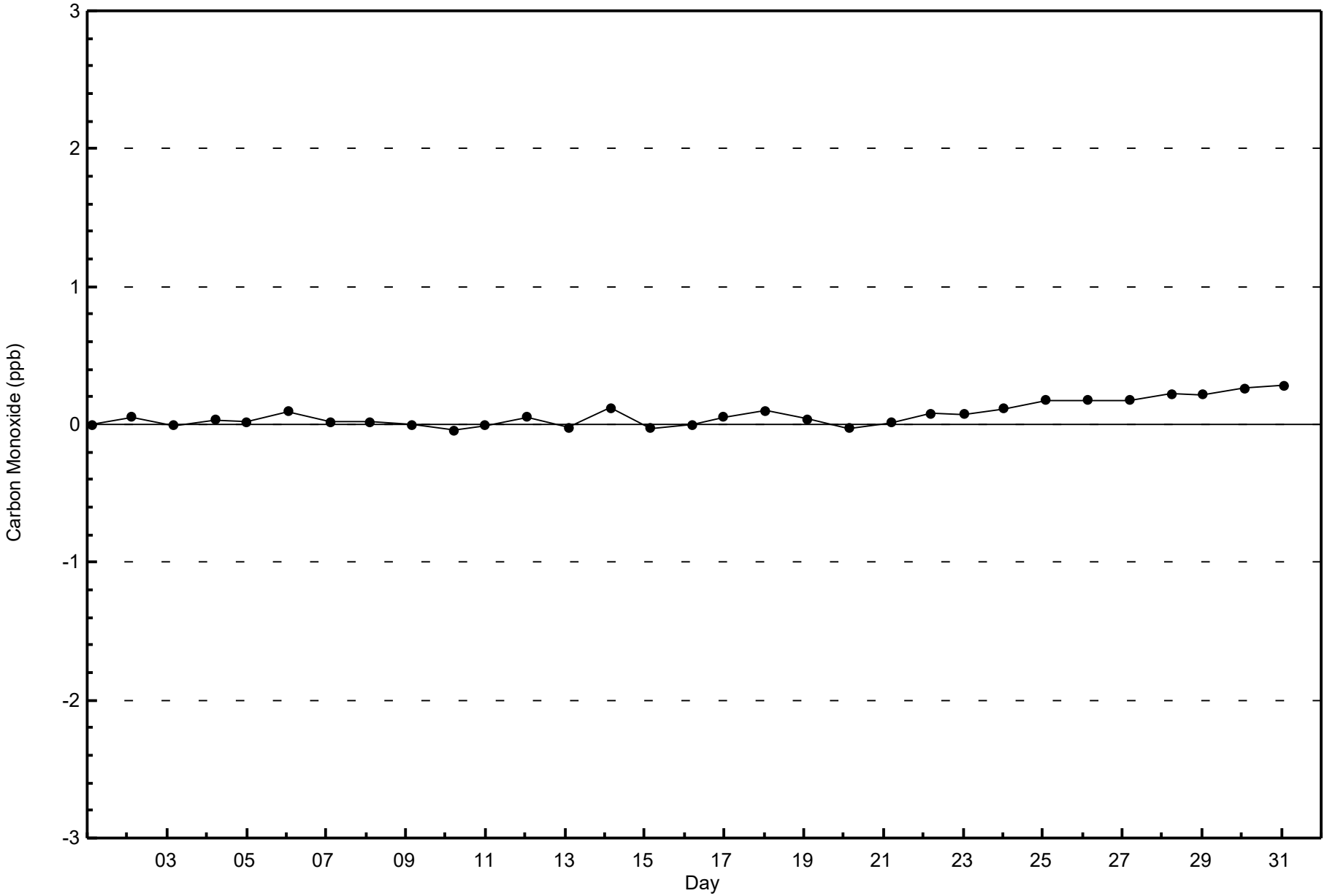

Total Number of Valid Hours: 703

**Wood Buffalo Environmental Association**

**Zero Responses**

**Carbon Monoxide (CO) - ppb**

**Athabasca Valley - August 2026**

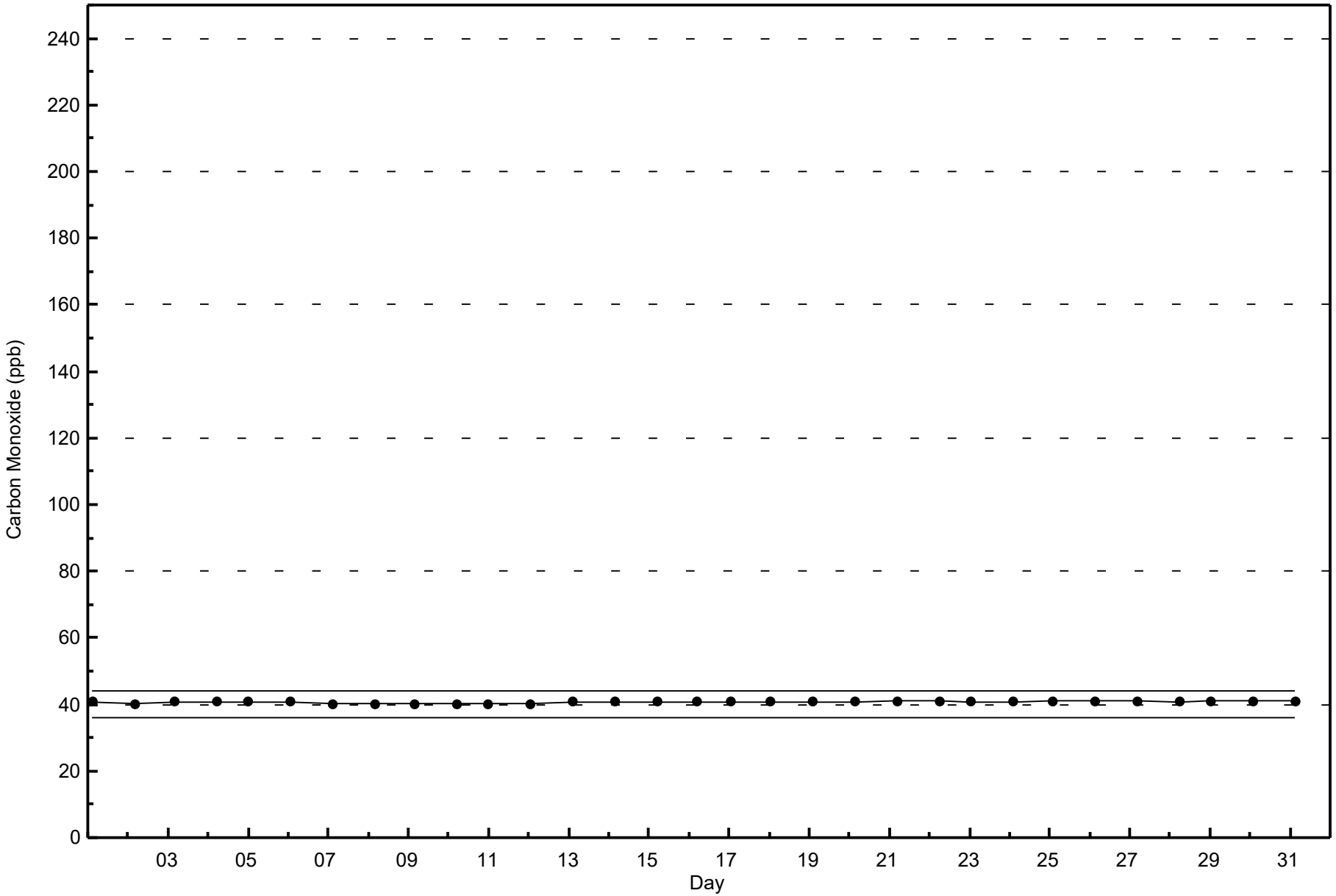


**Wood Buffalo Environmental Association**

**Span Responses**

**Carbon Monoxide (CO) - ppb**

**Athabasca Valley - August 2026**



Maximum Value: 30.7 C on Aug 26 17:00

Maximum Daily Average: 21.8 C on Aug 27

Minimum Value: 7.2 C on Aug 4 05:00

Minimum Daily Average: 13.9 C on Aug 12

Maximum Diurnal Average: 22.9 C at hour 16

Minimum Diurnal Average: 12.5 C at hour 6

Monthly Average: 17.60 C

Percentiles: $P_1$ = 8.3 $P_{10}$ = 11.8 $Q_1$ = 14.1 Median = 17.0 $Q_3$ = 20.9 $P_{90}$ = 24.0 $P_{99}$ = 29.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

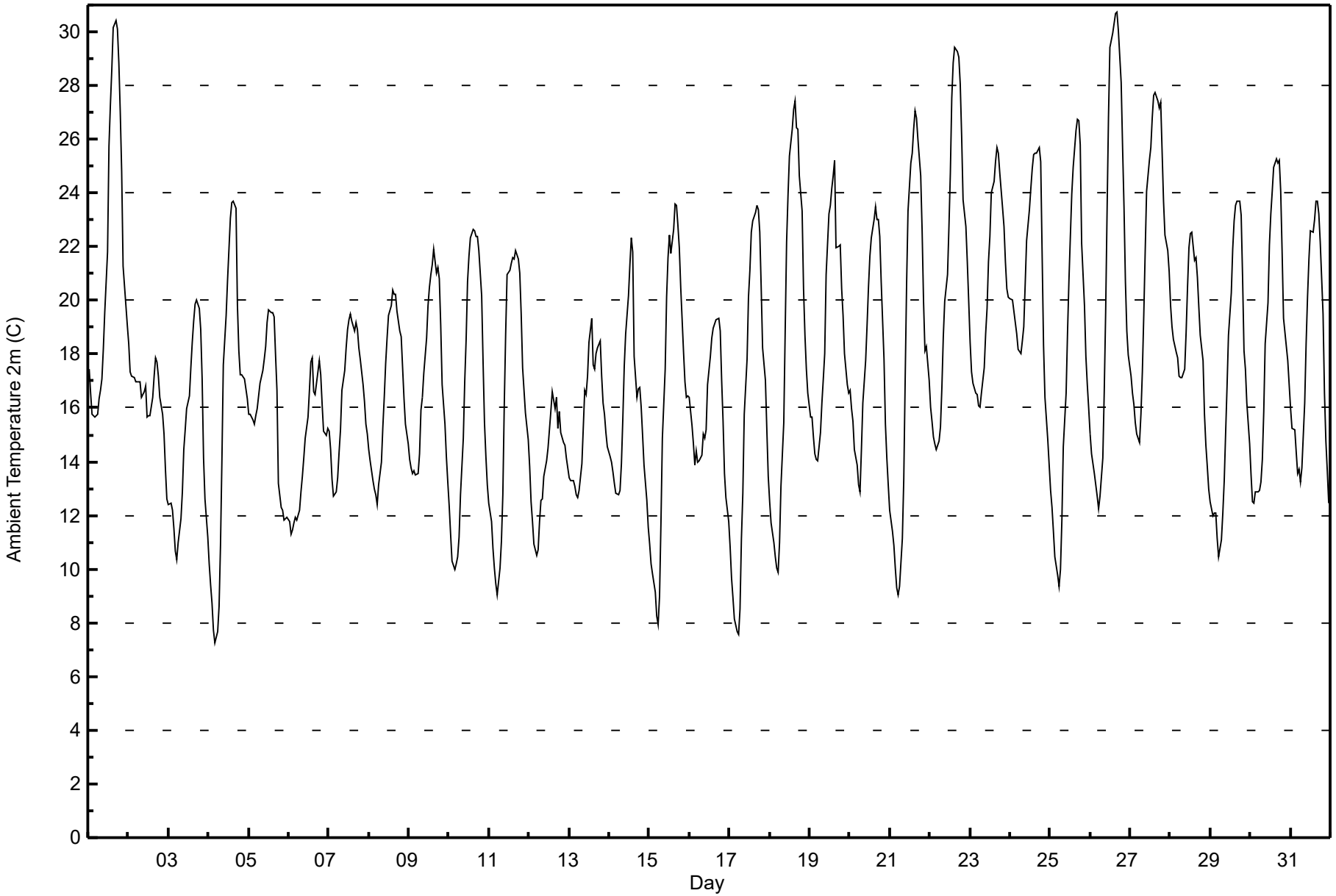
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.4 | 16.6 | 15.7 | 15.7 | 15.6 | 15.8 | 16.4 | 16.7 | 17.1 | 18.2 | 19.6 | 21.8 | 25.8 | 27.3 | 28.6 | 30.1 | 30.4 | 30.1 | 28.9 | 27.0 | 24.8 | 21.3 | 19.8 | 19.1 | 21.7 | 30.4 |
| 2-Aug | 18.4 | 17.3 | 17.2 | 17.1 | 17.0 | 17.0 | 17.0 | 16.9 | 16.4 | 16.6 | 16.8 | 15.7 | 15.7 | 15.7 | 16.4 | 17.2 | 17.8 | 17.7 | 17.2 | 16.4 | 15.8 | 15.0 | 13.7 | 12.6 | 16.4 | 18.4 |
| 3-Aug | 12.4 | 12.5 | 12.2 | 11.5 | 10.7 | 10.3 | 11.0 | 11.9 | 12.9 | 14.4 | 15.2 | 16.0 | 16.5 | 17.5 | 18.5 | 19.3 | 19.9 | 20.0 | 19.7 | 18.9 | 17.1 | 14.1 | 12.6 | 11.2 | 14.8 | 20.0 |
| 4-Aug | 10.2 | 9.4 | 8.7 | 7.7 | 7.2 | 7.7 | 8.6 | 10.9 | 14.1 | 17.6 | 19.4 | 20.8 | 21.9 | 23.1 | 23.6 | 23.7 | 23.4 | 19.8 | 18.1 | 17.2 | 17.2 | 17.1 | 16.7 | 16.4 | 15.9 | 23.7 |
| 5-Aug | 15.8 | 15.7 | 15.5 | 15.4 | 15.7 | 16.0 | 16.5 | 16.9 | 17.4 | 17.8 | 18.3 | 19.2 | 19.7 | 19.6 | 19.5 | 19.4 | 18.0 | 16.7 | 13.2 | 12.3 | 12.2 | 11.8 | 11.9 | 11.9 | 16.1 | 19.7 |
| 6-Aug | 11.8 | 11.3 | 11.5 | 11.7 | 11.9 | 11.8 | 12.2 | 12.9 | 13.5 | 14.1 | 14.9 | 15.7 | 16.7 | 17.7 | 17.9 | 16.6 | 16.5 | 17.4 | 17.8 | 17.3 | 16.2 | 15.1 | 15.0 | 15.2 | 14.7 | 17.9 |
| 7-Aug | 15.1 | 14.5 | 13.4 | 12.7 | 12.9 | 13.4 | 14.3 | 15.2 | 16.6 | 17.4 | 18.3 | 18.9 | 19.3 | 19.5 | 19.2 | 18.9 | 19.2 | 18.9 | 18.2 | 17.8 | 16.8 | 16.3 | 15.4 | 15.0 | 16.5 | 19.5 |
| 8-Aug | 14.4 | 14.0 | 13.3 | 13.0 | 12.8 | 12.4 | 13.1 | 14.0 | 15.3 | 16.4 | 17.6 | 18.6 | 19.4 | 19.8 | 20.4 | 20.2 | 20.2 | 19.6 | 18.9 | 18.6 | 17.5 | 16.3 | 15.4 | 14.7 | 16.5 | 20.4 |
| 9-Aug | 14.1 | 13.8 | 13.6 | 13.7 | 13.5 | 13.6 | 14.3 | 15.9 | 16.4 | 17.3 | 18.6 | 19.8 | 20.5 | 21.0 | 21.3 | 21.9 | 21.0 | 21.2 | 20.8 | 19.1 | 16.9 | 15.4 | 14.2 | 13.2 | 17.1 | 21.9 |
| 10-Aug | 12.3 | 11.3 | 10.3 | 10.0 | 10.2 | 10.5 | 11.2 | 12.8 | 14.9 | 17.0 | 18.6 | 20.7 | 21.7 | 22.3 | 22.7 | 22.6 | 22.4 | 22.4 | 21.8 | 20.2 | 17.7 | 15.4 | 14.2 | 13.2 | 16.5 | 22.7 |
| 11-Aug | 12.4 | 11.8 | 10.7 | 10.0 | 9.4 | 9.0 | 10.0 | 11.0 | 12.8 | 16.1 | 18.8 | 21.0 | 21.1 | 21.4 | 21.6 | 21.5 | 21.9 | 21.6 | 21.0 | 19.5 | 17.5 | 16.7 | 15.8 | 14.8 | 16.1 | 21.9 |
| 12-Aug | 13.8 | 12.5 | 11.8 | 11.0 | 10.5 | 10.7 | 11.8 | 12.6 | 12.6 | 13.4 | 14.0 | 14.5 | 15.2 | 15.9 | 16.6 | 16.0 | 16.4 | 15.2 | 15.8 | 15.1 | 14.7 | 14.6 | 14.1 | 13.8 | 13.9 | 16.6 |
| 13-Aug | 13.4 | 13.3 | 13.3 | 13.1 | 12.8 | 12.7 | 12.9 | 13.9 | 15.3 | 16.7 | 16.5 | 17.2 | 18.4 | 19.3 | 17.6 | 17.5 | 18.0 | 18.3 | 18.5 | 17.2 | 16.2 | 15.8 | 15.1 | 14.6 | 15.7 | 19.3 |
| 14-Aug | 14.2 | 14.0 | 13.6 | 13.2 | 12.8 | 12.8 | 12.9 | 13.9 | 15.6 | 17.5 | 18.8 | 20.2 | 21.3 | 22.3 | 21.8 | 17.9 | 16.4 | 16.7 | 16.8 | 16.0 | 15.0 | 13.9 | 12.6 | 11.6 | 15.9 | 22.3 |
| 15-Aug | 10.9 | 10.2 | 9.8 | 9.1 | 8.2 | 7.9 | 9.0 | 11.7 | 14.9 | 17.4 | 20.1 | 21.6 | 22.4 | 21.8 | 22.7 | 23.6 | 23.6 | 22.8 | 22.0 | 20.5 | 18.1 | 17.0 | 16.4 | 16.4 | 16.6 | 23.6 |
| 16-Aug | 16.4 | 15.4 | 14.7 | 13.9 | 14.4 | 14.0 | 14.0 | 14.2 | 15.0 | 14.9 | 15.2 | 16.9 | 17.9 | 18.6 | 19.0 | 19.1 | 19.3 | 19.3 | 18.8 | 17.0 | 15.5 | 13.6 | 12.7 | 11.8 | 15.9 | 19.3 |
| 17-Aug | 10.8 | 9.7 | 8.9 | 8.2 | 7.7 | 7.6 | 8.5 | 11.1 | 12.8 | 15.8 | 17.8 | 20.1 | 21.1 | 22.5 | 23.0 | 23.3 | 23.5 | 23.4 | 22.5 | 20.5 | 18.2 | 17.0 | 15.2 | 13.4 | 15.9 | 23.5 |
| 18-Aug | 12.5 | 11.7 | 11.0 | 10.5 | 10.0 | 9.9 | 11.0 | 13.1 | 15.5 | 18.9 | 22.2 | 23.9 | 25.4 | 26.4 | 27.1 | 27.4 | 26.5 | 26.4 | 24.6 | 23.3 | 20.4 | 18.7 | 17.5 | 16.5 | 18.8 | 27.4 |
| 19-Aug | 15.6 | 15.6 | 14.9 | 14.3 | 14.1 | 14.1 | 15.1 | 16.2 | 17.1 | 18.0 | 21.0 | 23.2 | 23.5 | 24.2 | 24.6 | 25.2 | 22.0 | 22.0 | 22.1 | 20.5 | 19.4 | 18.0 | 16.9 | 16.5 | 18.9 | 25.2 |
| 20-Aug | 16.6 | 16.0 | 15.5 | 14.4 | 13.9 | 13.1 | 12.9 | 14.4 | 16.2 | 17.8 | 19.1 | 20.5 | 21.7 | 22.3 | 23.0 | 23.5 | 23.0 | 23.0 | 22.4 | 20.7 | 17.8 | 15.4 | 14.1 | 13.1 | 17.9 | 23.5 |
| 21-Aug | 12.2 | 11.4 | 10.9 | 10.0 | 9.3 | 9.0 | 9.3 | 11.2 | 13.4 | 17.1 | 20.6 | 23.3 | 25.1 | 25.5 | 26.4 | 27.1 | 26.8 | 26.0 | 24.6 | 22.6 | 20.0 | 18.1 | 18.3 | 17.0 | 18.1 | 27.1 |
| 22-Aug | 16.1 | 15.5 | 14.9 | 14.7 | 14.5 | 14.8 | 15.3 | 16.8 | 18.6 | 19.9 | 21.0 | 22.7 | 24.7 | 27.6 | 28.9 | 29.4 | 29.3 | 29.1 | 28.0 | 26.1 | 23.8 | 22.8 | 21.4 | 20.0 | 21.5 | 29.4 |
| 23-Aug | 18.4 | 17.3 | 16.9 | 16.6 | 16.5 | 16.1 | 16.0 | 16.5 | 17.5 | 18.8 | 19.7 | 21.5 | 22.4 | 24.0 | 24.4 | 25.2 | 25.7 | 25.5 | 24.7 | 23.4 | 22.8 | 21.4 | 20.5 | 20.1 | 20.5 | 25.7 |
| 24-Aug | 20.1 | 20.0 | 19.6 | 19.2 | 18.8 | 18.2 | 18.0 | 18.5 | 19.0 | 20.6 | 22.2 | 23.4 | 24.2 | 24.9 | 25.4 | 25.5 | 25.5 | 25.7 | 25.2 | 21.7 | 18.3 | 16.4 | 14.8 | 13.9 | 20.8 | 25.7 |
| 25-Aug | 12.9 | 12.3 | 11.4 | 10.5 | 9.8 | 9.3 | 10.0 | 11.8 | 14.6 | 16.5 | 18.8 | 20.8 | 22.4 | 23.9 | 24.9 | 26.3 | 26.7 | 26.7 | 25.8 | 22.1 | 19.8 | 17.9 | 16.9 | 16.0 | 17.8 | 26.7 |
| 26-Aug | 15.1 | 14.3 | 13.6 | 13.1 | 12.7 | 12.2 | 12.7 | 14.2 | 16.6 | 19.6 | 23.3 | 26.8 | 29.4 | 29.9 | 30.3 | 30.7 | 30.7 | 30.0 | 28.1 | 25.7 | 23.5 | 20.7 | 18.9 | 18.0 | 21.3 | 30.7 |
| 27-Aug | 17.2 | 16.6 | 16.1 | 15.4 | 15.0 | 14.7 | 15.8 | 17.3 | 19.4 | 21.8 | 24.0 | 25.2 | 25.7 | 26.8 | 27.6 | 27.7 | 27.4 | 27.2 | 27.4 | 25.5 | 23.7 | 22.5 | 21.8 | 21.1 | 21.8 | 27.7 |
| 28-Aug | 19.8 | 19.0 | 18.6 | 18.1 | 17.9 | 17.2 | 17.1 | 17.2 | 17.5 | 18.8 | 20.5 | 22.0 | 22.5 | 22.5 | 21.5 | 21.6 | 20.9 | 19.8 | 18.7 | 17.8 | 15.8 | 14.6 | 13.8 | 13.0 | 18.6 | 22.5 |
| 29-Aug | 12.5 | 12.0 | 12.1 | 12.1 | 11.1 | 10.5 | 11.1 | 12.1 | 13.3 | 15.1 | 16.8 | 18.7 | 20.3 | 21.9 | 23.0 | 23.6 | 23.7 | 23.7 | 23.1 | 20.9 | 18.1 | 17.5 | 16.2 | 14.6 | 16.8 | 23.7 |
| 30-Aug | 13.5 | 12.5 | 12.4 | 12.9 | 12.9 | 12.9 | 13.2 | 14.1 | 15.9 | 18.4 | 19.9 | 22.1 | 23.2 | 24.0 | 25.0 | 25.3 | 25.1 | 25.2 | 24.1 | 21.8 | 19.4 | 18.3 | 17.8 | 16.9 | 18.6 | 25.3 |
| 31-Aug | 16.0 | 15.2 | 15.2 | 14.4 | 13.5 | 13.7 | 13.3 | 13.8 | 16.2 | 18.4 | 20.1 | 21.6 | 22.6 | 22.5 | 23.0 | 23.7 | 23.7 | 23.2 | 22.2 | 19.5 | 16.6 | 14.7 | 13.6 | 12.5 | 17.9 | 23.7 |
| | 14.6 | 14.0 | 13.5 | 13.0 | 12.7 | 12.5 | 13.0 | 14.2 | 15.6 | 17.4 | 19.0 | 20.5 | 21.5 | 22.3 | 22.8 | 22.9 | 22.7 | 22.4 | 21.7 | 20.1 | 18.3 | 16.9 | 15.9 | 15.1 | Diurnal Average | |
| | 20.1 | 20.0 | 19.6 | 19.2 | 18.8 | 18.2 | 18.0 | 18.5 | 19.4 | 21.8 | 24.0 | 26.8 | 29.4 | 29.9 | 30.3 | 30.7 | 30.7 | 30.1 | 28.9 | 27.0 | 24.8 | 22.8 | 21.8 | 21.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Athabasca Valley - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 25 | 3.36 | 3.36 |
| 10 - 20 | 503 | 67.61 | 70.97 |
| > 20 | 216 | 29.03 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 29.3 inHg on Aug 13 11:00

Maximum Daily Average: 29.3 inHg on Aug 13

Minimum Value: 28.5 inHg on Aug 1 21:00

Minimum Daily Average: 28.7 inHg on Aug 2

Maximum Diurnal Average: 29.0 inHg at hour 9

Minimum Diurnal Average: 29.0 inHg at hour 18

Monthly Average: 29.00 inHg

Percentiles: $P_1$ = 28.6 $P_{10}$ = 28.8 $Q_1$ = 28.8 Median = 29.1 $Q_3$ = 29.1 $P_{90}$ = 29.2 $P_{99}$ = 29.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

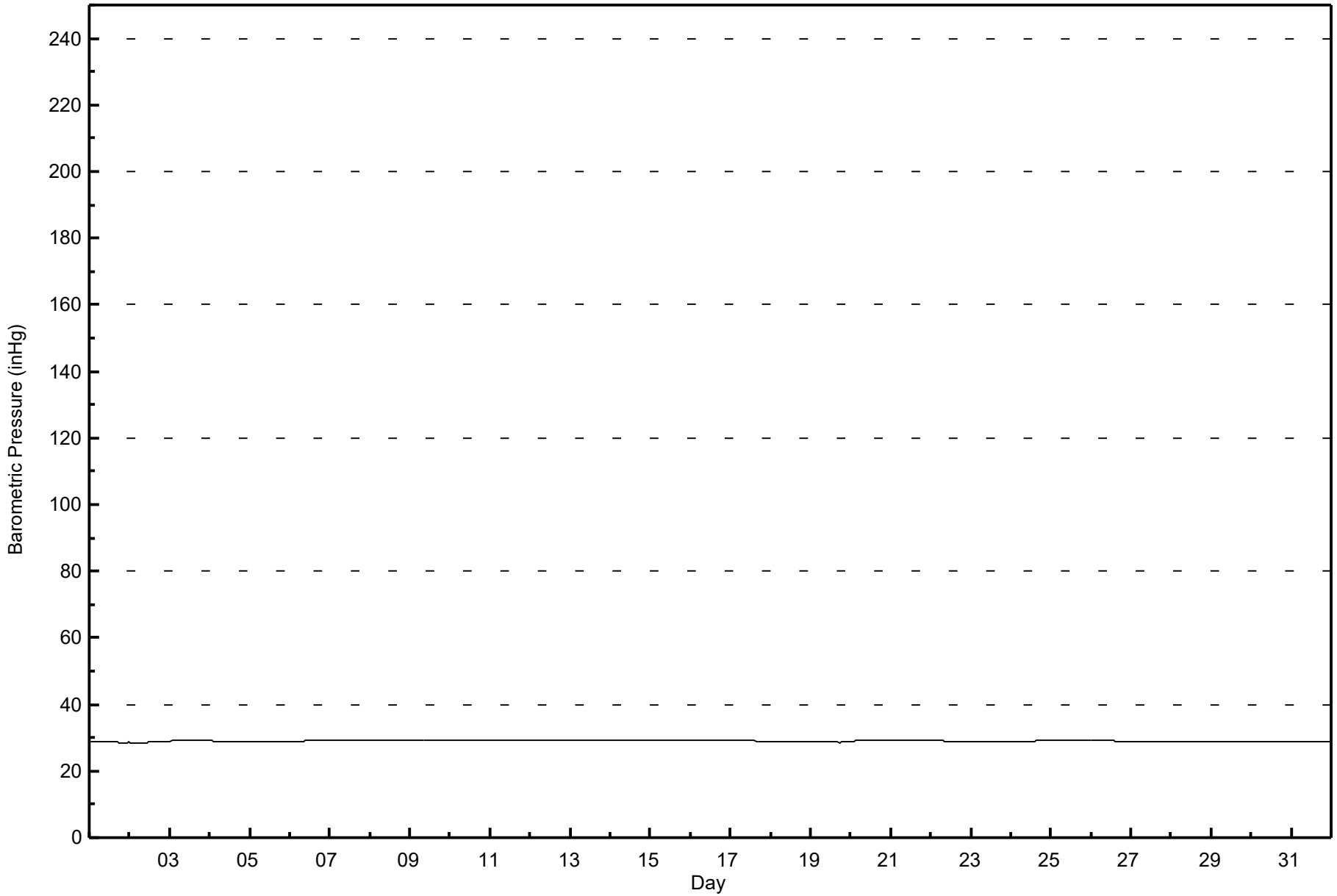
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.6 | 28.6 | 28.6 | 28.5 | 28.5 | 28.6 | 28.6 | 28.6 | 28.8 | 29.0 |
| 2-Aug | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 28.7 | 29.0 |
| 3-Aug | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.1 | 29.1 |
| 4-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 29.0 |
| 5-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.8 | 28.9 | 28.9 | 28.8 | 28.9 |
| 6-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.1 |
| 7-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 |
| 8-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 |
| 9-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.1 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 |
| 10-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 |
| 11-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.1 | 29.2 |
| 12-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 |
| 13-Aug | 29.2 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 |
| 14-Aug | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.3 |
| 15-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 |
| 16-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.2 |
| 17-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.2 |
| 18-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 29.0 |
| 19-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.6 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 29.0 |
| 20-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.2 |
| 21-Aug | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.3 |
| 22-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 29.0 | 29.1 |
| 23-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 |
| 24-Aug | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.0 | 29.2 |
| 25-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.3 |
| 26-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.2 |
| 27-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.9 | 29.0 |
| 28-Aug | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.8 | 28.9 |
| 29-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 |
| 30-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 |
| 31-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.9 |
| | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | Diurnal Average | |
| | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 | 29.3 | 29.3 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Barometric Pressure (BP) - inHg**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Athabasca Valley - August 2026

Maximum Value: 98.2 % on Aug 20 06:00

Maximum Daily Average: 86.1 % on Aug 12

Minimum Value: 30.0 % on Aug 26 16:00

Minimum Daily Average: 56.5 % on Aug 24

Maximum Diurnal Average: 86.7 % at hour 5

Minimum Diurnal Average: 49.1 % at hour 16

Monthly Average: 70.69 %

Percentiles: $P_1$ = 32.9 $P_{10}$ = 45.6 $Q_1$ = 56.7 Median = 73.9 $Q_3$ = 85.8 $P_{90}$ = 90.6 $P_{99}$ = 94.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

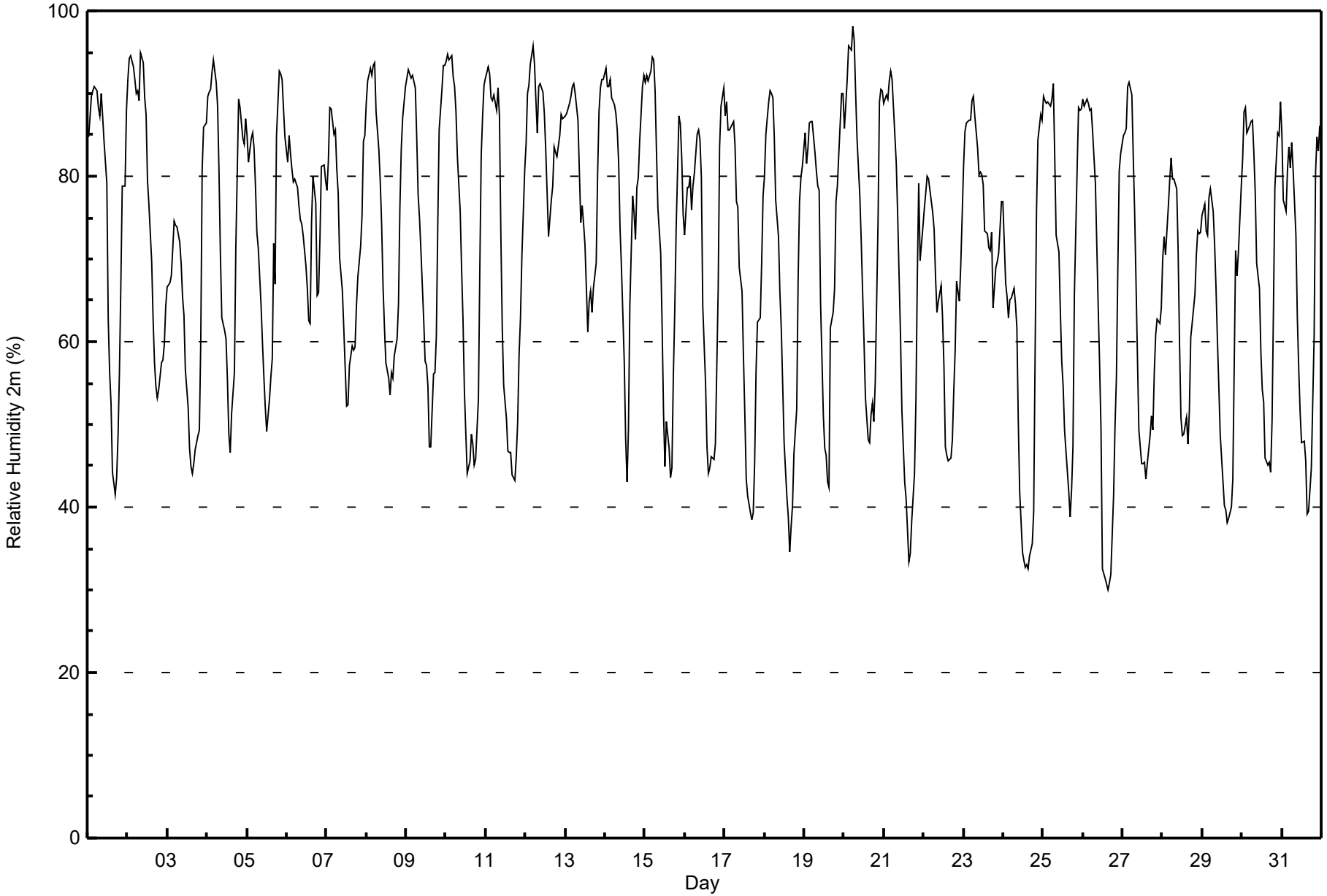
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 84.7 | 87.2 | 89.6 | 90.4 | 90.9 | 90.4 | 88.3 | 87.3 | 90.0 | 87.3 | 84.2 | 79.2 | 62.7 | 56.3 | 52.6 | 44.2 | 41.5 | 43.6 | 48.6 | 56.5 | 66.9 | 78.8 | 78.8 | 88.1 | 73.7 | 90.9 |
| 2-Aug | 91.7 | 94.2 | 94.6 | 93.2 | 91.7 | 90.1 | 90.3 | 89.2 | 94.9 | 93.7 | 89.4 | 87.5 | 79.5 | 76.7 | 69.7 | 62.7 | 57.4 | 54.6 | 53.1 | 54.2 | 57.4 | 57.8 | 59.7 | 64.3 | 77.0 | 94.9 |
| 3-Aug | 66.7 | 67.0 | 68.0 | 71.3 | 74.6 | 74.1 | 73.8 | 72.0 | 69.5 | 65.4 | 63.3 | 56.7 | 52.1 | 47.2 | 45.0 | 44.1 | 45.2 | 47.0 | 48.7 | 49.2 | 60.1 | 80.9 | 85.9 | 86.4 | 63.1 | 86.4 |
| 4-Aug | 89.7 | 90.1 | 90.5 | 92.6 | 94.2 | 91.4 | 88.5 | 80.5 | 70.6 | 62.8 | 61.4 | 60.3 | 55.4 | 48.9 | 46.6 | 51.3 | 56.3 | 71.3 | 80.3 | 89.3 | 88.3 | 84.6 | 83.9 | 86.9 | 75.7 | 94.2 |
| 5-Aug | 84.9 | 81.6 | 84.5 | 85.3 | 83.4 | 78.8 | 73.3 | 71.3 | 64.4 | 59.9 | 55.8 | 52.1 | 49.1 | 53.0 | 55.7 | 57.9 | 71.9 | 66.9 | 85.0 | 92.8 | 92.4 | 91.8 | 88.1 | 84.7 | 73.5 | 92.8 |
| 6-Aug | 81.7 | 84.9 | 82.7 | 80.8 | 79.3 | 79.6 | 78.6 | 76.4 | 74.7 | 74.2 | 73.0 | 69.2 | 66.4 | 62.6 | 62.2 | 74.5 | 80.0 | 76.8 | 65.6 | 65.9 | 72.5 | 81.3 | 81.4 | 79.4 | 75.2 | 84.9 |
| 7-Aug | 78.3 | 81.8 | 88.3 | 88.2 | 85.1 | 85.7 | 80.9 | 77.9 | 70.2 | 66.1 | 61.5 | 56.8 | 52.2 | 52.3 | 57.1 | 59.5 | 59.0 | 59.3 | 64.2 | 67.7 | 71.6 | 75.3 | 84.2 | 84.9 | 71.2 | 88.3 |
| 8-Aug | 88.8 | 91.5 | 93.1 | 92.3 | 93.4 | 93.8 | 87.8 | 83.2 | 79.3 | 74.1 | 66.7 | 61.7 | 57.4 | 55.6 | 53.6 | 56.3 | 55.6 | 58.2 | 60.4 | 64.6 | 76.3 | 83.3 | 87.1 | 90.8 | 75.2 | 93.8 |
| 9-Aug | 91.9 | 92.9 | 92.3 | 91.8 | 92.2 | 90.7 | 84.7 | 77.8 | 74.9 | 71.1 | 62.5 | 57.7 | 57.2 | 54.5 | 47.3 | 47.2 | 56.0 | 56.3 | 60.7 | 73.9 | 85.6 | 90.6 | 93.5 | 93.4 | 74.9 | 93.5 |
| 10-Aug | 93.9 | 94.7 | 94.0 | 94.6 | 92.0 | 90.9 | 87.8 | 82.4 | 75.7 | 68.9 | 62.8 | 54.1 | 49.0 | 44.1 | 45.6 | 48.8 | 47.7 | 45.1 | 45.8 | 53.0 | 68.9 | 82.6 | 87.3 | 91.0 | 70.9 | 94.7 |
| 11-Aug | 91.8 | 93.2 | 92.4 | 89.5 | 89.2 | 89.9 | 87.9 | 90.7 | 87.2 | 73.0 | 61.6 | 54.7 | 50.6 | 46.8 | 46.7 | 46.6 | 43.9 | 43.3 | 46.1 | 50.3 | 58.4 | 62.9 | 70.3 | 80.7 | 68.7 | 93.2 |
| 12-Aug | 83.9 | 90.0 | 91.1 | 93.6 | 95.8 | 93.6 | 89.2 | 85.3 | 90.9 | 91.1 | 90.1 | 87.7 | 83.2 | 78.0 | 72.7 | 77.1 | 78.7 | 83.6 | 82.9 | 82.3 | 85.0 | 87.5 | 86.9 | 87.1 | 86.1 | 95.8 |
| 13-Aug | 87.3 | 87.7 | 88.9 | 89.7 | 90.8 | 91.2 | 90.0 | 86.7 | 80.5 | 74.4 | 76.4 | 74.2 | 71.6 | 61.1 | 65.0 | 66.0 | 63.5 | 66.4 | 69.4 | 80.2 | 87.7 | 90.6 | 91.7 | 91.7 | 80.1 | 91.7 |
| 14-Aug | 93.0 | 90.8 | 90.9 | 91.8 | 89.5 | 88.6 | 87.6 | 85.6 | 81.7 | 73.7 | 69.0 | 57.6 | 48.2 | 43.1 | 49.4 | 64.5 | 77.7 | 75.6 | 72.4 | 78.6 | 79.9 | 84.3 | 90.8 | 92.2 | 77.4 | 93.0 |
| 15-Aug | 91.4 | 92.3 | 91.6 | 92.7 | 94.4 | 94.1 | 90.3 | 82.9 | 76.1 | 70.7 | 62.0 | 51.6 | 45.0 | 50.3 | 47.2 | 43.6 | 44.8 | 55.7 | 63.5 | 73.5 | 87.2 | 86.3 | 82.2 | 75.4 | 72.7 | 94.4 |
| 16-Aug | 72.9 | 78.6 | 78.6 | 80.0 | 75.9 | 78.8 | 80.4 | 85.0 | 85.6 | 84.3 | 79.9 | 64.2 | 54.9 | 47.2 | 44.1 | 44.7 | 46.1 | 45.7 | 47.7 | 56.9 | 66.4 | 83.6 | 88.4 | 90.8 | 69.2 | 90.8 |
| 17-Aug | 87.4 | 88.9 | 85.5 | 85.6 | 86.3 | 86.6 | 83.7 | 77.0 | 76.2 | 69.0 | 66.1 | 58.3 | 51.2 | 43.4 | 41.3 | 39.3 | 38.5 | 39.3 | 45.4 | 56.5 | 62.4 | 62.9 | 69.6 | 77.6 | 65.7 | 88.9 |
| 18-Aug | 79.9 | 85.1 | 89.0 | 90.4 | 90.0 | 89.5 | 84.8 | 77.2 | 72.7 | 66.0 | 61.5 | 54.8 | 47.9 | 41.2 | 38.8 | 34.6 | 37.6 | 40.1 | 46.4 | 51.9 | 67.4 | 76.9 | 79.9 | 81.2 | 66.0 | 90.4 |
| 19-Aug | 85.2 | 81.6 | 83.4 | 86.5 | 86.6 | 86.6 | 82.9 | 80.7 | 78.8 | 78.3 | 64.7 | 51.0 | 47.1 | 46.2 | 43.1 | 42.3 | 61.7 | 63.6 | 66.5 | 76.9 | 78.8 | 82.7 | 90.1 | 90.0 | 72.3 | 90.1 |
| 20-Aug | 85.8 | 88.7 | 91.7 | 95.7 | 95.3 | 98.2 | 96.5 | 90.2 | 84.6 | 77.6 | 72.2 | 65.9 | 59.9 | 53.1 | 48.1 | 47.7 | 51.3 | 52.5 | 50.4 | 55.1 | 74.5 | 89.1 | 90.6 | 90.3 | 75.2 | 98.2 |
| 21-Aug | 88.8 | 89.9 | 89.3 | 91.6 | 92.8 | 91.6 | 88.4 | 81.5 | 75.2 | 67.9 | 60.9 | 51.6 | 43.0 | 41.0 | 37.2 | 33.3 | 34.3 | 38.3 | 44.0 | 52.7 | 67.9 | 79.2 | 69.9 | 73.9 | 66.0 | 92.8 |
| 22-Aug | 76.1 | 78.0 | 79.9 | 79.7 | 78.3 | 75.7 | 73.6 | 67.8 | 63.6 | 64.9 | 66.8 | 62.9 | 57.0 | 47.4 | 46.2 | 45.6 | 45.9 | 48.1 | 54.1 | 59.0 | 67.3 | 64.9 | 69.4 | 75.2 | 64.5 | 79.9 |
| 23-Aug | 81.3 | 85.5 | 86.4 | 86.8 | 86.8 | 89.2 | 89.6 | 87.3 | 83.5 | 80.1 | 80.4 | 80.2 | 79.0 | 73.4 | 73.0 | 71.3 | 70.9 | 73.1 | 64.0 | 69.0 | 69.6 | 70.7 | 73.8 | 77.0 | 78.4 | 89.6 |
| 24-Aug | 76.9 | 67.1 | 65.4 | 62.9 | 65.2 | 65.2 | 66.5 | 64.5 | 61.7 | 50.5 | 41.8 | 34.6 | 33.5 | 32.8 | 33.0 | 32.6 | 34.1 | 35.5 | 39.5 | 58.5 | 75.7 | 84.5 | 87.4 | 86.9 | 56.5 | 87.4 |
| 25-Aug | 89.6 | 89.1 | 88.8 | 89.0 | 88.4 | 89.3 | 91.3 | 82.3 | 72.9 | 70.9 | 63.8 | 57.6 | 54.5 | 49.4 | 46.8 | 41.8 | 38.8 | 42.0 | 47.3 | 65.5 | 80.9 | 88.4 | 88.1 | 88.2 | 71.0 | 91.3 |
| 26-Aug | 89.2 | 88.5 | 89.4 | 88.9 | 88.0 | 88.1 | 85.4 | 79.1 | 71.6 | 64.2 | 57.2 | 49.4 | 32.5 | 31.3 | 30.7 | 30.0 | 30.8 | 31.9 | 41.6 | 49.8 | 55.7 | 68.9 | 80.7 | 82.7 | 62.7 | 89.4 |
| 27-Aug | 84.9 | 85.3 | 85.8 | 90.9 | 91.3 | 89.9 | 82.3 | 75.6 | 67.0 | 58.0 | 49.3 | 45.3 | 45.3 | 45.4 | 43.3 | 45.3 | 48.7 | 51.1 | 49.3 | 56.3 | 60.8 | 62.7 | 62.2 | 64.0 | 64.2 | 91.3 |
| 28-Aug | 70.0 | 72.8 | 70.5 | 76.3 | 79.4 | 82.2 | 79.7 | 79.6 | 78.5 | 70.9 | 59.8 | 50.8 | 48.6 | 48.7 | 50.8 | 47.6 | 51.6 | 60.6 | 62.2 | 65.8 | 70.6 | 73.3 | 73.0 | 73.2 | 66.5 | 82.2 |
| 29-Aug | 75.2 | 76.7 | 73.5 | 72.9 | 77.5 | 78.6 | 75.8 | 71.9 | 66.6 | 60.3 | 54.7 | 48.8 | 43.0 | 40.1 | 39.6 | 38.2 | 38.6 | 40.1 | 43.4 | 57.1 | 71.1 | 68.0 | 70.9 | 78.7 | 60.9 | 78.7 |
| 30-Aug | 82.1 | 87.8 | 88.3 | 85.3 | 86.1 | 86.6 | 86.7 | 83.0 | 77.9 | 69.4 | 66.4 | 58.9 | 54.2 | 52.8 | 45.9 | 45.1 | 45.3 | 44.2 | 50.5 | 64.3 | 78.7 | 85.3 | 84.8 | 89.0 | 70.8 | 89.0 |
| 31-Aug | 85.2 | 77.1 | 75.7 | 80.8 | 83.5 | 81.0 | 84.0 | 80.8 | 73.0 | 63.1 | 56.7 | 51.5 | 47.7 | 47.9 | 45.6 | 39.1 | 39.5 | 42.0 | 44.7 | 60.6 | 80.4 | 84.8 | 83.0 | 86.1 | 66.4 | 86.1 |
| | 84.2 | 85.2 | 85.6 | 86.5 | 86.7 | 86.5 | 84.2 | 80.4 | 76.5 | 71.0 | 65.9 | 59.6 | 54.2 | 50.7 | 49.2 | 49.1 | 51.4 | 53.3 | 56.2 | 64.1 | 73.1 | 78.8 | 81.1 | 83.3 | Diurnal Average | |
| | 93.9 | 94.7 | 94.6 | 95.7 | 95.8 | 98.2 | 96.5 | 90.7 | 94.9 | 93.7 | 90.1 | 87.7 | 83.2 | 78.0 | 73.0 | 77.1 | 80.0 | 83.6 | 85.0 | 92.8 | 92.4 | 91.8 | 93.5 | 93.4 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Athabasca Valley - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Athabasca Valley - August 2026

Maximum Speed: 36 km/h on Aug 2 13:00

Maximum Daily Speed Average: 22.6 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 23 15:00

Minimum Daily Speed Average: 1.1 km/h on Aug 9

Maximum Diurnal Speed Average: 6.3 km/h at hour 12

Minimum Diurnal Speed Average: 0.5 km/h at hour 8

Monthly Average Velocity: 2.0 km/h 284.6 deg

Percentiles: $P_1 = 1$ $P_{10} = 3$ $Q_1 = 4$ Median = 7 $Q_3 = 11$ $P_{90} = 17$ $P_{99} = 27$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SE5 | SSE4 | SSE4 | SE3 | ESE7 | SE7 | ESE6 | SE5 | ESE3 | E5 | NNW3 | W2 | ESE13 | E17 | E14 | ESE15 | ESE17 | ESE12 | ESE9 | ESE10 | W11 | SW6 | SW3 | WSW6 | ESE5.2 | ESE17 |
| 2-Aug | NW8 | NW15 | NW16 | NW18 | NW16 | NW14 | NW17 | NW20 | NW21 | NW19 | NW26 | NW34 | NW36 | NW31 | NW32 | NW33 | NW29 | NW30 | NW26 | NW25 | NW22 | NW24 | WNW19 | WNW22 | NW22.6 | NW36 |
| 3-Aug | WNW17 | WNW22 | WNW15 | NW10 | NW10 | NW12 | NW11 | NW11 | NW17 | NW16 | NW14 | NW15 | NW19 | NW16 | NW12 | NNW9 | NW10 | NNW11 | NNW9 | N6 | N4 | S2 | E2 | SE3 | NW10.4 | WNW22 |
| 4-Aug | ESE6 | ESE9 | ESE10 | ESE11 | SE12 | ESE12 | ESE10 | ESE8 | SE8 | SSE5 | SSW13 | SSW17 | SSW18 | SSW16 | SSW16 | SSW14 | SW11 | WSW10 | ESE2 | SW7 | WSW9 | W20 | WNW15 | NW8 | SSW5.9 | W20 |
| 5-Aug | NW10 | W15 | WSW11 | SW10 | W11 | W21 | W21 | WNW22 | NW25 | WNW26 | WNW23 | WNW25 | NW25 | WNW21 | WNW17 | NNW7 | NNE4 | N14 | NW19 | NW13 | WNW14 | W14 | W23 | W24 | WNW15.5 | WNW26 |
| 6-Aug | W25 | W24 | W25 | W27 | WNW27 | WNW21 | WNW22 | WNW26 | WNW26 | WNW22 | NW19 | WNW16 | WNW11 | WNW18 | WNW18 | NW9 | NW7 | NNW5 | W17 | W20 | NNW9 | WNW4 | NW3 | WNW5 | WNW16.3 | W27 |
| 7-Aug | WNW5 | W6 | SW7 | SSW8 | SSW5 | S4 | S3 | WSW5 | W7 | NW9 | NW17 | NW19 | WNW18 | WNW17 | NNW11 | NNW7 | NNW6 | NNW6 | NW6 | NNW5 | NNW6 | NNW4 | SW3 | WSW4 | WNW5.8 | NW19 |
| 8-Aug | SSE2 | SSW5 | SSW7 | S4 | ENE1 | NE2 | NNE3 | NNW6 | NNW11 | NW9 | NW11 | NW10 | NW10 | NW9 | NW11 | NNW11 | NNW11 | NNW9 | NNW7 | N3 | SW2 | SSW3 | SSW4 | SW6 | NW4.3 | NNW11 |
| 9-Aug | SSW6 | SSW4 | SSW4 | SSW1 | S2 | ENE3 | E3 | ENE3 | NE3 | WSW4 | SSW7 | SSW7 | WNW4 | WNW5 | NW7 | NW7 | NNW7 | NW5 | W3 | WSW2 | SW3 | E1 | ENE4 | E2 | W1.1 | NW7 |
| 10-Aug | E4 | ESE5 | SE4 | ESE5 | ESE6 | ESE7 | ESE8 | ESE4 | ENE8 | N2 | NW6 | NW8 | NW11 | NW10 | NW11 | NNW14 | NW14 | NNW10 | NW9 | NW4 | WSW4 | SW6 | SW6 | SSW2 | NNW2.6 | NNW14 |
| 11-Aug | ENE1 | SSE2 | ENE3 | ESE3 | ESE4 | ESE5 | SE4 | SE2 | E1 | WSW2 | NNW7 | NNW10 | NNW13 | NW17 | NW18 | NNW15 | NNW14 | NNW15 | NNW10 | NNW8 | NNW8 | NNW6 | WNW4 | WSW4 | NNW5.2 | NW18 |
| 12-Aug | SW5 | SSW3 | S1 | SSW3 | S2 | SSW5 | SE1 | SSW3 | NW5 | NW5 | NW11 | NW12 | NW14 | NNW14 | NW14 | NNW13 | NW15 | NW15 | NNW11 | NW8 | WNW6 | WNW7 | NW8 | NW9 | NW6.5 | NW15 |
| 13-Aug | NW9 | NW12 | NW12 | NW12 | NW11 | NW11 | NW14 | NNW11 | NNW12 | NNW11 | NNW9 | NW7 | N4 | NW10 | ENE16 | ESE8 | NE2 | NW2 | ENE4 | S2 | SW4 | S1 | SW5 | SSW5 | NNW5.3 | ENE16 |
| 14-Aug | SSW4 | SSE3 | S2 | ESE3 | ESE4 | ESE4 | ESE5 | ESE3 | SSE1 | NNW3 | NW6 | NW8 | NW6 | W4 | S13 | ENE13 | SSW13 | SSW6 | S2 | S5 | SSE4 | SE4 | SSE3 | ESE4 | SSE1.9 | ENE13 |
| 15-Aug | SE5 | ESE5 | ESE6 | ESE8 | ESE11 | ESE9 | ESE8 | ESE6 | E5 | S4 | SSW6 | SSW12 | SSW13 | W4 | NNW1 | SW3 | SSW3 | SW0 | SW3 | SW2 | E2 | ESE4 | SE5 | ESE4 | SSE3.6 | SSW13 |
| 16-Aug | SSE3 | SE2 | SE2 | SE3 | SSW5 | SSW9 | WNW4 | NW9 | NW11 | NNW15 | NNW14 | NNW17 | NNW16 | NNW15 | NNW13 | NNW13 | NW12 | WNW11 | NW8 | NE4 | NNE2 | SSW2 | SE2 | E3 | NW5.6 | NNW17 |
| 17-Aug | ESE4 | ESE6 | SE7 | SE6 | ESE6 | ESE6 | ESE6 | ESE3 | NE5 | ENE3 | SE1 | N6 | NNW8 | N4 | ENE4 | SSE6 | SSE7 | SSE7 | SSE7 | SE7 | SSE6 | SE8 | ESE9 | E6 | ESE4.1 | ESE9 |
| 18-Aug | E8 | ESE9 | ESE10 | ESE13 | ESE11 | ESE9 | ESE9 | SE10 | ESE10 | ESE6 | SSW2 | SSW10 | SSW13 | SSW11 | SSW7 | SW14 | SW11 | WSW16 | WSW13 | SW7 | S3 | ESE4 | ESE4 | SE3 | SSE5.2 | WSW16 |
| 19-Aug | ESE3 | SE4 | SE5 | SE5 | SE4 | SE5 | SE5 | SE4 | SE5 | SSW8 | SSW6 | NNW5 | W14 | NW14 | NW16 | NW11 | W19 | WNW7 | W5 | WSW4 | W4 | SW5 | SSE3 | NW3 | W2.7 | W19 |
| 20-Aug | SSE1 | S4 | S1 | SSW5 | S2 | E4 | ESE5 | E5 | SSW5 | NW4 | NNW8 | NW13 | NNW11 | NNW11 | NNW11 | NNW10 | NNW11 | NNW9 | N8 | NNW4 | S3 | E3 | ENE4 | E3 | NNW3.0 | NW13 |
| 21-Aug | ESE4 | ESE5 | ESE5 | ESE7 | ESE9 | ESE8 | ESE10 | ESE8 | ESE9 | E7 | ENE5 | NE5 | NE1 | WNW4 | SE1 | SE8 | ESE10 | SE10 | ESE11 | ESE9 | ENE3 | E6 | ESE9 | ESE9 | ESE6.1 | ESE11 |
| 22-Aug | ESE9 | ESE6 | SE7 | ESE10 | ESE9 | ESE9 | ESE12 | ESE12 | ESE8 | NNW2 | NW4 | NW4 | NW2 | SE7 | E10 | E13 | E15 | ESE12 | ESE10 | SE7 | ESE4 | SSE8 | SE5 | SE9 | ESE6.7 | E15 |
| 23-Aug | ESE7 | ESE6 | ESE9 | ESE10 | ESE10 | ESE10 | ESE10 | SE7 | SE8 | ESE6 | E6 | SSE4 | ENE6 | ESE3 | E0 | SW5 | S3 | SW5 | W8 | W6 | WNW5 | SW9 | SW8 | SW6 | SE3.5 | ESE10 |
| 24-Aug | WNW7 | NW7 | NW9 | NW8 | NNW10 | NW10 | NW9 | NNW12 | NNW10 | NW13 | NW12 | NW21 | NW22 | NW19 | NNW17 | NNW14 | NNW9 | N4 | NNW4 | W4 | SSW3 | ESE2 | ENE4 | ESE3 | NW8.8 | NW22 |
| 25-Aug | ESE3 | E3 | ESE3 | ESE3 | ESE4 | ESE4 | SE3 | E6 | NE2 | NNW6 | NNW6 | NW6 | NW6 | NW5 | NW5 | NE4 | ENE6 | ENE5 | ESE4 | WNW1 | NW1 | E4 | E3 | SE3 | NE1.7 | NNW6 |
| 26-Aug | ESE4 | ESE6 | ESE6 | ESE7 | SE8 | SE9 | ESE7 | ESE9 | ESE9 | ESE8 | ESE5 | ESE5 | SSE10 | S11 | SE11 | SSE11 | SSE12 | SSE10 | ESE10 | ESE10 | ESE7 | NE4 | E4 | ENE4 | SE7.1 | SSE12 |
| 27-Aug | E3 | ENE2 | NNE3 | NE2 | ENE2 | E3 | ESE5 | ESE6 | ESE7 | E10 | ESE12 | ESE15 | ESE14 | E14 | ESE12 | E8 | E5 | SE5 | ESE11 | ESE11 | ESE12 | ESE11 | ESE11 | ESE9 | ESE7.8 | ESE15 |
| 28-Aug | ESE5 | ESE10 | ESE12 | S8 | SE3 | SE9 | SE8 | S10 | SSE11 | SSW18 | SW19 | SW20 | SW22 | SW19 | SW27 | WSW22 | SW18 | SW20 | WSW19 | WSW18 | W17 | WSW11 | WSW14 | SW11 | SW11.5 | SW27 |
| 29-Aug | S7 | S5 | SW15 | SW13 | S10 | S9 | SSW10 | SW16 | SSW16 | SSW15 | SSW17 | SSW18 | SSW19 | SSW17 | SW17 | SW16 | SW14 | SW7 | SSE5 | S4 | SE4 | ESE7 | SE7 | ESE5 | SSW10.2 | SSW19 |
| 30-Aug | E2 | ESE5 | ESE6 | ESE7 | ESE6 | ESE4 | ESE4 | ESE3 | W2 | NNW1 | NW6 | W3 | WNW5 | W5 | WSW5 | WSW4 | NW3 | E7 | SE8 | SSE3 | SE2 | ESE2 | SSE2 | SE3 | SE1.3 | SE8 |
| 31-Aug | SE4 | SSW7 | SW6 | ESE6 | SE4 | SSW8 | SSW10 | SSW10 | WSW4 | NNW7 | NNW8 | NNW6 | W4 | W9 | W8 | W16 | WSW13 | SW13 | WSW12 | WSW6 | E2 | E4 | E4 | SE3 | WSW3.8 | W16 |
| | SSW0.8 | SSW1.5 | S1.7 | SSE2.0 | SE1.7 | SE1.7 | SE1.2 | WSW0.5 | NW1.7 | NW3.4 | WNW5.3 | WNW6.3 | WNW6.3 | WNW6.2 | NW5.1 | NW3.7 | WNW3.4 | WNW3.3 | WNW2.6 | W2.1 | W2.1 | WSW1.4 | SW1.6 | SW1.6 | Diurnal Average | |
| | W25 | W24 | W25 | W27 | WNW27 | WNW21 | WNW22 | WNW26 | WNW26 | WNW26 | NW26 | NW34 | NW36 | NW31 | NW32 | NW33 | NW29 | NW30 | NW26 | NW25 | NW22 | NW24 | W23 | W24 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Athabasca Valley - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12 km/h on Aug 1 21:00

Minimum Value: 1 km/h on Aug 24 20:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

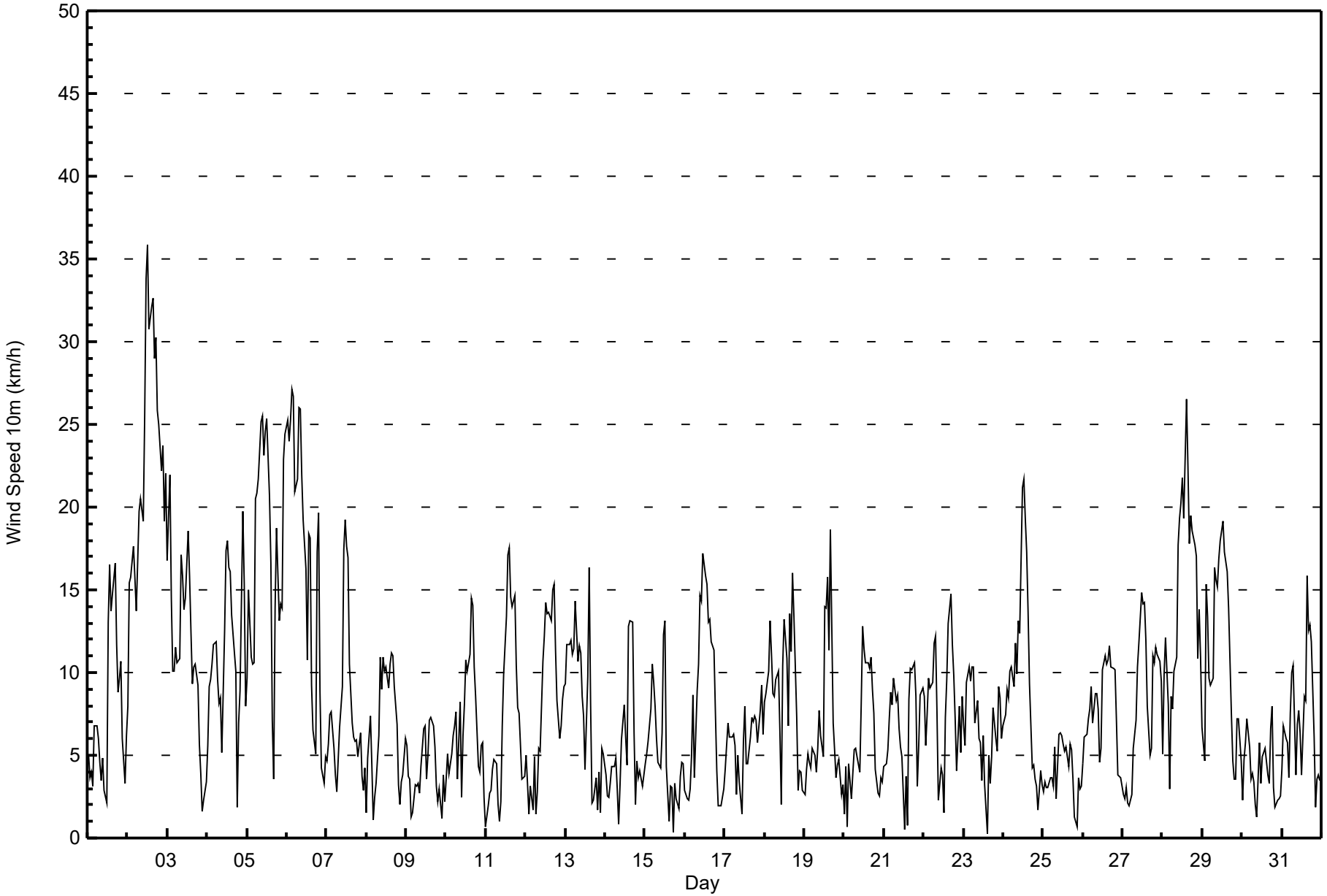
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 5 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 12 | 5 | 4 | 4 | 12 |
| 2-Aug | 6 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 5 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 3 | 3 | 7 |
| 3-Aug | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 5 |
| 4-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 11 | 3 | 3 | 4 | 4 | 6 | 2 | 11 |
| 5-Aug | 2 | 2 | 2 | 3 | 5 | 3 | 4 | 4 | 5 | 5 | 4 | 6 | 5 | 4 | 5 | 2 | 3 | 7 | 4 | 3 | 2 | 4 | 3 | 5 | 7 |
| 6-Aug | 4 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 3 | 3 | 5 | 5 | 6 | 2 | 2 | 4 | 3 | 5 | 2 | 1 | 2 | 6 |
| 7-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 4 |
| 8-Aug | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 |
| 9-Aug | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 10-Aug | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 3 |
| 11-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 1 | 1 | 1 | 4 |
| 12-Aug | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 5 | 5 | 5 | 6 | 5 | 6 | 3 | 3 | 1 | 2 | 1 | 2 | 6 |
| 13-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 5 | 3 | 3 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 5 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 4 | 8 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 8 |
| 15-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 16-Aug | 2 | 1 | 2 | 1 | 3 | 2 | 3 | 3 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 5 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 |
| 18-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 6 | 6 | 1 | 2 | 2 | 1 | 1 | 6 |
| 19-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 6 | 4 | 4 | 4 | 6 | 4 | 3 | 1 | 2 | 2 | 2 | 3 | 6 |
| 20-Aug | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 3 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 2 | 3 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 3 |
| 23-Aug | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 3 | 2 | 3 | 2 | 2 | 6 |
| 24-Aug | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 4 | 3 | 5 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 7 |
| 25-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 |
| 26-Aug | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 |
| 27-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 4 |
| 28-Aug | 2 | 3 | 3 | 3 | 5 | 3 | 3 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 7 | 6 | 6 | 6 | 5 | 4 | 3 | 2 | 3 | 3 | 7 |
| 29-Aug | 4 | 3 | 4 | 5 | 2 | 3 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 2 | 2 | 2 | 3 | 5 |
| 30-Aug | 1 | 1 | 3 | 4 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 4 |
| 31-Aug | 2 | 3 | 3 | 3 | 2 | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 4 |
| | 6 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 6 | 7 | 8 | 6 | 11 | 6 | 6 | 12 | 5 | 6 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Athabasca Valley - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 279 | 37.50 | 37.50 |
| 6 - 11 | 283 | 38.04 | 75.54 |
| 12 - 19 | 136 | 18.28 | 93.82 |
| 20 - 28 | 39 | 5.24 | 99.06 |
| 29 - 38 | 7 | 0.94 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Athabasca Valley - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 6 | 4 | 11 | 17 | 26 | 47 | 37 | 16 | 21 | 21 | 13 | 12 | 11 | 11 | 15 | 11 | 279 |
| 6 - 11 | 3 | 0 | 0 | 4 | 9 | 82 | 21 | 10 | 6 | 18 | 16 | 6 | 8 | 6 | 48 | 46 | 283 |
| 12 - 19 | 1 | 0 | 0 | 2 | 5 | 16 | 0 | 1 | 1 | 17 | 11 | 7 | 7 | 12 | 36 | 20 | 136 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 10 | 13 | 11 | 0 | 39 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 10 | 4 | 11 | 23 | 40 | 145 | 58 | 27 | 28 | 56 | 44 | 26 | 36 | 42 | 117 | 77 | 744 |

Total Number of Valid Hours: 744

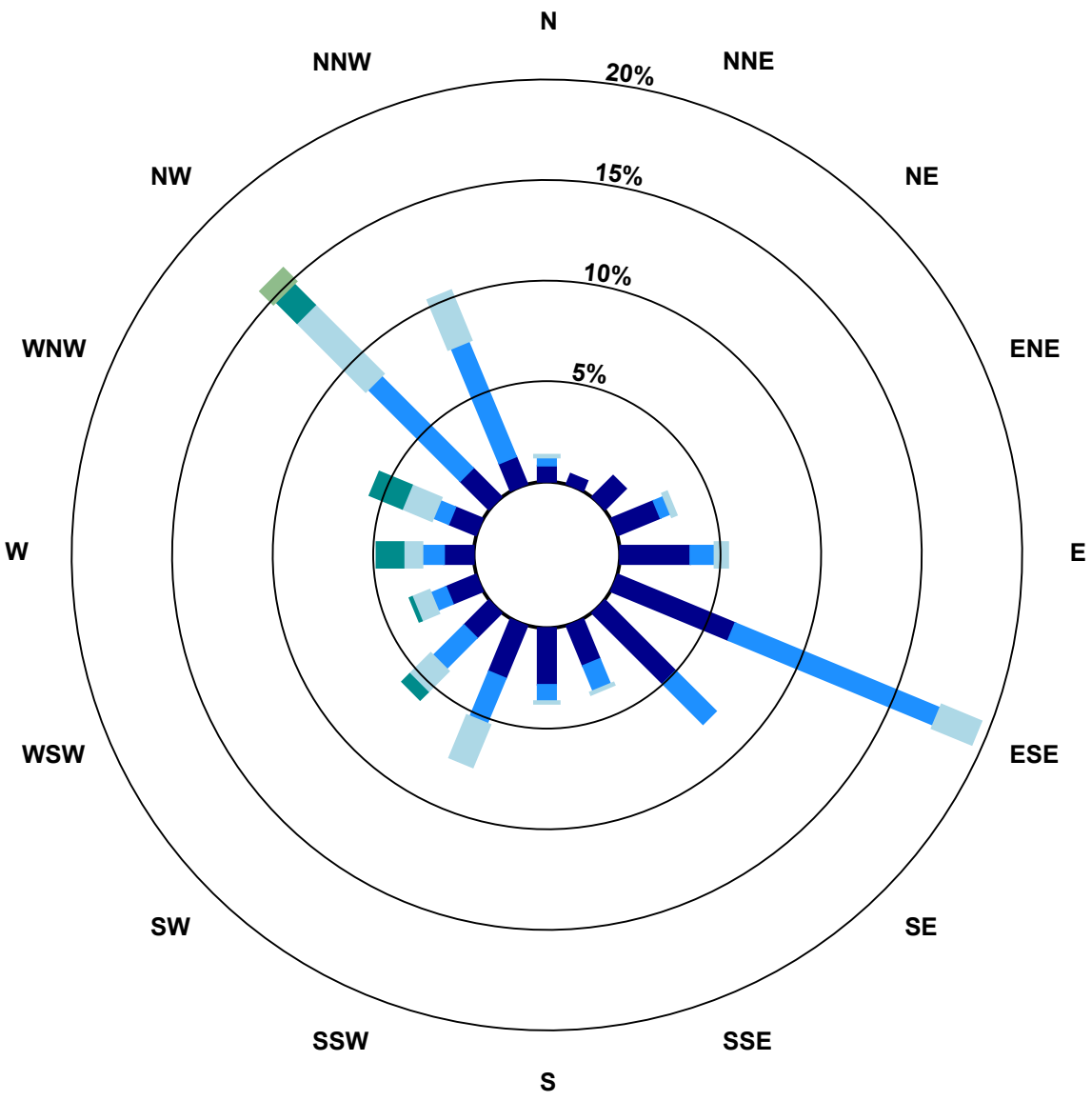
Total Number of Hours: 744

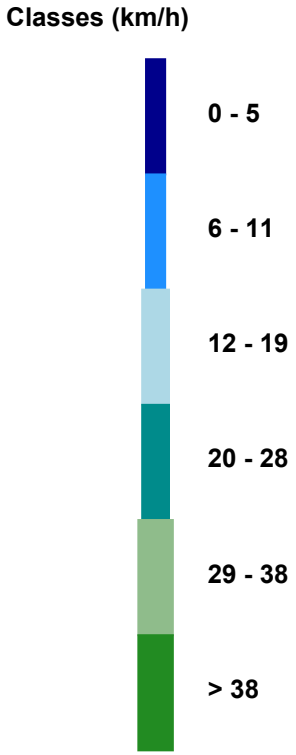
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Athabasca Valley




Total Number of Valid Hours: 744

Direction of Maximum Speed: 324 deg on Aug 2 13:00
Direction of Maximum Daily Speed Average: 317.1 deg on Aug 2

Direction of Minimum Speed: 90 deg on Aug 23 15:00

Direction of Minimum Daily Speed Average: 1.1 deg on Aug 9

Monthly Average Direction: 284.6 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 139 | 150 | 163 | 127 | 118 | 126 | 112 | 124 | 107 | 99 | 330 | 271 | 106 | 87 | 86 | 106 | 108 | 104 | 103 | 118 | 266 | 230 | 225 | 242 | 115.7 |
| 2-Aug | 306 | 312 | 326 | 311 | 313 | 314 | 320 | 319 | 320 | 326 | 324 | 324 | 324 | 324 | 317 | 320 | 323 | 322 | 317 | 317 | 312 | 310 | 294 | 287 | 317.1 |
| 3-Aug | 303 | 287 | 301 | 319 | 311 | 320 | 323 | 319 | 306 | 322 | 322 | 316 | 320 | 322 | 320 | 342 | 319 | 333 | 331 | 4 | 353 | 182 | 88 | 124 | 317.5 |
| 4-Aug | 110 | 119 | 122 | 121 | 124 | 121 | 112 | 115 | 125 | 154 | 209 | 207 | 210 | 212 | 209 | 206 | 214 | 243 | 122 | 225 | 245 | 275 | 296 | 317 | 194.6 |
| 5-Aug | 314 | 273 | 239 | 236 | 266 | 267 | 275 | 292 | 310 | 295 | 301 | 299 | 308 | 282 | 293 | 340 | 28 | 350 | 324 | 307 | 282 | 264 | 264 | 267 | 289.9 |
| 6-Aug | 269 | 259 | 265 | 269 | 283 | 299 | 285 | 289 | 292 | 292 | 304 | 289 | 289 | 282 | 294 | 304 | 326 | 340 | 279 | 279 | 334 | 297 | 316 | 291 | 285.8 |
| 7-Aug | 287 | 278 | 214 | 197 | 193 | 187 | 186 | 257 | 269 | 318 | 311 | 305 | 303 | 291 | 328 | 345 | 335 | 340 | 316 | 333 | 346 | 337 | 233 | 251 | 296.8 |
| 8-Aug | 167 | 206 | 210 | 181 | 69 | 56 | 13 | 328 | 329 | 325 | 324 | 321 | 323 | 325 | 321 | 331 | 331 | 342 | 327 | 350 | 214 | 195 | 203 | 216 | 316.2 |
| 9-Aug | 208 | 202 | 195 | 199 | 171 | 64 | 79 | 61 | 48 | 238 | 204 | 200 | 300 | 302 | 322 | 322 | 331 | 323 | 267 | 240 | 229 | 99 | 68 | 86 | 270.9 |
| 10-Aug | 101 | 116 | 125 | 117 | 106 | 112 | 115 | 109 | 61 | 4 | 318 | 323 | 325 | 326 | 326 | 327 | 325 | 329 | 308 | 311 | 252 | 227 | 222 | 198 | 335.9 |
| 11-Aug | 72 | 164 | 72 | 110 | 116 | 105 | 124 | 133 | 91 | 254 | 328 | 340 | 328 | 325 | 325 | 331 | 339 | 331 | 331 | 339 | 337 | 332 | 291 | 238 | 334.1 |
| 12-Aug | 231 | 208 | 186 | 204 | 182 | 199 | 125 | 212 | 320 | 316 | 309 | 324 | 326 | 338 | 326 | 340 | 322 | 325 | 328 | 318 | 294 | 302 | 309 | 316 | 315.2 |
| 13-Aug | 319 | 319 | 321 | 321 | 314 | 317 | 322 | 332 | 328 | 328 | 335 | 324 | 4 | 320 | 62 | 110 | 55 | 323 | 77 | 181 | 220 | 179 | 223 | 206 | 328.5 |
| 14-Aug | 194 | 162 | 178 | 106 | 111 | 108 | 113 | 114 | 160 | 336 | 323 | 323 | 309 | 267 | 172 | 70 | 202 | 211 | 183 | 179 | 151 | 133 | 147 | 122 | 159.5 |
| 15-Aug | 143 | 115 | 120 | 115 | 117 | 116 | 112 | 102 | 100 | 175 | 198 | 197 | 203 | 275 | 328 | 215 | 207 | 225 | 234 | 236 | 98 | 115 | 134 | 122 | 149.6 |
| 16-Aug | 162 | 125 | 124 | 135 | 202 | 198 | 288 | 317 | 320 | 329 | 332 | 331 | 333 | 336 | 336 | 328 | 307 | 302 | 324 | 36 | 28 | 196 | 144 | 85 | 323.7 |
| 17-Aug | 122 | 118 | 129 | 131 | 120 | 117 | 108 | 112 | 55 | 78 | 143 | 1 | 336 | 8 | 67 | 158 | 155 | 167 | 150 | 131 | 149 | 128 | 112 | 101 | 117.3 |
| 18-Aug | 94 | 111 | 103 | 121 | 117 | 109 | 114 | 124 | 122 | 107 | 201 | 199 | 199 | 210 | 193 | 224 | 229 | 247 | 239 | 234 | 178 | 113 | 122 | 130 | 165.8 |
| 19-Aug | 102 | 139 | 139 | 131 | 126 | 133 | 137 | 126 | 136 | 202 | 203 | 335 | 274 | 320 | 308 | 313 | 272 | 292 | 269 | 245 | 261 | 220 | 152 | 323 | 262.5 |
| 20-Aug | 160 | 178 | 177 | 195 | 171 | 96 | 102 | 94 | 208 | 320 | 331 | 326 | 339 | 339 | 341 | 340 | 327 | 327 | 352 | 341 | 188 | 81 | 67 | 79 | 343.4 |
| 21-Aug | 122 | 118 | 118 | 105 | 110 | 110 | 112 | 114 | 110 | 94 | 67 | 54 | 55 | 293 | 125 | 134 | 113 | 125 | 106 | 121 | 64 | 84 | 122 | 119 | 109.5 |
| 22-Aug | 112 | 122 | 129 | 116 | 121 | 120 | 119 | 120 | 110 | 344 | 307 | 316 | 306 | 130 | 87 | 88 | 93 | 102 | 117 | 128 | 115 | 152 | 145 | 139 | 113.9 |
| 23-Aug | 120 | 122 | 119 | 114 | 113 | 113 | 113 | 124 | 124 | 118 | 99 | 154 | 70 | 103 | 90 | 217 | 169 | 219 | 266 | 259 | 302 | 227 | 223 | 223 | 143.5 |
| 24-Aug | 299 | 307 | 319 | 319 | 331 | 325 | 316 | 328 | 330 | 317 | 314 | 313 | 308 | 322 | 330 | 329 | 348 | 350 | 346 | 259 | 203 | 111 | 69 | 102 | 321.9 |
| 25-Aug | 103 | 79 | 106 | 109 | 102 | 103 | 144 | 83 | 53 | 328 | 328 | 321 | 311 | 311 | 312 | 49 | 62 | 70 | 109 | 296 | 307 | 83 | 97 | 138 | 46.8 |
| 26-Aug | 110 | 119 | 116 | 120 | 125 | 124 | 118 | 118 | 120 | 114 | 113 | 109 | 151 | 174 | 144 | 161 | 159 | 148 | 117 | 111 | 122 | 47 | 92 | 78 | 128.5 |
| 27-Aug | 91 | 74 | 32 | 36 | 66 | 100 | 112 | 113 | 110 | 98 | 104 | 108 | 103 | 98 | 107 | 98 | 86 | 125 | 114 | 120 | 118 | 119 | 123 | 122 | 107.1 |
| 28-Aug | 117 | 116 | 120 | 180 | 136 | 139 | 140 | 182 | 157 | 209 | 216 | 221 | 219 | 217 | 234 | 243 | 236 | 235 | 240 | 251 | 261 | 249 | 241 | 228 | 218.1 |
| 29-Aug | 190 | 179 | 232 | 216 | 169 | 178 | 195 | 219 | 207 | 196 | 203 | 201 | 202 | 202 | 216 | 217 | 217 | 214 | 161 | 185 | 128 | 119 | 133 | 107 | 199.6 |
| 30-Aug | 98 | 106 | 120 | 120 | 120 | 121 | 115 | 123 | 259 | 341 | 316 | 262 | 285 | 277 | 243 | 255 | 310 | 79 | 144 | 159 | 134 | 102 | 152 | 127 | 140.0 |
| 31-Aug | 133 | 192 | 218 | 116 | 141 | 205 | 209 | 213 | 246 | 345 | 345 | 336 | 276 | 277 | 279 | 265 | 254 | 226 | 241 | 241 | 86 | 91 | 82 | 126 | 239.6 |
| | 203.7 | 206.7 | 189.1 | 165.6 | 138.2 | 139.0 | 131.5 | 256.3 | 317.7 | 305.6 | 302.1 | 298.2 | 296.5 | 298.7 | 305.2 | 307.8 | 294.4 | 301.7 | 294.0 | 273.0 | 274.2 | 236.4 | 216.3 | 216.4 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 103 deg on Aug 15 18:00

Minimum Value: 8 deg on Aug 3 02:00

Percentiles: $P_1$ = 9 $P_{10}$ = 12 $Q_1$ = 15 Median = 22 $Q_3$ = 40 $P_{90}$ = 66 $P_{99}$ = 92

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

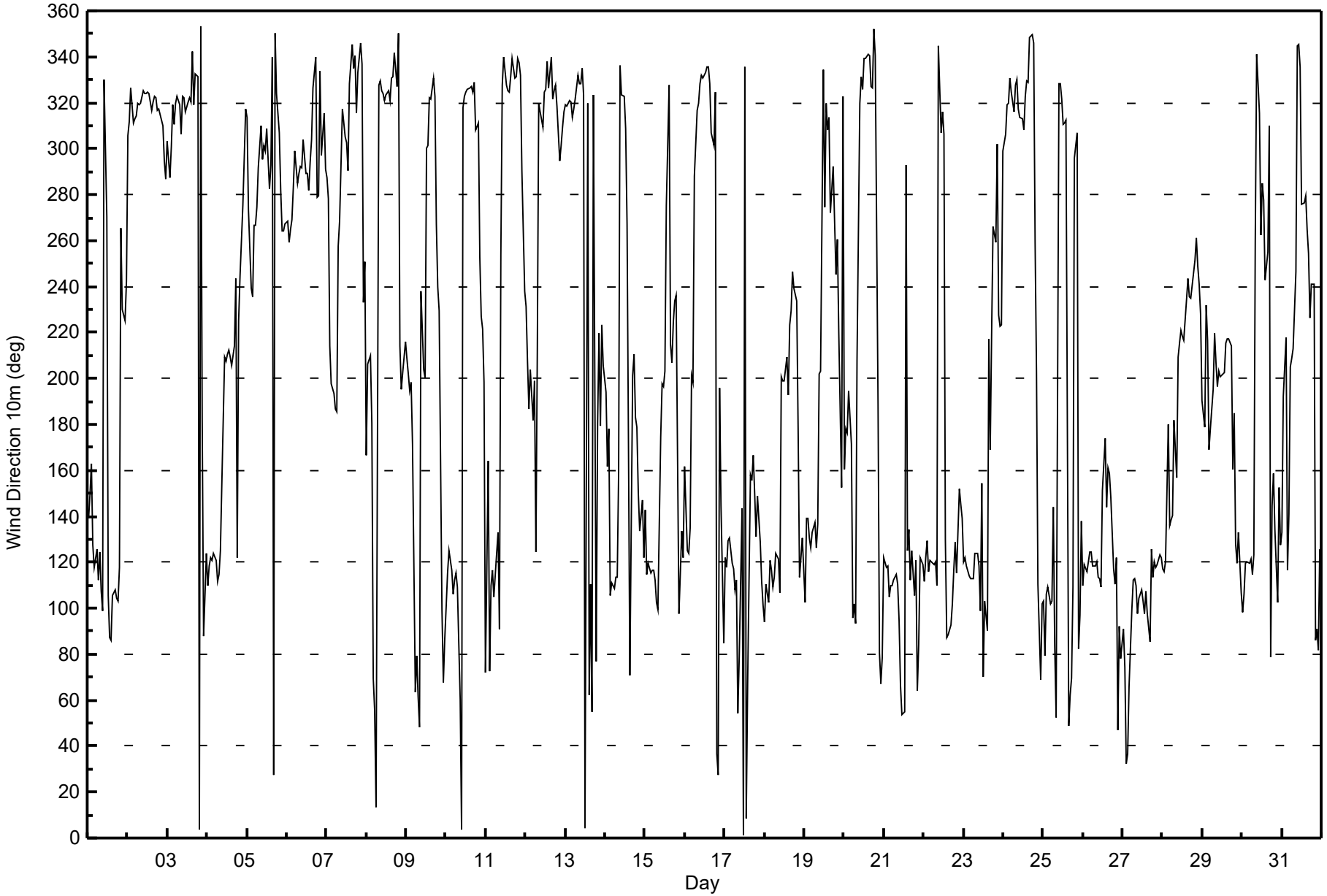
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 29 | 29 | 28 | 45 | 16 | 28 | 25 | 24 | 46 | 33 | 74 | 70 | 21 | 17 | 17 | 19 | 17 | 19 | 20 | 23 | 83 | 79 | 83 | 61 | 83 |
| 2-Aug | 64 | 12 | 19 | 14 | 15 | 12 | 11 | 10 | 10 | 15 | 13 | 12 | 12 | 13 | 10 | 11 | 12 | 11 | 11 | 10 | 10 | 11 | 10 | 9 | 64 |
| 3-Aug | 12 | 8 | 15 | 22 | 17 | 14 | 16 | 19 | 16 | 20 | 20 | 26 | 18 | 18 | 23 | 29 | 24 | 19 | 20 | 18 | 45 | 63 | 48 | 32 | 63 |
| 4-Aug | 26 | 13 | 14 | 11 | 12 | 12 | 14 | 18 | 21 | 48 | 13 | 11 | 11 | 15 | 13 | 13 | 15 | 90 | 89 | 15 | 26 | 13 | 14 | 29 | 90 |
| 5-Aug | 19 | 13 | 12 | 14 | 25 | 10 | 11 | 11 | 13 | 13 | 16 | 13 | 13 | 18 | 20 | 19 | 43 | 25 | 14 | 17 | 19 | 13 | 8 | 10 | 43 |
| 6-Aug | 11 | 8 | 10 | 12 | 11 | 14 | 14 | 11 | 11 | 12 | 13 | 18 | 20 | 17 | 14 | 43 | 22 | 35 | 12 | 13 | 28 | 41 | 40 | 28 | 43 |
| 7-Aug | 41 | 44 | 17 | 14 | 32 | 54 | 53 | 63 | 41 | 39 | 17 | 15 | 15 | 17 | 16 | 23 | 22 | 19 | 27 | 17 | 18 | 22 | 68 | 34 | 68 |
| 8-Aug | 74 | 23 | 11 | 30 | 84 | 73 | 44 | 16 | 15 | 15 | 13 | 11 | 12 | 18 | 15 | 17 | 18 | 20 | 15 | 38 | 83 | 66 | 60 | 15 | 84 |
| 9-Aug | 17 | 69 | 65 | 88 | 91 | 28 | 33 | 36 | 76 | 35 | 15 | 16 | 63 | 36 | 24 | 17 | 17 | 22 | 16 | 61 | 63 | 92 | 24 | 57 | 92 |
| 10-Aug | 45 | 30 | 33 | 26 | 19 | 28 | 29 | 73 | 10 | 67 | 16 | 9 | 9 | 14 | 15 | 14 | 12 | 15 | 11 | 24 | 35 | 12 | 14 | 73 | 73 |
| 11-Aug | 87 | 71 | 57 | 38 | 25 | 26 | 30 | 78 | 83 | 75 | 35 | 20 | 15 | 13 | 13 | 19 | 20 | 18 | 19 | 17 | 17 | 14 | 48 | 40 | 87 |
| 12-Aug | 20 | 60 | 71 | 62 | 78 | 51 | 62 | 65 | 27 | 23 | 13 | 14 | 13 | 27 | 19 | 25 | 12 | 14 | 16 | 20 | 21 | 24 | 10 | 11 | 78 |
| 13-Aug | 12 | 9 | 11 | 9 | 11 | 12 | 13 | 18 | 13 | 15 | 21 | 14 | 61 | 10 | 32 | 34 | 90 | 60 | 58 | 73 | 21 | 80 | 13 | 35 | 90 |
| 14-Aug | 49 | 55 | 47 | 30 | 24 | 16 | 18 | 56 | 89 | 70 | 19 | 11 | 17 | 42 | 32 | 53 | 28 | 41 | 84 | 36 | 41 | 28 | 49 | 28 | 89 |
| 15-Aug | 29 | 17 | 14 | 12 | 9 | 9 | 10 | 25 | 42 | 68 | 33 | 11 | 16 | 31 | 74 | 84 | 28 | 103 | 34 | 72 | 69 | 34 | 18 | 35 | 103 |
| 16-Aug | 68 | 59 | 73 | 59 | 73 | 17 | 60 | 25 | 19 | 18 | 20 | 17 | 19 | 19 | 19 | 22 | 14 | 13 | 28 | 52 | 83 | 86 | 68 | 53 | 86 |
| 17-Aug | 23 | 20 | 15 | 15 | 17 | 17 | 17 | 72 | 76 | 55 | 81 | 38 | 24 | 58 | 74 | 43 | 27 | 16 | 18 | 18 | 27 | 12 | 12 | 22 | 81 |
| 18-Aug | 21 | 15 | 14 | 11 | 14 | 18 | 19 | 20 | 15 | 28 | 92 | 12 | 11 | 16 | 32 | 15 | 16 | 20 | 21 | 21 | 78 | 49 | 32 | 52 | 92 |
| 19-Aug | 55 | 25 | 16 | 16 | 20 | 23 | 36 | 46 | 32 | 16 | 55 | 50 | 21 | 20 | 16 | 22 | 19 | 37 | 23 | 26 | 34 | 67 | 65 | 83 | 83 |
| 20-Aug | 98 | 58 | 102 | 25 | 59 | 33 | 14 | 34 | 55 | 60 | 15 | 13 | 19 | 21 | 21 | 24 | 18 | 16 | 21 | 35 | 53 | 66 | 48 | 41 | 102 |
| 21-Aug | 26 | 24 | 18 | 14 | 13 | 13 | 12 | 18 | 15 | 25 | 47 | 26 | 100 | 58 | 98 | 36 | 21 | 22 | 15 | 25 | 38 | 22 | 9 | 12 | 100 |
| 22-Aug | 14 | 16 | 16 | 14 | 14 | 15 | 13 | 13 | 22 | 64 | 24 | 38 | 85 | 41 | 28 | 18 | 16 | 19 | 18 | 40 | 51 | 13 | 27 | 12 | 85 |
| 23-Aug | 20 | 32 | 22 | 13 | 14 | 14 | 14 | 22 | 20 | 23 | 41 | 72 | 22 | 66 | 97 | 18 | 49 | 44 | 73 | 31 | 33 | 32 | 19 | 28 | 97 |
| 24-Aug | 19 | 14 | 14 | 16 | 17 | 16 | 12 | 15 | 14 | 18 | 18 | 15 | 19 | 16 | 16 | 20 | 24 | 40 | 24 | 24 | 55 | 71 | 17 | 59 | 71 |
| 25-Aug | 54 | 35 | 41 | 27 | 28 | 28 | 39 | 27 | 69 | 33 | 18 | 24 | 18 | 18 | 12 | 48 | 11 | 36 | 37 | 67 | 77 | 45 | 44 | 47 | 77 |
| 26-Aug | 23 | 20 | 22 | 18 | 17 | 14 | 16 | 15 | 17 | 23 | 44 | 82 | 31 | 27 | 25 | 31 | 15 | 14 | 17 | 15 | 21 | 30 | 30 | 32 | 82 |
| 27-Aug | 52 | 35 | 33 | 43 | 48 | 51 | 30 | 30 | 26 | 23 | 21 | 23 | 17 | 19 | 21 | 24 | 26 | 33 | 16 | 16 | 15 | 15 | 16 | 18 | 52 |
| 28-Aug | 34 | 21 | 18 | 35 | 84 | 25 | 39 | 38 | 24 | 15 | 17 | 18 | 13 | 16 | 13 | 17 | 17 | 16 | 12 | 19 | 12 | 14 | 14 | 32 | 84 |
| 29-Aug | 41 | 50 | 14 | 32 | 19 | 19 | 33 | 16 | 16 | 12 | 13 | 12 | 13 | 13 | 16 | 16 | 16 | 14 | 25 | 42 | 61 | 19 | 15 | 35 | 61 |
| 30-Aug | 69 | 31 | 38 | 33 | 26 | 36 | 27 | 61 | 65 | 85 | 20 | 67 | 25 | 41 | 24 | 32 | 32 | 27 | 19 | 52 | 66 | 77 | 75 | 55 | 85 |
| 31-Aug | 46 | 26 | 65 | 41 | 52 | 65 | 9 | 10 | 50 | 22 | 23 | 38 | 64 | 32 | 25 | 21 | 22 | 14 | 11 | 18 | 71 | 43 | 33 | 37 | 71 |
| | 98 | 71 | 102 | 88 | 91 | 73 | 62 | 78 | 89 | 85 | 92 | 82 | 100 | 66 | 98 | 84 | 90 | 103 | 89 | 73 | 83 | 92 | 83 | 83 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Athabasca Valley - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS08
## FORT CHIPEWYAN
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 709 | 35 | 35 | 100 | - | - | 2.5 | 0 | 0.6 | 0 |
| TRS (ppb) Average | 501 | 28 | 243 | 71.1 | 0.8 | 0 | 0.8 | - | 0.3 | - |
| O3(ppb) Average | 710 | 34 | 34 | 100 | - | - | 47.7 | 0 | 32.5 | - |
| NO2(ppb) Average | 699 | 36 | 45 | 98.79 | - | - | 11.4 | 0 | 4.9 | - |
| NO(ppb) Average | 699 | 36 | 45 | 98.79 | - | - | 5.9 | - | 1.6 | - |
| NOX(ppb) Average | 699 | 36 | 45 | 98.79 | - | - | 17 | - | 6.5 | - |
| PM2.5(ug/m3) Average | 743 | 1 | 1 | 100 | - | - | 128 | 7 | 51.1 | 2 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 26.5 | - | 22.7 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 100 | - | 92.4 | - |
| Wind Speed 10 m (km/h) Average | 743 | 0 | 1 | 99.87 | - | - | 32 | - | 24 | - |
| Wind Direction 10 m (deg) Average | 743 | 0 | 1 | 99.87 | - | | - | - | - | - |
| PC(mm) Total | 740 | 0 | 4 | 99.46 | - | - | 26.7 | - | 33.4 | - |
| Leaf Wetness (% of range) Average | 744 | 0 | 0 | 100 | - | - | 46.5 | - | 11.5 | - |
| Global Solar Radiation (W/m2) Average | 744 | 0 | 0 | 100 | - | - | 766.7 | - | 287.1 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2(ppb) Average | 709 | 0.12 | 0.2 | - | 0 | 0 | 0 | 0 | 0.1 | 0.3 | 2.5 |
| TRS (ppb) Average | 501 | 0.15 | 0.1 | - | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.8 |
| O3(ppb) Average | 710 | 23.22 | 6.9 | - | 9 | 14 | 18.5 | 23 | 28.1 | 31.6 | 47.7 |
| NO2(ppb) Average | 699 | 0.84 | 1.6 | - | 0 | 0.2 | 0.2 | 0.3 | 0.5 | 1.5 | 11.4 |
| NO(ppb) Average | 699 | 0.23 | 0.7 | - | 0 | 0 | 0 | 0.1 | 0.1 | 0.2 | 5.9 |
| NOX(ppb) Average | 699 | 1.07 | 2.2 | - | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 1.7 | 17 |
| PM2.5(ug/m3) Average | 743 | 10.78 | 14.9 | - | 0.6 | 2.4 | 3.2 | 5.6 | 13.2 | 21.9 | 128 |
| Temperature 2 m (C) Average | 744 | 16.89 | 3.7 | - | 8.6 | 12.4 | 14.1 | 16.6 | 19.5 | 21.8 | 26.5 |
| Relative Humidity (%) Average | 744 | 73.36 | 14.7 | - | 35.4 | 52.7 | 63.4 | 74 | 84.9 | 92.8 | 100 |
| Wind Speed 10 m (km/h) Average | 743 | 11.6 | 6 | - | 1 | 6 | 8 | 10 | 15 | 20 | 32 |
| Wind Direction 10 m (deg) Average | 743 | - | - | - | - | - | - | - | - | - | - |
| Precipitation (mm) Total | 740 | - | - | 58.42 | - | - | - | 0 | 0 | 0 | 26.7 |
| Leaf Wetness (% of range) Average | 744 | 3.26 | 6.3 | - | 0.2 | 0.7 | 0.9 | 1.2 | 1.7 | 7.5 | 46.5 |
| Global Solar Radiation (W/m2) Average | 744 | 197.52 | 231.3 | - | 0 | 0 | 0 | 89.6 | 371.4 | 582.7 | 766.7 |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| TRS | 02 Aug 2026 11:00 | 02 Aug 2026 12:00 | 2 | Maintenance - verify daily QA response |
| TRS | 23 Aug 2026 04:00 | 01 Sep 2026 00:00 | 213 | Analyzer Failure - TRS converter failure |
| NO2 | 23 Aug 2026 12:00 | 23 Aug 2026 20:00 | 9 | Unstable Operation - inconsistent response |
| Wind Speed, Wind Direction | 13 Aug 2026 20:00 | 13 Aug 2026 20:00 | 1 | Flat line in sensor output signal |
| Precipitation | 13 Aug 2026 07:00 | 13 Aug 2026 10:00 | 4 | DAS Failure - data not recorded |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Fort Chipewyan - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.5 ppb on Aug 28 12:00 Maximum Daily Average: 0.6 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 3 03:00
Maximum Diurnal Average: 0.2 ppb at hour 12
Monthly Average: 0.12 ppb

Minimum Daily Average: 0.0 ppb on Aug 12
Minimum Diurnal Average: 0.1 ppb at hour 24
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.3 $P_{99}$ = 1.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.1 | 0.8 | 0.5 | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 1.1 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 5-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 |
| 6-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 7-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 10-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 |
| 11-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 12-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 13-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 16-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 17-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 18-Aug | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.7 | 0.8 | 1.0 | 0.8 | 0.7 | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 1.0 |
| 19-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 20-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 21-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.8 | 0.5 | 0.1 | 0.8 |
| 22-Aug | Z | 0.7 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 |
| 23-Aug | 0.3 | Z | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 |
| 24-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 25-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 1.2 | 0.9 | 0.2 | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 1.2 |
| 27-Aug | 0.2 | 0.2 | 0.3 | 0.6 | 0.7 | Z | 0.8 | 1.0 | 1.0 | 1.3 | 1.4 | 1.0 | 1.5 | 1.1 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 1.5 |
| 28-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.9 | 2.5 | 1.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 2.5 |
| 29-Aug | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 30-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 31-Aug | 0.1 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 1.1 | 0.8 | 0.6 | 0.6 | 0.7 | 0.5 | 0.8 | 1.0 | 1.0 | 1.3 | 1.4 | 2.5 | 1.5 | 1.1 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.4 | 0.8 | 0.5 | Diurnal Maximum | |

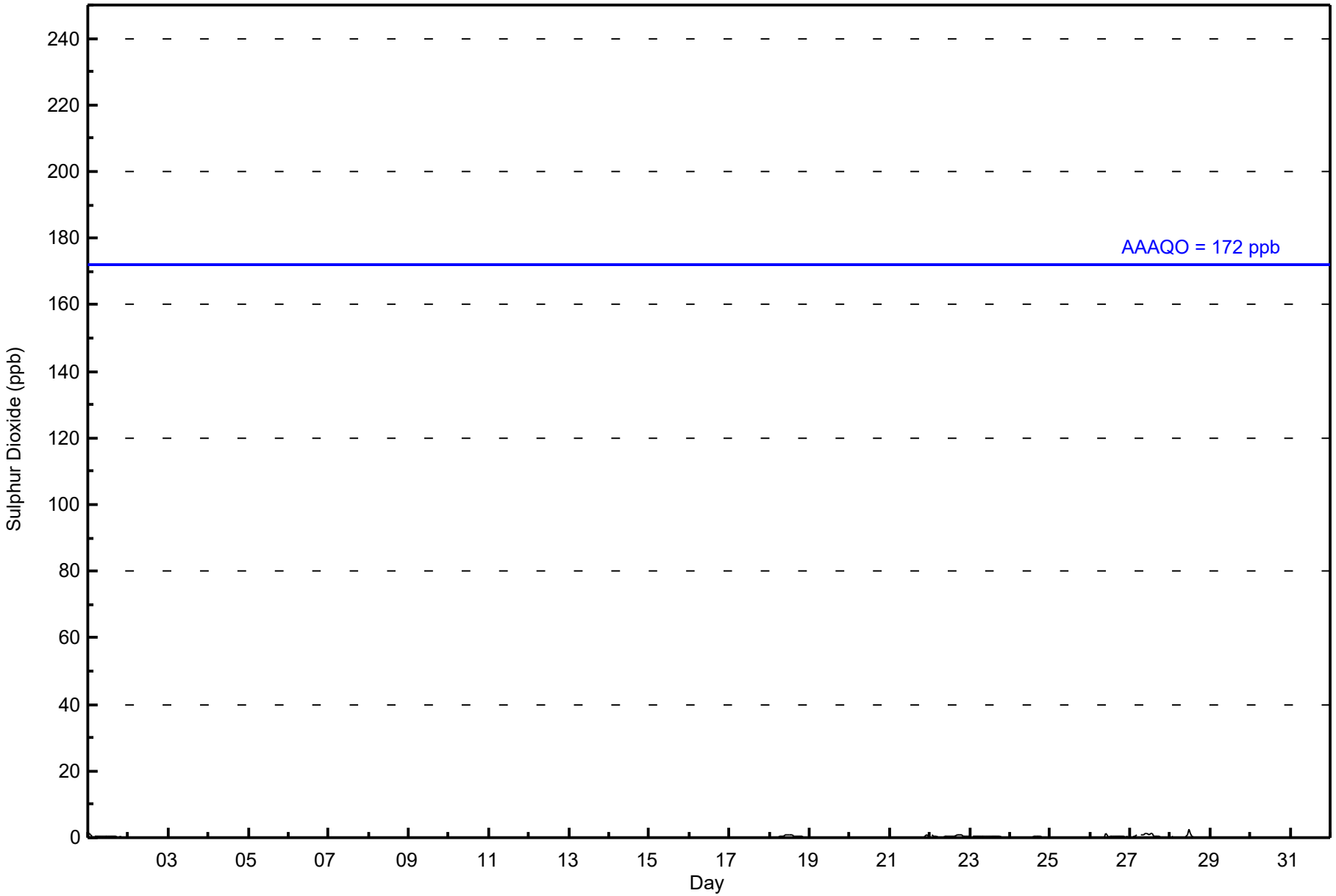
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Chipewyan - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Fort Chipewyan - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 709 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Chipewyan - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 24 | 7 | 5 | 19 | 64 | 44 | 25 | 15 | 28 | 38 | 49 | 39 | 48 | 80 | 114 | 109 | 708 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 7 | 5 | 19 | 64 | 44 | 25 | 15 | 28 | 38 | 49 | 39 | 48 | 80 | 114 | 109 | 708 |

Total Number of Valid Hours: 708

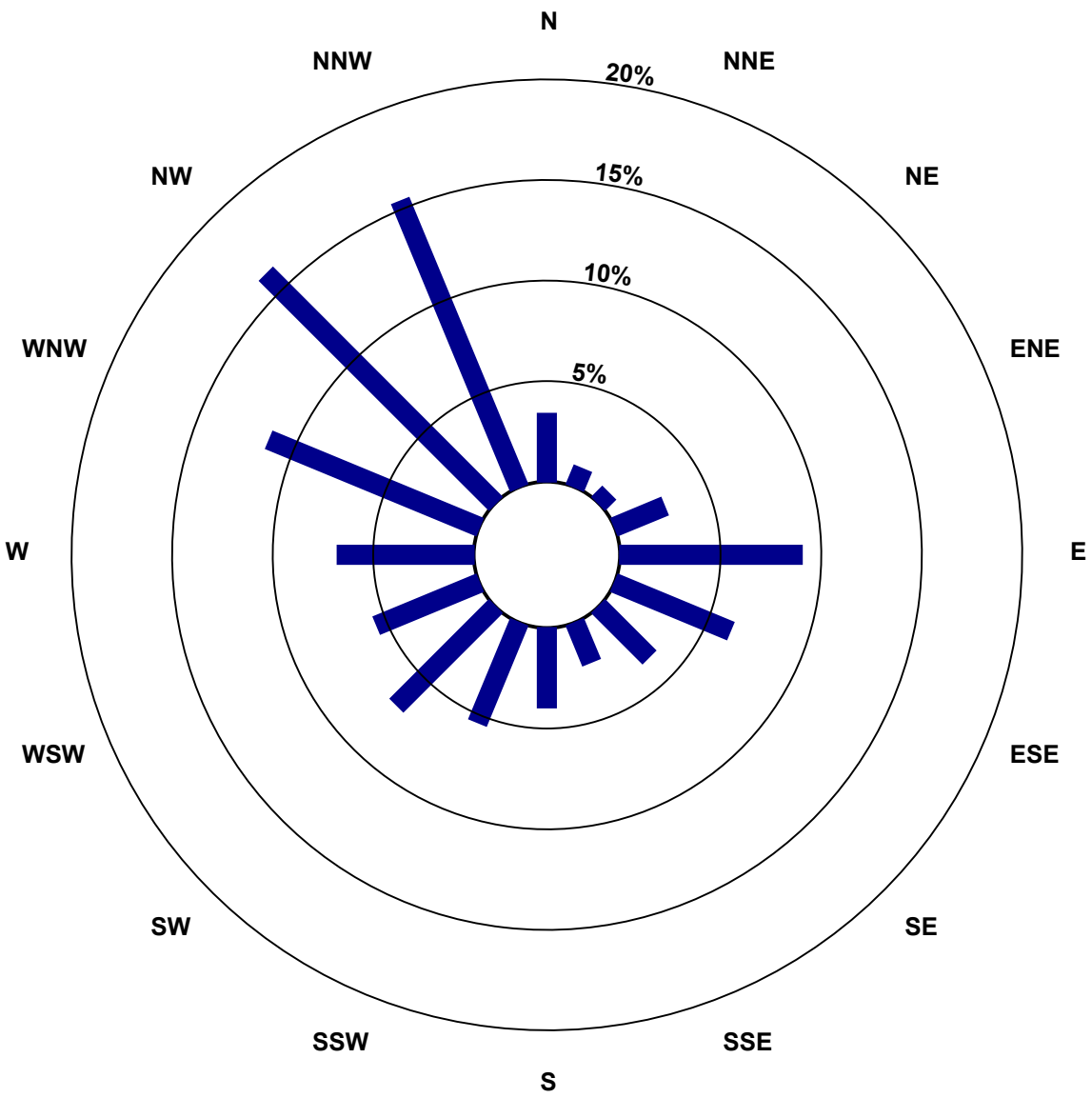
Total Number of Hours: 744

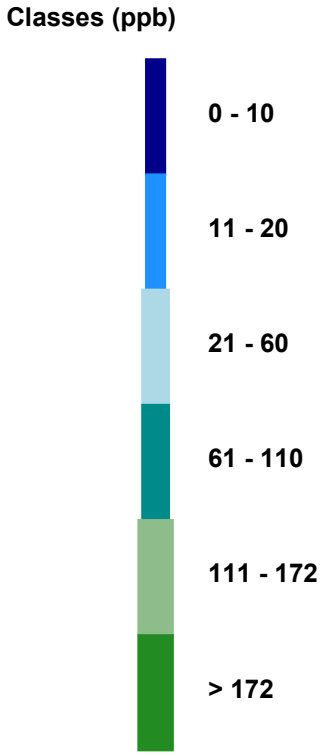
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Fort Chipewyan



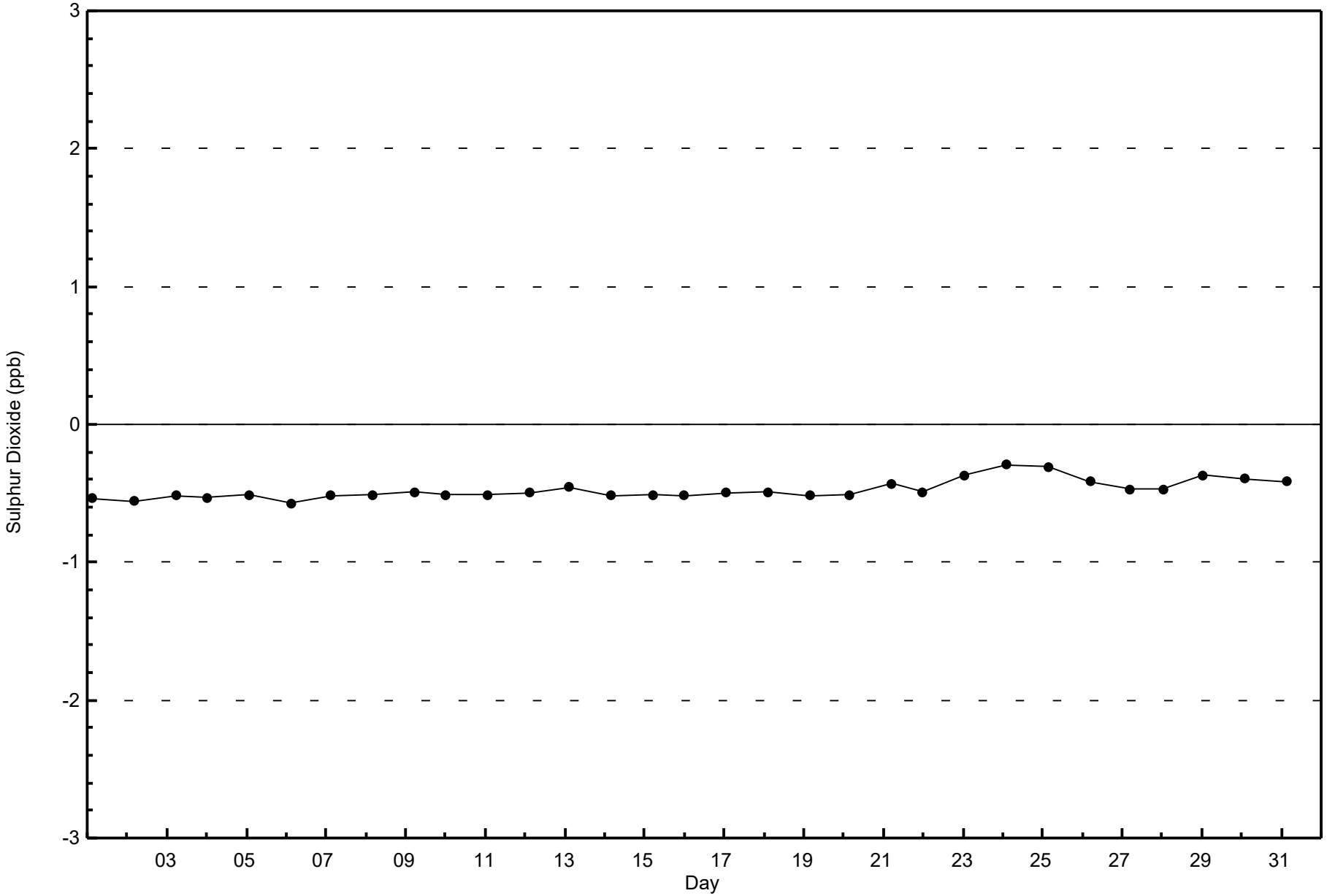

Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Chipewyan - August 2026**

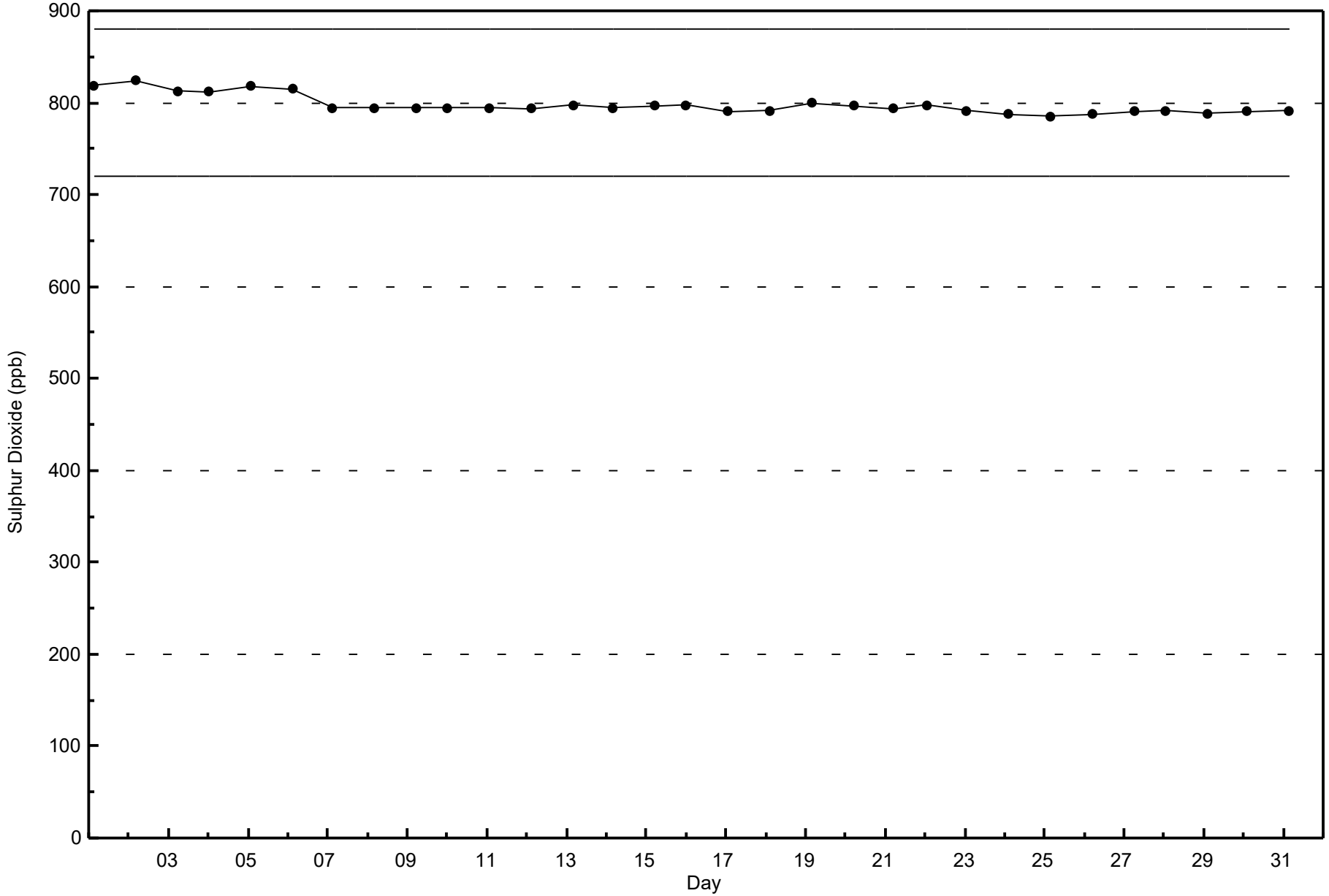


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Chipewyan - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort Chipewyan - August 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.8 ppb on Aug 22 04:00 Maximum Daily Average: 0.3 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 19 21:00 Minimum Daily Average: 0.0 ppb on Aug 19

Maximum Diurnal Average: 0.3 ppb at hour 6 Minimum Diurnal Average: 0.1 ppb at hour 18

Monthly Average: 0.15 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.7

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1002 |
| Periods of Invalid Data: | 486 |
| Periods of Calibration: | 56 |
| Percent Operational Time: | 71.1 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.5 |
| | 0.3 | 0.3 | 0.3 | 0.3 | SP | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 2-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | M | M | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.3 | 0.2 | 0.2 | M | M | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 3-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | | |
| 4-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 5-Aug | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| | 0.2 | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | 0.1 | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 7-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 |
| | 0.1 | 0.1 | 0.1 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | | |
| 8-Aug | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | | |
| 9-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | | |
| 10-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | | |
| 11-Aug | 0.1 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| | 0.2 | 0.2 | SP | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 12-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | C | C | C | C | C | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 |
| | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | C | C | C | C | C | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | |
| 13-Aug | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| | 0.1 | 0.1 | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 15-Aug | Z | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| | SP | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort Chipewyan - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 |
| | 0.1 | SP | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | | |
| 17-Aug | 0.2 | 0.2 | Z | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| | 0.2 | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 18-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.7 |
| | 0.1 | 0.1 | 0.1 | SP | 0.3 | 0.4 | 0.6 | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | | |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| | 0.0 | 0.0 | 0.0 | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.4 | 0.5 | 0.4 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.5 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | SP | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | | |
| 21-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 |
| | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | | |
| 22-Aug | 0.2 | Z | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.8 |
| | 0.3 | SP | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 23-Aug | 0.2 | 0.3 | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 0.3 |
| | 0.2 | 0.3 | SP | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 24-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 28-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 29-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 30-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 31-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.3 | 0.3 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Reduced Sulphur (TRS) - ppb

## Fort Chipewyan - August 2026

Maximum Value: 0.8 ppb on Aug 22 04:00

Maximum Daily Average: 0.3 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 19 21:00

Minimum Daily Average: 0.0 ppb on Aug 19

Maximum Diurnal Average: 0.3 ppb at hour 6

Minimum Diurnal Average: 0.1 ppb at hour 18

Monthly Average: 0.15 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 501 |
| Hours of Missing Data: | 243 |
| Hours of Calibration: | 28 |
| Percent Operational Time: | 71.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 |
| 2-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.2 | 0.2 | M | M | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 3-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 4-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 5-Aug | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 8-Aug | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 9-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 10-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 |
| 11-Aug | 0.1 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 12-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | C | C | C | C | C | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 |
| 13-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 15-Aug | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 16-Aug | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 |
| 17-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 18-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.7 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.5 |
| 21-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 |
| 22-Aug | 0.3 | Z | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.8 |
| 23-Aug | 0.2 | 0.3 | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 0.3 |
| 24-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 25-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 26-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 27-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 28-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 29-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 30-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 31-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.3 | 0.3 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

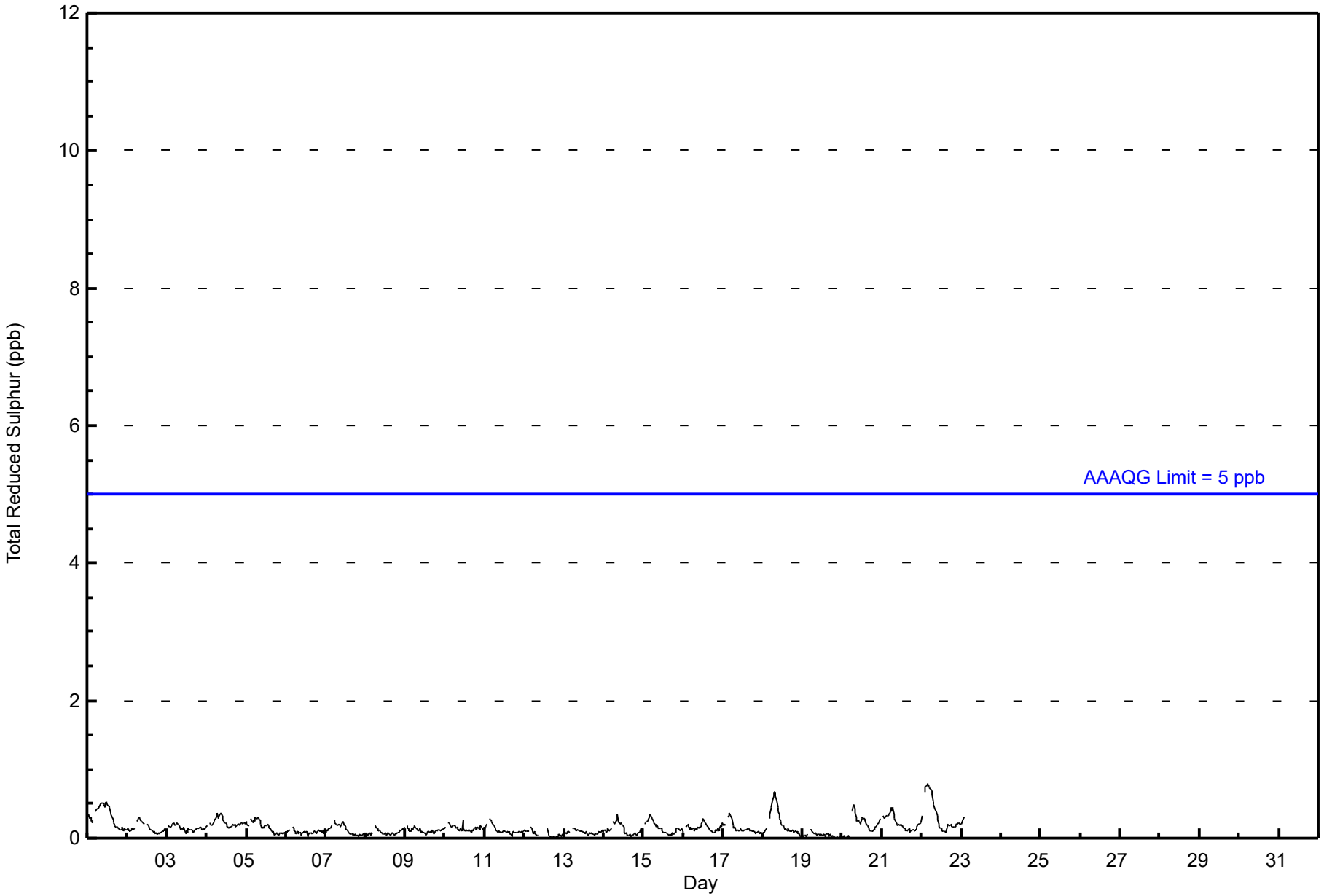
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Chipewyan - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 501 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 501

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Chipewyan - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 22 | 6 | 5 | 10 | 44 | 25 | 10 | 6 | 13 | 17 | 29 | 31 | 36 | 64 | 86 | 96 | 500 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 22 | 6 | 5 | 10 | 44 | 25 | 10 | 6 | 13 | 17 | 29 | 31 | 36 | 64 | 86 | 96 | 500 |

Total Number of Valid Hours: 500

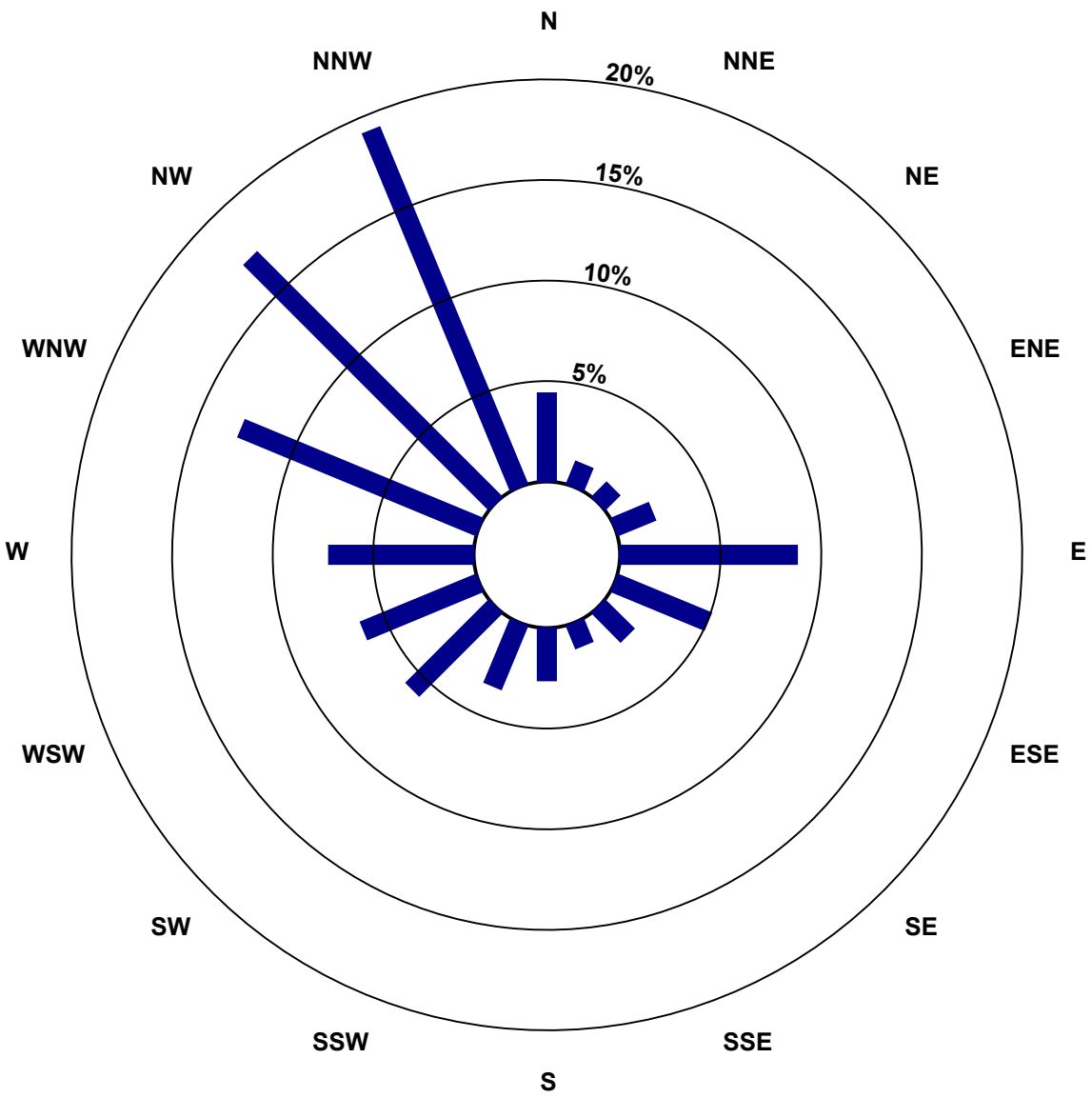
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

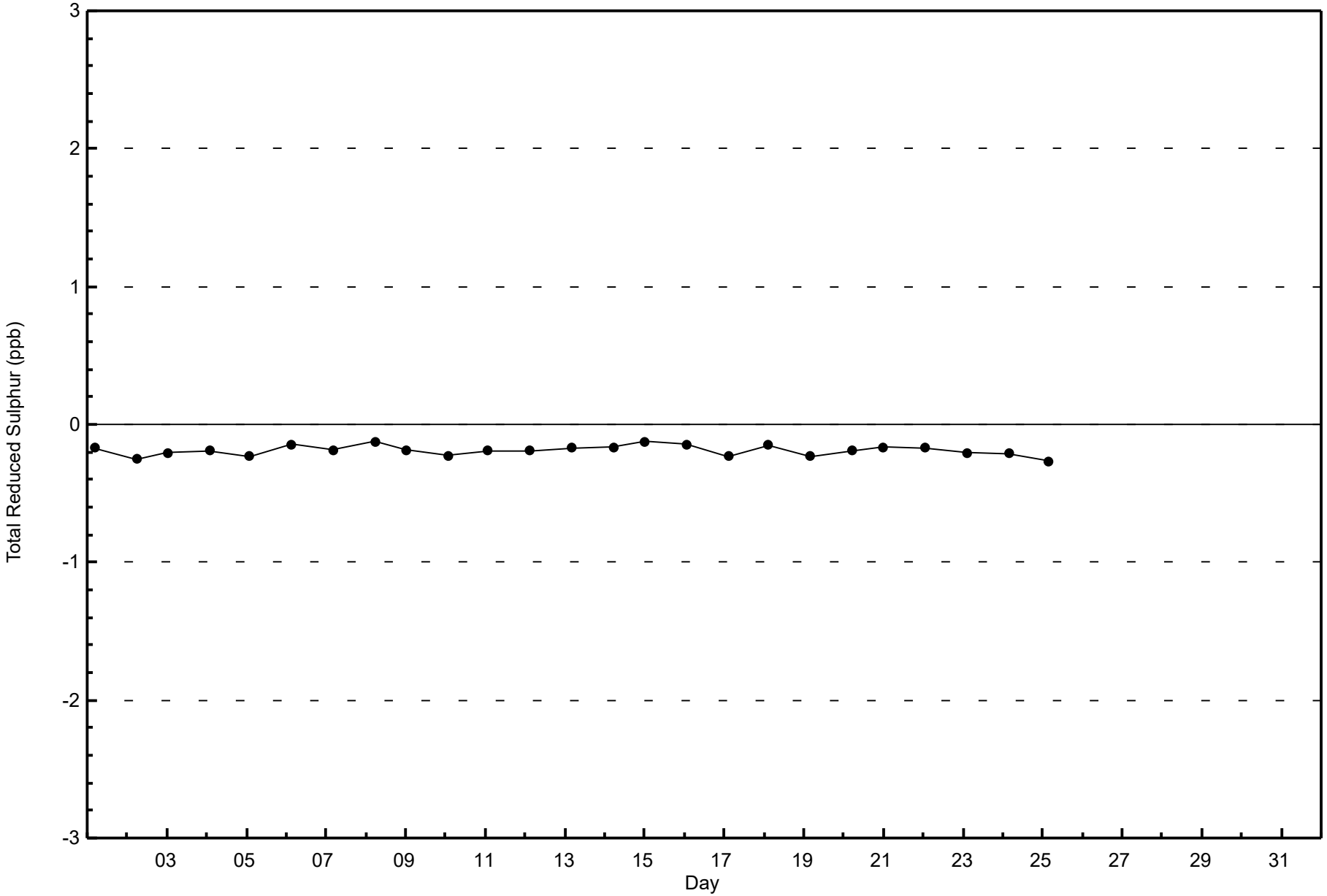
Total Number of Valid Hours: 500

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Chipewyan - August 2026**

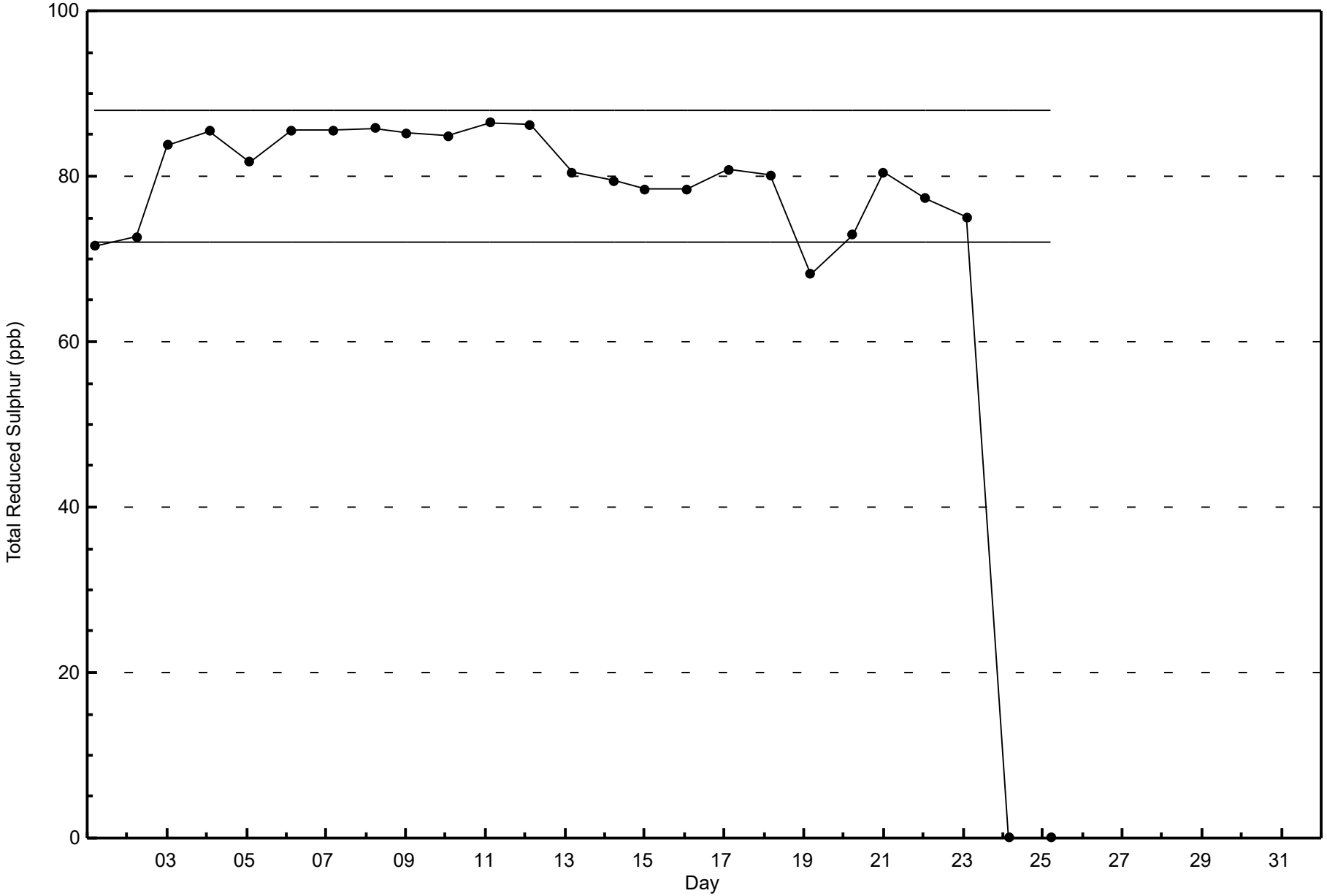


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Chipewyan - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Fort Chipewyan - August 2026

Maximum Value: 5.9 ppb on Aug 30 08:00

Maximum Daily Average: 1.6 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 2 17:00

Minimum Daily Average: 0.0 ppb on Aug 2

Maximum Diurnal Average: 0.8 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 24

Monthly Average: 0.23 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.1 $P_{90}$ = 0.2 $P_{99}$ = 4.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 699 |
| Hours of Missing Data: | 45 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.8 | 1.9 | 5.0 | 5.4 | 2.7 | 2.1 | 5.6 | 5.4 | 2.9 | 2.6 | 1.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.6 | 5.6 |
| 2-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 4-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |
| 5-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.3 | 0.1 | 0.2 | 0.1 | 0.8 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 6-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 8-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 9-Aug | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 10-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.8 | 1.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 |
| 11-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 12-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 13-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 |
| 14-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.1 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| 15-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 17-Aug | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 18-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 1.1 | 3.4 | 4.1 | 3.2 | 1.8 | 1.0 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 4.1 |
| 19-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 20-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.4 | 2.0 | 3.1 | 3.0 | 1.9 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 3.1 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | Z | 2.3 | 3.3 | 2.5 | 0.8 | 0.0 | UO | UO | UO | UO | UO | UO | UO | UO | UO | 0.0 | 0.0 | 0.0 | 0.0 | -- | 3.3 |
| 24-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 1.0 | 0.0 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 |
| 25-Aug | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 26-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| 27-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.7 | 0.6 | 0.4 | 0.4 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 30-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 3.4 | 5.9 | 5.9 | 5.7 | 4.2 | 4.7 | 2.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 5.9 |
| 31-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 0.1 | 0.4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.8 | 0.8 | 0.5 | 0.4 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.1 | 3.4 | 5.9 | 5.9 | 5.7 | 4.2 | 5.6 | 5.4 | 2.9 | 2.6 | 1.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Maximum | |

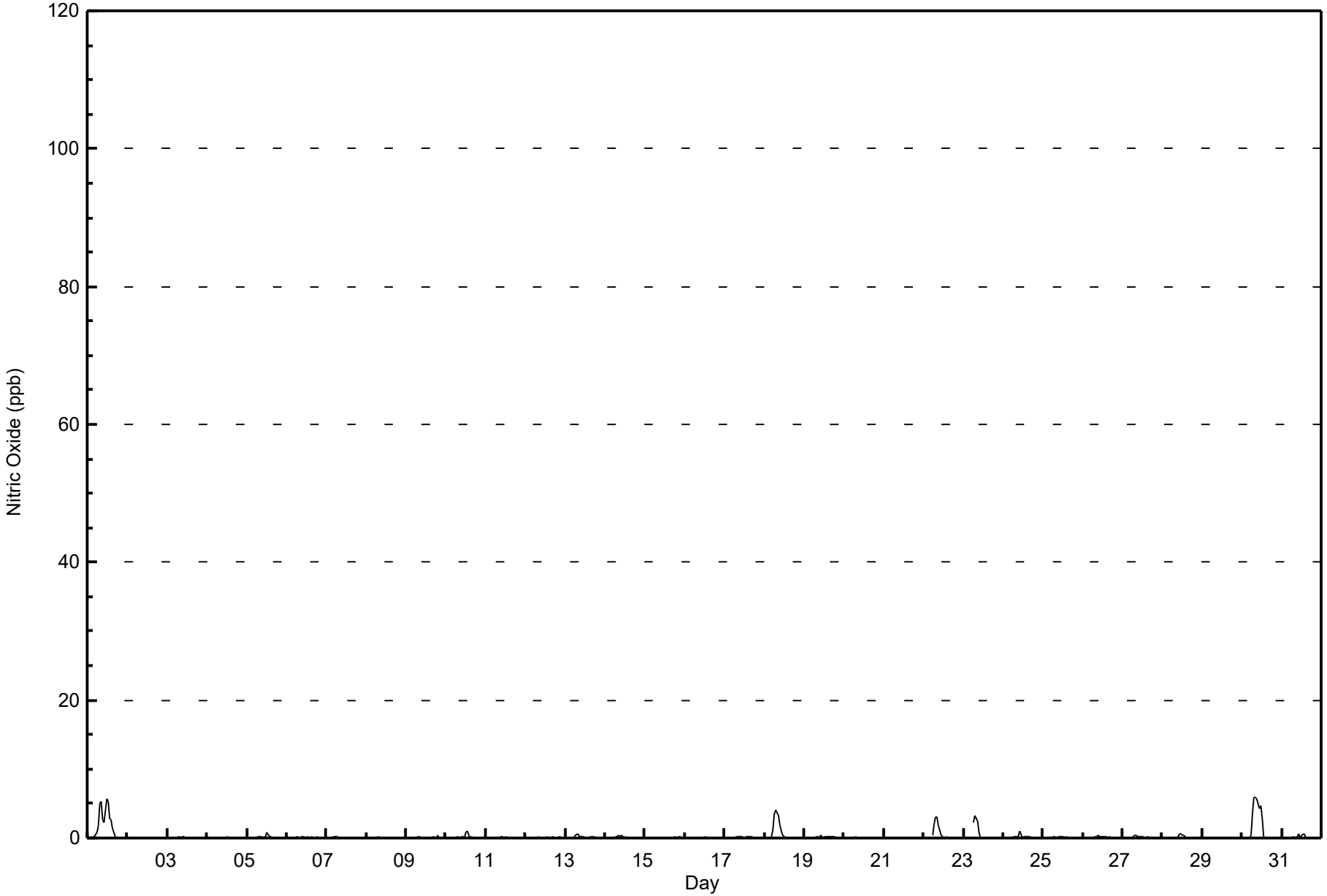
Z - zerospan C - Calibration UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Fort Chipewyan - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 699 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 699

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Fort Chipewyan - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 24 | 7 | 5 | 19 | 63 | 46 | 23 | 17 | 27 | 38 | 50 | 33 | 45 | 79 | 116 | 106 | 698 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 7 | 5 | 19 | 63 | 46 | 23 | 17 | 27 | 38 | 50 | 33 | 45 | 79 | 116 | 106 | 698 |

Total Number of Valid Hours: 698

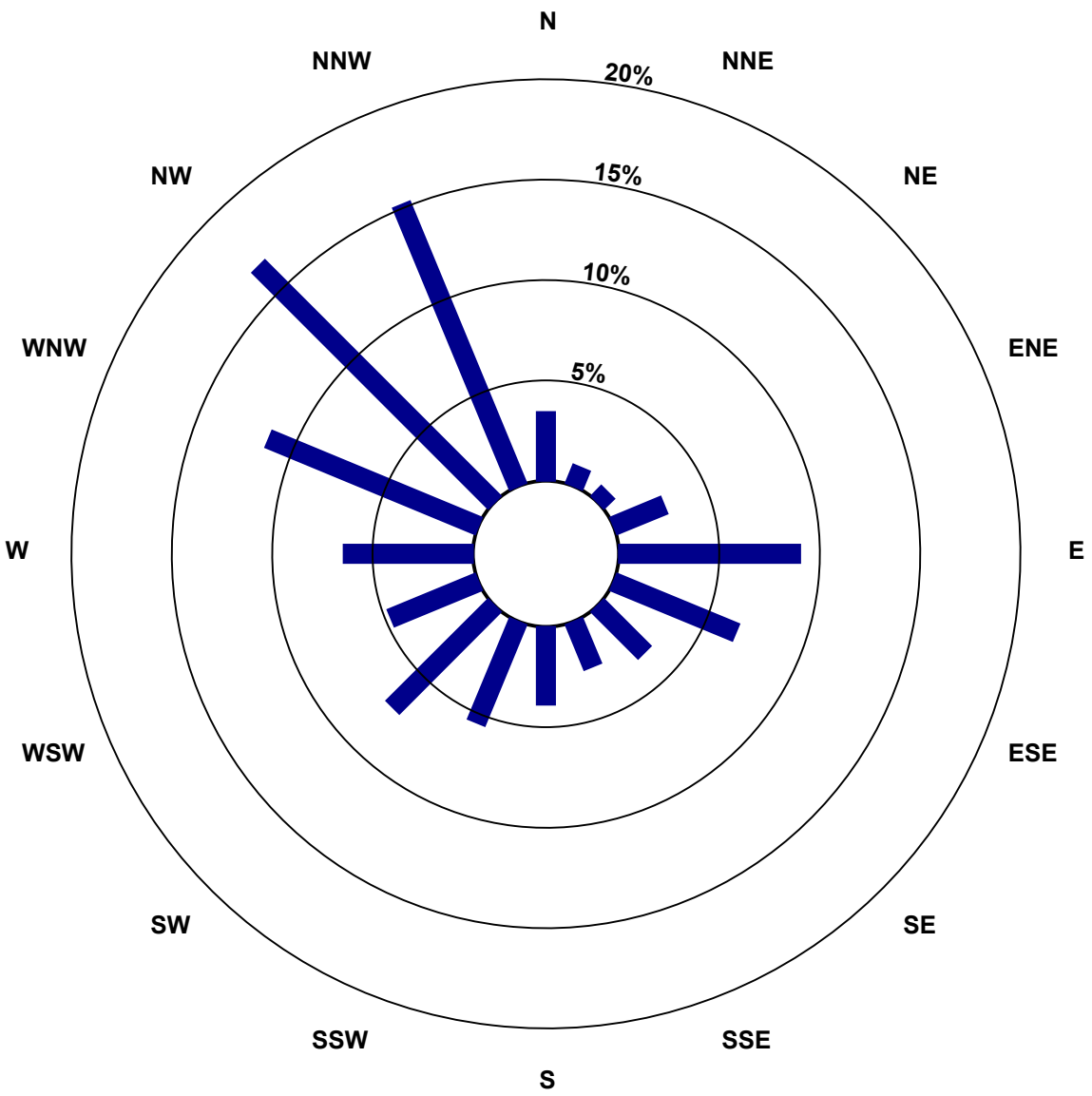
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Fort Chipewyan




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

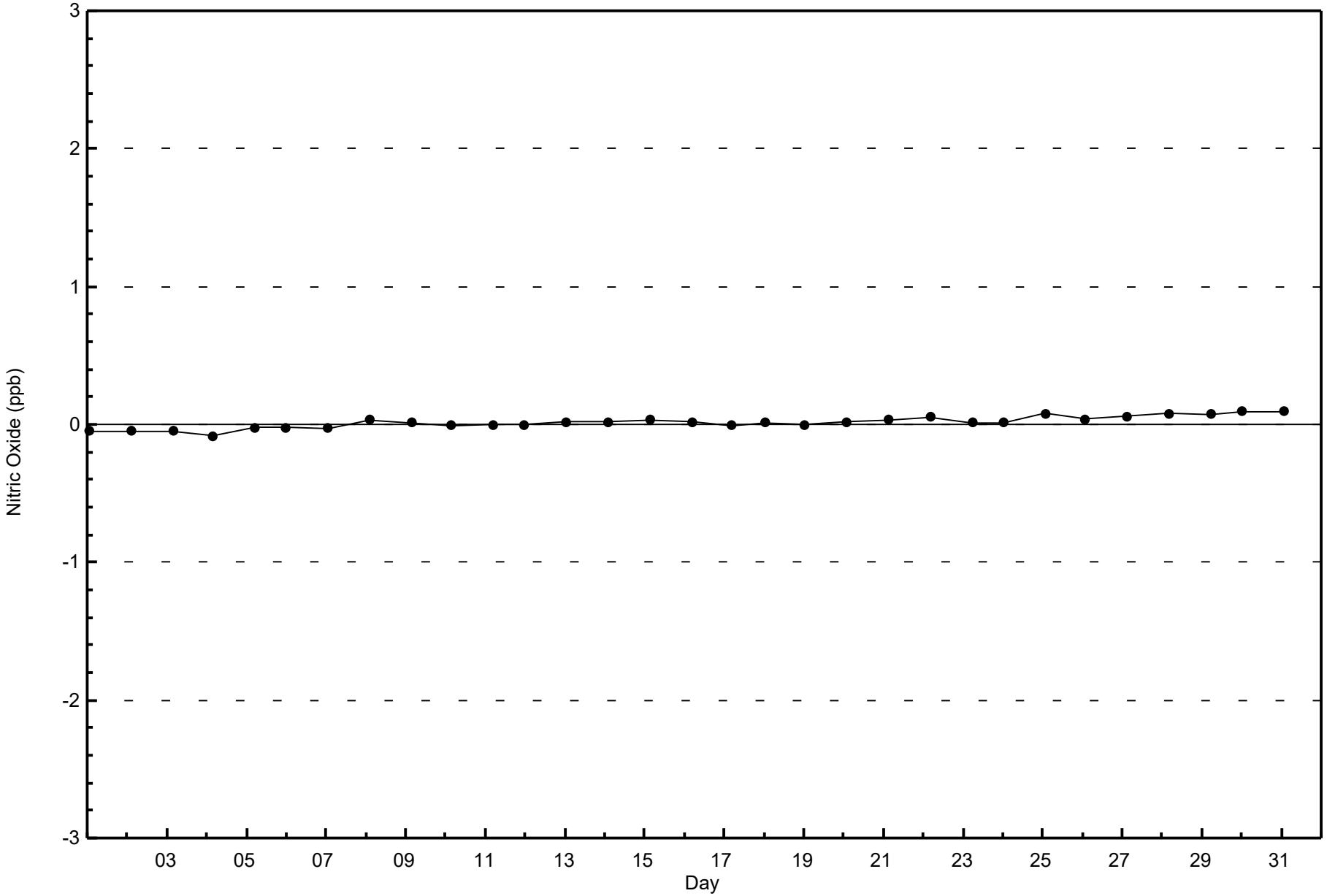
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Fort Chipewyan - August 2026**

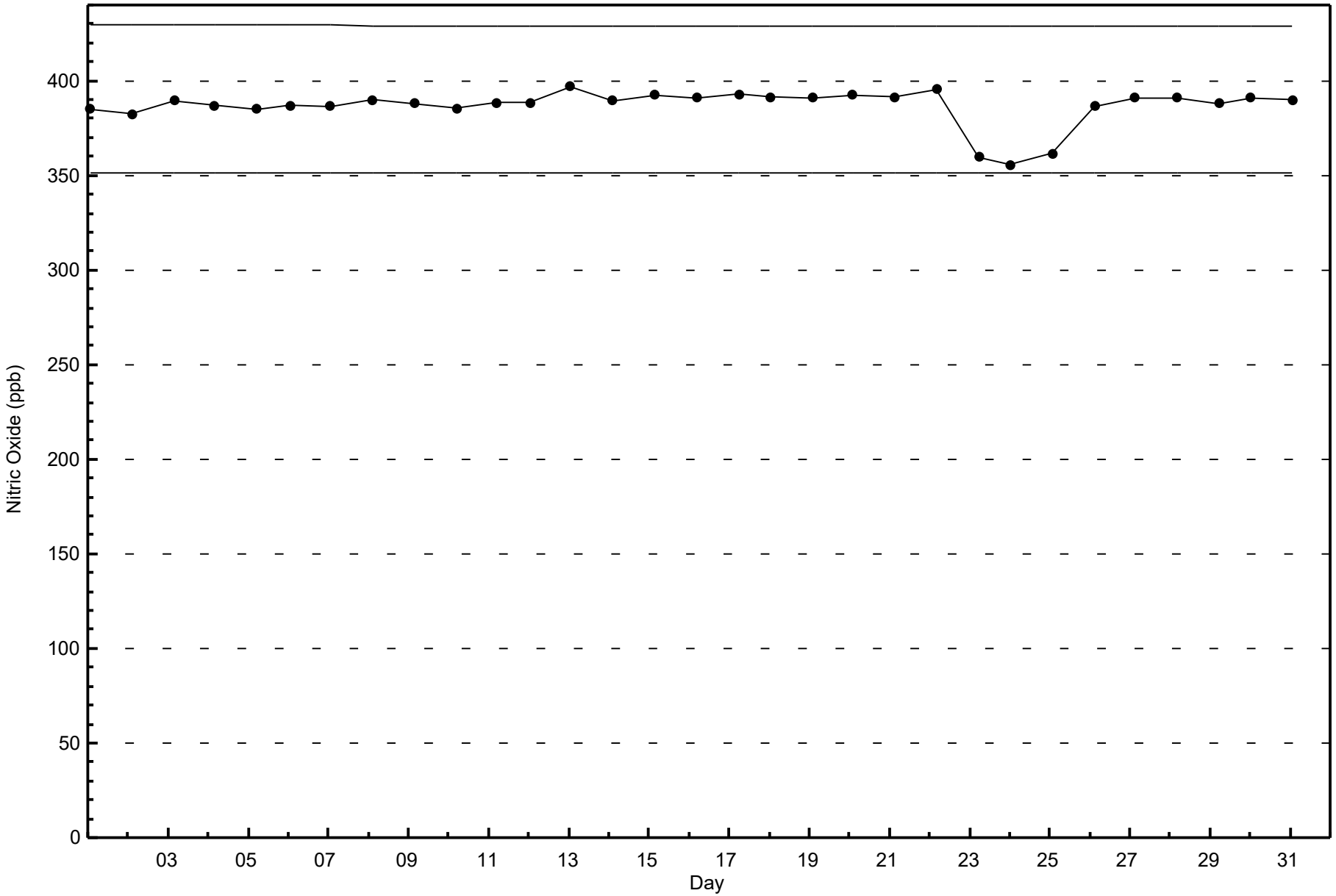


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Fort Chipewyan - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Fort Chipewyan - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.4 ppb on Aug 1 12:00 Maximum Daily Average: 4.9 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 14 11:00 Minimum Daily Average: 0.2 ppb on Aug 6
Maximum Diurnal Average: 1.6 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 23
Monthly Average: 0.84 ppb Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.2 $Q_1$ = 0.2 Median = 0.3 $Q_3$ = 0.5 $P_{90}$ = 1.5 $P_{99}$ = 8.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 699 |
| Hours of Missing Data: | 45 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 6.7 | Z | 4.7 | 4.4 | 4.5 | 4.6 | 5.3 | 7.2 | 9.6 | 9.5 | 7.1 | 11.4 | 8.9 | 7.6 | 6.3 | 4.8 | 2.6 | 1.5 | 1.2 | 1.3 | 1.1 | 0.9 | 0.8 | 0.6 | 4.9 | 11.4 |
| 2-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| 3-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 4-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.4 | 0.3 | 0.5 |
| 5-Aug | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.5 | 0.6 | 0.4 | 0.9 | 0.5 | 1.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 1.2 |
| 6-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 7-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | C | C | C | C | C | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 8-Aug | 0.3 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.3 | 0.4 | 0.2 | 0.3 | 0.6 |
| 9-Aug | 0.3 | 0.3 | 0.3 | Z | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.3 | 0.3 | 1.1 | 0.5 | 0.2 | 0.2 | 0.3 | 0.3 | 1.1 |
| 10-Aug | 0.4 | 0.3 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.9 | 1.4 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 1.4 |
| 11-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.2 | 0.2 | 0.2 | 0.5 |
| 12-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| 13-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 1.0 | 1.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.5 | 0.2 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 1.1 |
| 14-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.2 | 0.3 | 0.0 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.6 | 1.1 | 0.5 | 0.2 | 0.2 | 0.3 | 1.1 |
| 15-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 |
| 16-Aug | 0.2 | 0.3 | 0.4 | 0.4 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 |
| 17-Aug | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 18-Aug | Z | 0.2 | 0.7 | 2.0 | 4.6 | 9.1 | 7.8 | 5.9 | 4.7 | 3.7 | 2.7 | 2.3 | 1.6 | 1.2 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 2.2 | 9.1 |
| 19-Aug | 0.3 | Z | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.4 | 0.2 | 0.6 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.9 | 1.0 | 0.8 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 1.0 |
| 20-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 1.1 | 0.6 | 0.7 | 0.9 | 0.5 | 1.1 |
| 21-Aug | 0.9 | 1.2 | 1.1 | Z | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.7 | 1.3 | 1.8 | 0.6 | 1.8 |
| 22-Aug | 3.4 | 6.1 | 5.9 | 6.2 | Z | 5.8 | 6.5 | 5.9 | 5.7 | 4.3 | 2.2 | 1.5 | 1.4 | 1.2 | 1.3 | 1.1 | 1.2 | 1.1 | 1.3 | 1.0 | 1.0 | 0.8 | 0.8 | 0.8 | 2.9 | 6.5 |
| 23-Aug | 0.7 | 0.9 | 2.1 | 4.4 | 6.3 | Z | 8.7 | 7.4 | 6.0 | 3.8 | 1.5 | UO | UO | UO | UO | UO | UO | UO | UO | UO | 0.7 | 0.6 | 0.5 | 0.4 | -- | 8.7 |
| 24-Aug | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.5 | 0.5 | 1.2 | 0.2 | 0.7 | 0.8 | 1.3 | 1.4 | 1.5 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 1.5 |
| 25-Aug | 0.6 | Z | 0.5 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.7 |
| 26-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.5 | 1.2 | 0.9 | 0.3 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 1.2 |
| 27-Aug | 0.3 | 0.5 | 1.4 | Z | 2.4 | 2.5 | 2.4 | 2.3 | 2.1 | 1.9 | 2.1 | 1.2 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.3 | 0.5 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 1.1 | 2.5 |
| 28-Aug | 0.3 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 1.6 | 3.4 | 3.0 | 2.4 | 1.7 | 0.8 | 0.5 | 0.5 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.9 | 3.4 |
| 29-Aug | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.6 | 0.8 | 0.4 | 0.4 | 0.4 | 0.8 |
| 30-Aug | Z | 0.3 | 0.5 | 1.5 | 2.5 | 8.5 | 9.8 | 8.3 | 7.6 | 7.8 | 6.4 | 8.0 | 6.0 | 1.2 | 0.6 | 0.4 | 0.4 | 0.3 | 0.8 | 1.1 | 1.8 | 0.6 | 0.5 | 0.4 | 3.3 | 9.8 |
| 31-Aug | 0.5 | Z | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.7 | 0.3 | 0.3 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.3 | 0.4 | 0.7 |
| | 0.7 | 0.6 | 0.8 | 0.9 | 1.0 | 1.4 | 1.6 | 1.5 | 1.5 | 1.4 | 1.2 | 1.2 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | Diurnal Average | |
| | 6.7 | 6.1 | 5.9 | 6.2 | 6.3 | 9.1 | 9.8 | 8.3 | 9.6 | 9.5 | 7.1 | 11.4 | 8.9 | 7.6 | 6.3 | 4.8 | 2.6 | 1.5 | 1.3 | 1.3 | 1.8 | 0.9 | 1.3 | 1.8 | Diurnal Maximum | |

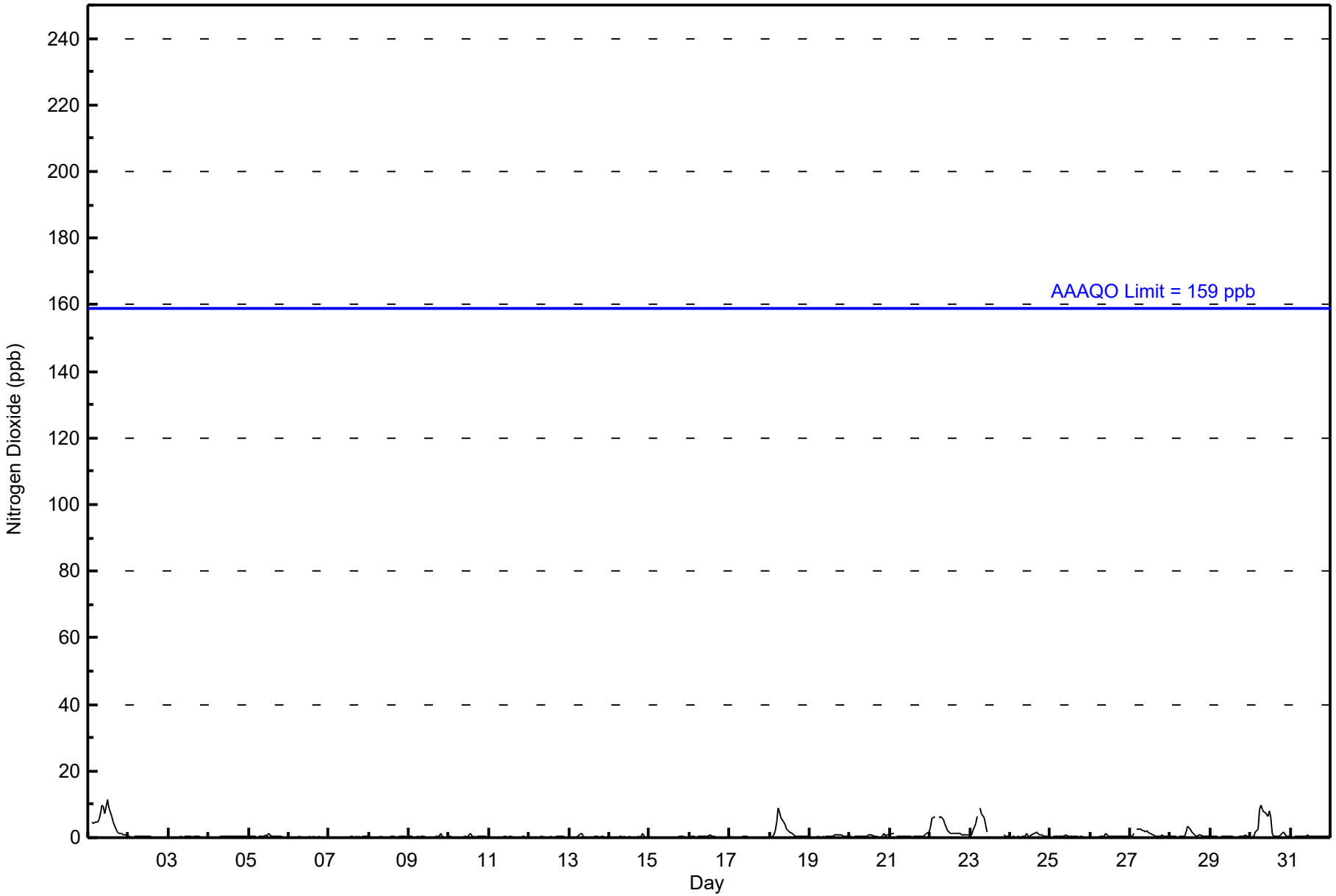
Z - zerospan C - Calibration UO - Unstable Operation
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Chipewyan - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Fort Chipewyan - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 699 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 699

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Chipewyan - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 24 | 7 | 5 | 19 | 63 | 46 | 23 | 17 | 27 | 38 | 50 | 33 | 45 | 79 | 116 | 106 | 698 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 7 | 5 | 19 | 63 | 46 | 23 | 17 | 27 | 38 | 50 | 33 | 45 | 79 | 116 | 106 | 698 |

Total Number of Valid Hours: 698

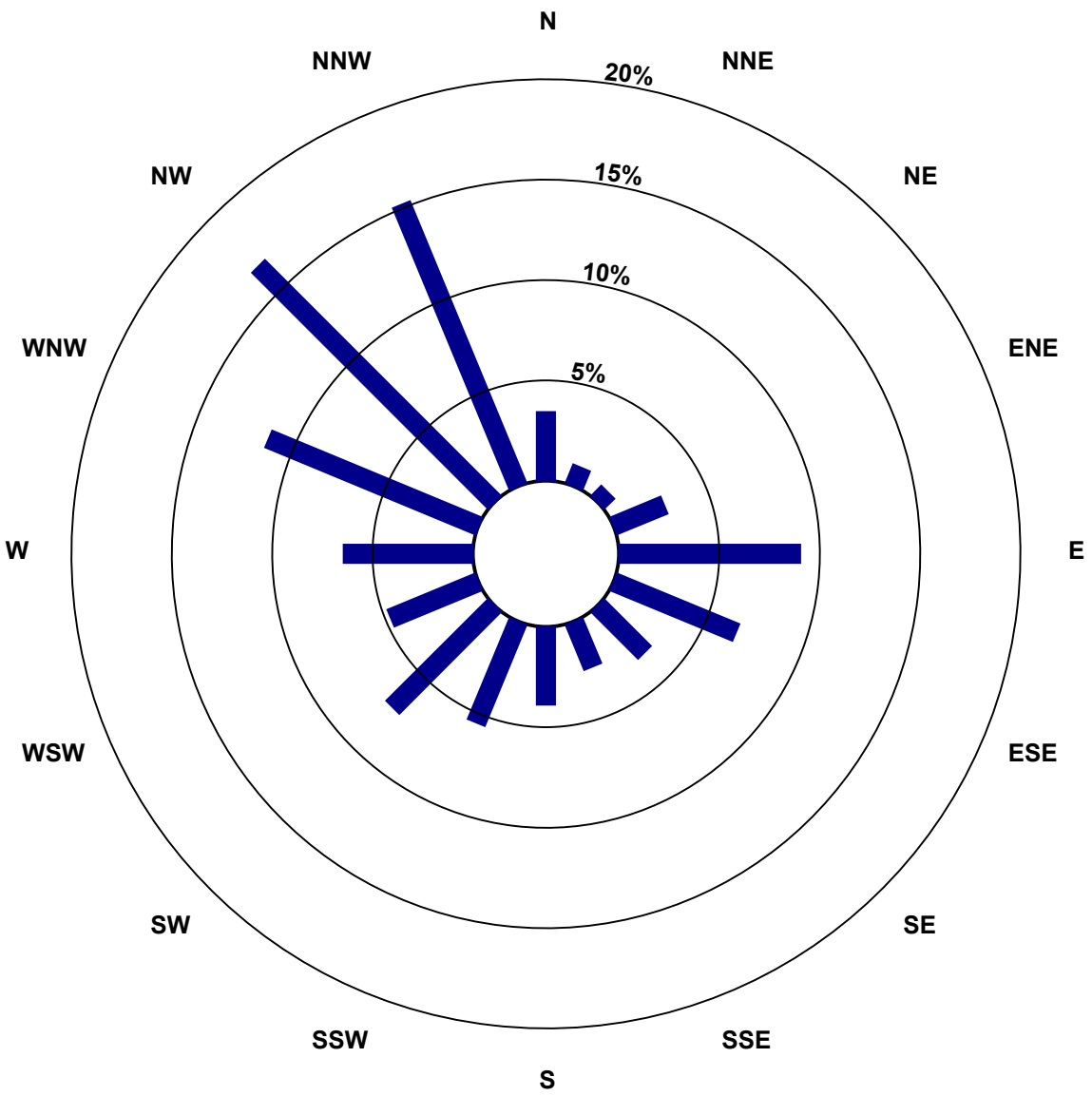
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Fort Chipewyan




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

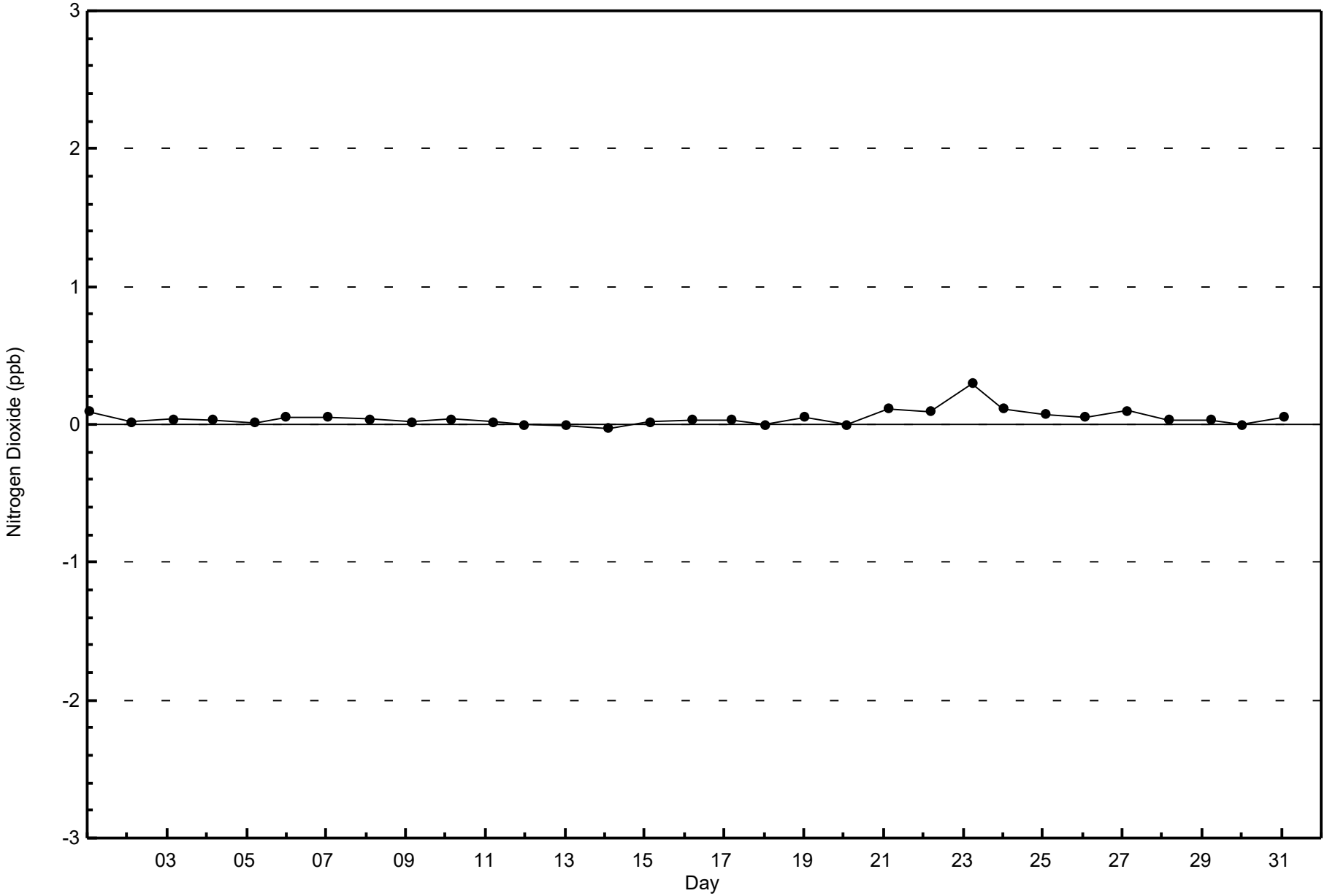
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Chipewyan - August 2026**

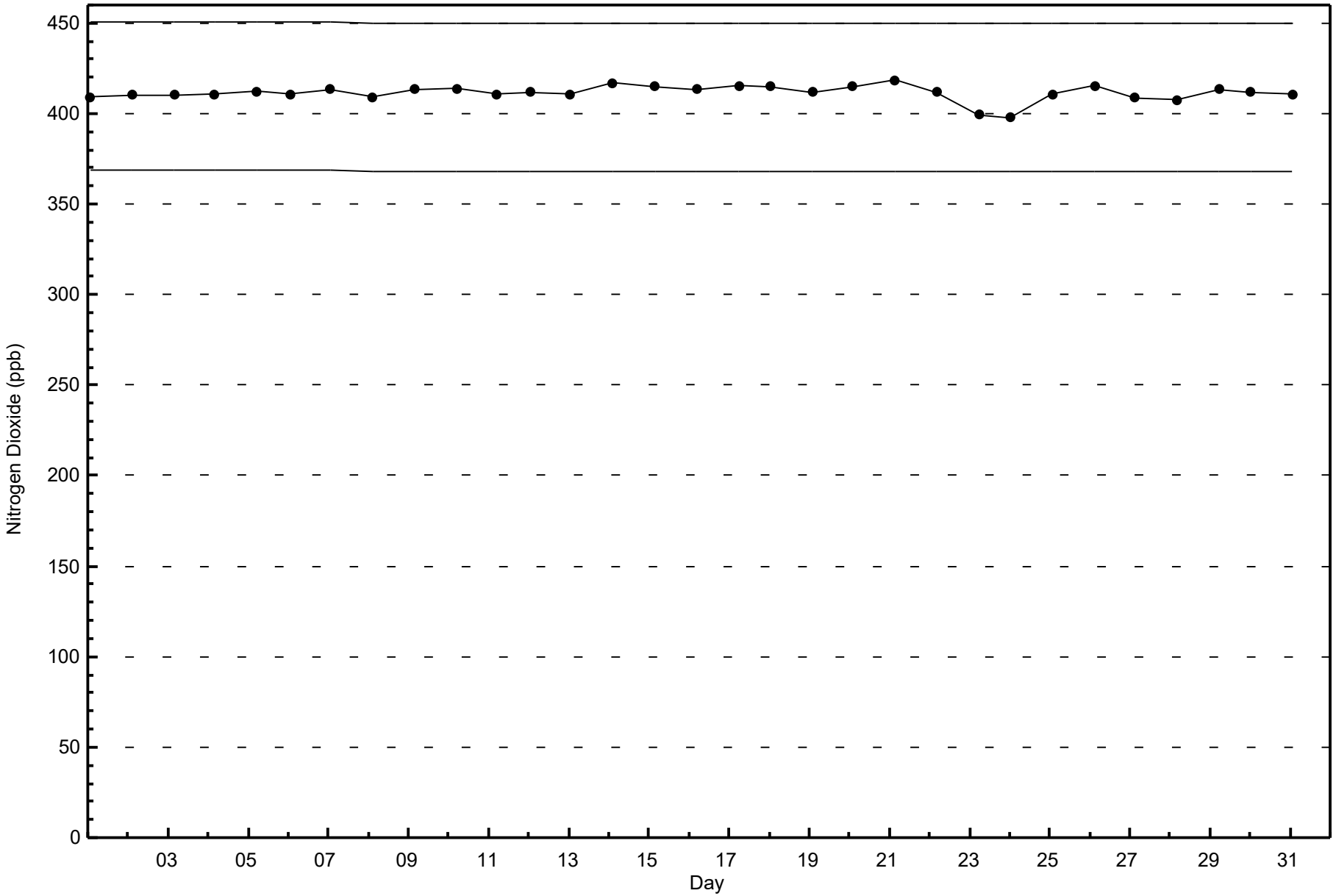


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Chipewyan - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxides ($NO_X$) - ppb

## Fort Chipewyan - August 2026

Maximum Value: 17.0 ppb on Aug 1 12:00

Maximum Daily Average: 6.5 ppb on Aug 1

Minimum Value: 0.2 ppb on Aug 20 19:00

Minimum Daily Average: 0.3 ppb on Aug 2

Maximum Diurnal Average: 2.3 ppb at hour 8

Minimum Diurnal Average: 0.4 ppb at hour 24

Monthly Average: 1.07 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.6$ $P_{90} = 1.7$ $P_{99} = 12.7$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 699 |
| Hours of Missing Data: | 45 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 6.8 | Z | 4.8 | 4.5 | 4.7 | 5.4 | 7.2 | 12.2 | 15.0 | 12.2 | 9.2 | 17.0 | 14.3 | 10.5 | 8.9 | 6.3 | 2.9 | 1.6 | 1.2 | 1.3 | 1.1 | 0.9 | 0.8 | 0.7 | 6.5 | 17.0 |
| 2-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| 3-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.6 | 0.3 | 0.4 | 0.6 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 |
| 4-Aug | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 |
| 5-Aug | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.7 | 0.9 | 0.5 | 1.1 | 0.6 | 2.0 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 2.0 |
| 6-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 |
| 7-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | C | C | C | C | C | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| 8-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.7 | 0.4 | 0.5 | 0.3 | 0.3 | 0.7 |
| 9-Aug | 0.4 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.3 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 | 0.4 | 0.4 | 1.4 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 1.4 |
| 10-Aug | 0.5 | 0.4 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.5 | 0.3 | 1.7 | 2.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 2.4 |
| 11-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.3 | 0.3 | 0.3 | 0.6 |
| 12-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| 13-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 1.3 | 1.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 | 0.4 | 0.6 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 1.7 |
| 14-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.5 | 0.8 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.7 | 1.2 | 0.6 | 0.3 | 0.3 | 0.4 | 1.2 |
| 15-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 |
| 16-Aug | 0.3 | 0.4 | 0.5 | 0.5 | Z | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.8 |
| 17-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 |
| 18-Aug | Z | 0.3 | 0.8 | 2.1 | 4.7 | 10.2 | 11.2 | 10.0 | 7.9 | 5.5 | 3.7 | 2.7 | 1.7 | 1.3 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 2.9 | 11.2 |
| 19-Aug | 0.4 | Z | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.6 | 0.3 | 1.0 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 1.1 | 1.1 | 0.9 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 1.1 |
| 20-Aug | 0.3 | 0.3 | Z | 0.4 | 0.3 | 0.6 | 0.4 | 0.6 | 0.7 | 0.5 | 0.6 | 0.8 | 1.0 | 0.9 | 0.7 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 1.1 | 0.6 | 0.7 | 0.9 | 0.5 | 1.1 |
| 21-Aug | 0.9 | 1.2 | 1.1 | Z | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.7 | 1.3 | 1.8 | 0.6 | 1.8 |
| 22-Aug | 3.4 | 6.1 | 5.9 | 6.2 | Z | 6.2 | 8.5 | 9.0 | 8.7 | 6.2 | 2.6 | 1.6 | 1.5 | 1.3 | 1.4 | 1.1 | 1.2 | 1.1 | 1.4 | 1.0 | 1.0 | 0.8 | 0.8 | 0.8 | 3.4 | 9.0 |
| 23-Aug | 0.7 | 0.9 | 2.1 | 4.5 | 6.4 | Z | 11.0 | 10.7 | 8.5 | 4.6 | 1.5 | UO | UO | UO | UO | UO | UO | UO | UO | UO | 0.7 | 0.6 | 0.5 | 0.4 | -- | 11.0 |
| 24-Aug | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.7 | 2.2 | 0.2 | 0.9 | 0.9 | 1.5 | 1.7 | 1.7 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 2.2 |
| 25-Aug | 0.6 | Z | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 | 0.5 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.0 |
| 26-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 1.7 | 1.2 | 0.4 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.6 | 1.7 |
| 27-Aug | 0.4 | 0.6 | 1.5 | Z | 2.5 | 2.6 | 2.6 | 2.6 | 2.5 | 2.2 | 2.4 | 1.4 | 1.2 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 1.3 | 2.6 |
| 28-Aug | 0.3 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.5 | 1.8 | 4.1 | 3.6 | 2.8 | 2.1 | 0.9 | 0.5 | 0.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 1.0 | 4.1 |
| 29-Aug | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 0.4 | 0.4 | 0.4 | 0.8 |
| 30-Aug | Z | 0.4 | 0.5 | 1.5 | 2.5 | 9.0 | 13.2 | 14.2 | 13.5 | 13.5 | 10.6 | 12.7 | 8.8 | 1.4 | 0.6 | 0.4 | 0.4 | 0.3 | 0.8 | 1.1 | 1.8 | 0.6 | 0.5 | 0.4 | 4.7 | 14.2 |
| 31-Aug | 0.5 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4 | 0.4 | 0.7 | 1.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.3 | 0.5 | 1.4 |
| | 0.8 | 0.6 | 0.9 | 1.0 | 1.1 | 1.6 | 2.1 | 2.3 | 2.3 | 1.9 | 1.6 | 1.6 | 1.5 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | Diurnal Average | |
| | 6.8 | 6.1 | 5.9 | 6.2 | 6.4 | 10.2 | 13.2 | 14.2 | 15.0 | 13.5 | 10.6 | 17.0 | 14.3 | 10.5 | 8.9 | 6.3 | 2.9 | 1.6 | 1.4 | 1.4 | 1.8 | 0.9 | 1.3 | 1.8 | Diurnal Maximum | |

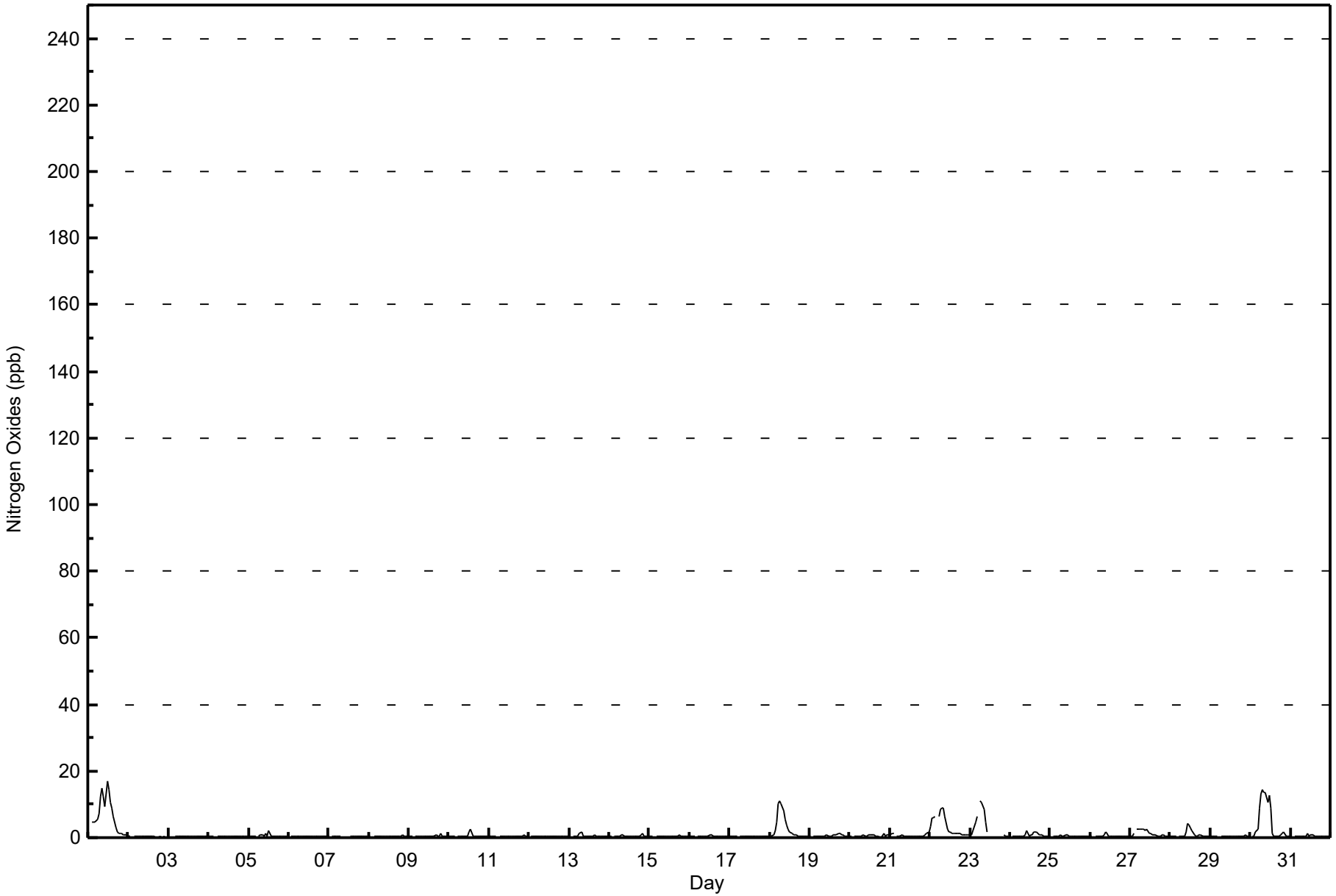
Z - zerospan C - Calibration UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort Chipewyan - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 699 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 699

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort Chipewyan - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 24 | 7 | 5 | 19 | 63 | 46 | 23 | 17 | 27 | 38 | 50 | 33 | 45 | 79 | 116 | 106 | 698 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 7 | 5 | 19 | 63 | 46 | 23 | 17 | 27 | 38 | 50 | 33 | 45 | 79 | 116 | 106 | 698 |

Total Number of Valid Hours: 698

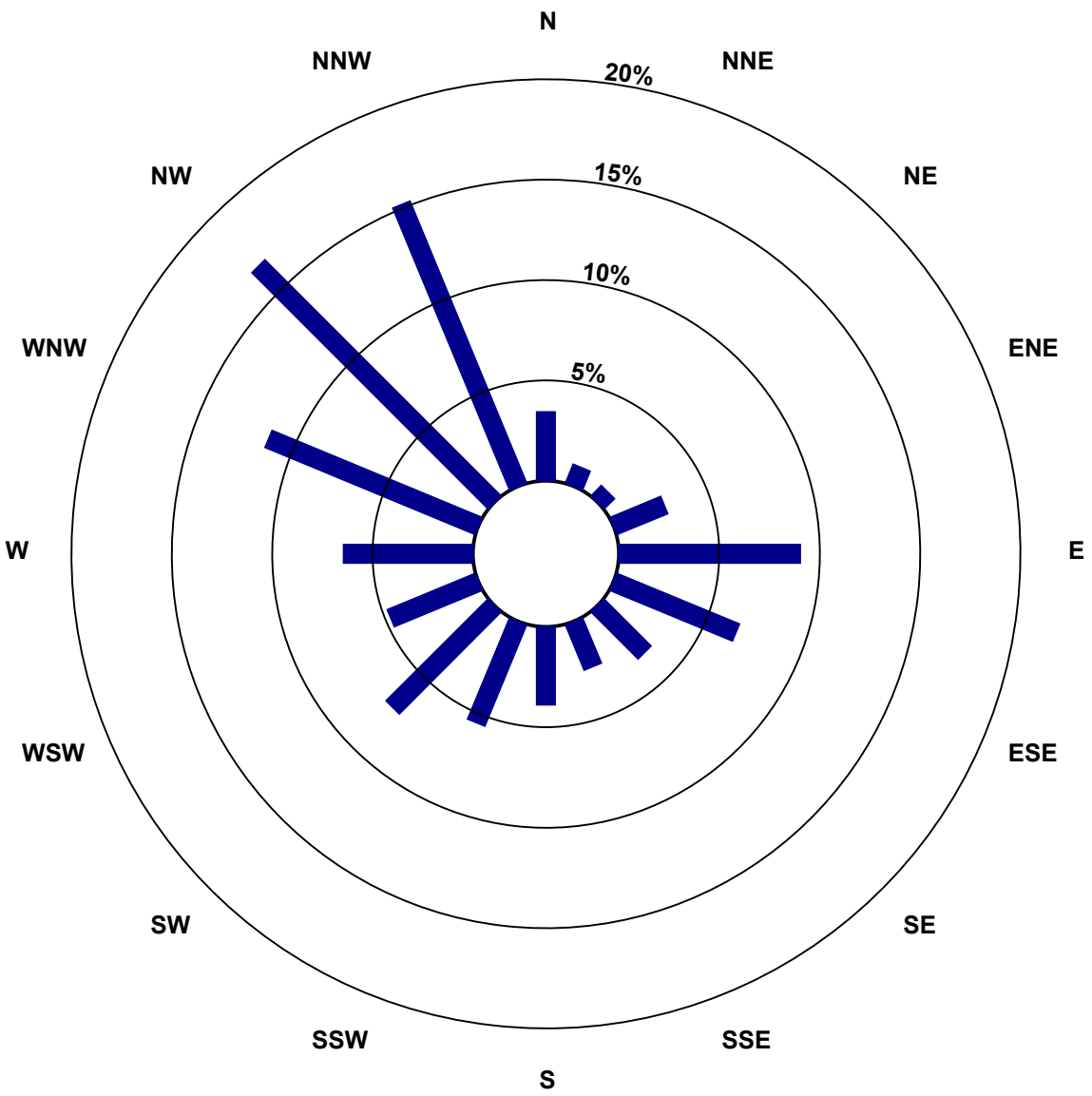
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Fort Chipewyan




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

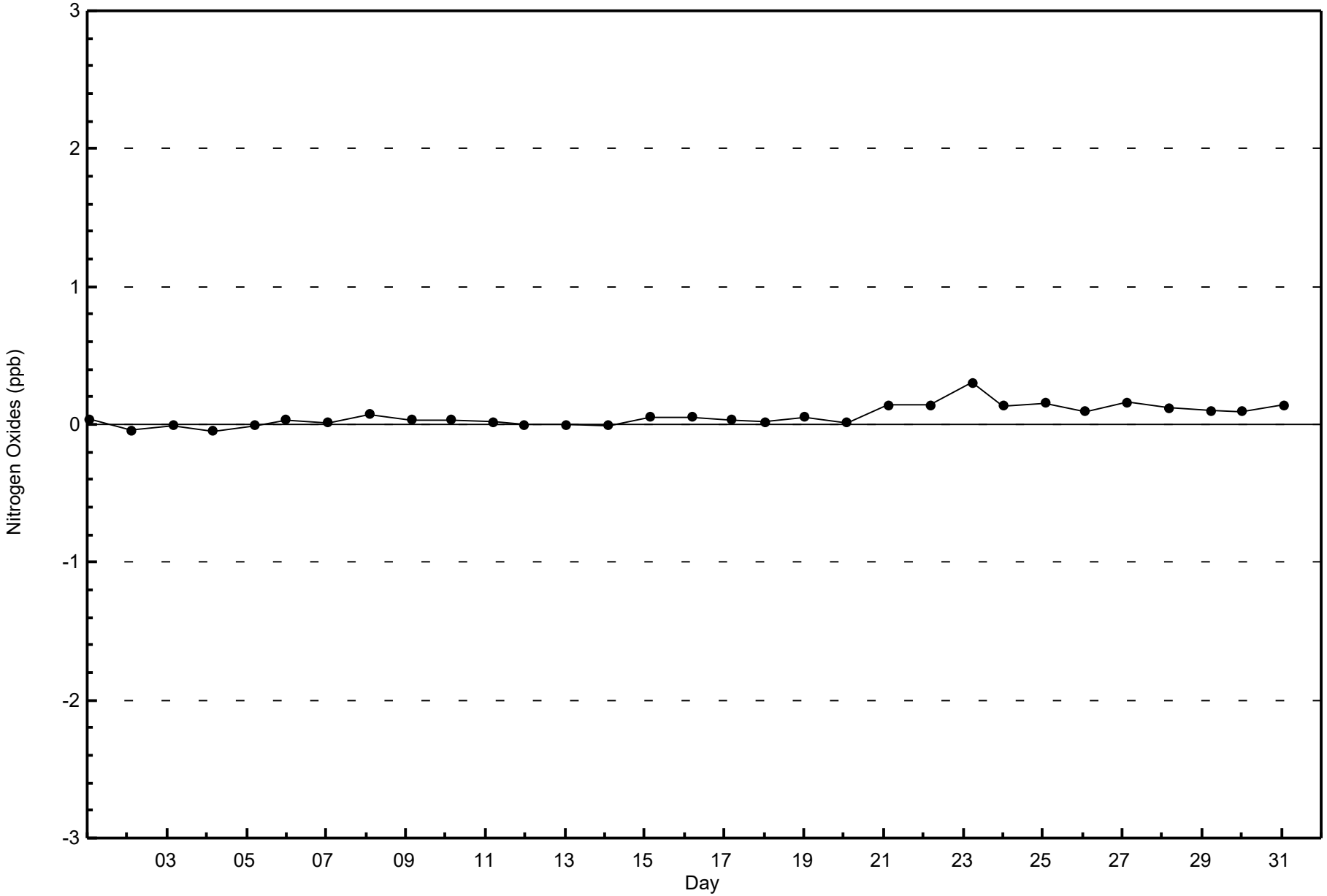
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort Chipewyan - August 2026**

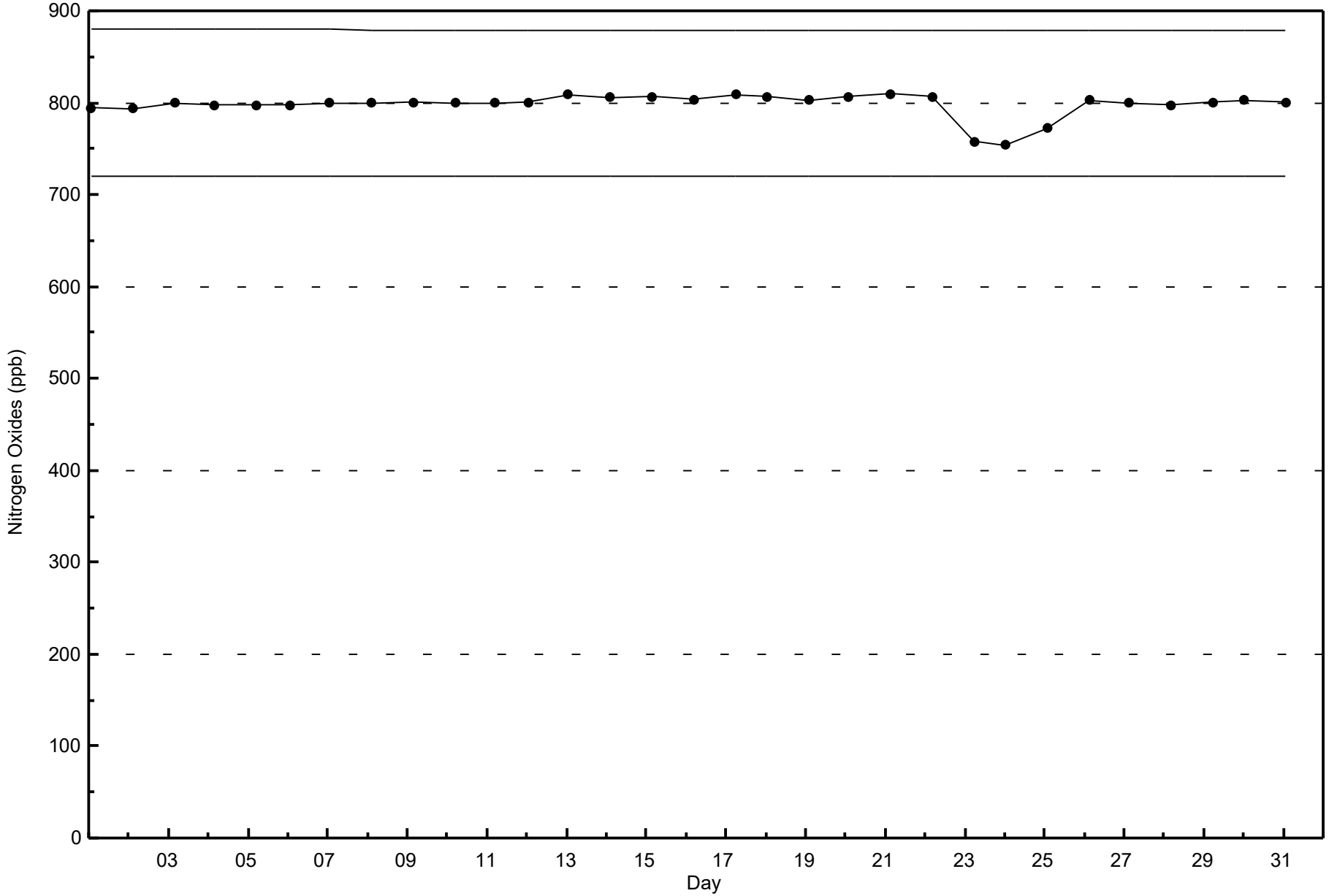


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort Chipewyan - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Fort Chipewyan - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 47.7 ppb on Aug 22 18:00
Maximum Daily Average: 32.5 ppb on Aug 22

Minimum Value: 9.0 ppb on Aug 8 06:00
Minimum Daily Average: 13.5 ppb on Aug 29
Maximum Diurnal Average: 27.5 ppb at hour 17
Minimum Diurnal Average: 17.8 ppb at hour 7
Monthly Average: 23.22 ppb
Percentiles: $P_1$ = 10.0 $P_{10}$ = 14.0 $Q_1$ = 18.5 Median = 23.0 $Q_3$ = 28.1 $P_{90}$ = 31.6 $P_{99}$ = 40.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.6 | 16.2 | 16.5 | 14.8 | 13.7 | Z | 14.1 | 14.3 | 13.0 | 12.1 | 14.0 | 9.6 | 13.5 | 14.6 | 19.8 | 25.1 | 30.6 | 31.0 | 32.6 | 30.3 | 29.5 | 27.8 | 37.4 | 29.6 | 20.8 | 37.4 |
| 2-Aug | Z | 22.2 | 19.3 | 17.6 | 18.8 | 21.2 | 20.2 | 19.0 | 19.3 | 20.9 | 22.9 | 23.8 | 27.5 | 29.4 | 29.5 | 30.8 | 29.1 | 28.0 | 27.9 | 27.1 | 26.6 | 25.4 | 24.4 | 24.3 | 24.1 | 30.8 |
| 3-Aug | 24.5 | Z | 23.1 | 22.7 | 22.1 | 22.1 | 21.4 | 22.1 | 23.8 | 25.5 | 24.4 | 27.4 | 27.6 | 27.4 | 28.2 | 29.1 | 29.7 | 30.1 | 30.2 | 27.6 | 26.1 | 25.9 | 24.4 | 22.1 | 25.5 | 30.2 |
| 4-Aug | 19.5 | 19.7 | Z | 20.2 | 18.8 | 16.0 | 15.5 | 19.9 | 21.9 | 23.5 | 24.6 | 25.9 | 29.5 | 27.8 | 25.1 | 23.9 | 24.3 | 28.1 | 27.7 | 26.3 | 25.7 | 22.5 | 19.8 | 19.8 | 22.9 | 29.5 |
| 5-Aug | 20.6 | 23.1 | 21.3 | Z | 21.6 | 18.7 | 20.7 | 20.2 | 22.5 | 27.1 | 26.0 | 25.4 | C | C | C | 22.4 | 22.8 | 25.7 | 25.5 | 26.0 | 25.3 | 21.0 | 17.9 | 16.1 | 22.5 | 27.1 |
| 6-Aug | 14.1 | 12.7 | 11.7 | 11.4 | Z | 13.6 | 16.7 | 17.9 | 17.2 | 16.1 | 18.9 | 21.1 | 21.4 | 21.8 | 24.0 | 21.9 | 21.1 | 19.9 | 21.0 | 19.1 | 18.9 | 21.2 | 21.4 | 19.5 | 18.4 | 24.0 |
| 7-Aug | 19.1 | 19.0 | 18.0 | 18.6 | 18.2 | Z | 19.7 | 18.5 | 16.1 | 15.0 | 14.1 | 16.3 | 17.4 | 18.8 | 19.1 | 21.3 | 21.4 | 19.8 | 17.8 | 17.4 | 15.4 | 13.8 | 14.3 | 13.5 | 17.5 | 21.4 |
| 8-Aug | Z | 11.7 | 10.6 | 9.7 | 9.7 | 9.0 | 9.2 | 9.2 | 10.0 | 11.3 | 12.4 | 16.4 | 19.5 | 18.5 | 19.6 | 20.3 | 22.4 | 23.2 | 23.3 | 21.8 | 19.1 | 17.6 | 16.2 | 14.8 | 15.5 | 23.3 |
| 9-Aug | 14.3 | Z | 20.6 | 18.9 | 14.0 | 12.6 | 13.0 | 13.5 | 14.8 | 20.6 | 22.7 | 26.7 | 28.5 | 30.1 | 28.9 | 28.8 | 28.4 | 28.4 | 26.0 | 23.0 | 19.9 | 21.6 | 22.7 | 18.5 | 21.6 | 30.1 |
| 10-Aug | 15.6 | 18.3 | Z | 19.1 | 18.2 | 17.8 | 19.1 | 22.5 | 25.9 | 29.0 | 30.2 | 30.2 | 30.3 | 30.8 | 29.5 | 29.0 | 30.0 | 29.0 | 27.2 | 25.1 | 25.4 | 26.3 | 27.6 | 28.7 | 25.4 | 30.8 |
| 11-Aug | 25.2 | 23.3 | 21.1 | Z | 19.2 | 17.7 | 19.0 | 23.0 | 26.1 | 27.5 | 28.3 | 28.3 | 27.9 | 28.2 | 27.8 | 28.8 | 28.5 | 26.7 | 26.1 | 24.3 | 23.2 | 20.6 | 20.1 | 18.9 | 24.4 | 28.8 |
| 12-Aug | 17.4 | 16.8 | 15.2 | 13.7 | Z | 14.2 | 14.7 | 17.0 | 20.2 | 22.6 | 23.0 | 24.6 | 24.4 | 23.0 | 23.4 | 23.5 | 22.0 | 20.2 | 20.1 | 18.7 | 18.6 | 14.6 | 14.1 | 15.3 | 19.0 | 24.6 |
| 13-Aug | 14.1 | 15.2 | 15.7 | 15.9 | 16.5 | Z | 15.2 | 16.3 | 22.0 | 23.4 | 25.8 | 26.5 | 29.1 | 28.5 | 28.6 | 27.3 | 27.9 | 28.5 | 33.5 | 34.1 | 31.0 | 29.3 | 29.0 | 30.6 | 24.5 | 34.1 |
| 14-Aug | Z | 30.4 | 28.4 | 22.0 | 27.4 | 27.1 | 13.6 | 20.0 | 21.1 | 23.9 | 25.1 | 26.5 | 29.5 | 32.8 | 33.9 | 36.1 | 36.8 | 36.5 | 31.6 | 28.6 | 29.3 | 27.4 | 23.3 | 21.1 | 27.5 | 36.8 |
| 15-Aug | 21.2 | Z | 18.6 | 18.8 | 21.0 | 20.8 | 19.5 | 19.8 | 20.0 | 20.4 | 22.7 | 26.6 | 29.0 | 30.3 | 29.3 | 30.6 | 32.5 | 32.7 | 32.1 | 28.6 | 22.3 | 22.3 | 24.7 | 26.4 | 24.8 | 32.7 |
| 16-Aug | 32.6 | 32.2 | Z | 27.9 | 31.4 | 34.2 | 33.7 | 30.3 | 26.7 | 25.9 | 27.0 | 27.9 | 29.4 | 28.9 | 27.7 | 28.1 | 27.1 | 27.8 | 26.8 | 25.2 | 24.8 | 24.0 | 22.9 | 22.2 | 28.0 | 34.2 |
| 17-Aug | 21.1 | 20.4 | 19.0 | Z | 16.5 | 16.7 | 19.0 | 19.5 | 22.7 | 23.7 | 24.5 | 24.5 | 24.2 | 24.3 | 24.8 | 25.0 | 25.2 | 26.8 | 28.2 | 30.3 | 31.7 | 30.0 | 29.4 | 28.2 | 24.2 | 31.7 |
| 18-Aug | 27.0 | 25.8 | 23.5 | 20.8 | Z | 13.0 | 13.6 | 16.2 | 19.3 | 23.4 | 26.9 | 33.2 | 35.6 | 34.2 | 31.8 | 28.6 | 30.8 | 28.5 | 27.5 | 29.8 | 25.9 | 24.6 | 24.1 | 21.7 | 25.5 | 35.6 |
| 19-Aug | 18.5 | 19.5 | 20.5 | 21.7 | 21.1 | Z | 19.5 | 20.1 | 19.7 | 21.0 | 20.3 | 18.9 | 16.8 | 17.2 | 18.8 | 16.8 | 17.9 | 19.7 | 20.9 | 21.5 | 21.9 | 24.0 | 23.9 | 20.2 | 20.0 | 24.0 |
| 20-Aug | Z | 20.5 | 17.7 | 18.1 | 19.7 | 20.4 | 20.3 | 22.2 | 24.4 | 26.5 | 27.8 | 31.3 | 31.5 | 31.9 | 32.8 | 32.9 | 34.3 | 36.4 | 38.3 | 36.7 | 31.3 | 29.3 | 26.6 | 22.7 | 27.5 | 38.3 |
| 21-Aug | 22.2 | Z | 17.3 | 19.1 | 20.0 | 19.3 | 17.9 | 20.1 | 22.2 | 24.8 | 27.1 | 25.9 | 26.6 | 28.1 | 29.3 | 28.9 | 28.9 | 28.7 | 27.8 | 27.9 | 29.7 | 31.3 | 32.7 | 29.1 | 25.4 | 32.7 |
| 22-Aug | 23.0 | 17.2 | Z | 14.0 | 13.0 | 13.8 | 14.5 | 17.4 | 21.0 | 26.9 | 36.0 | 38.8 | 39.7 | 40.3 | 44.3 | 45.3 | 47.2 | 47.7 | 46.8 | 44.9 | 43.7 | 39.0 | 37.8 | 34.6 | 32.5 | 47.7 |
| 23-Aug | 34.2 | 31.0 | 26.4 | Z | 17.0 | 12.1 | 11.8 | 14.0 | 19.6 | 28.1 | 29.5 | 28.9 | 26.2 | 30.9 | 29.9 | 25.3 | 25.5 | 25.8 | 23.9 | 24.2 | 24.6 | 23.6 | 24.1 | 26.2 | 24.5 | 34.2 |
| 24-Aug | 26.6 | 26.8 | 27.3 | 26.4 | Z | 21.0 | 20.5 | 21.5 | 23.8 | 26.1 | 26.5 | 26.8 | 27.0 | 27.4 | 30.6 | 29.7 | 32.7 | 30.1 | 26.7 | 24.2 | 23.6 | 22.8 | 22.5 | 21.4 | 25.7 | 32.7 |
| 25-Aug | 20.6 | 19.6 | 19.1 | 17.8 | 17.4 | Z | 16.1 | 16.8 | 18.5 | 19.5 | 20.2 | 20.4 | 21.1 | 23.7 | 24.4 | 25.2 | 22.4 | 22.6 | 22.7 | 23.3 | 23.8 | 25.1 | 24.9 | 24.0 | 21.3 | 25.2 |
| 26-Aug | Z | 23.5 | 23.3 | 23.5 | 22.4 | 21.4 | 20.9 | 20.3 | 20.9 | 24.1 | 25.2 | 21.0 | 25.2 | 28.1 | 31.3 | 31.8 | 32.6 | 32.2 | 32.5 | 31.9 | 33.8 | 35.9 | 35.2 | 32.8 | 27.4 | 35.9 |
| 27-Aug | 30.4 | Z | 26.4 | 24.9 | 25.8 | 26.9 | 27.5 | 28.7 | 29.4 | 32.2 | 34.0 | 34.5 | 37.3 | 36.9 | 33.1 | 30.3 | 32.5 | 31.5 | 29.1 | 28.6 | 29.2 | 31.1 | 34.7 | 37.1 | 31.0 | 37.3 |
| 28-Aug | 36.6 | 36.8 | Z | 33.3 | 31.6 | 29.4 | 28.7 | 27.8 | 27.4 | 27.3 | 29.5 | 33.3 | 38.9 | 39.1 | 39.6 | 40.4 | 28.6 | 14.1 | 12.1 | 10.3 | 11.2 | 11.5 | 12.3 | 12.9 | 26.6 | 40.4 |
| 29-Aug | 13.6 | 14.4 | 15.4 | Z | 15.4 | 15.4 | 15.4 | 14.4 | 14.5 | 14.6 | 14.5 | 15.1 | 13.7 | 14.0 | 14.2 | 12.6 | 12.9 | 11.0 | 11.3 | 10.9 | 12.1 | 10.9 | 11.7 | 12.6 | 13.5 | 15.4 |
| 30-Aug | 12.5 | 13.3 | 14.0 | 15.1 | Z | 10.2 | 9.9 | 12.4 | 14.3 | 14.0 | 16.7 | 17.9 | 22.9 | 27.2 | 25.5 | 26.9 | 26.1 | 23.9 | 22.0 | 19.0 | 16.9 | 20.3 | 16.5 | 15.0 | 17.9 | 27.2 |
| 31-Aug | 11.6 | 10.4 | 9.9 | 10.7 | 11.8 | Z | 12.0 | 11.5 | 11.7 | 12.5 | 12.6 | 12.4 | 12.7 | 14.6 | 18.5 | 19.8 | 19.5 | 19.4 | 18.4 | 17.3 | 15.1 | 14.7 | 15.4 | 16.4 | 14.3 | 19.8 |
| | 21.3 | 20.8 | 19.2 | 19.1 | 19.3 | 18.6 | 17.8 | 18.9 | 20.3 | 22.2 | 23.7 | 24.7 | 26.1 | 27.0 | 27.4 | 27.3 | 27.5 | 26.9 | 26.4 | 25.3 | 24.4 | 23.7 | 23.6 | 22.5 | Diurnal Average | |
| | 36.6 | 36.8 | 28.4 | 33.3 | 31.6 | 34.2 | 33.7 | 30.3 | 29.4 | 32.2 | 36.0 | 38.8 | 39.7 | 40.3 | 44.3 | 45.3 | 47.2 | 47.7 | 46.8 | 44.9 | 43.7 | 39.0 | 37.8 | 37.1 | Diurnal Maximum | |

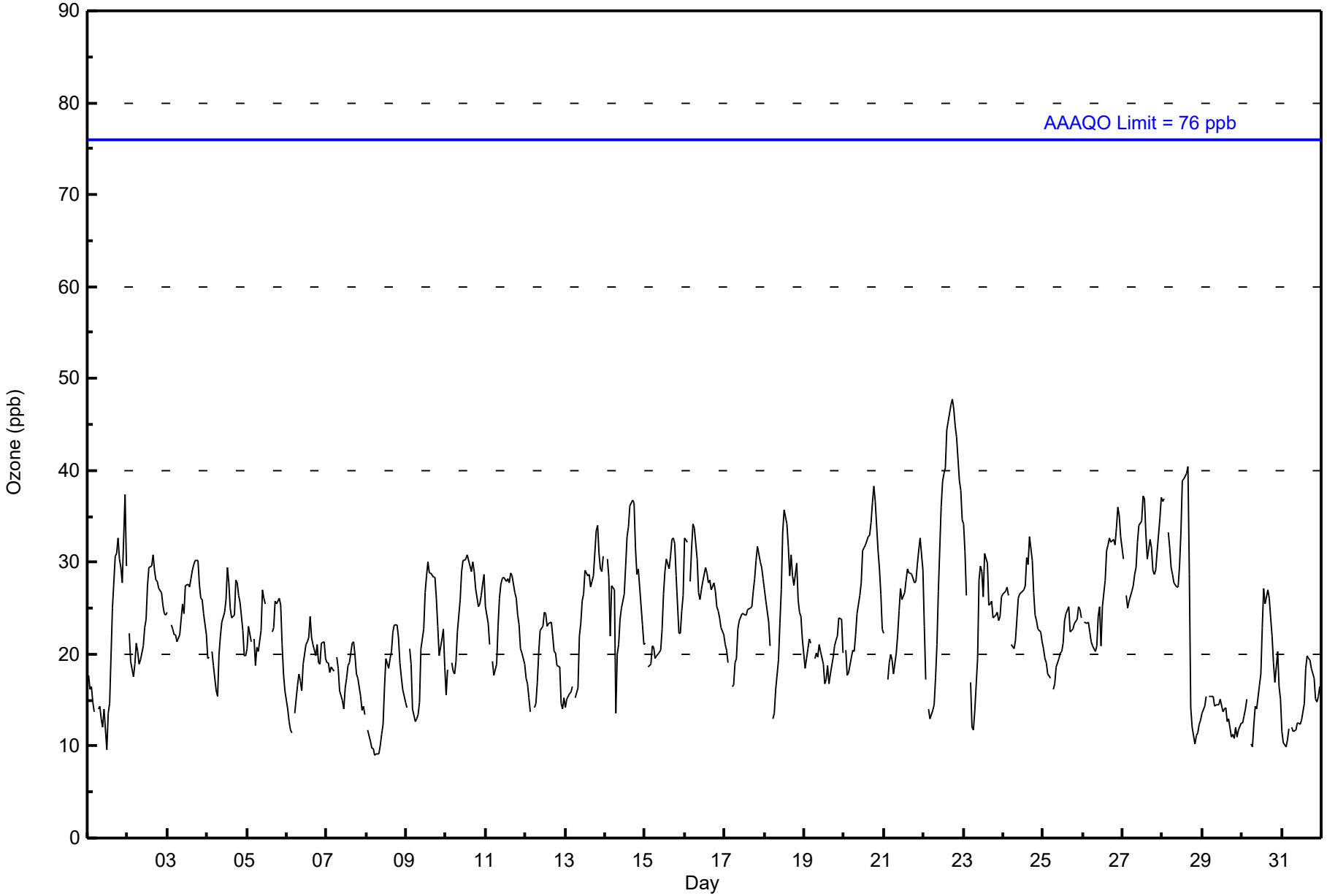
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Fort Chipewyan - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 263 | 37.04 | 37.04 |
| 21 - 50 | 447 | 62.96 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Fort Chipewyan - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 12 | 3 | 1 | 2 | 4 | 8 | 4 | 7 | 10 | 28 | 28 | 13 | 15 | 30 | 48 | 50 | 263 |
| 21 - 50 | 11 | 4 | 3 | 17 | 60 | 37 | 20 | 10 | 16 | 11 | 21 | 25 | 34 | 49 | 73 | 55 | 446 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 23 | 7 | 4 | 19 | 64 | 45 | 24 | 17 | 26 | 39 | 49 | 38 | 49 | 79 | 121 | 105 | 709 |

Total Number of Valid Hours: 709

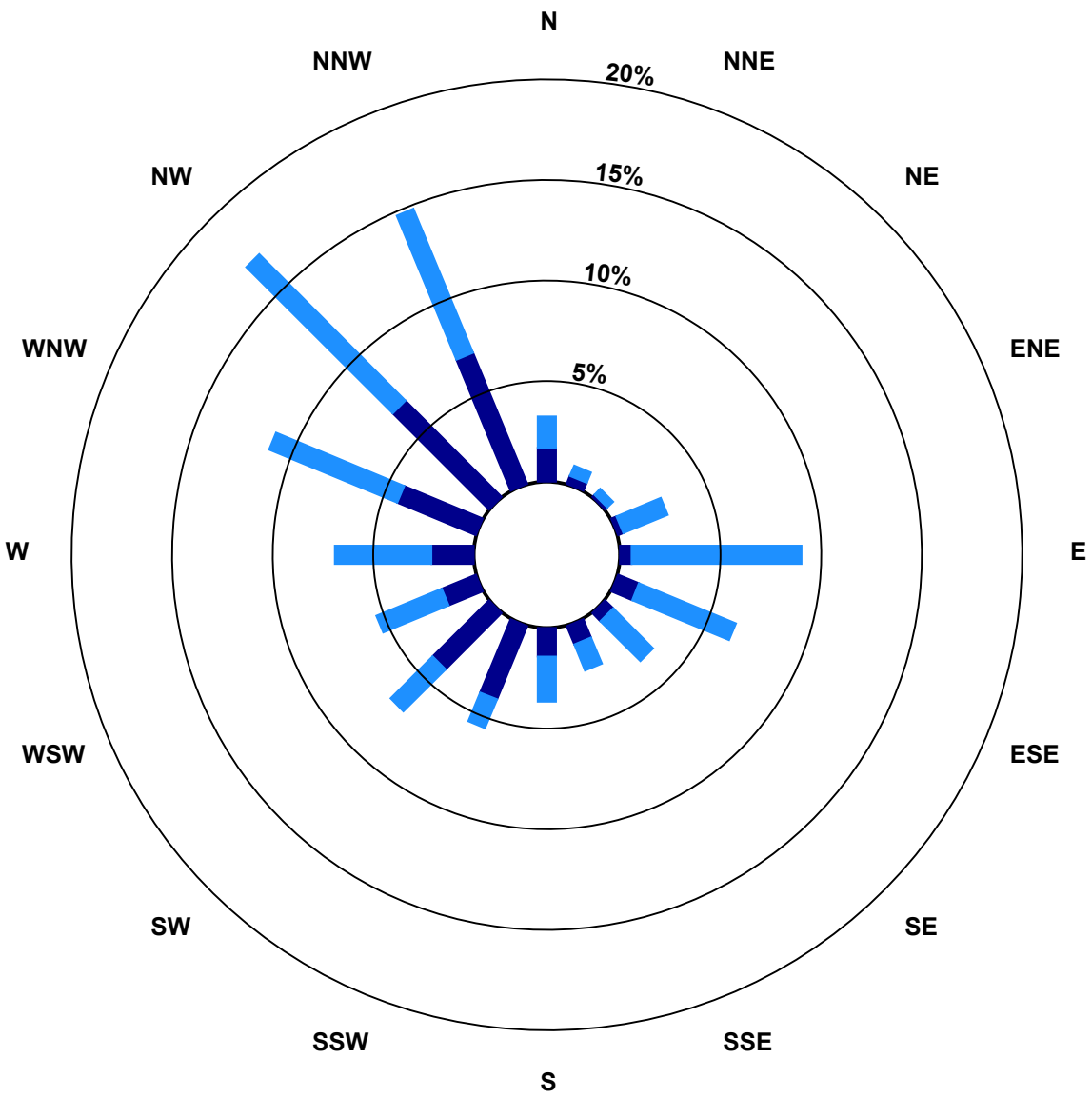
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ozone ($O_3$) - ppb

Fort Chipewyan




Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

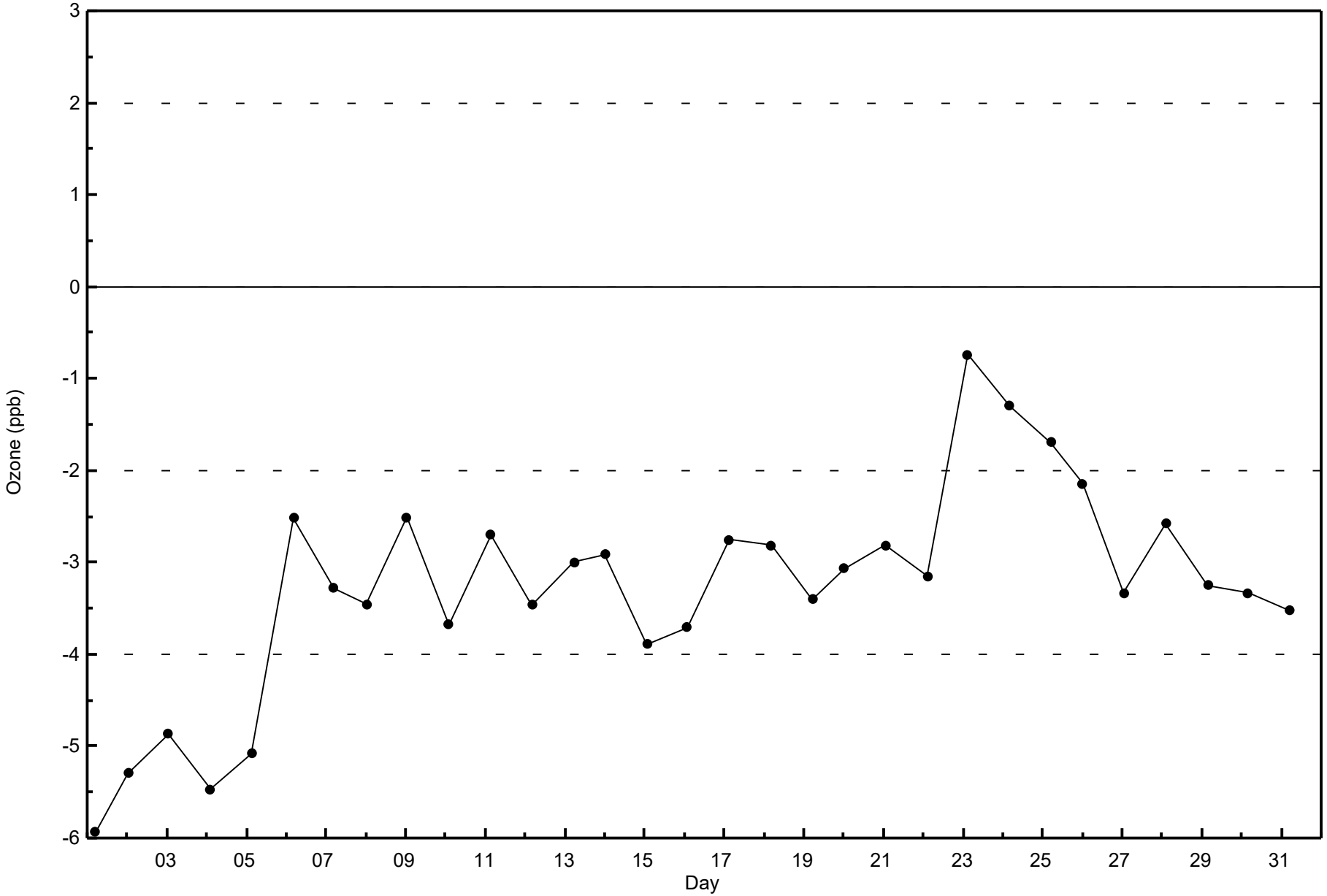
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Fort Chipewyan - August 2026**

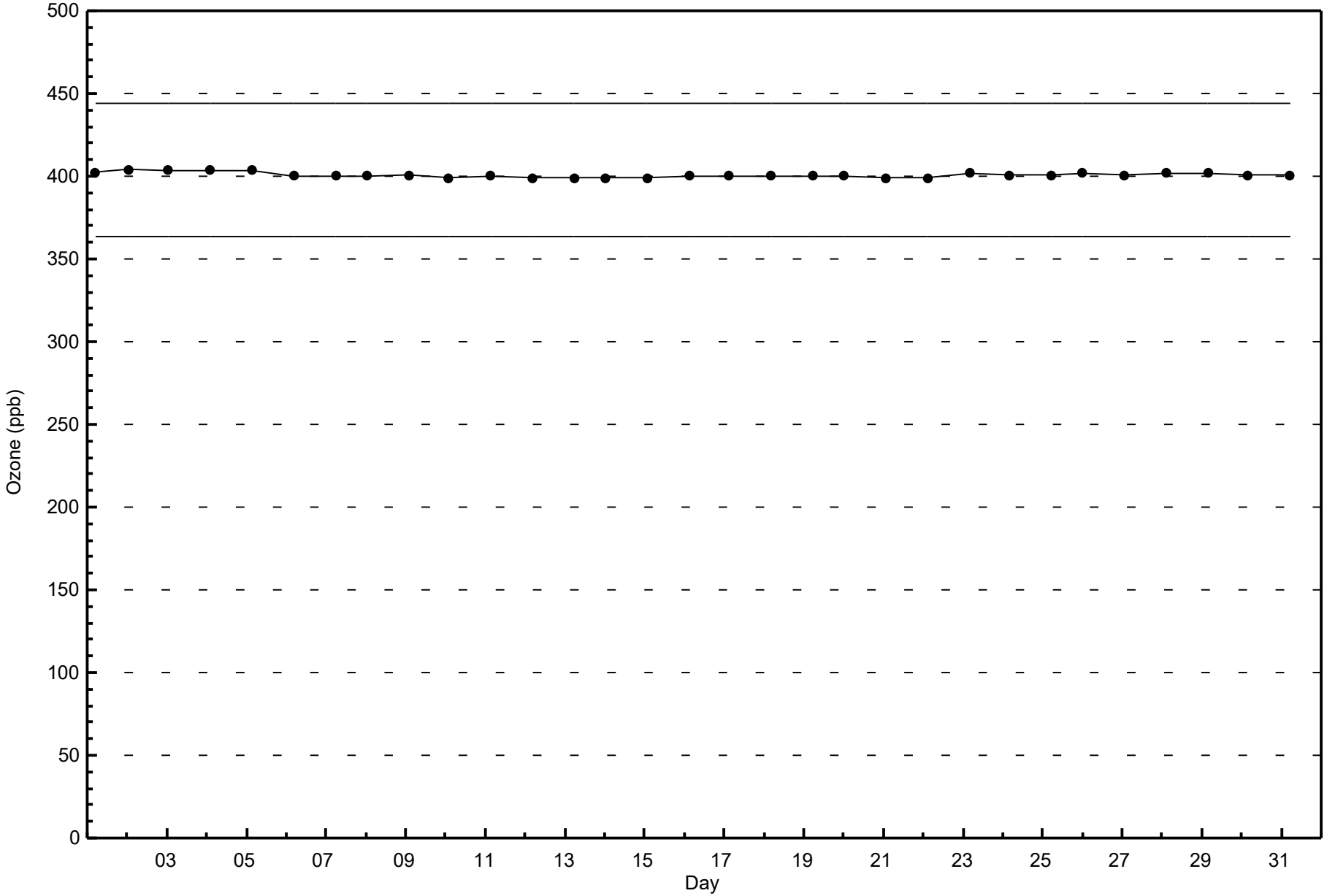


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Fort Chipewyan - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Fort Chipewyan - August 2026

Number of Exceedances (AAAQO): 1-hr: 7 24-hr: 2

Maximum Value: 128.0 $\mu g/m^3$ on Aug 19 19:00

Maximum Daily Average: 51.1 $\mu g/m^3$ on Aug 21

Minimum Value: 0.6 $\mu g/m^3$ on Aug 6 04:00

Minimum Daily Average: 2.2 $\mu g/m^3$ on Aug 7

Maximum Diurnal Average: 13.5 $\mu g/m^3$ at hour 13

Minimum Diurnal Average: 9.2 $\mu g/m^3$ at hour 22

Monthly Average: 10.78 $\mu g/m^3$

Percentiles: $P_1$ = 1.0 $P_{10}$ = 2.4 $Q_1$ = 3.2 Median = 5.6 $Q_3$ = 13.2 $P_{90}$ = 21.9 $P_{99}$ = 79.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 16.2 | 14.9 | 10.5 | 7.8 | 7.3 | 7.2 | 7.7 | 7.9 | 8.7 | 8.4 | 9.0 | 9.4 | 9.0 | 9.4 | 11.3 | 12.3 | 14.5 | 16.8 | 18.5 | 18.1 | 16.7 | 15.2 | 21.2 | 17.7 | 12.3 | 21.2 |
| 2-Aug | 7.8 | 6.8 | 6.8 | 7.2 | 6.8 | 6.0 | 6.5 | 7.2 | 4.7 | 4.1 | 4.2 | 3.8 | 3.0 | 2.7 | 2.5 | 1.7 | 1.4 | 1.4 | 2.3 | 3.5 | 4.1 | 3.4 | 3.2 | 2.5 | 4.3 | 7.8 |
| 3-Aug | 2.5 | 2.5 | 2.6 | 2.7 | 2.6 | 2.8 | 3.2 | 3.6 | 2.9 | 3.0 | 4.4 | 3.7 | 4.9 | 3.9 | 3.4 | 3.1 | 2.9 | 2.8 | 2.4 | 2.5 | 2.5 | 2.2 | 2.1 | 2.4 | 3.0 | 4.9 |
| 4-Aug | 2.5 | 2.5 | 2.6 | 2.7 | 2.8 | 3.1 | 4.1 | 9.2 | 12.9 | 13.2 | 13.2 | 13.8 | 15.8 | 14.4 | 12.6 | 12.0 | 11.9 | 8.7 | 7.0 | 9.9 | 21.9 | 22.7 | 18.6 | 17.7 | 10.7 | 22.7 |
| 5-Aug | 17.3 | 9.8 | 7.0 | 4.8 | 3.0 | 4.0 | 2.9 | 2.4 | 2.1 | 2.5 | 2.6 | 2.2 | 2.8 | 2.0 | 1.4 | 1.8 | 2.3 | 1.3 | 0.8 | 0.7 | 1.0 | 1.5 | 1.0 | 0.9 | 3.3 | 17.3 |
| 6-Aug | 1.3 | 1.3 | 0.7 | 0.6 | 1.4 | 1.9 | 2.1 | 2.3 | 2.3 | 2.5 | 2.9 | 2.5 | 2.7 | 2.6 | 2.6 | 2.6 | 2.7 | 2.8 | 2.9 | 3.1 | 3.3 | 3.3 | 3.3 | 3.3 | 2.4 | 3.3 |
| 7-Aug | 3.5 | 3.5 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 2.9 | 2.8 | 2.8 | 2.5 | 1.7 | 1.4 | 1.4 | 1.0 | 1.0 | 1.1 | 1.4 | 1.4 | 1.4 | 1.7 | 1.9 | 1.9 | 1.9 | 2.2 | 3.5 |
| 8-Aug | 2.3 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.6 | 2.4 | 2.1 | 1.8 | 1.4 | 1.5 | 1.7 | 1.9 | 2.2 | 2.5 | 2.9 | 2.9 | 4.9 | 5.3 | 4.1 | 3.0 | 3.1 | 2.6 | 5.3 |
| 9-Aug | 3.2 | 2.8 | 2.8 | 3.0 | 3.2 | 3.3 | 3.4 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.1 | 3.5 | 3.3 | 3.5 | 3.0 | 3.2 | 3.1 | 3.3 | 3.4 | 3.3 | 3.3 | 3.7 | 3.3 | 3.7 |
| 10-Aug | 4.3 | 4.2 | 4.3 | 4.3 | 4.4 | 4.3 | 4.0 | 3.5 | 2.6 | 2.7 | 2.8 | 2.8 | 3.2 | 3.8 | 3.7 | 3.5 | 3.5 | 4.5 | 4.3 | 4.1 | 4.6 | 5.1 | 5.1 | 5.2 | 3.9 | 5.2 |
| 11-Aug | 5.3 | 5.5 | 5.6 | 5.9 | 6.1 | 6.4 | 5.6 | 4.3 | 3.7 | 3.6 | 3.7 | 3.5 | 3.6 | 3.2 | 2.9 | 2.6 | 2.1 | 1.6 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 | 3.4 | 6.4 |
| 12-Aug | 1.1 | 1.2 | 1.4 | 1.6 | 1.6 | 2.1 | 2.6 | 2.6 | 2.4 | 2.1 | 2.5 | 2.5 | 2.5 | 2.4 | 2.1 | 2.3 | 2.5 | 2.7 | 2.7 | 2.8 | 2.9 | 2.9 | 3.0 | 3.1 | 2.3 | 3.1 |
| 13-Aug | 3.2 | 3.2 | 3.2 | 3.0 | 3.1 | 3.2 | 3.3 | 3.3 | 3.1 | 3.0 | 3.1 | 3.3 | 3.4 | 3.2 | 3.7 | 3.5 | 3.5 | 3.3 | 4.5 | 5.7 | 5.2 | 5.5 | 5.5 | 5.6 | 3.8 | 5.7 |
| 14-Aug | 5.8 | 5.6 | 5.3 | 5.6 | 5.8 | 6.0 | 5.0 | 4.8 | 4.7 | 4.3 | 5.0 | 4.6 | 4.7 | 5.4 | 7.0 | 7.8 | 6.9 | 4.0 | 3.8 | 3.8 | 3.9 | 4.2 | 4.2 | 4.7 | 5.1 | 7.8 |
| 15-Aug | 5.3 | 4.8 | 4.5 | 4.0 | 4.2 | 4.6 | 4.5 | 4.5 | 4.7 | 4.8 | 5.4 | 6.0 | 6.0 | 6.3 | 5.9 | 5.2 | 7.6 | 5.4 | 5.0 | 4.4 | 4.2 | 3.8 | 3.7 | 4.5 | 5.0 | 7.6 |
| 16-Aug | 6.7 | 8.9 | 19.3 | 26.5 | 23.3 | 23.9 | 21.4 | 21.0 | 18.9 | 19.6 | 23.5 | 39.1 | 58.4 | 49.4 | 30.5 | 20.0 | 6.2 | 3.6 | 4.0 | 4.4 | 4.5 | 4.6 | 4.4 | 4.3 | 18.6 | 58.4 |
| 17-Aug | 4.3 | 4.4 | 4.2 | 4.2 | 4.1 | 4.0 | 3.4 | 2.9 | 2.4 | 2.8 | 3.2 | 3.7 | 4.0 | 4.5 | 5.7 | 6.2 | 6.0 | 7.4 | 7.6 | 9.7 | 12.2 | 9.9 | 5.9 | 5.3 | 5.3 | 12.2 |
| 18-Aug | 6.3 | 9.1 | 13.3 | 17.7 | 20.3 | 21.8 | 21.0 | 19.4 | 17.7 | 16.2 | 16.5 | 16.7 | 16.2 | 14.6 | 12.5 | 9.9 | 10.3 | 9.3 | 8.2 | 9.2 | 8.2 | 8.0 | 7.7 | 7.7 | 13.2 | 21.8 |
| 19-Aug | 6.3 | 4.1 | 3.4 | 3.1 | 3.3 | 3.4 | 3.4 | 3.4 | 4.5 | 5.7 | 11.0 | 12.8 | 19.4 | 29.4 | 54.3 | 60.6 | 70.9 | 98.1 | 128.0 | 107.2 | 78.7 | 39.9 | 13.6 | 12.7 | 32.4 | 128.0 |
| 20-Aug | 7.6 | 7.5 | 7.6 | 7.0 | 6.7 | 7.8 | 9.4 | 18.5 | 32.1 | 17.3 | 25.3 | 40.7 | 76.3 | 65.5 | 50.7 | 31.4 | 7.6 | 4.8 | 4.0 | 7.5 | 22.5 | 28.5 | 59.9 | 100.4 | 26.9 | 100.4 |
| 21-Aug | 103.9 | 92.7 | 79.0 | 82.6 | 79.8 | 77.5 | 69.8 | 71.3 | 67.7 | 60.6 | 56.9 | 59.1 | 49.0 | 38.3 | 33.0 | 28.4 | C | 23.1 | 18.6 | 18.9 | 19.8 | 16.1 | 13.7 | 14.6 | 51.1 | 103.9 |
| 22-Aug | 15.9 | 17.8 | 17.6 | 17.5 | 16.3 | 15.1 | 13.9 | 13.2 | 13.2 | 13.2 | 12.4 | 11.4 | 12.1 | 13.4 | 13.5 | 13.5 | 16.0 | 15.4 | 15.2 | 14.5 | 13.6 | 12.9 | 13.0 | 13.6 | 14.3 | 17.8 |
| 23-Aug | 13.1 | 14.5 | 16.9 | 21.5 | 23.8 | 24.4 | 23.2 | 22.9 | 25.0 | 26.0 | 25.0 | 23.7 | 24.2 | 23.8 | 21.8 | 17.1 | 14.4 | 15.8 | 14.7 | 11.3 | 9.6 | 8.5 | 6.6 | 4.4 | 18.0 | 26.0 |
| 24-Aug | 3.9 | 3.5 | 2.9 | 3.0 | 3.3 | 3.4 | 3.7 | 4.0 | 3.3 | 3.1 | 7.3 | 4.0 | 4.7 | 10.6 | 39.1 | 30.1 | 50.8 | 50.4 | 38.0 | 27.7 | 30.2 | 28.9 | 35.0 | 32.3 | 17.6 | 50.8 |
| 25-Aug | 27.4 | 18.0 | 19.0 | 22.2 | 22.1 | 20.9 | 23.4 | 22.3 | 14.3 | 18.0 | 20.0 | 19.7 | 17.4 | 12.5 | 9.7 | 8.6 | 13.6 | 12.8 | 13.1 | 13.0 | 8.3 | 6.4 | 6.3 | 6.7 | 15.6 | 27.4 |
| 26-Aug | 6.9 | 7.0 | 6.7 | 7.4 | 8.4 | 8.2 | 10.1 | 12.7 | 16.8 | 19.1 | 18.6 | 13.6 | 14.8 | 14.8 | 14.0 | 11.8 | 10.1 | 8.0 | 7.7 | 7.5 | 6.8 | 6.7 | 6.1 | 5.2 | 10.4 | 19.1 |
| 27-Aug | 5.6 | 6.1 | 6.8 | 7.5 | 7.9 | 9.0 | 10.5 | 12.9 | 14.5 | 15.5 | 15.2 | 14.0 | 13.8 | 13.5 | 13.2 | 12.8 | 13.8 | 13.9 | 12.6 | 13.5 | 13.2 | 15.0 | 19.5 | 21.9 | 12.6 | 21.9 |
| 28-Aug | 21.2 | 23.0 | 22.2 | 20.1 | 18.5 | 15.4 | 13.6 | 13.4 | 15.6 | 19.8 | 22.5 | 19.0 | 16.1 | 16.3 | 17.4 | 9.6 | 5.4 | 12.0 | 5.8 | 3.2 | 2.1 | 1.5 | 1.0 | 0.9 | 13.1 | 23.0 |
| 29-Aug | 0.9 | 1.0 | 2.0 | 2.8 | 3.7 | 4.1 | 4.2 | 4.3 | 4.0 | 4.2 | 5.4 | 9.3 | 6.7 | 7.6 | 6.4 | 6.4 | 6.6 | 7.0 | 7.0 | 7.2 | 7.8 | 7.5 | 6.8 | 6.1 | 5.4 | 9.3 |
| 30-Aug | 6.1 | 6.4 | 7.1 | 8.6 | 8.9 | 11.0 | 11.0 | 10.2 | 9.1 | 9.0 | 7.9 | 9.2 | 9.4 | 5.4 | 4.1 | 3.0 | 3.2 | 3.3 | 7.9 | 14.6 | 5.3 | 4.2 | 4.1 | 4.4 | 7.2 | 14.6 |
| 31-Aug | 4.8 | 5.4 | 5.9 | 5.6 | 5.1 | 4.6 | 4.6 | 4.7 | 5.1 | 6.0 | 6.7 | 7.0 | 7.6 | 7.6 | 6.5 | 6.3 | 6.2 | 6.8 | 6.5 | 6.4 | 6.5 | 7.9 | 8.7 | 9.0 | 6.3 | 9.0 |
| | 10.4 | 9.7 | 9.6 | 10.2 | 10.1 | 10.2 | 9.9 | 10.4 | 10.6 | 10.3 | 11.1 | 11.9 | 13.5 | 12.7 | 12.8 | 11.0 | 10.3 | 11.4 | 11.7 | 11.1 | 10.7 | 9.2 | 9.4 | 10.5 | Diurnal Average | |
| | 103.9 | 92.7 | 79.0 | 82.6 | 79.8 | 77.5 | 69.8 | 71.3 | 67.7 | 60.6 | 56.9 | 59.1 | 76.3 | 65.5 | 54.3 | 60.6 | 70.9 | 98.1 | 128.0 | 107.2 | 78.7 | 39.9 | 59.9 | 100.4 | Diurnal Maximum | |

C - Calibration

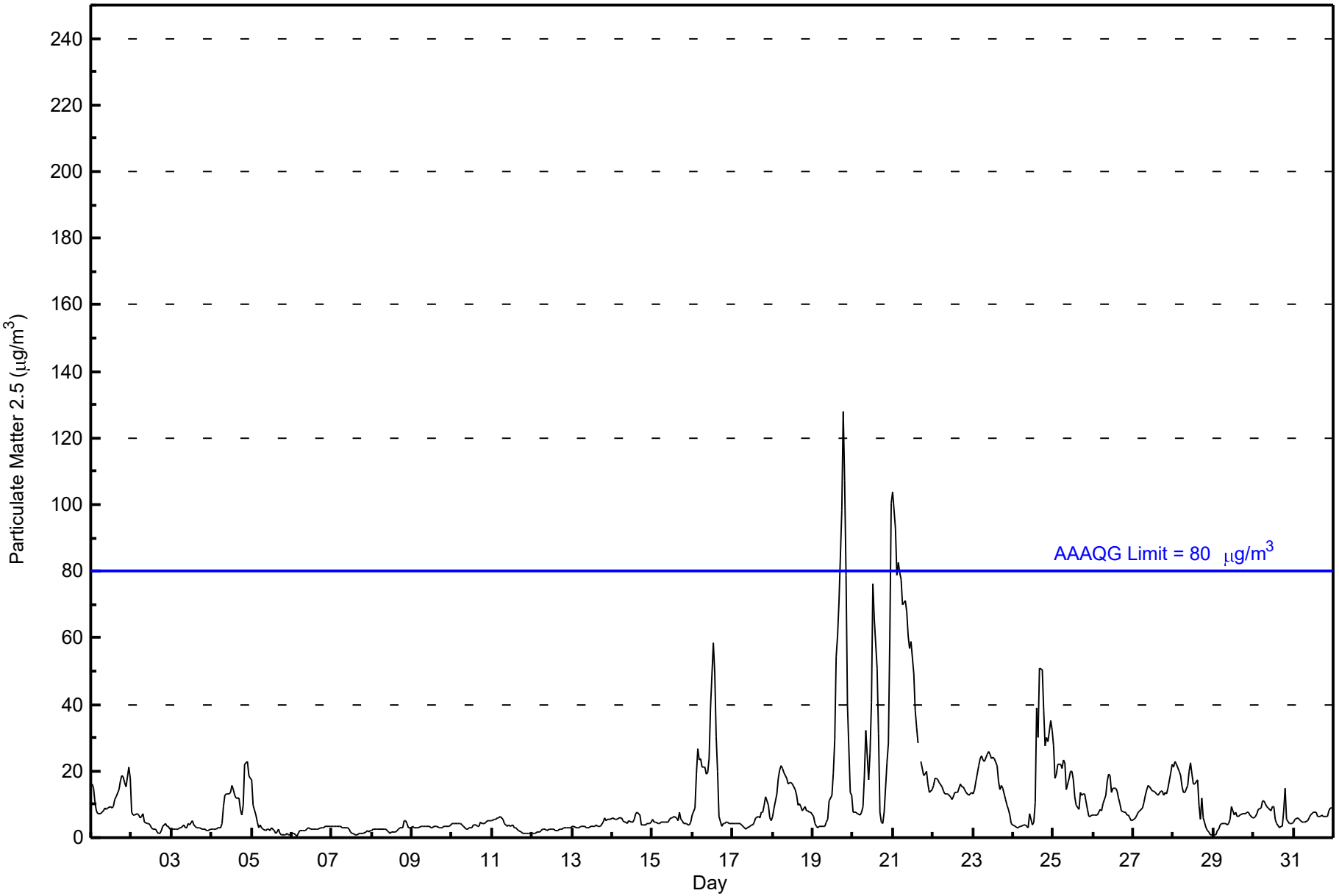
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort Chipewyan - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort Chipewyan - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 366 | 49.26 | 49.26 |
| 6 - 15 | 235 | 31.63 | 80.89 |
| 16 - 25 | 91 | 12.25 | 93.14 |
| 26 - 80 | 44 | 5.92 | 99.06 |
| > 81.0 | 7 | 0.94 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort Chipewyan - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 18 | 5 | 2 | 4 | 8 | 10 | 7 | 1 | 2 | 9 | 30 | 22 | 33 | 54 | 74 | 87 | 366 |
| 6 - 15 | 6 | 1 | 0 | 9 | 41 | 20 | 15 | 11 | 21 | 20 | 17 | 8 | 10 | 14 | 24 | 17 | 234 |
| 16 - 25 | 1 | 0 | 1 | 5 | 9 | 15 | 3 | 3 | 6 | 9 | 2 | 4 | 5 | 9 | 11 | 8 | 91 |
| 26 - 80 | 0 | 1 | 0 | 0 | 5 | 2 | 1 | 2 | 0 | 1 | 2 | 3 | 1 | 7 | 15 | 4 | 44 |
| > 81.0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 7 |
| **Totals** | 25 | 7 | 5 | 19 | 63 | 47 | 26 | 17 | 29 | 39 | 52 | 39 | 50 | 84 | 124 | 116 | 742 |

Total Number of Valid Hours: 742

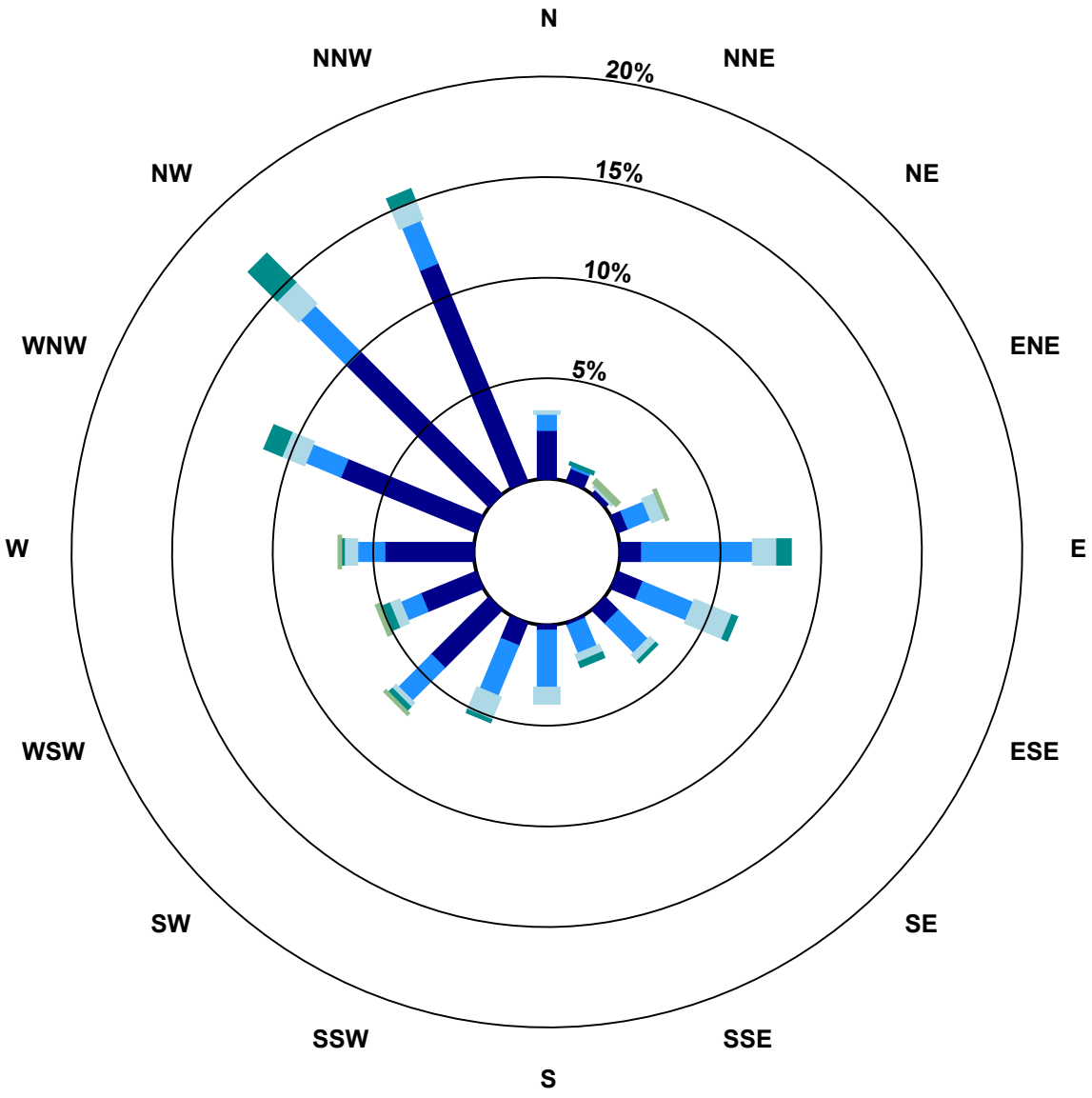
Total Number of Hours: 744

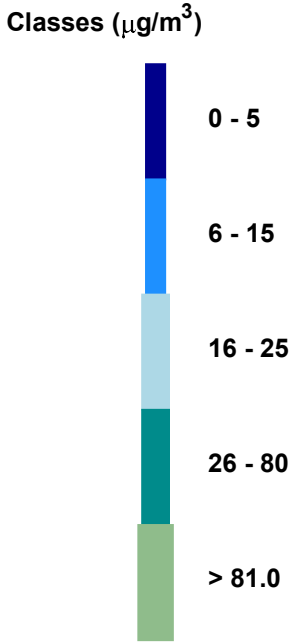
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Fort Chipewyan




Total Number of Valid Hours: 742

Maximum Value: 26.5 C on Aug 23 17:00
Maximum Daily Average: 22.7 C on Aug 23

Minimum Value: 8.6 C on Aug 17 05:00
Minimum Daily Average: 11.8 C on Aug 29
Maximum Diurnal Average: 20.0 C at hour 16
Minimum Diurnal Average: 13.6 C at hour 6
Monthly Average: 16.89 C
Percentiles: $P_1$ = 9.4 $P_{10}$ = 12.4 $Q_1$ = 14.1 Median = 16.6 $Q_3$ = 19.5 $P_{90}$ = 21.8 $P_{99}$ = 25.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

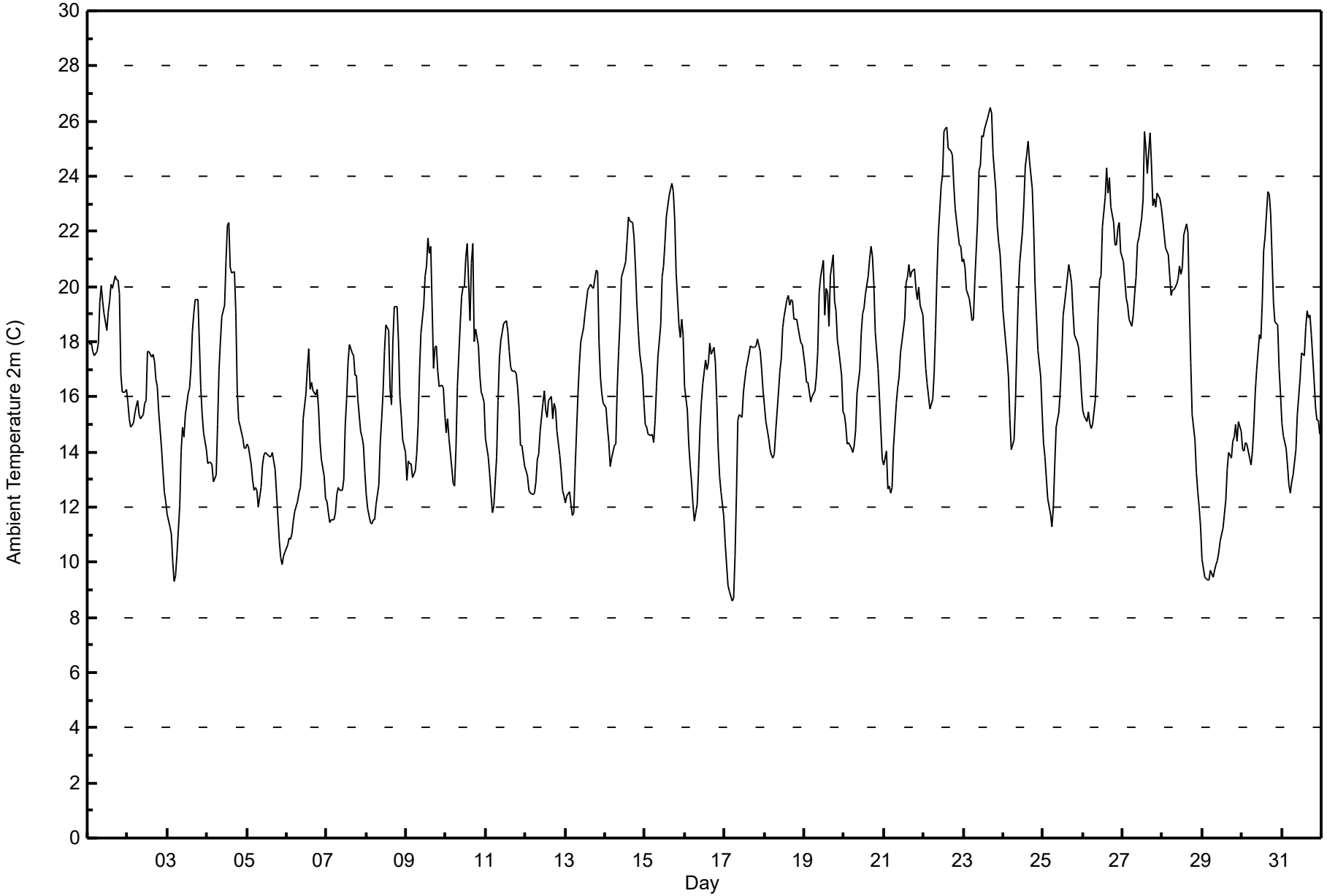
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 18.0 | 17.9 | 17.9 | 17.7 | 17.5 | 17.6 | 18.0 | 19.4 | 20.0 | 19.5 | 19.0 | 18.4 | 19.1 | 19.5 | 20.1 | 19.9 | 20.4 | 20.3 | 20.2 | 19.7 | 16.8 | 16.2 | 16.2 | 16.3 | 18.6 | 20.4 |
| 2-Aug | 15.8 | 15.2 | 14.9 | 15.1 | 15.4 | 15.6 | 15.9 | 15.4 | 15.2 | 15.4 | 15.7 | 15.9 | 17.7 | 17.6 | 17.5 | 17.5 | 17.3 | 16.6 | 16.4 | 15.5 | 14.1 | 13.3 | 12.5 | 12.2 | 15.6 | 17.7 |
| 3-Aug | 11.8 | 11.3 | 11.0 | 10.0 | 9.3 | 9.5 | 10.3 | 12.1 | 14.0 | 14.9 | 14.6 | 15.4 | 16.1 | 16.3 | 17.0 | 18.4 | 19.0 | 19.5 | 19.5 | 17.9 | 16.3 | 15.4 | 14.7 | 14.1 | 14.5 | 19.5 |
| 4-Aug | 13.6 | 13.6 | 13.6 | 13.5 | 12.9 | 13.2 | 15.0 | 17.0 | 18.0 | 18.9 | 19.3 | 20.9 | 22.2 | 22.3 | 20.7 | 20.5 | 20.5 | 19.1 | 16.2 | 15.2 | 15.0 | 14.5 | 14.1 | 14.2 | 16.8 | 22.3 |
| 5-Aug | 14.3 | 14.2 | 13.5 | 13.0 | 12.6 | 12.7 | 12.6 | 12.0 | 12.7 | 13.5 | 13.9 | 14.0 | 13.9 | 13.8 | 13.8 | 14.0 | 13.7 | 13.4 | 12.5 | 10.8 | 10.2 | 9.9 | 10.2 | 10.4 | 12.7 | 14.3 |
| 6-Aug | 10.6 | 10.9 | 10.8 | 11.0 | 11.5 | 11.8 | 12.2 | 12.5 | 12.7 | 13.5 | 15.2 | 16.1 | 17.0 | 17.7 | 16.3 | 16.5 | 16.2 | 16.1 | 16.3 | 15.5 | 14.4 | 13.7 | 13.1 | 12.3 | 13.9 | 17.7 |
| 7-Aug | 12.2 | 11.8 | 11.4 | 11.6 | 11.6 | 11.8 | 12.4 | 12.7 | 12.6 | 12.6 | 13.0 | 15.0 | 15.9 | 17.3 | 17.9 | 17.6 | 17.5 | 16.8 | 16.8 | 15.9 | 14.7 | 14.6 | 14.2 | 13.3 | 14.2 | 17.9 |
| 8-Aug | 12.5 | 12.0 | 11.4 | 11.4 | 11.5 | 11.5 | 12.1 | 12.8 | 14.4 | 15.2 | 16.2 | 17.6 | 18.6 | 18.4 | 16.3 | 15.7 | 18.0 | 19.3 | 19.3 | 18.0 | 16.0 | 15.3 | 14.4 | 14.0 | 15.1 | 19.3 |
| 9-Aug | 13.0 | 13.7 | 13.6 | 13.6 | 13.1 | 13.3 | 13.9 | 15.0 | 16.9 | 18.3 | 19.3 | 20.4 | 20.8 | 21.7 | 21.2 | 21.4 | 17.0 | 17.8 | 17.9 | 16.9 | 16.4 | 16.4 | 16.3 | 15.4 | 16.8 | 21.7 |
| 10-Aug | 14.7 | 15.2 | 14.5 | 13.4 | 12.9 | 12.8 | 14.1 | 16.4 | 18.6 | 19.6 | 20.0 | 20.0 | 21.1 | 21.6 | 18.7 | 20.8 | 21.6 | 18.0 | 18.5 | 17.9 | 16.8 | 16.2 | 16.0 | 15.8 | 17.3 | 21.6 |
| 11-Aug | 14.5 | 13.9 | 13.2 | 12.5 | 11.8 | 12.1 | 13.8 | 15.9 | 17.4 | 18.1 | 18.4 | 18.7 | 18.8 | 18.4 | 17.6 | 17.1 | 17.0 | 16.9 | 16.8 | 16.3 | 15.6 | 14.3 | 14.2 | 13.5 | 15.7 | 18.8 |
| 12-Aug | 13.3 | 13.1 | 12.6 | 12.5 | 12.4 | 12.5 | 12.9 | 13.7 | 13.9 | 14.7 | 15.8 | 16.2 | 15.5 | 15.3 | 15.9 | 16.0 | 15.2 | 15.7 | 15.6 | 14.7 | 13.9 | 13.3 | 12.6 | 12.4 | 14.2 | 16.2 |
| 13-Aug | 12.1 | 12.4 | 12.6 | 12.1 | 11.7 | 11.8 | 13.4 | 16.1 | 17.2 | 18.0 | 18.2 | 18.5 | 19.0 | 19.9 | 20.0 | 20.1 | 20.0 | 19.9 | 20.6 | 20.5 | 18.0 | 16.7 | 16.1 | 15.8 | 16.7 | 20.6 |
| 14-Aug | 15.6 | 14.9 | 14.3 | 13.5 | 13.8 | 14.2 | 14.3 | 16.3 | 17.6 | 18.7 | 20.3 | 20.7 | 20.9 | 21.6 | 22.5 | 22.4 | 22.3 | 21.8 | 20.7 | 19.4 | 18.4 | 17.6 | 16.8 | 15.8 | 18.1 | 22.5 |
| 15-Aug | 15.0 | 14.9 | 14.6 | 14.6 | 14.7 | 14.3 | 15.2 | 16.4 | 17.4 | 18.6 | 20.3 | 20.7 | 21.6 | 22.5 | 23.3 | 23.5 | 23.8 | 23.5 | 22.4 | 20.5 | 18.6 | 18.1 | 18.8 | 18.2 | 18.8 | 23.8 |
| 16-Aug | 16.4 | 15.5 | 14.3 | 13.5 | 12.9 | 12.1 | 11.5 | 12.1 | 13.4 | 14.8 | 15.8 | 16.5 | 17.3 | 17.0 | 17.2 | 17.9 | 17.5 | 17.8 | 17.2 | 15.9 | 14.2 | 13.1 | 12.6 | 11.6 | 14.9 | 17.9 |
| 17-Aug | 10.7 | 9.9 | 9.2 | 9.0 | 8.6 | 8.7 | 10.2 | 12.5 | 15.2 | 15.3 | 15.3 | 16.2 | 16.6 | 17.1 | 17.3 | 17.8 | 17.8 | 17.8 | 17.8 | 17.9 | 18.1 | 17.7 | 17.0 | 16.2 | 14.6 | 18.1 |
| 18-Aug | 15.7 | 15.1 | 14.5 | 14.1 | 13.9 | 13.8 | 13.9 | 14.7 | 16.1 | 16.9 | 17.4 | 18.5 | 18.9 | 19.5 | 19.7 | 19.3 | 19.5 | 19.5 | 18.8 | 18.8 | 18.5 | 18.2 | 17.9 | 17.9 | 17.1 | 19.7 |
| 19-Aug | 17.1 | 16.5 | 16.5 | 16.2 | 15.8 | 16.0 | 16.2 | 16.8 | 17.7 | 19.8 | 20.4 | 21.0 | 19.0 | 19.9 | 19.8 | 18.6 | 20.4 | 21.1 | 19.5 | 19.1 | 18.0 | 17.7 | 16.8 | 15.5 | 18.1 | 21.1 |
| 20-Aug | 15.4 | 14.9 | 14.3 | 14.3 | 14.2 | 14.0 | 14.2 | 14.8 | 16.1 | 17.0 | 18.3 | 19.0 | 19.2 | 19.7 | 20.4 | 21.0 | 21.5 | 21.1 | 20.1 | 18.4 | 17.1 | 16.0 | 14.8 | 13.7 | 17.1 | 21.5 |
| 21-Aug | 13.5 | 14.0 | 12.7 | 12.7 | 12.5 | 12.7 | 14.2 | 15.8 | 16.3 | 16.8 | 17.6 | 18.0 | 18.8 | 20.1 | 20.4 | 20.8 | 20.3 | 20.5 | 20.7 | 20.0 | 19.5 | 20.0 | 19.3 | 19.0 | 17.3 | 20.8 |
| 22-Aug | 18.0 | 17.1 | 16.5 | 16.0 | 15.5 | 15.9 | 16.8 | 18.5 | 20.4 | 21.9 | 23.7 | 24.0 | 25.6 | 25.7 | 25.8 | 25.0 | 24.9 | 24.8 | 23.7 | 22.8 | 22.4 | 21.5 | 21.5 | 20.9 | 21.2 | 25.8 |
| 23-Aug | 21.0 | 20.7 | 19.9 | 19.6 | 19.2 | 18.7 | 18.8 | 20.2 | 22.4 | 24.2 | 24.4 | 25.5 | 25.4 | 25.7 | 26.1 | 26.3 | 26.5 | 26.3 | 24.8 | 23.5 | 22.2 | 21.6 | 21.2 | 20.3 | 22.7 | 26.5 |
| 24-Aug | 19.2 | 18.0 | 17.4 | 16.7 | 15.2 | 14.1 | 14.5 | 15.8 | 17.9 | 19.7 | 20.9 | 22.0 | 23.0 | 24.3 | 24.8 | 25.3 | 24.5 | 23.6 | 22.1 | 20.0 | 18.8 | 17.7 | 16.7 | 15.4 | 19.5 | 25.3 |
| 25-Aug | 14.3 | 13.8 | 13.1 | 12.3 | 11.7 | 11.3 | 12.0 | 13.5 | 14.9 | 15.5 | 16.3 | 17.5 | 19.0 | 19.4 | 19.8 | 20.8 | 20.5 | 20.2 | 19.1 | 18.2 | 18.0 | 17.8 | 17.2 | 16.2 | 16.3 | 20.8 |
| 26-Aug | 15.5 | 15.3 | 15.1 | 15.4 | 15.0 | 14.9 | 15.0 | 15.9 | 17.3 | 19.0 | 20.2 | 20.4 | 22.2 | 23.3 | 24.3 | 23.4 | 24.0 | 22.9 | 22.3 | 21.5 | 21.5 | 22.1 | 22.3 | 21.3 | 19.6 | 24.3 |
| 27-Aug | 20.9 | 20.2 | 19.6 | 19.3 | 18.8 | 18.6 | 19.0 | 19.7 | 20.4 | 21.6 | 21.8 | 22.5 | 23.2 | 25.6 | 25.0 | 24.1 | 25.6 | 24.4 | 22.9 | 23.2 | 22.9 | 23.4 | 23.2 | 22.9 | 22.0 | 25.6 |
| 28-Aug | 22.4 | 21.9 | 21.4 | 21.2 | 20.4 | 19.7 | 19.9 | 19.9 | 20.1 | 20.3 | 20.8 | 20.4 | 20.7 | 21.9 | 22.3 | 22.0 | 19.3 | 17.2 | 15.3 | 14.5 | 13.3 | 12.6 | 12.0 | 11.3 | 18.8 | 22.4 |
| 29-Aug | 10.1 | 9.5 | 9.4 | 9.4 | 9.4 | 9.7 | 9.4 | 9.7 | 9.9 | 10.1 | 10.4 | 10.8 | 11.2 | 11.7 | 12.3 | 13.4 | 14.0 | 13.8 | 14.4 | 14.5 | 15.0 | 14.4 | 15.1 | 14.8 | 11.8 | 15.1 |
| 30-Aug | 14.1 | 14.0 | 14.4 | 14.3 | 13.8 | 13.5 | 14.0 | 15.0 | 16.2 | 17.0 | 18.2 | 18.1 | 19.4 | 21.3 | 21.8 | 23.4 | 23.3 | 22.6 | 21.1 | 19.4 | 18.7 | 18.6 | 17.0 | 16.1 | 17.7 | 23.4 |
| 31-Aug | 15.0 | 14.6 | 14.1 | 13.5 | 12.8 | 12.5 | 12.9 | 13.2 | 14.1 | 15.4 | 16.0 | 16.7 | 17.6 | 17.5 | 18.5 | 19.1 | 18.9 | 19.0 | 18.2 | 16.6 | 15.6 | 15.2 | 15.1 | 14.7 | 15.7 | 19.1 |
| | 15.0 | 14.7 | 14.3 | 14.0 | 13.6 | 13.6 | 14.2 | 15.2 | 16.4 | 17.2 | 18.0 | 18.6 | 19.2 | 19.8 | 19.8 | 20.0 | 19.9 | 19.6 | 19.0 | 18.0 | 17.1 | 16.5 | 16.1 | 15.5 | Diurnal Average | |
| | 22.4 | 21.9 | 21.4 | 21.2 | 20.4 | 19.7 | 19.9 | 20.2 | 22.4 | 24.2 | 24.4 | 25.5 | 25.6 | 25.7 | 26.1 | 26.3 | 26.5 | 26.3 | 24.8 | 23.5 | 22.9 | 23.4 | 23.2 | 22.9 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Fort Chipewyan - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 17 | 2.28 | 2.28 |
| 10 - 20 | 568 | 76.34 | 78.63 |
| > 20 | 159 | 21.37 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Fort Chipewyan - August 2026

Maximum Value: 100.0 % on Aug 1 22:00

Maximum Daily Average: 92.4 % on Aug 29

Minimum Value: 35.4 % on Aug 24 17:00

Minimum Daily Average: 53.6 % on Aug 24

Maximum Diurnal Average: 87.0 % at hour 6

Minimum Diurnal Average: 60.9 % at hour 14

Monthly Average: 73.36 %

Percentiles: $P_1$ = 39.0 $P_{10}$ = 52.7 $Q_1$ = 63.4 Median = 74.0 $Q_3$ = 84.9 $P_{90}$ = 92.8 $P_{99}$ = 99.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

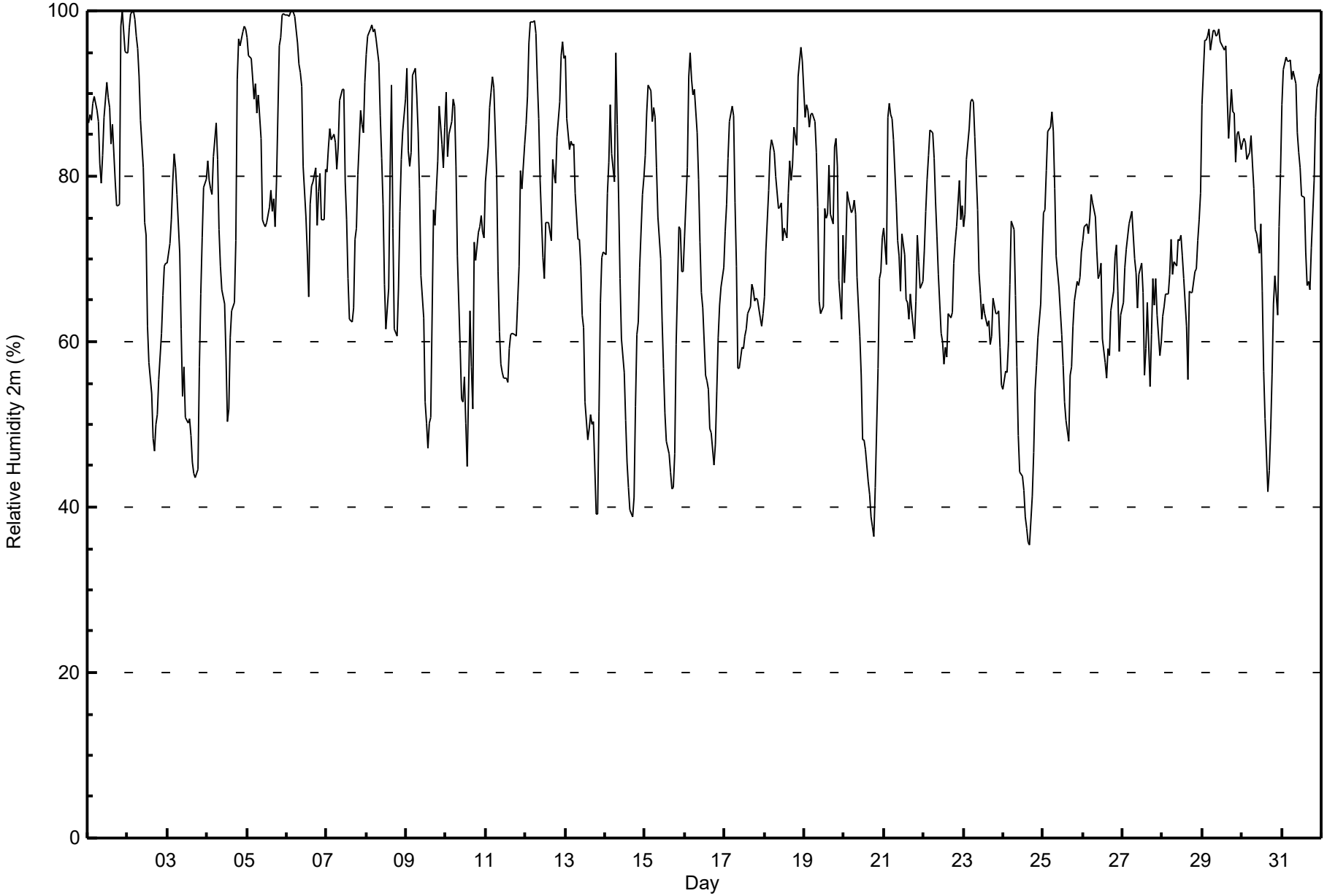
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 86.4 | 87.5 | 86.8 | 88.8 | 89.6 | 88.0 | 86.6 | 81.5 | 79.1 | 82.5 | 87.1 | 91.3 | 89.5 | 88.3 | 83.9 | 86.2 | 79.4 | 76.5 | 76.5 | 76.6 | 98.1 | 100.0 | 95.0 | 95.0 | 86.7 | 100.0 |
| 2-Aug | 95.0 | 97.9 | 99.7 | 100.0 | 99.0 | 97.0 | 95.5 | 92.0 | 86.8 | 81.0 | 74.3 | 72.9 | 61.9 | 57.5 | 53.7 | 48.3 | 46.9 | 49.9 | 51.2 | 55.5 | 61.0 | 65.5 | 69.2 | 69.5 | 74.2 | 100.0 |
| 3-Aug | 69.6 | 71.8 | 74.8 | 79.3 | 82.7 | 81.1 | 77.7 | 70.7 | 61.5 | 53.4 | 56.9 | 50.9 | 50.2 | 50.6 | 48.7 | 45.4 | 44.1 | 43.6 | 44.6 | 56.9 | 65.8 | 72.6 | 78.7 | 79.6 | 63.0 | 82.7 |
| 4-Aug | 81.8 | 79.5 | 78.4 | 77.8 | 82.4 | 86.4 | 82.1 | 73.5 | 69.2 | 66.2 | 64.6 | 58.2 | 50.3 | 51.8 | 60.6 | 63.8 | 64.8 | 72.2 | 91.6 | 96.6 | 95.8 | 97.4 | 98.1 | 97.8 | 76.7 | 98.1 |
| 5-Aug | 96.8 | 94.6 | 94.3 | 91.9 | 89.2 | 91.3 | 87.6 | 89.8 | 84.6 | 74.7 | 74.2 | 73.8 | 74.3 | 76.3 | 78.3 | 75.7 | 77.2 | 74.0 | 79.4 | 95.7 | 96.8 | 99.4 | 99.6 | 99.4 | 86.2 | 99.6 |
| 6-Aug | 99.6 | 99.4 | 99.9 | 100.0 | 99.8 | 99.2 | 96.1 | 93.6 | 92.5 | 90.8 | 81.3 | 75.0 | 70.7 | 65.4 | 76.5 | 78.7 | 79.3 | 81.0 | 74.1 | 78.2 | 80.3 | 74.8 | 74.8 | 80.8 | 85.1 | 100.0 |
| 7-Aug | 80.5 | 83.5 | 85.8 | 84.4 | 85.1 | 84.0 | 80.9 | 83.5 | 89.1 | 90.5 | 90.5 | 79.3 | 74.8 | 67.6 | 62.8 | 62.4 | 64.1 | 72.4 | 73.8 | 80.1 | 88.0 | 86.3 | 85.3 | 91.3 | 80.3 | 91.3 |
| 8-Aug | 94.7 | 96.9 | 97.8 | 98.4 | 97.5 | 97.8 | 96.5 | 93.7 | 87.3 | 82.2 | 76.7 | 67.0 | 61.5 | 66.5 | 80.2 | 91.0 | 73.7 | 61.5 | 60.6 | 66.4 | 75.8 | 82.0 | 85.5 | 89.2 | 82.5 | 98.4 |
| 9-Aug | 93.0 | 83.0 | 81.2 | 82.8 | 92.2 | 93.0 | 89.9 | 85.5 | 78.5 | 67.9 | 62.9 | 52.7 | 50.2 | 47.1 | 50.2 | 50.8 | 76.0 | 74.1 | 78.2 | 81.8 | 88.4 | 83.9 | 81.0 | 86.0 | 75.4 | 93.0 |
| 10-Aug | 90.2 | 82.4 | 85.1 | 86.7 | 89.4 | 88.4 | 81.2 | 70.3 | 59.2 | 53.1 | 52.8 | 55.7 | 50.2 | 45.0 | 63.7 | 57.0 | 51.9 | 72.0 | 69.9 | 73.3 | 74.0 | 75.3 | 73.3 | 72.6 | 69.7 | 90.2 |
| 11-Aug | 79.2 | 83.5 | 88.3 | 90.2 | 92.1 | 90.6 | 80.2 | 68.5 | 61.2 | 57.3 | 56.3 | 55.6 | 55.6 | 55.1 | 59.1 | 60.8 | 61.0 | 60.8 | 60.6 | 64.9 | 69.2 | 80.7 | 78.5 | 83.9 | 70.6 | 92.1 |
| 12-Aug | 86.3 | 89.7 | 96.1 | 98.6 | 98.7 | 98.8 | 97.2 | 91.8 | 86.9 | 79.4 | 70.2 | 67.7 | 74.3 | 74.3 | 74.4 | 72.3 | 82.0 | 80.2 | 79.2 | 84.8 | 89.0 | 94.6 | 96.2 | 94.2 | 85.7 | 98.8 |
| 13-Aug | 94.6 | 86.9 | 83.3 | 84.2 | 83.7 | 83.9 | 77.9 | 72.4 | 72.4 | 69.1 | 63.2 | 61.7 | 52.7 | 48.2 | 49.5 | 51.2 | 49.9 | 50.3 | 39.2 | 39.2 | 51.5 | 64.8 | 70.2 | 70.9 | 65.4 | 94.6 |
| 14-Aug | 70.6 | 78.0 | 81.7 | 88.6 | 82.7 | 79.4 | 94.8 | 86.3 | 77.4 | 67.5 | 60.3 | 56.3 | 50.6 | 45.4 | 42.4 | 39.7 | 38.9 | 41.2 | 52.2 | 60.8 | 62.4 | 68.9 | 77.8 | 79.8 | 66.0 | 94.8 |
| 15-Aug | 82.5 | 87.6 | 91.1 | 90.4 | 86.6 | 88.2 | 87.1 | 81.1 | 75.1 | 70.0 | 62.6 | 56.8 | 51.4 | 48.0 | 46.4 | 44.2 | 42.2 | 42.3 | 46.5 | 59.7 | 74.0 | 73.5 | 68.5 | 68.5 | 67.7 | 91.1 |
| 16-Aug | 72.7 | 81.0 | 92.1 | 94.9 | 91.7 | 89.8 | 90.5 | 85.3 | 79.7 | 72.0 | 65.9 | 64.1 | 56.0 | 55.3 | 54.2 | 49.4 | 49.1 | 45.1 | 47.6 | 54.1 | 60.6 | 64.3 | 66.7 | 68.9 | 68.8 | 94.9 |
| 17-Aug | 73.4 | 76.7 | 82.3 | 86.6 | 88.5 | 87.3 | 76.8 | 69.2 | 56.8 | 56.8 | 59.3 | 59.2 | 60.7 | 61.5 | 63.4 | 64.2 | 67.0 | 66.3 | 64.9 | 65.2 | 65.1 | 63.0 | 61.8 | 63.4 | 68.3 | 88.5 |
| 18-Aug | 65.4 | 71.0 | 78.3 | 83.0 | 84.4 | 83.7 | 82.9 | 80.0 | 76.2 | 76.3 | 76.8 | 72.2 | 73.7 | 72.5 | 78.0 | 81.8 | 79.5 | 81.4 | 85.9 | 83.8 | 92.1 | 93.9 | 95.5 | 93.8 | 80.9 | 95.5 |
| 19-Aug | 87.2 | 88.7 | 88.0 | 85.9 | 87.4 | 87.6 | 86.6 | 82.8 | 76.2 | 65.0 | 63.3 | 64.2 | 76.1 | 75.0 | 75.5 | 81.3 | 75.5 | 74.3 | 83.6 | 84.7 | 81.2 | 67.5 | 62.7 | 72.8 | 78.0 | 88.7 |
| 20-Aug | 67.1 | 71.3 | 78.1 | 77.2 | 75.6 | 76.0 | 77.2 | 75.4 | 67.8 | 60.7 | 56.0 | 48.2 | 48.1 | 46.9 | 43.1 | 41.5 | 38.9 | 37.6 | 36.4 | 42.4 | 56.7 | 67.6 | 68.4 | 72.6 | 59.6 | 78.1 |
| 21-Aug | 73.8 | 69.3 | 87.1 | 88.8 | 87.5 | 86.9 | 84.3 | 76.8 | 72.2 | 70.3 | 66.1 | 73.1 | 70.5 | 65.0 | 64.7 | 62.8 | 65.8 | 63.6 | 60.4 | 64.9 | 72.8 | 69.7 | 66.4 | 67.3 | 72.1 | 88.8 |
| 22-Aug | 71.0 | 75.8 | 79.7 | 82.6 | 85.6 | 85.2 | 82.3 | 77.0 | 72.7 | 68.1 | 61.0 | 60.0 | 57.3 | 59.4 | 58.1 | 63.3 | 62.8 | 63.6 | 69.5 | 72.1 | 74.0 | 79.5 | 74.8 | 76.4 | 71.3 | 85.6 |
| 23-Aug | 73.8 | 75.4 | 82.1 | 85.8 | 89.0 | 89.3 | 89.0 | 84.8 | 76.0 | 68.3 | 65.7 | 62.6 | 64.5 | 63.4 | 61.8 | 62.5 | 59.7 | 60.7 | 65.2 | 63.4 | 63.5 | 63.8 | 59.3 | 54.8 | 70.2 | 89.3 |
| 24-Aug | 54.2 | 56.5 | 56.2 | 59.9 | 66.9 | 74.6 | 73.6 | 65.7 | 56.9 | 48.6 | 44.3 | 43.8 | 42.0 | 38.9 | 37.5 | 35.7 | 35.4 | 41.4 | 46.5 | 54.0 | 57.1 | 60.5 | 64.5 | 70.7 | 53.6 | 74.6 |
| 25-Aug | 75.6 | 75.9 | 80.7 | 85.4 | 86.0 | 87.9 | 85.3 | 78.5 | 70.3 | 66.6 | 63.8 | 60.9 | 57.1 | 52.6 | 50.4 | 48.0 | 55.9 | 56.9 | 61.9 | 65.0 | 67.3 | 66.7 | 67.9 | 70.8 | 68.2 | 87.9 |
| 26-Aug | 72.1 | 73.9 | 74.3 | 73.0 | 74.9 | 77.9 | 76.8 | 75.1 | 71.0 | 67.7 | 68.1 | 69.4 | 60.3 | 57.5 | 55.6 | 59.1 | 58.4 | 63.7 | 66.1 | 70.3 | 71.7 | 66.1 | 58.8 | 63.2 | 67.7 | 77.9 |
| 27-Aug | 64.8 | 69.0 | 71.2 | 72.7 | 74.3 | 75.8 | 72.8 | 70.0 | 68.4 | 64.0 | 68.1 | 69.5 | 66.0 | 55.9 | 59.1 | 64.8 | 54.6 | 60.8 | 67.7 | 64.4 | 67.7 | 63.2 | 58.3 | 59.9 | 65.9 | 75.8 |
| 28-Aug | 63.0 | 64.2 | 65.7 | 65.8 | 68.1 | 72.4 | 68.2 | 69.6 | 69.2 | 72.4 | 72.2 | 72.8 | 70.3 | 67.6 | 61.9 | 55.5 | 66.1 | 66.0 | 66.0 | 68.5 | 68.8 | 72.2 | 74.8 | 78.0 | 68.3 | 78.0 |
| 29-Aug | 88.6 | 96.5 | 96.4 | 96.9 | 97.8 | 95.3 | 97.6 | 97.6 | 96.9 | 97.1 | 97.7 | 96.3 | 95.7 | 95.2 | 95.8 | 89.7 | 84.6 | 90.5 | 87.8 | 87.6 | 81.6 | 85.0 | 85.5 | 83.3 | 92.4 | 97.8 |
| 30-Aug | 84.1 | 84.7 | 84.0 | 82.0 | 82.9 | 84.8 | 81.6 | 78.5 | 73.6 | 73.0 | 70.6 | 74.3 | 66.2 | 56.4 | 50.7 | 41.8 | 44.4 | 49.4 | 56.1 | 64.5 | 68.1 | 63.2 | 74.0 | 80.4 | 69.6 | 84.8 |
| 31-Aug | 88.7 | 92.9 | 94.4 | 93.9 | 94.0 | 94.1 | 91.7 | 92.7 | 91.1 | 85.3 | 83.0 | 81.1 | 77.7 | 77.5 | 70.9 | 66.8 | 67.3 | 66.2 | 71.4 | 79.5 | 87.1 | 90.7 | 91.5 | 92.3 | 84.2 | 94.4 |
| | 79.9 | 81.4 | 84.4 | 85.7 | 86.6 | 87.0 | 84.8 | 80.4 | 75.3 | 70.9 | 68.2 | 66.0 | 63.2 | 60.9 | 61.6 | 61.2 | 61.2 | 62.6 | 65.0 | 69.5 | 74.4 | 76.0 | 76.2 | 78.3 | Diurnal Average | |
| | 99.6 | 99.4 | 99.9 | 100.0 | 99.8 | 99.2 | 97.6 | 97.6 | 96.9 | 97.1 | 97.7 | 96.3 | 95.7 | 95.2 | 95.8 | 91.0 | 84.6 | 90.5 | 91.6 | 96.6 | 98.1 | 100.0 | 99.6 | 99.4 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Fort Chipewyan - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 11 | 1.48 | 1.48 |
| 40 - 60 | 124 | 16.67 | 18.15 |
| 60 - 80 | 343 | 46.10 | 64.25 |
| 80 - 100 | 264 | 35.48 | 99.73 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Leaf Wetness (LW) - %

## Fort Chipewyan - August 2026

Maximum Value: 46.5 % on Aug 1 21:00

Maximum Daily Average: 11.5 % on Aug 29

Minimum Value: 0.2 % on Aug 24 12:00

Minimum Daily Average: 0.8 % on Aug 24

Maximum Diurnal Average: 7.0 % at hour 4

Minimum Diurnal Average: 1.3 % at hour 13

Monthly Average: 3.26 %

Percentiles: $P_1$ = 0.4 $P_{10}$ = 0.7 $Q_1$ = 0.9 Median = 1.2 $Q_3$ = 1.7 $P_{90}$ = 7.5 $P_{99}$ = 36.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

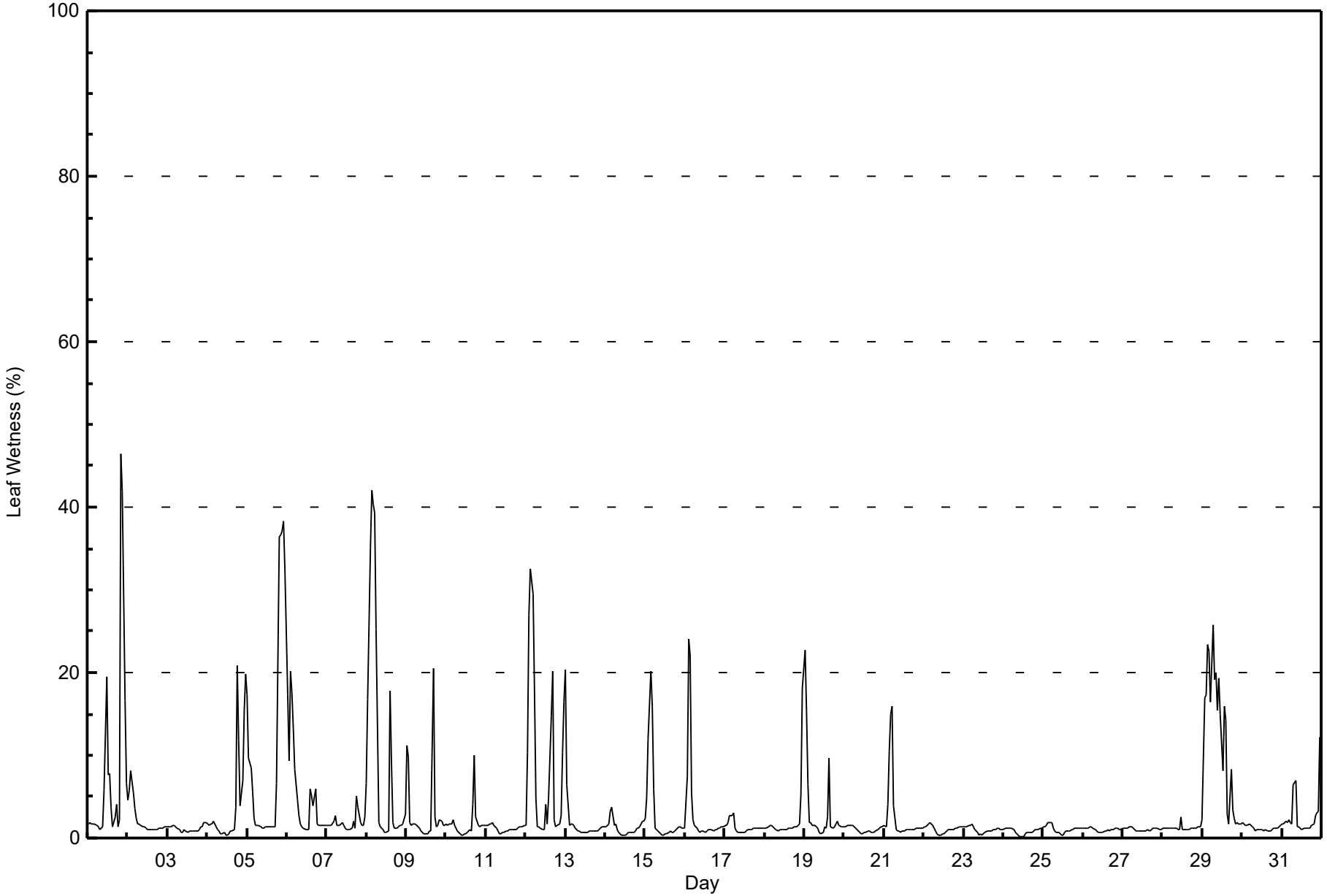
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.7 | 1.8 | 1.6 | 1.6 | 1.7 | 1.5 | 1.4 | 1.0 | 1.2 | 1.4 | 5.8 | 19.5 | 7.6 | 7.8 | 3.7 | 1.3 | 2.5 | 4.0 | 1.3 | 2.3 | 46.5 | 41.9 | 16.6 | 6.6 | 7.6 | 46.5 |
| 2-Aug | 4.6 | 5.7 | 8.1 | 5.5 | 3.5 | 2.3 | 1.7 | 1.6 | 1.4 | 1.4 | 1.3 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.3 | 1.3 | 1.3 | 2.2 | 8.1 |
| 3-Aug | 1.3 | 1.3 | 1.4 | 1.5 | 1.5 | 1.3 | 1.1 | 0.9 | 0.6 | 0.7 | 0.9 | 0.8 | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 | 1.1 | 1.3 | 1.4 | 1.8 | 1.9 | 1.1 | 1.9 |
| 4-Aug | 1.8 | 1.6 | 1.6 | 1.7 | 2.0 | 1.4 | 1.0 | 0.9 | 0.6 | 0.5 | 0.7 | 0.4 | 0.4 | 0.6 | 0.9 | 0.9 | 1.0 | 3.8 | 20.8 | 11.9 | 3.9 | 6.9 | 15.4 | 19.9 | 4.2 | 20.8 |
| 5-Aug | 17.4 | 9.6 | 8.5 | 5.6 | 2.3 | 1.5 | 1.5 | 1.5 | 1.4 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | 6.6 | 36.5 | 36.6 | 37.0 | 38.2 | 32.3 | 10.3 | 38.2 |
| 6-Aug | 17.4 | 9.2 | 20.2 | 17.4 | 13.2 | 8.2 | 4.6 | 2.8 | 1.6 | 1.4 | 1.1 | 1.1 | 1.0 | 1.0 | 6.0 | 5.1 | 3.8 | 6.0 | 1.7 | 1.5 | 1.6 | 1.5 | 1.5 | 1.6 | 5.4 | 20.2 |
| 7-Aug | 1.5 | 1.6 | 1.6 | 1.6 | 2.0 | 2.6 | 1.5 | 1.5 | 1.5 | 1.8 | 1.5 | 1.2 | 1.1 | 0.9 | 1.1 | 1.1 | 2.1 | 1.2 | 5.0 | 3.8 | 1.8 | 1.6 | 1.6 | 2.5 | 1.8 | 5.0 |
| 8-Aug | 6.6 | 16.7 | 35.1 | 42.0 | 40.4 | 39.3 | 25.2 | 1.8 | 1.3 | 1.2 | 1.0 | 0.6 | 0.7 | 0.9 | 17.7 | 8.9 | 1.9 | 1.2 | 1.1 | 1.3 | 1.5 | 1.5 | 1.7 | 2.9 | 10.5 | 42.0 |
| 9-Aug | 11.1 | 9.9 | 1.8 | 1.6 | 1.7 | 1.7 | 1.6 | 1.4 | 1.3 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 20.5 | 2.5 | 1.4 | 1.5 | 2.2 | 2.0 | 1.5 | 1.6 | 2.9 | 20.5 |
| 10-Aug | 1.8 | 1.5 | 1.6 | 1.7 | 2.2 | 1.6 | 1.1 | 0.9 | 0.5 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 1.0 | 0.9 | 4.1 | 10.0 | 2.6 | 1.5 | 1.4 | 1.5 | 1.5 | 1.4 | 1.7 | 10.0 |
| 11-Aug | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 1.5 | 1.1 | 0.9 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.4 | 1.4 | 1.4 | 1.5 | 1.2 | 1.9 |
| 12-Aug | 1.5 | 10.3 | 26.9 | 32.6 | 29.4 | 17.6 | 4.7 | 1.4 | 1.3 | 1.2 | 1.0 | 1.0 | 4.0 | 1.7 | 4.8 | 14.8 | 20.2 | 2.2 | 1.4 | 1.5 | 1.7 | 2.7 | 10.3 | 16.4 | 8.8 | 32.6 |
| 13-Aug | 20.4 | 6.5 | 1.6 | 1.7 | 1.7 | 1.5 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 1.1 | 1.2 | 1.3 | 1.4 | 2.1 | 20.4 |
| 14-Aug | 1.4 | 1.6 | 1.7 | 3.2 | 3.7 | 1.5 | 1.8 | 1.1 | 0.7 | 0.6 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 1.2 | 1.2 | 1.3 | 2.1 | 2.0 | 1.3 | 3.7 |
| 15-Aug | 2.3 | 4.8 | 12.0 | 20.1 | 15.8 | 5.9 | 1.2 | 1.0 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.7 | 0.7 | 0.8 | 1.1 | 1.3 | 1.3 | 1.3 | 1.2 | 3.2 | 20.1 |
| 16-Aug | 1.3 | 7.5 | 24.1 | 22.1 | 5.4 | 2.2 | 1.5 | 1.2 | 0.9 | 0.7 | 0.8 | 0.9 | 0.8 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 1.1 | 1.2 | 1.3 | 1.3 | 1.3 | 3.4 | 24.1 |
| 17-Aug | 1.5 | 1.5 | 1.8 | 2.7 | 2.7 | 3.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 3.1 |
| 18-Aug | 1.2 | 1.3 | 1.4 | 1.4 | 1.5 | 1.4 | 1.2 | 1.1 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.4 | 1.4 | 1.6 | 1.7 | 5.3 | 18.1 | 2.1 | 18.1 |
| 19-Aug | 22.7 | 15.3 | 6.4 | 1.9 | 1.8 | 1.6 | 1.5 | 1.4 | 1.2 | 0.6 | 0.6 | 0.6 | 1.3 | 1.1 | 2.5 | 9.6 | 1.4 | 1.2 | 1.4 | 1.7 | 2.0 | 1.5 | 1.3 | 1.4 | 3.4 | 22.7 |
| 20-Aug | 1.4 | 1.4 | 1.5 | 1.4 | 1.4 | 1.4 | 1.3 | 1.2 | 1.0 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.9 | 1.1 | 1.2 | 1.3 | 1.4 | 1.0 | 1.5 |
| 21-Aug | 1.5 | 1.4 | 4.0 | 10.5 | 14.9 | 15.9 | 3.9 | 1.1 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.3 | 2.9 | 15.9 |
| 22-Aug | 1.3 | 1.4 | 1.5 | 1.6 | 1.8 | 1.6 | 1.2 | 0.9 | 0.5 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.3 | 1.3 | 1.1 | 1.8 |
| 23-Aug | 1.3 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.4 | 1.0 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.7 |
| 24-Aug | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 | 1.0 | 0.7 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 0.8 | 1.3 |
| 25-Aug | 1.3 | 1.4 | 1.5 | 1.9 | 1.9 | 1.8 | 1.2 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | 0.9 | 0.9 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.9 |
| 26-Aug | 1.2 | 1.3 | 1.3 | 1.2 | 1.3 | 1.3 | 1.2 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.1 | 1.1 | 1.1 | 1.0 | 1.3 |
| 27-Aug | 1.1 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 | 1.1 | 1.0 | 0.9 | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.3 |
| 28-Aug | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 2.5 | 1.0 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 | 1.2 | 2.5 |
| 29-Aug | 2.2 | 17.0 | 17.3 | 23.4 | 22.5 | 16.4 | 25.8 | 19.1 | 20.0 | 15.4 | 19.3 | 14.9 | 8.2 | 16.0 | 14.2 | 3.0 | 1.7 | 8.2 | 3.4 | 2.3 | 1.7 | 1.8 | 1.7 | 1.7 | 11.5 | 25.8 |
| 30-Aug | 1.8 | 1.7 | 1.6 | 1.6 | 1.7 | 1.6 | 1.3 | 1.1 | 0.9 | 1.0 | 1.0 | 1.1 | 1.0 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 1.2 | 1.3 | 1.2 | 1.3 | 1.5 | 1.2 | 1.8 |
| 31-Aug | 1.7 | 1.7 | 2.0 | 1.9 | 2.2 | 1.9 | 1.7 | 6.5 | 7.0 | 1.4 | 1.3 | 1.2 | 0.9 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.5 | 1.7 | 2.8 | 3.1 | 3.3 | 12.2 | 2.6 | 12.2 |
| | 4.4 | 4.6 | 6.3 | 7.0 | 6.0 | 4.7 | 3.2 | 1.9 | 1.7 | 1.3 | 1.5 | 1.9 | 1.3 | 1.6 | 2.3 | 2.1 | 2.5 | 2.0 | 2.2 | 2.9 | 4.1 | 4.1 | 4.0 | 4.6 | Diurnal Average | |
| | 22.7 | 17.0 | 35.1 | 42.0 | 40.4 | 39.3 | 25.8 | 19.1 | 20.0 | 15.4 | 19.3 | 19.5 | 8.2 | 16.0 | 17.7 | 14.8 | 20.5 | 10.0 | 20.8 | 36.5 | 46.5 | 41.9 | 38.2 | 32.3 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Leaf Wetness (LW) - %**

**Fort Chipewyan - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 7 | 0.94 | 0.94 |
| 0.4 - 0.5 | 32 | 4.30 | 5.24 |
| 0.6 - 0.7 | 56 | 7.53 | 12.77 |
| 0.8 - 1.4 | 376 | 50.54 | 63.31 |
| 1.5 - 10 | 190 | 25.54 | 88.84 |
| > 10 | 62 | 8.33 | 97.18 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Precipitation (PC) - mm

## Fort Chipewyan - August 2026

Maximum Value: 26.7 mm on Aug 1 21:00

Maximum Daily Total: 33.4 mm on Aug 1

Minimum Value: 0.0 mm on Aug 1 01:00

Minimum Daily Total: 0.0 mm on Aug 2

Maximum Diurnal Total: 30.4 mm at hour 21

Minimum Diurnal Total: 0.0 mm at hour 16

Monthly Total: 58.42 mm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 1.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 740 |
| Hours of Missing Data: | 4 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.7 | 5.6 | 0.7 | 0.0 | 33.4 | 26.7 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 |
| 5-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.0 | 3.7 | 5.8 | 2.1 | 1.3 | 15.3 | 5.8 |
| 6-Aug | 0.2 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.3 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 1.6 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | 0.0 | 0.0 | 0.5 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.5 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | DF | DF | DF | DF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | 0.0 | 0.0 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.5 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29-Aug | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.3 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.3 | 0.2 | 1.3 | 1.0 | 0.5 | 0.1 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.4 | 0.1 | 0.2 | 1.9 | 0.0 | 1.0 | 1.3 | 1.4 | 2.0 | 30.4 | 11.4 | 2.8 | 1.3 | Diurnal Average | |
| | 0.2 | 0.1 | 0.5 | 0.5 | 0.4 | 0.1 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.3 | 0.1 | 0.2 | 1.6 | 0.0 | 0.5 | 1.0 | 1.0 | 2.0 | 26.7 | 5.8 | 2.1 | 1.3 | Diurnal Maximum | |

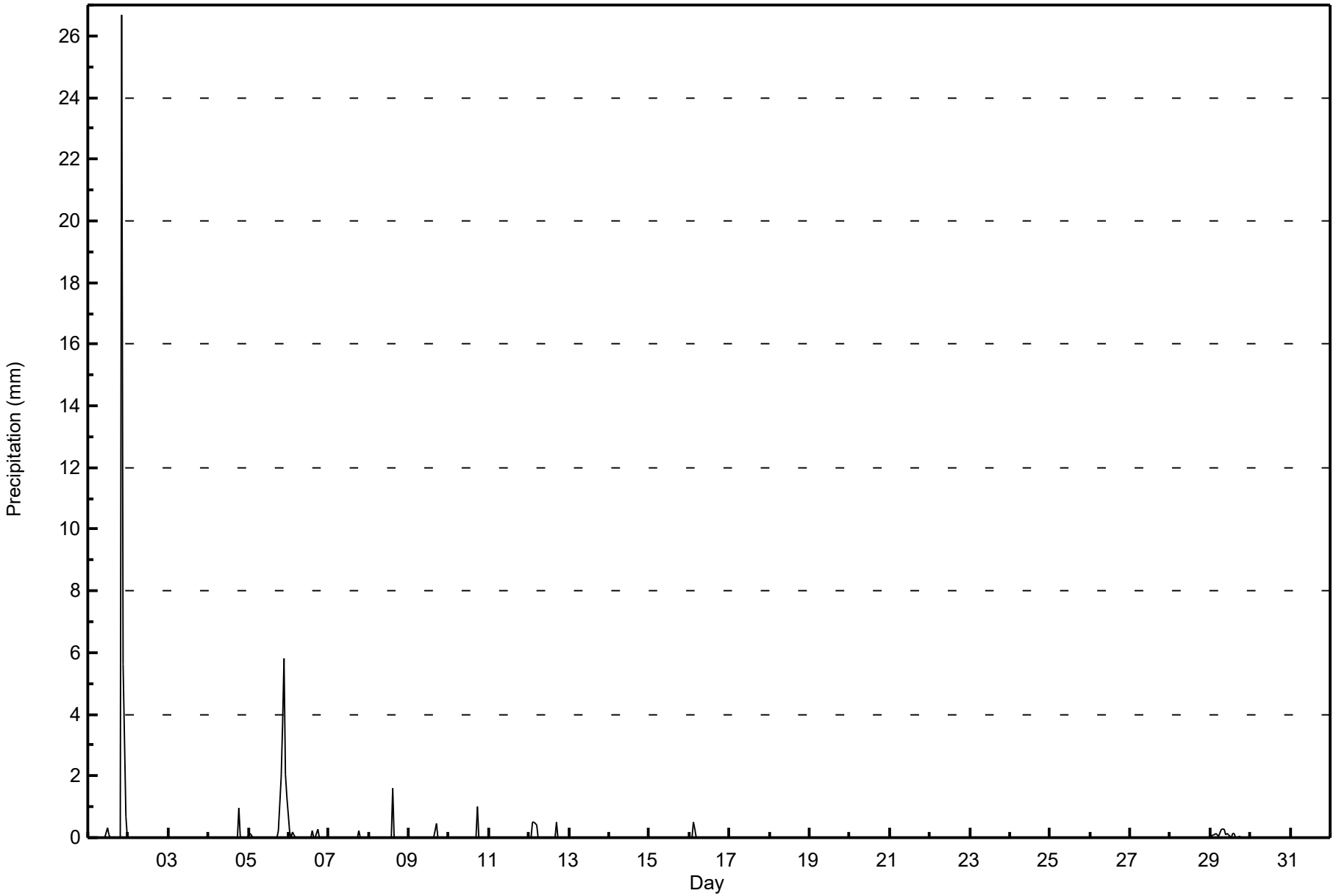
DF - DAS Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Precipitation (PC) - mm**

**Fort Chipewyan - August 2026**



| Concentration Ranges (mm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 723 | 97.70 | 97.70 |
| 0.4 - 0.5 | 6 | 0.81 | 98.51 |
| 0.6 - 0.7 | 1 | 0.14 | 98.65 |
| 0.8 - 1.4 | 3 | 0.41 | 99.05 |
| 1.5 - 10 | 6 | 0.81 | 99.86 |
| > 10 | 1 | 0.14 | 100.00 |

Total Number of Valid Hours: 740

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Global Radiation (GR) - W/m2

## Fort Chipewyan - August 2026

Maximum Value: 766.7 W/m2 on Aug 13 12:00

Maximum Daily Average: 287.1 W/m2 on Aug 13

Minimum Value: 0.0 W/m2 on Aug 1 01:00

Minimum Daily Average: 33.3 W/m2 on Aug 29

Maximum Diurnal Average: 545.2 W/m2 at hour 13

Minimum Diurnal Average: 0.0 W/m2 at hour 24

Monthly Average: 197.52 W/m2

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 89.6 $Q_3$ = 371.4 $P_{90}$ = 582.7 $P_{99}$ = 720.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

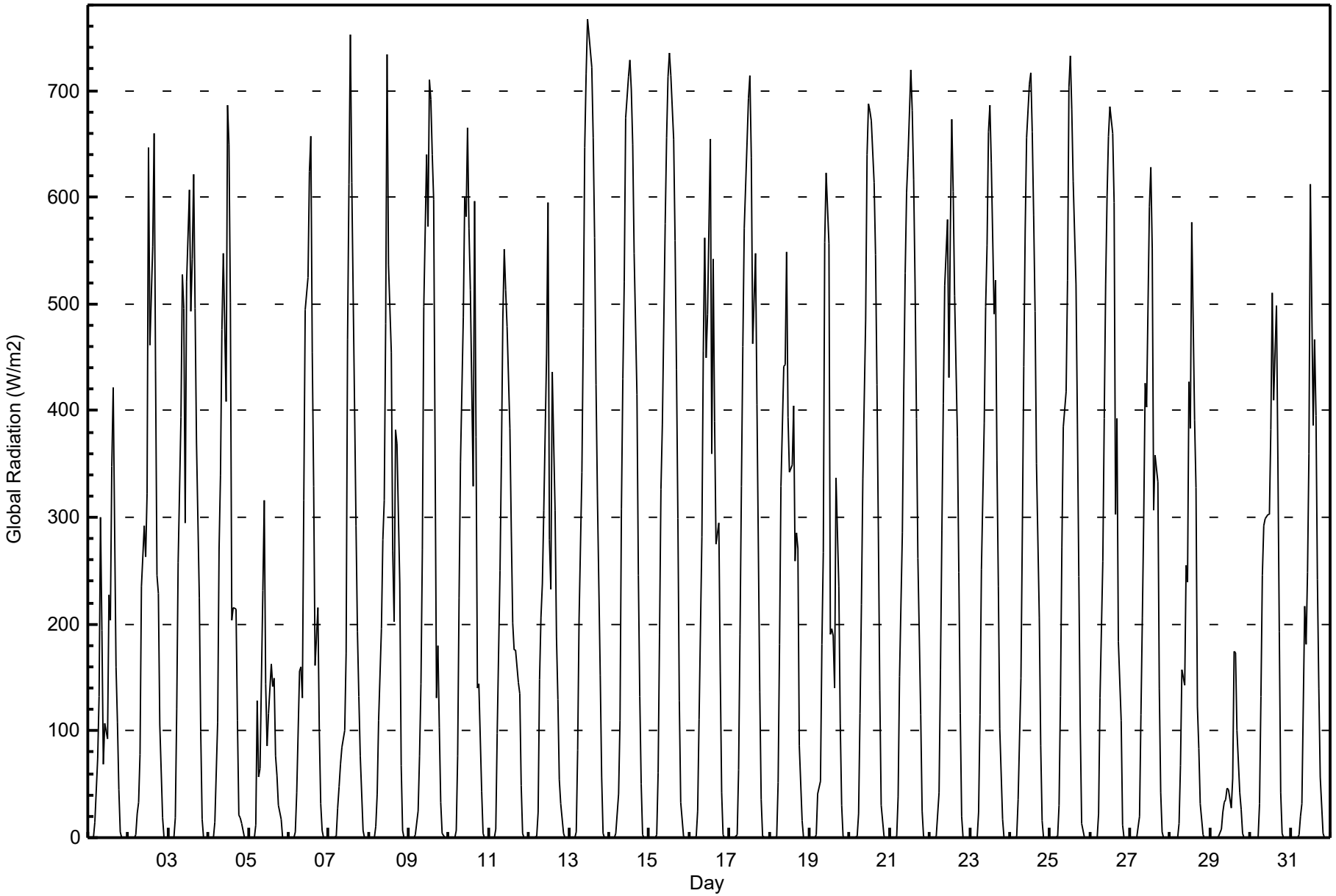
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.3 | 13.9 | 73.4 | 132.4 | 300.6 | 194.7 | 68.7 | 107.1 | 92.6 | 226.9 | 203.1 | 348.3 | 421.7 | 159.8 | 107.9 | 45.4 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 | 104.2 | 421.7 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 3.2 | 22.9 | 33.3 | 78.6 | 236.0 | 291.8 | 262.8 | 323.1 | 646.1 | 461.9 | 553.5 | 659.9 | 437.0 | 246.2 | 228.1 | 105.7 | 19.1 | 0.4 | 0.0 | 0.0 | 192.1 | 659.9 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.3 | 18.8 | 120.5 | 257.6 | 393.5 | 528.0 | 495.6 | 294.2 | 520.5 | 607.0 | 492.5 | 541.9 | 621.2 | 495.3 | 370.2 | 224.1 | 99.7 | 17.0 | 0.2 | 0.0 | 0.0 | 254.1 | 621.2 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 14.4 | 109.1 | 271.1 | 339.9 | 475.4 | 546.9 | 408.4 | 685.9 | 648.6 | 501.6 | 203.5 | 215.9 | 214.6 | 109.6 | 21.2 | 18.4 | 13.0 | 0.1 | 0.0 | 0.0 | 199.9 | 685.9 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 12.0 | 128.2 | 56.4 | 64.6 | 230.7 | 316.0 | 144.2 | 85.4 | 115.7 | 162.4 | 141.0 | 150.0 | 76.1 | 58.4 | 30.9 | 17.4 | 0.4 | 0.0 | 0.0 | 0.0 | 74.6 | 316.0 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 5.9 | 42.6 | 156.1 | 159.6 | 130.9 | 315.4 | 494.5 | 525.1 | 623.4 | 656.4 | 454.6 | 328.6 | 160.9 | 215.7 | 99.1 | 32.3 | 6.8 | 0.1 | 0.0 | 0.0 | 183.7 | 656.4 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 27.2 | 47.8 | 68.8 | 85.2 | 100.8 | 172.7 | 467.3 | 612.7 | 752.5 | 613.0 | 400.2 | 292.5 | 192.4 | 131.6 | 76.4 | 6.5 | 0.0 | 0.0 | 0.0 | 168.7 | 752.5 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 10.9 | 41.1 | 109.1 | 195.8 | 278.8 | 316.6 | 480.6 | 734.4 | 536.2 | 454.9 | 268.5 | 202.2 | 381.9 | 369.4 | 238.6 | 67.4 | 6.3 | 0.0 | 0.0 | 0.0 | 195.5 | 734.4 |
| 9-Aug | 0.0 | 0.1 | 0.0 | 0.0 | 2.9 | 25.2 | 76.1 | 143.9 | 269.7 | 496.5 | 639.2 | 572.1 | 710.2 | 691.5 | 640.2 | 597.8 | 130.6 | 179.8 | 103.5 | 32.8 | 4.5 | 0.0 | 0.0 | 0.0 | 221.5 | 710.2 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 6.9 | 76.3 | 225.1 | 351.8 | 487.4 | 600.6 | 581.2 | 665.2 | 571.0 | 513.4 | 329.4 | 596.4 | 375.0 | 140.7 | 144.7 | 44.2 | 4.5 | 0.0 | 0.0 | 0.0 | 238.1 | 665.2 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 7.9 | 97.7 | 250.2 | 357.3 | 485.9 | 551.3 | 512.9 | 478.4 | 383.8 | 286.9 | 201.4 | 176.3 | 176.4 | 145.0 | 135.5 | 49.4 | 4.0 | 0.0 | 0.0 | 0.0 | 179.2 | 551.3 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 24.2 | 148.2 | 206.8 | 238.6 | 306.5 | 452.8 | 595.1 | 278.3 | 232.7 | 435.9 | 306.7 | 187.2 | 129.6 | 53.7 | 31.6 | 3.5 | 0.0 | 0.0 | 0.0 | 151.4 | 595.1 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 4.7 | 81.7 | 204.9 | 342.9 | 477.8 | 646.8 | 714.6 | 766.7 | 752.7 | 721.8 | 655.4 | 561.5 | 425.0 | 319.8 | 152.4 | 56.9 | 3.7 | 0.0 | 0.1 | 0.1 | 287.1 | 766.7 |
| 14-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 3.4 | 40.8 | 109.7 | 308.2 | 429.6 | 520.6 | 673.9 | 712.6 | 728.1 | 701.3 | 649.2 | 546.7 | 414.7 | 245.8 | 132.7 | 50.1 | 2.6 | 0.0 | 0.0 | 0.0 | 261.3 | 728.1 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 60.8 | 190.7 | 326.3 | 388.0 | 575.2 | 655.4 | 712.8 | 735.1 | 713.6 | 654.6 | 559.7 | 439.5 | 299.4 | 128.1 | 33.7 | 1.8 | 0.0 | 0.0 | 0.0 | 269.9 | 735.1 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 25.0 | 111.3 | 281.4 | 455.8 | 561.5 | 450.1 | 490.5 | 654.0 | 359.8 | 541.7 | 390.5 | 275.6 | 295.5 | 155.8 | 42.2 | 2.4 | 0.1 | 0.1 | 0.0 | 212.3 | 654.0 |
| 17-Aug | 0.1 | 0.1 | 0.1 | 0.0 | 2.4 | 63.8 | 190.9 | 328.7 | 459.5 | 570.7 | 652.1 | 693.4 | 714.4 | 636.7 | 462.9 | 547.0 | 405.4 | 270.6 | 136.2 | 35.7 | 1.5 | 0.0 | 0.0 | 0.0 | 257.2 | 714.4 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 51.5 | 180.8 | 329.5 | 442.1 | 442.6 | 549.1 | 394.5 | 342.9 | 349.2 | 404.1 | 258.9 | 286.0 | 271.1 | 86.6 | 16.4 | 0.5 | 0.0 | 0.0 | 0.0 | 183.7 | 549.1 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 41.0 | 52.8 | 181.8 | 267.5 | 557.8 | 623.1 | 556.3 | 190.0 | 196.1 | 189.4 | 140.4 | 337.1 | 235.5 | 107.6 | 31.0 | 1.0 | 0.0 | 0.0 | 0.0 | 154.7 | 623.1 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 22.3 | 117.0 | 218.8 | 336.5 | 485.2 | 639.4 | 687.8 | 680.5 | 671.5 | 613.7 | 546.6 | 423.9 | 287.3 | 137.7 | 29.8 | 1.0 | 0.0 | 0.0 | 0.0 | 245.8 | 687.8 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 37.9 | 150.9 | 286.1 | 420.4 | 528.7 | 603.9 | 637.9 | 719.7 | 680.3 | 615.9 | 518.4 | 392.7 | 261.4 | 114.8 | 25.6 | 0.7 | 0.0 | 0.0 | 0.0 | 249.8 | 719.7 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 42.5 | 157.9 | 288.1 | 407.6 | 516.5 | 578.9 | 430.4 | 570.1 | 672.6 | 605.6 | 507.6 | 375.5 | 249.0 | 116.5 | 20.0 | 0.4 | 0.0 | 0.0 | 0.0 | 230.8 | 672.6 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 23.7 | 115.5 | 251.3 | 389.3 | 496.5 | 555.7 | 661.3 | 685.9 | 632.1 | 490.5 | 522.5 | 353.5 | 235.6 | 101.7 | 17.3 | 0.6 | 0.1 | 0.0 | 0.0 | 230.6 | 685.9 |
| 24-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 35.5 | 149.3 | 287.7 | 441.0 | 568.8 | 655.1 | 706.0 | 716.7 | 660.6 | 583.4 | 492.5 | 350.9 | 206.0 | 86.4 | 15.3 | 0.4 | 0.2 | 0.2 | 0.1 | 248.2 | 716.7 |
| 25-Aug | 0.1 | 0.0 | 0.0 | 0.1 | 0.7 | 30.1 | 132.0 | 272.3 | 384.9 | 417.4 | 521.9 | 703.0 | 732.4 | 682.3 | 615.2 | 517.7 | 387.4 | 245.2 | 105.7 | 13.8 | 0.1 | 0.0 | 0.0 | 0.0 | 240.1 | 732.4 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 22.0 | 131.4 | 259.6 | 392.7 | 518.3 | 599.6 | 657.6 | 685.3 | 660.2 | 594.6 | 303.0 | 392.5 | 183.5 | 110.3 | 12.2 | 0.1 | 0.0 | 0.0 | 0.0 | 230.1 | 685.3 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 19.9 | 114.5 | 205.7 | 303.2 | 426.3 | 402.8 | 590.7 | 628.1 | 551.8 | 306.3 | 357.8 | 333.7 | 139.7 | 42.7 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 184.5 | 628.1 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 13.6 | 67.2 | 157.1 | 142.9 | 255.7 | 239.8 | 426.7 | 384.0 | 576.4 | 391.6 | 327.2 | 122.9 | 83.5 | 31.6 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 134.3 | 576.4 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 8.1 | 23.4 | 32.6 | 36.1 | 46.3 | 45.3 | 27.7 | 55.5 | 174.0 | 173.7 | 100.5 | 42.1 | 26.3 | 4.6 | 0.0 | 0.0 | 0.0 | 0.0 | 33.3 | 174.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 31.1 | 131.8 | 245.3 | 292.7 | 298.5 | 302.2 | 303.3 | 381.5 | 510.9 | 409.7 | 498.0 | 354.0 | 193.0 | 42.3 | 4.5 | 0.0 | 0.0 | 0.0 | 0.0 | 166.6 | 510.9 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 20.4 | 31.5 | 217.4 | 180.7 | 248.2 | 359.3 | 612.0 | 385.6 | 467.1 | 395.6 | 242.1 | 140.4 | 56.6 | 4.5 | 0.0 | 0.0 | 0.0 | 0.0 | 140.2 | 612.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 46.3 | 132.3 | 235.1 | 333.0 | 419.7 | 460.1 | 525.2 | 545.2 | 510.6 | 456.6 | 414.3 | 306.5 | 208.7 | 107.4 | 32.3 | 3.3 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.1 | 0.1 | 0.1 | 0.3 | 18.8 | 128.2 | 271.1 | 393.5 | 528.0 | 646.8 | 714.6 | 766.7 | 752.7 | 752.5 | 655.4 | 659.9 | 495.3 | 370.2 | 238.6 | 105.7 | 19.1 | 0.4 | 0.2 | 0.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Global Radiation (GR) - W/m2**

**Fort Chipewyan - August 2026**



| Concentration Ranges (W/m2) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 299 | 40.19 | 40.19 |
| 21 - 100 | 77 | 10.35 | 50.54 |
| 101 - 300 | 144 | 19.35 | 69.89 |
| 301 - 600 | 156 | 20.97 | 90.86 |
| 601 - 900 | 68 | 9.14 | 100.00 |
| > 900 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Fort Chipewyan - August 2026

Maximum Speed: 32 km/h on Aug 28 16:00

Maximum Daily Speed Average: 17.8 km/h on Aug 26

Minimum Speed Value: 1 km/h on Aug 10 11:00

Minimum Daily Speed Average: 2.0 km/h on Aug 25

Maximum Diurnal Speed Average: 4.0 km/h at hour 14

Minimum Diurnal Speed Average: 1.0 km/h at hour 23

Monthly Average Velocity: 2.5 km/h 292.9 deg

Percentiles: $P_1$ = 2 $P_{10}$ = 6 $Q_1$ = 8 Median = 10 $Q_3$ = 15 $P_{90}$ = 20 $P_{99}$ = 28

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSW10 | S9 | SSE8 | SSE9 | S8 | S9 | S8 | S9 | S9 | S8 | SSW13 | S11 | SSE6 | SSW4 | ESE6 | E16 | ENE15 | ENE16 | ENE22 | N15 | NW17 | NNE18 | NE29 | WNW13 | ESE3.3 | NE29 |
| 2-Aug | N10 | N9 | NNW11 | NNW11 | NNW11 | NNW11 | NNW10 | NNW18 | NNW19 | NNW19 | NNW18 | NNW18 | NNW21 | NNW20 | NNW22 | NNW22 | NNW22 | NNW21 | NNW20 | NNW21 | NNW19 | NNW18 | NW14 | NW16 | NNW16.6 | NNW22 |
| 3-Aug | NNW15 | NNW12 | NW11 | NNW11 | NNW11 | NNW13 | NNW12 | NNW11 | NW11 | NW14 | NW11 | NW14 | NNW13 | NW10 | NW8 | NW8 | WNW9 | NW7 | NW7 | W8 | WSW8 | W8 | WSW6 | WSW8 | NW9.3 | NNW15 |
| 4-Aug | SW10 | SW8 | SW8 | WSW10 | WSW8 | SW6 | SW8 | SW8 | SW8 | SSW11 | SW10 | SSW9 | SSW11 | WSW13 | WSW12 | W12 | WNW12 | NW14 | WNW15 | WNW13 | NW12 | WNW12 | WNW12 | WNW13 | WSW8.6 | WNW15 |
| 5-Aug | WNW15 | WNW15 | WNW14 | WNW15 | WNW15 | WNW18 | WNW19 | WNW19 | WNW18 | NW20 | WNW13 | WNW15 | WNW19 | WNW21 | NW20 | NW20 | WNW16 | NW15 | NW15 | NW15 | NW17 | NW18 | NW18 | NW17 | NW16.7 | WNW21 |
| 6-Aug | NW17 | NW17 | NW17 | NW14 | NNW12 | NNW12 | NW13 | NW15 | NW15 | NW15 | NW16 | NW15 | NW15 | NW16 | NW11 | W11 | WNW12 | WNW13 | WNW14 | WNW10 | NW7 | WNW9 | WNW10 | WNW11 | NW12.7 | NW17 |
| 7-Aug | WNW11 | WNW10 | WNW12 | WNW11 | WNW11 | WNW12 | WNW13 | NW14 | NW12 | NW13 | WNW12 | WNW12 | WNW15 | WNW15 | NNW12 | NNW10 | WNW10 | W9 | WNW9 | W9 | WNW5 | NW7 | NNW8 | NNW8 | WNW10.4 | WNW15 |
| 8-Aug | NNW8 | NNW8 | NNW10 | NW10 | NW10 | NW7 | NNW8 | NW8 | NW5 | NW8 | NW8 | NNW8 | NNW7 | W8 | NE6 | SSW4 | WSW7 | WNW7 | WNW8 | WNW5 | WNW8 | WNW8 | WNW8 | WNW3 | NW6.4 | NNW10 |
| 9-Aug | NNW4 | N6 | N4 | NNW4 | WNW4 | NW4 | NNW5 | NNW4 | SE2 | S5 | SSW6 | NW4 | WSW4 | WSW8 | W10 | W6 | NE10 | E9 | S5 | W6 | SW4 | W7 | W5 | NW5 | WNW2.3 | NE10 |
| 10-Aug | NW8 | NW7 | NNW8 | NNW9 | NNW10 | NNW9 | N7 | N8 | N8 | NNW7 | N1 | SE5 | ENE2 | NW10 | WSW13 | WSW15 | WSW13 | W7 | WNW7 | WNW7 | NW8 | WNW8 | NW8 | NNW8 | NW5.7 | WSW15 |
| 11-Aug | NW9 | NNW10 | NNW11 | NNW12 | NNW13 | NNW11 | N10 | N8 | NNW8 | NNW10 | NNW11 | NNW11 | NW13 | NNW11 | N12 | NNW13 | NNW10 | NNW10 | NNW9 | NW8 | NNW8 | NNW6 | NNW8 | NNW9 | NNW9.9 | NNW13 |
| 12-Aug | NNW10 | N9 | NNW8 | NNW8 | NNW8 | N8 | N8 | N9 | NNE9 | N9 | NNE10 | E17 | E18 | ENE12 | ESE12 | E9 | NNE2 | ENE4 | NNE7 | NNW7 | NNW8 | NNW9 | NNW9 | NNW9 | NNE6.6 | E18 |
| 13-Aug | NNW9 | N8 | N9 | NNW10 | N11 | NNW6 | NNW5 | NNE3 | ESE6 | SE7 | SE9 | ESE10 | ESE9 | SE7 | ESE6 | ESE6 | ESE5 | ESE5 | ENE1 | UO | WNW7 | WNW6 | NW8 | NW8 | NE2.0 | N11 |
| 14-Aug | NW7 | NW6 | NW5 | NW6 | WNW4 | SSW1 | SW5 | SW6 | SW8 | SW11 | SW10 | W11 | W12 | WSW11 | SW10 | SW9 | SW9 | SW7 | WSW6 | SW7 | SW6 | SW5 | SW6 | SW7 | WSW6.3 | W12 |
| 15-Aug | WSW8 | WSW9 | WSW10 | WSW11 | W12 | W11 | W12 | W13 | W11 | W11 | WSW12 | W15 | W15 | W15 | WSW17 | W16 | WSW15 | WSW13 | WSW11 | SW10 | SW9 | SW12 | WSW14 | NW13 | WSW11.8 | WSW17 |
| 16-Aug | N9 | NW12 | NNW9 | NNW12 | NNW13 | NNW13 | NNW13 | NNW13 | NW12 | NW12 | WNW14 | NNW12 | NW15 | NW15 | NW16 | NW12 | NNW12 | NW13 | NNW8 | NW6 | NW6 | NW7 | NNW6 | NNW6 | NW10.9 | NW16 |
| 17-Aug | NW7 | NW8 | NW8 | NNW8 | NNW8 | NNW7 | N7 | N5 | SE4 | SE6 | ESE9 | ESE8 | E12 | E11 | E14 | E16 | E19 | E20 | E21 | E22 | E23 | ESE24 | ESE24 | E22 | E9.5 | ESE24 |
| 18-Aug | E22 | ESE20 | ESE15 | ESE14 | ESE15 | ESE15 | ESE13 | ESE14 | E16 | E19 | E20 | E18 | E17 | E12 | E14 | E15 | E13 | E14 | E12 | E9 | E10 | E8 | E7 | S3 | E13.5 | E22 |
| 19-Aug | WSW8 | W10 | W10 | W9 | W9 | W10 | W10 | W14 | W11 | W12 | W13 | W14 | W13 | WSW8 | WNW12 | NW9 | WSW7 | WSW11 | WSW12 | W9 | NW7 | NW8 | NW8 | NW9 | W9.5 | W14 |
| 20-Aug | NNW8 | NNW9 | NW8 | NW8 | NW7 | WNW7 | NW9 | NNW12 | NW11 | WNW11 | WNW15 | WNW18 | NW17 | WNW18 | WNW17 | WNW16 | NW13 | NNW12 | NNW9 | N6 | ENE2 | W4 | NNE8 | NE5 | NW9.4 | WNW18 |
| 21-Aug | ENE5 | NE4 | SW5 | SW7 | WSW6 | SW4 | SSE4 | SSE9 | SE11 | ESE15 | ESE16 | E17 | E19 | E18 | E20 | E21 | E21 | E18 | ENE15 | ENE16 | E18 | ESE15 | SSE14 | S19 | ESE9.7 | E21 |
| 22-Aug | SSW14 | SSW13 | SW12 | SSW10 | SSW9 | SSW9 | SSW12 | SSW11 | S11 | S12 | SSW11 | SSW11 | S8 | SE7 | SE9 | E13 | E12 | E12 | E15 | ENE15 | E14 | E13 | ESE13 | ESE11 | SSE6.6 | ENE15 |
| 23-Aug | E9 | ESE10 | ESE10 | SE7 | SE7 | S9 | SSW9 | SSW6 | S4 | SSW9 | SW13 | WSW15 | WSW14 | WSW12 | WSW13 | W14 | W14 | W12 | W13 | NW7 | NW8 | NW8 | NW9 | NNW9 | WSW5.1 | WSW15 |
| 24-Aug | NW9 | NW8 | NW10 | WNW7 | WNW8 | WNW9 | WNW10 | W9 | W12 | WNW12 | WNW12 | W13 | W14 | WNW13 | WNW14 | WNW13 | NW15 | NW10 | NW7 | NW7 | NW9 | NW8 | NNW7 | NNW7 | WNW9.6 | NW15 |
| 25-Aug | NW7 | NNW9 | NNW7 | NW7 | NW7 | NW7 | NW7 | NW7 | NW9 | NW9 | NW9 | W8 | W5 | WNW8 | WNW8 | W6 | SW12 | SW9 | S9 | SSE8 | SE15 | ESE14 | SE17 | SE20 | W2.0 | SE20 |
| 26-Aug | SE20 | SE21 | SE21 | SE21 | SE19 | ESE20 | ESE18 | ESE18 | ESE17 | ESE18 | E18 | E22 | E21 | E22 | E21 | E22 | E20 | E19 | E17 | E18 | E18 | ESE18 | SSE22 | SSE20 | ESE17.8 | E22 |
| 27-Aug | SSE24 | S21 | S14 | SE10 | SSE11 | S14 | S9 | S14 | S15 | SSE11 | ESE10 | E16 | E17 | ENE12 | ENE12 | ENE14 | ENE18 | E13 | ENE10 | ENE8 | E14 | ESE16 | SE14 | ESE16 | ESE10.3 | SSE24 |
| 28-Aug | ESE17 | ESE16 | ESE19 | ESE23 | ESE24 | ESE23 | SE23 | SE23 | SSE21 | S23 | SSW20 | S24 | SSE22 | S26 | S29 | SSW32 | SW26 | WSW24 | WSW20 | SW24 | SW30 | SSW27 | SSW31 | SW31 | S17.5 | SSW32 |
| 29-Aug | SSW29 | SW26 | SW28 | SW27 | SW25 | SW25 | SW25 | SSW23 | SSW24 | SSW26 | SSW25 | SSW23 | SSW22 | SW23 | SW25 | SW20 | SW19 | SSW12 | SSW8 | ESE2 | ENE2 | E7 | ESE10 | ESE10 | SSW17.4 | SSW29 |
| 30-Aug | SE5 | SE6 | SSE8 | SSE9 | S9 | S9 | SSW7 | SSW10 | SSW10 | SSW6 | S5 | E5 | ESE1 | WNW7 | WNW8 | W8 | NW8 | NW7 | NW5 | NW3 | E3 | W5 | WNW8 | NW5 | SW3.0 | SSW10 |
| 31-Aug | NW5 | NW5 | NNW8 | WNW5 | NW2 | NNW11 | NNW9 | NW10 | NNW9 | NNW9 | NW8 | NW8 | NW12 | NW10 | NNW8 | NNW6 | N4 | WNW2 | SW5 | SW4 | SW4 | WSW4 | SW3 | SW2 | NW5.3 | NW12 |
| | WNW2.1 | WNW2.5 | WNW2.9 | WNW2.7 | WNW2.7 | W2.9 | WNW3.3 | W3.1 | W2.8 | W3.2 | W3.3 | W2.2 | WNW2.4 | WNW4.0 | WNW3.0 | WNW2.8 | NW3.1 | NW2.8 | NNW2.7 | NW2.9 | NNW2.1 | NW1.5 | NW1.0 | WNW2.0 | Diurnal Average | |
| | SSW29 | SW26 | SW28 | SW27 | SW25 | SW25 | SW25 | SSW23 | SSW24 | SSW26 | SSW25 | S24 | SSW22 | S26 | S29 | SSW32 | SW26 | WSW24 | ENE22 | SW24 | SW30 | SSW27 | SSW31 | SW31 | Diurnal Maximum | |

UO - Unstable Operation

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11 km/h on Aug 1 23:00

Minimum Value: 1 km/h on Aug 9 22:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 2 $Q_3$ = 4 $P_{90}$ = 5 $P_{99}$ = 8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 4 | 3 | 2 | 2 | 3 | 2 | 3 | 5 | 3 | 5 | 9 | 9 | 11 | 6 | 11 |
| 2-Aug | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 8 | 8 | 8 | 7 | 7 | 6 | 5 | 5 | 9 |
| 3-Aug | 5 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 5 | 4 | 3 | 4 | 3 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 4-Aug | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 5 |
| 5-Aug | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 7 | 5 | 5 | 6 | 6 | 7 | 6 | 5 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 7 |
| 6-Aug | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 6 |
| 7-Aug | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 |
| 8-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 4 |
| 9-Aug | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 4 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 10-Aug | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 4 |
| 11-Aug | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 2 | 3 | 4 |
| 12-Aug | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 2 | 5 | 2 | 3 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 2 | 5 |
| 13-Aug | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | UO | 1 | 2 | 1 | 1 | 3 |
| 14-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 15-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 2 | 1 | 1 | 2 | 3 | 5 | 5 |
| 16-Aug | 4 | 4 | 3 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 3 | 2 | 1 | 1 | 2 | 1 | 5 |
| 17-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 |
| 18-Aug | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 19-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 5 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 5 |
| 20-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 3 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 4 | 2 | 3 | 1 | 2 | 2 | 6 |
| 21-Aug | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 3 | 2 | 2 | 1 | 2 | 3 | 3 |
| 23-Aug | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 4 |
| 24-Aug | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 5 |
| 25-Aug | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 |
| 26-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
| 27-Aug | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 4 | 2 | 2 | 2 | 4 |
| 28-Aug | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 4 | 4 | 5 | 5 | 7 | 4 | 4 | 4 | 5 | 7 | 6 | 5 | 5 | 6 | 5 | 5 | 6 | 7 |
| 29-Aug | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 5 | 2 | 1 | 2 | 2 | 1 | 5 |
| 30-Aug | 1 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |
| 31-Aug | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 |
| | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 8 | 8 | 8 | 7 | 9 | 9 | 11 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

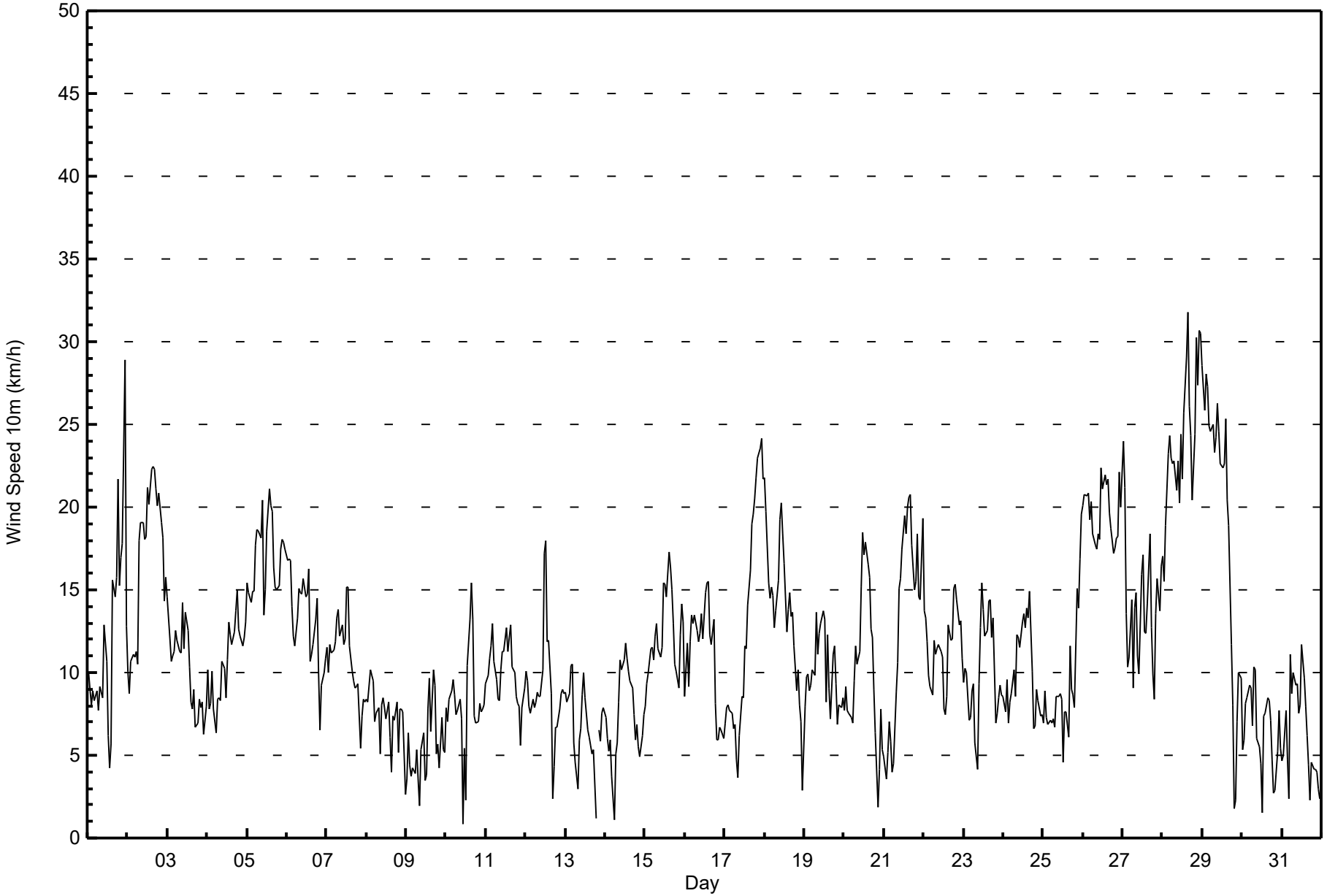
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Fort Chipewyan - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 72 | 9.69 | 9.69 |
| 6 - 11 | 350 | 47.11 | 56.80 |
| 12 - 19 | 241 | 32.44 | 89.23 |
| 20 - 28 | 73 | 9.83 | 99.06 |
| 29 - 38 | 7 | 0.94 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Fort Chipewyan - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 4 | 2 | 2 | 6 | 2 | 4 | 4 | 1 | 5 | 3 | 10 | 2 | 3 | 8 | 11 | 5 | 72 |
| 6 - 11 | 19 | 4 | 2 | 2 | 9 | 14 | 11 | 9 | 14 | 20 | 24 | 20 | 26 | 33 | 67 | 76 | 350 |
| 12 - 19 | 2 | 1 | 0 | 10 | 37 | 22 | 4 | 2 | 5 | 5 | 5 | 15 | 21 | 42 | 43 | 27 | 241 |
| 20 - 28 | 0 | 0 | 0 | 1 | 16 | 7 | 7 | 5 | 4 | 8 | 11 | 2 | 0 | 1 | 3 | 8 | 73 |
| 29 - 38 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 7 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 25 | 7 | 5 | 19 | 64 | 47 | 26 | 17 | 29 | 39 | 52 | 39 | 50 | 84 | 124 | 116 | 743 |

Total Number of Valid Hours: 743

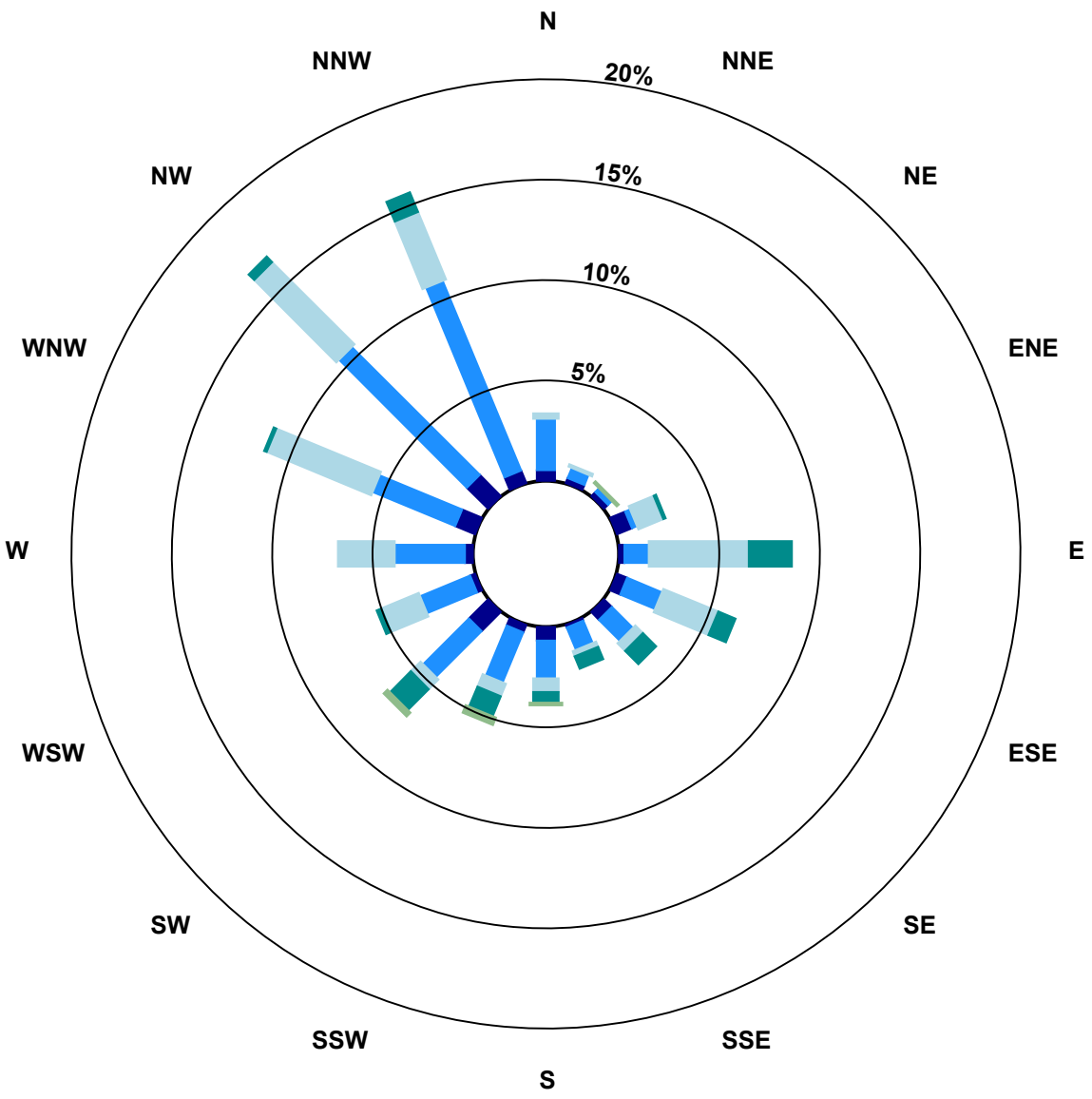
Total Number of Hours: 744

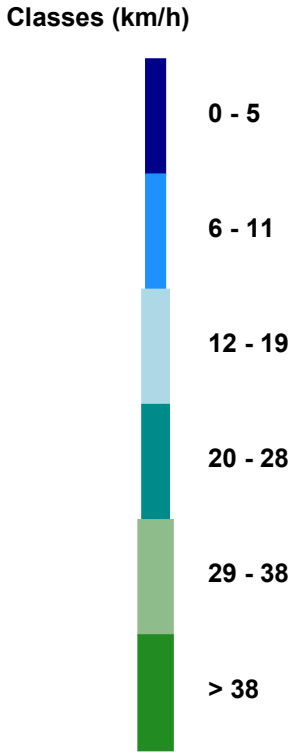
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Fort Chipewyan**




**Total Number of Valid Hours: 743**

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Fort Chipewyan - August 2026

Direction of Maximum Speed: 198 deg on Aug 28 16:00
Direction of Maximum Daily Speed Average: 108.6 deg on Aug 26

Direction of Minimum Speed: 2 deg on Aug 10 11:00

Direction of Minimum Daily Speed Average: 2.0 deg on Aug 25

Monthly Average Direction: 292.9 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 196 | 182 | 155 | 155 | 170 | 187 | 175 | 185 | 191 | 179 | 193 | 180 | 149 | 196 | 110 | 91 | 69 | 59 | 63 | 10 | 319 | 26 | 41 | 295 | 108.4 |
| 2-Aug | 352 | 352 | 329 | 335 | 348 | 346 | 336 | 340 | 343 | 343 | 343 | 332 | 339 | 338 | 328 | 327 | 340 | 331 | 330 | 327 | 327 | 327 | 322 | 325 | 334.9 |
| 3-Aug | 330 | 332 | 326 | 329 | 327 | 330 | 330 | 332 | 318 | 322 | 320 | 320 | 330 | 324 | 324 | 315 | 303 | 306 | 307 | 265 | 254 | 260 | 255 | 242 | 314.5 |
| 4-Aug | 227 | 233 | 235 | 237 | 238 | 235 | 218 | 234 | 214 | 212 | 217 | 200 | 212 | 243 | 255 | 269 | 301 | 314 | 302 | 302 | 305 | 288 | 284 | 284 | 257.7 |
| 5-Aug | 293 | 292 | 300 | 301 | 298 | 290 | 294 | 291 | 296 | 306 | 300 | 303 | 294 | 296 | 304 | 310 | 299 | 318 | 318 | 319 | 324 | 312 | 318 | 324 | 304.2 |
| 6-Aug | 326 | 321 | 315 | 321 | 334 | 328 | 325 | 319 | 312 | 311 | 315 | 314 | 313 | 305 | 306 | 273 | 283 | 288 | 292 | 302 | 315 | 298 | 297 | 284 | 309.5 |
| 7-Aug | 289 | 290 | 284 | 292 | 289 | 288 | 296 | 308 | 308 | 311 | 302 | 301 | 286 | 286 | 329 | 339 | 303 | 262 | 282 | 274 | 299 | 316 | 330 | 335 | 299.2 |
| 8-Aug | 328 | 335 | 330 | 325 | 326 | 318 | 332 | 308 | 320 | 307 | 306 | 332 | 331 | 270 | 40 | 212 | 251 | 289 | 289 | 292 | 293 | 284 | 301 | 296 | 309.8 |
| 9-Aug | 341 | 2 | 2 | 340 | 292 | 324 | 343 | 330 | 138 | 178 | 201 | 322 | 255 | 256 | 265 | 266 | 36 | 93 | 169 | 262 | 236 | 276 | 281 | 325 | 293.6 |
| 10-Aug | 307 | 326 | 347 | 348 | 345 | 344 | 358 | 3 | 3 | 348 | 2 | 132 | 57 | 309 | 253 | 253 | 240 | 273 | 286 | 283 | 310 | 299 | 323 | 336 | 311.9 |
| 11-Aug | 324 | 334 | 339 | 338 | 339 | 348 | 355 | 3 | 340 | 335 | 333 | 332 | 315 | 345 | 349 | 341 | 336 | 327 | 331 | 324 | 347 | 336 | 334 | 339 | 337.5 |
| 12-Aug | 343 | 355 | 347 | 345 | 348 | 353 | 3 | 11 | 14 | 2 | 12 | 82 | 90 | 62 | 104 | 95 | 29 | 61 | 20 | 343 | 341 | 340 | 340 | 344 | 21.0 |
| 13-Aug | 345 | 349 | 350 | 348 | 352 | 340 | 346 | 29 | 108 | 128 | 124 | 122 | 122 | 133 | 118 | 120 | 113 | 110 | 77 | UO | 285 | 297 | 311 | 314 | 34.0 |
| 14-Aug | 312 | 313 | 316 | 315 | 297 | 209 | 229 | 234 | 235 | 231 | 231 | 259 | 265 | 254 | 218 | 219 | 223 | 235 | 238 | 234 | 229 | 218 | 217 | 233 | 245.3 |
| 15-Aug | 238 | 245 | 239 | 257 | 264 | 261 | 264 | 266 | 260 | 259 | 254 | 261 | 261 | 261 | 257 | 262 | 257 | 258 | 241 | 231 | 232 | 228 | 246 | 318 | 256.0 |
| 16-Aug | 350 | 323 | 327 | 335 | 336 | 332 | 330 | 334 | 325 | 311 | 303 | 327 | 317 | 324 | 305 | 316 | 330 | 321 | 339 | 323 | 322 | 322 | 338 | 344 | 325.0 |
| 17-Aug | 323 | 326 | 326 | 339 | 340 | 347 | 355 | 1 | 144 | 133 | 121 | 117 | 99 | 81 | 84 | 82 | 83 | 82 | 83 | 89 | 97 | 103 | 102 | 101 | 82.5 |
| 18-Aug | 99 | 103 | 112 | 121 | 115 | 114 | 113 | 111 | 98 | 90 | 83 | 79 | 81 | 82 | 87 | 85 | 84 | 88 | 90 | 89 | 91 | 89 | 83 | 174 | 95.9 |
| 19-Aug | 246 | 268 | 264 | 265 | 269 | 276 | 271 | 269 | 274 | 269 | 275 | 271 | 279 | 251 | 300 | 309 | 254 | 246 | 254 | 269 | 311 | 326 | 308 | 306 | 275.0 |
| 20-Aug | 332 | 327 | 320 | 319 | 320 | 293 | 323 | 328 | 316 | 297 | 296 | 301 | 307 | 294 | 290 | 293 | 314 | 328 | 338 | 351 | 64 | 270 | 29 | 45 | 313.6 |
| 21-Aug | 57 | 47 | 223 | 233 | 238 | 214 | 150 | 162 | 135 | 111 | 112 | 86 | 84 | 84 | 83 | 82 | 81 | 80 | 71 | 72 | 81 | 113 | 166 | 187 | 102.5 |
| 22-Aug | 207 | 211 | 214 | 209 | 208 | 197 | 209 | 201 | 187 | 188 | 202 | 203 | 189 | 143 | 124 | 92 | 88 | 83 | 82 | 74 | 79 | 95 | 108 | 113 | 152.3 |
| 23-Aug | 96 | 107 | 118 | 133 | 141 | 185 | 199 | 199 | 179 | 212 | 230 | 237 | 253 | 258 | 251 | 261 | 268 | 271 | 275 | 314 | 315 | 319 | 325 | 331 | 245.1 |
| 24-Aug | 325 | 316 | 317 | 298 | 300 | 294 | 283 | 280 | 279 | 291 | 294 | 270 | 275 | 296 | 295 | 303 | 313 | 322 | 319 | 313 | 310 | 315 | 331 | 331 | 300.6 |
| 25-Aug | 320 | 336 | 333 | 319 | 311 | 305 | 313 | 317 | 319 | 314 | 304 | 270 | 259 | 290 | 300 | 271 | 221 | 219 | 184 | 150 | 125 | 122 | 126 | 137 | 264.0 |
| 26-Aug | 136 | 142 | 142 | 141 | 129 | 123 | 119 | 115 | 110 | 114 | 100 | 83 | 82 | 81 | 83 | 82 | 81 | 82 | 82 | 82 | 86 | 113 | 149 | 148 | 108.6 |
| 27-Aug | 161 | 178 | 170 | 135 | 162 | 179 | 179 | 172 | 169 | 151 | 103 | 88 | 82 | 68 | 71 | 74 | 70 | 81 | 75 | 72 | 83 | 109 | 133 | 103 | 120.6 |
| 28-Aug | 105 | 104 | 109 | 113 | 112 | 118 | 131 | 134 | 161 | 189 | 199 | 177 | 161 | 171 | 173 | 198 | 227 | 238 | 244 | 227 | 218 | 210 | 202 | 218 | 178.5 |
| 29-Aug | 213 | 215 | 222 | 217 | 215 | 217 | 227 | 212 | 213 | 202 | 211 | 211 | 203 | 215 | 217 | 224 | 222 | 210 | 196 | 106 | 67 | 83 | 105 | 103 | 210.9 |
| 30-Aug | 134 | 141 | 160 | 164 | 186 | 189 | 209 | 196 | 198 | 204 | 173 | 90 | 115 | 282 | 283 | 280 | 306 | 315 | 305 | 306 | 89 | 281 | 298 | 312 | 223.1 |
| 31-Aug | 314 | 317 | 327 | 297 | 305 | 336 | 338 | 317 | 331 | 332 | 311 | 306 | 308 | 320 | 332 | 341 | 352 | 298 | 229 | 226 | 220 | 253 | 233 | 216 | 313.2 |
| | 288.8 | 293.6 | 286.3 | 287.1 | 290.6 | 279.7 | 283.8 | 278.1 | 264.2 | 262.2 | 263.1 | 276.7 | 295.0 | 292.1 | 291.9 | 296.4 | 312.3 | 323.0 | 327.1 | 325.7 | 338.3 | 317.9 | 316.6 | 290.4 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 93 deg on Aug 10 11:00

Minimum Value: 4 deg on Aug 21 15:00

Percentiles: $P_1$ = 4 $P_{10}$ = 7 $Q_1$ = 12 Median = 17 $Q_3$ = 25 $P_{90}$ = 34 $P_{99}$ = 75

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 14 | 13 | 20 | 15 | 17 | 13 | 17 | 12 | 12 | 12 | 18 | 21 | 29 | 61 | 66 | 6 | 15 | 19 | 11 | 34 | 35 | 26 | 39 | 24 | 66 |
| 2-Aug | 24 | 23 | 20 | 25 | 21 | 25 | 26 | 25 | 26 | 27 | 27 | 27 | 26 | 27 | 26 | 27 | 27 | 29 | 27 | 25 | 25 | 25 | 24 | 25 | 29 |
| 3-Aug | 25 | 24 | 22 | 21 | 20 | 23 | 22 | 24 | 27 | 28 | 27 | 29 | 33 | 32 | 41 | 51 | 38 | 63 | 30 | 16 | 12 | 10 | 13 | 15 | 63 |
| 4-Aug | 9 | 11 | 11 | 11 | 10 | 16 | 12 | 20 | 15 | 13 | 12 | 17 | 18 | 18 | 17 | 17 | 22 | 25 | 19 | 21 | 20 | 17 | 15 | 15 | 25 |
| 5-Aug | 18 | 18 | 20 | 20 | 19 | 17 | 17 | 16 | 20 | 22 | 22 | 22 | 19 | 18 | 22 | 22 | 19 | 27 | 25 | 24 | 25 | 21 | 25 | 25 | 27 |
| 6-Aug | 24 | 24 | 23 | 24 | 23 | 23 | 22 | 22 | 23 | 22 | 26 | 24 | 26 | 22 | 32 | 23 | 24 | 17 | 18 | 18 | 24 | 16 | 17 | 14 | 32 |
| 7-Aug | 15 | 17 | 15 | 18 | 16 | 16 | 19 | 21 | 21 | 22 | 22 | 23 | 20 | 24 | 34 | 33 | 25 | 17 | 15 | 13 | 37 | 17 | 19 | 17 | 37 |
| 8-Aug | 17 | 18 | 13 | 14 | 14 | 18 | 17 | 18 | 29 | 23 | 25 | 41 | 45 | 47 | 51 | 52 | 37 | 24 | 22 | 19 | 13 | 10 | 12 | 58 | 58 |
| 9-Aug | 66 | 33 | 47 | 42 | 31 | 65 | 17 | 65 | 67 | 14 | 35 | 66 | 91 | 39 | 26 | 61 | 38 | 13 | 25 | 17 | 30 | 4 | 15 | 24 | 91 |
| 10-Aug | 9 | 15 | 16 | 15 | 13 | 13 | 19 | 22 | 27 | 44 | 93 | 59 | 93 | 31 | 21 | 19 | 23 | 27 | 15 | 11 | 11 | 14 | 14 | 14 | 93 |
| 11-Aug | 14 | 15 | 14 | 15 | 16 | 16 | 20 | 25 | 32 | 30 | 30 | 32 | 26 | 26 | 27 | 24 | 27 | 27 | 27 | 22 | 35 | 31 | 20 | 19 | 35 |
| 12-Aug | 19 | 19 | 18 | 17 | 19 | 20 | 24 | 22 | 24 | 27 | 29 | 22 | 8 | 19 | 12 | 20 | 74 | 45 | 35 | 20 | 9 | 14 | 14 | 16 | 74 |
| 13-Aug | 18 | 18 | 16 | 17 | 16 | 54 | 26 | 50 | 14 | 11 | 14 | 6 | 9 | 12 | 16 | 15 | 12 | 9 | 44 | UO | 12 | 11 | 8 | 6 | 54 |
| 14-Aug | 5 | 8 | 8 | 10 | 28 | 83 | 16 | 22 | 28 | 16 | 22 | 26 | 21 | 24 | 19 | 18 | 15 | 14 | 13 | 10 | 14 | 8 | 11 | 15 | 83 |
| 15-Aug | 13 | 12 | 11 | 13 | 11 | 12 | 13 | 16 | 16 | 17 | 21 | 17 | 17 | 17 | 17 | 16 | 17 | 16 | 13 | 9 | 11 | 10 | 16 | 40 | 40 |
| 16-Aug | 27 | 26 | 28 | 27 | 24 | 26 | 25 | 27 | 25 | 25 | 22 | 30 | 28 | 27 | 27 | 29 | 32 | 29 | 28 | 20 | 12 | 14 | 19 | 14 | 32 |
| 17-Aug | 11 | 12 | 11 | 12 | 14 | 17 | 18 | 27 | 71 | 15 | 14 | 17 | 12 | 8 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 71 |
| 18-Aug | 6 | 6 | 8 | 6 | 6 | 8 | 9 | 7 | 9 | 6 | 6 | 6 | 6 | 9 | 5 | 4 | 5 | 7 | 7 | 6 | 5 | 8 | 8 | 59 | 59 |
| 19-Aug | 18 | 15 | 15 | 14 | 14 | 17 | 18 | 15 | 19 | 21 | 16 | 19 | 17 | 23 | 36 | 23 | 28 | 19 | 15 | 14 | 19 | 15 | 25 | 17 | 36 |
| 20-Aug | 14 | 21 | 11 | 15 | 15 | 17 | 22 | 25 | 24 | 23 | 26 | 22 | 26 | 23 | 21 | 23 | 30 | 29 | 24 | 19 | 66 | 16 | 35 | 35 | 66 |
| 21-Aug | 18 | 5 | 45 | 9 | 12 | 23 | 41 | 13 | 16 | 7 | 8 | 5 | 4 | 4 | 4 | 4 | 5 | 6 | 8 | 8 | 7 | 24 | 11 | 9 | 45 |
| 22-Aug | 9 | 9 | 10 | 11 | 13 | 12 | 10 | 10 | 10 | 9 | 13 | 15 | 16 | 25 | 19 | 9 | 4 | 4 | 5 | 7 | 8 | 7 | 14 | 24 | 25 |
| 23-Aug | 18 | 12 | 17 | 16 | 18 | 12 | 17 | 44 | 33 | 19 | 15 | 16 | 20 | 21 | 19 | 18 | 15 | 15 | 14 | 18 | 12 | 14 | 18 | 19 | 44 |
| 24-Aug | 18 | 13 | 15 | 17 | 9 | 16 | 14 | 14 | 16 | 21 | 24 | 24 | 21 | 26 | 23 | 25 | 22 | 25 | 23 | 18 | 18 | 17 | 16 | 18 | 26 |
| 25-Aug | 15 | 16 | 16 | 16 | 15 | 12 | 18 | 24 | 31 | 34 | 32 | 38 | 74 | 40 | 38 | 60 | 13 | 12 | 17 | 13 | 6 | 7 | 7 | 7 | 74 |
| 26-Aug | 7 | 8 | 7 | 6 | 7 | 6 | 7 | 7 | 8 | 6 | 12 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 16 | 9 | 9 | 16 |
| 27-Aug | 10 | 7 | 12 | 16 | 19 | 11 | 19 | 16 | 14 | 19 | 24 | 6 | 8 | 11 | 12 | 11 | 11 | 11 | 13 | 9 | 8 | 11 | 9 | 10 | 24 |
| 28-Aug | 11 | 8 | 7 | 4 | 4 | 8 | 7 | 10 | 13 | 15 | 12 | 13 | 12 | 9 | 11 | 10 | 21 | 15 | 15 | 14 | 10 | 13 | 11 | 11 | 21 |
| 29-Aug | 10 | 10 | 11 | 10 | 9 | 15 | 12 | 11 | 11 | 10 | 14 | 16 | 9 | 11 | 10 | 13 | 11 | 15 | 20 | 75 | 56 | 9 | 15 | 10 | 75 |
| 30-Aug | 20 | 22 | 16 | 13 | 16 | 33 | 37 | 13 | 12 | 15 | 31 | 14 | 76 | 27 | 16 | 20 | 32 | 26 | 19 | 72 | 67 | 7 | 18 | 32 | 76 |
| 31-Aug | 47 | 45 | 47 | 78 | 93 | 20 | 28 | 22 | 27 | 26 | 27 | 24 | 21 | 25 | 34 | 51 | 41 | 55 | 9 | 13 | 12 | 36 | 59 | 48 | 93 |
| | 66 | 45 | 47 | 78 | 93 | 83 | 41 | 65 | 71 | 44 | 93 | 66 | 93 | 61 | 66 | 61 | 74 | 63 | 44 | 75 | 67 | 36 | 59 | 59 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

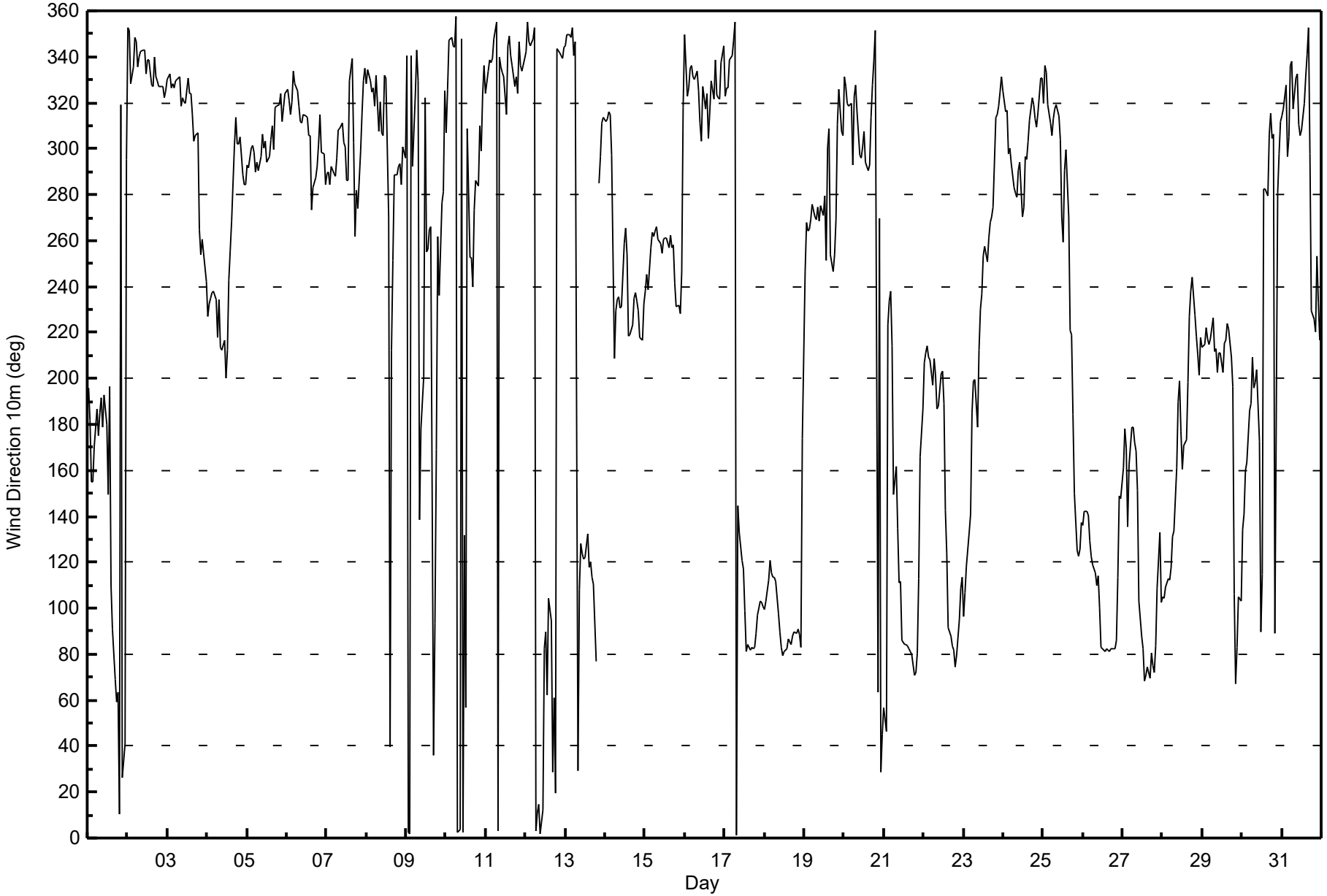
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Fort Chipewyan - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS09
## BARGE LANDING
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 701 | 35 | 43 | 98.92 | - | - | 26.2 | 0 | 2.9 | 0 |
| TRS(ppb) Average | 696 | 37 | 48 | 98.52 | 6.7 | 2 | 5.1 | 0 | 1.3 | 0 |
| THC(ppm) Average | 701 | 35 | 43 | 98.92 | - | - | 3.2 | - | 2.4 | - |
| NMHC(ppm) Average | 701 | 35 | 43 | 98.92 | - | - | 0.497 | - | 0.08 | - |
| CH4(ppm) Average | 701 | 35 | 43 | 98.92 | - | - | 2.9 | - | 2.4 | 0 |
| NO2 (ppb) Average | 699 | 37 | 45 | 98.92 | - | - | 22.4 | 0 | 8.4 | - |
| NO (ppb) Average | 699 | 37 | 45 | 98.92 | - | - | 62.8 | - | 9.4 | - |
| NOX (ppb) Average | 699 | 37 | 45 | 98.92 | - | - | 71.9 | - | 16.8 | - |
| PM2.5(ug/m3) Average | 735 | 1 | 9 | 98.92 | - | - | 98.9 | 3 | 26.3 | 0 |
| Temperature (C) Average | 744 | 0 | 0 | 100 | - | - | 30.6 | - | 21.8 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 100 | - | 89.6 | - |
| Barometric Pressure (inHg) Average | 744 | 0 | 0 | 100 | - | - | 29.2 | - | 29.2 | - |
| Wind Speed 20 m (km/h) Average | 743 | 0 | 1 | 99.87 | - | - | 30 | - | 21 | - |
| Wind Direction 20 m (deg) Average | 743 | 0 | 1 | 99.87 | - | - | 0 | - | 0 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | | Percentile | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 701 | 0.42 | 1.7 | - | 0 | 0 | 0 | 0.1 | 0.2 | 0.5 | 26.2 |
| TRS(ppb) Average | 696 | 0.54 | 0.5 | - | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 1.1 | 5.1 |
| THC(ppm) Average | 701 | 2.23 | 0.2 | - | 2 | 2 | 2.1 | 2.2 | 2.4 | 2.5 | 3.2 |
| NMHC(ppm) Average | 701 | 0.026 | 0.052 | - | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.497 |
| CH4(ppm) Average | 701 | 2.2 | 0.2 | - | 2 | 2 | 2.1 | 2.2 | 2.3 | 2.5 | 2.9 |
| NO2 (ppb) Average | 699 | 5.02 | 4.2 | - | 0 | 0.3 | 1.7 | 4.2 | 7.4 | 10.5 | 22.4 |
| NO (ppb) Average | 699 | 3.5 | 7.2 | - | 0 | 0 | 0.1 | 0.7 | 3.2 | 11.4 | 62.8 |
| NOX (ppb) Average | 699 | 8.52 | 9.9 | - | 0 | 0.4 | 2.1 | 5.3 | 11.3 | 19.8 | 71.9 |
| PM2.5(ug/m3) Average | 735 | 12.5 | 11 | - | 0.7 | 3 | 5.2 | 9.1 | 17 | 24.8 | 98.9 |
| Temperature (C) Average | 744 | 17.03 | 5.3 | - | 5.3 | 10.5 | 12.7 | 16.4 | 21.2 | 24.5 | 30.6 |
| Relative Humidity (%) Average | 744 | 72.87 | 21 | - | 29 | 43.2 | 53.4 | 75 | 93.1 | 98.9 | 100 |
| Barometric Pressure (inHg) Average | 744 | 28.9 | 0.2 | - | 28.5 | 28.7 | 28.7 | 29 | 29 | 29.1 | 29.2 |
| Wind Speed 20 m (km/h) Average | 743 | 9.4 | 5 | - | 0 | 4 | 6 | 8 | 12 | 16 | 30 |
| Wind Direction 20 m (deg) Average | 743 | 263.1 | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| AIR QUALITY ANALYZERS | 25 Aug 2026 16:00 | 25 Aug 2026 22:00 | 7 | Station power failure |
| NO2, TRS | 25 Aug 2026 12:00 | 25 Aug 2026 12:00 | 1 | Maintenance - sample manifold cleaned |
| SO2, TRS, THC/NMHC/CH4 | 13 Aug 2026 16:00 | 13 Aug 2026 16:00 | 1 | Maintenance - sample manifold cleaned |
| PM2.5 | 17 Aug 2026 10:00 | 17 Aug 2026 10:00 | 1 | Unstable Operation - flatline in analyzer output signal |
| TRS | 02 Aug 2026 11:00 | 02 Aug 2026 12:00 | 2 | Maintenance - verify daily QA response |
| Wind Speed, Wind Direction | 30 Aug 2026 19:00 | 30 Aug 2026 19:00 | 1 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Barge Landing - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 26.2 ppb on Aug 30 14:00
Maximum Daily Average: 2.9 ppb on Aug 30

Minimum Value: 0.0 ppb on Aug 2 07:00
Maximum Diurnal Average: 1.9 ppb at hour 14
Monthly Average: 0.42 ppb
Minimum Daily Average: 0.0 ppb on Aug 12
Minimum Diurnal Average: 0.1 ppb at hour 4
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.5 $P_{99}$ = 9.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | 0.7 | 0.9 | 0.7 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.9 |
| 2-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 1.1 | 0.8 | 0.1 | 1.1 |
| 3-Aug | 0.4 | 0.6 | 0.5 | Z | 0.3 | 0.2 | 0.1 | 0.4 | 0.1 | 0.1 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.4 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 8-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 |
| 11-Aug | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 13-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1.5 | 0.3 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 1.5 |
| 15-Aug | 0.1 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 2.1 | 2.9 | 1.0 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 2.9 |
| 18-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 1.1 | 1.2 | 1.6 | 1.1 | 0.8 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.4 | 1.6 |
| 19-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.5 | 0.6 | 0.5 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.6 |
| 20-Aug | 0.2 | 0.3 | Z | 0.4 | 0.2 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.6 |
| 21-Aug | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 0.9 | 0.3 | 0.1 | 0.0 | 2.5 | 1.1 | 0.3 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.4 | 2.5 |
| 22-Aug | 0.3 | 0.2 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.3 | 1.0 | 2.7 | 7.5 | 9.9 | 15.7 | 9.9 | 1.9 | 0.9 | 1.8 | 0.8 | 0.4 | 0.4 | 0.6 | 0.8 | 0.5 | 2.4 | 15.7 |
| 23-Aug | 0.2 | 0.3 | 0.1 | 0.2 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.4 | 0.4 | 0.5 | 5.7 | 2.9 | 2.8 | 1.9 | 1.0 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.8 | 5.7 |
| 24-Aug | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 |
| 25-Aug | 0.3 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | C | C | C | C | 0.3 | PF | PF | PF | PF | PF | PF | PF | 0.0 | 0.0 | -- | 0.3 |
| 26-Aug | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.4 | 3.1 | 9.1 | 18.7 | 6.1 | 4.3 | 0.7 | 0.5 | 0.7 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 2.1 | 18.7 |
| 27-Aug | 0.5 | 0.4 | 0.3 | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 6.1 | 1.3 | 0.6 | 1.3 | 1.5 | 3.7 | 0.8 | 0.4 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.9 | 6.1 |
| 28-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 |
| 29-Aug | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 30-Aug | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 | 2.5 | 10.5 | 26.2 | 13.5 | 4.5 | 2.4 | 1.2 | 1.3 | 1.2 | 1.2 | 0.6 | 0.1 | 0.1 | 2.9 | 26.2 |
| 31-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 1.2 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 1.2 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.6 | 1.2 | 1.1 | 1.9 | 1.2 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | Diurnal Average | |
| | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 1.1 | 1.2 | 1.6 | 6.1 | 9.1 | 18.7 | 10.5 | 26.2 | 13.5 | 4.5 | 2.4 | 2.9 | 1.3 | 1.2 | 1.2 | 0.6 | 1.1 | 0.8 | Diurnal Maximum | |

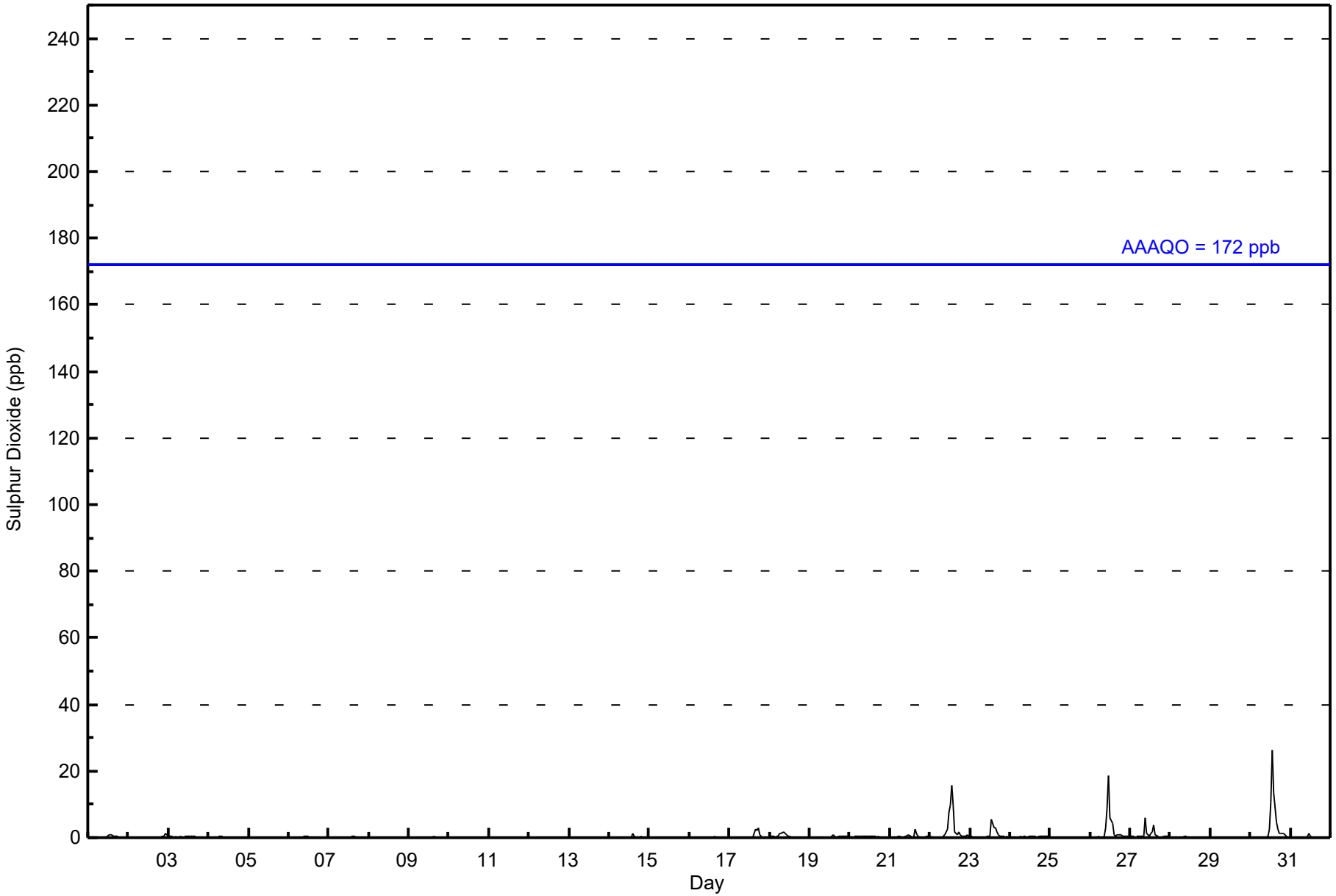
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Barge Landing - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Barge Landing - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 697 | 99.43 | 99.43 |
| 11 - 20 | 3 | 0.43 | 99.86 |
| 21 - 60 | 1 | 0.14 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Barge Landing - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 68 | 37 | 15 | 5 | 5 | 14 | 39 | 94 | 41 | 39 | 55 | 45 | 34 | 49 | 69 | 87 | 696 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 68 | 37 | 15 | 5 | 5 | 14 | 39 | 95 | 42 | 39 | 56 | 46 | 34 | 49 | 69 | 87 | 700 |

Total Number of Valid Hours: 700

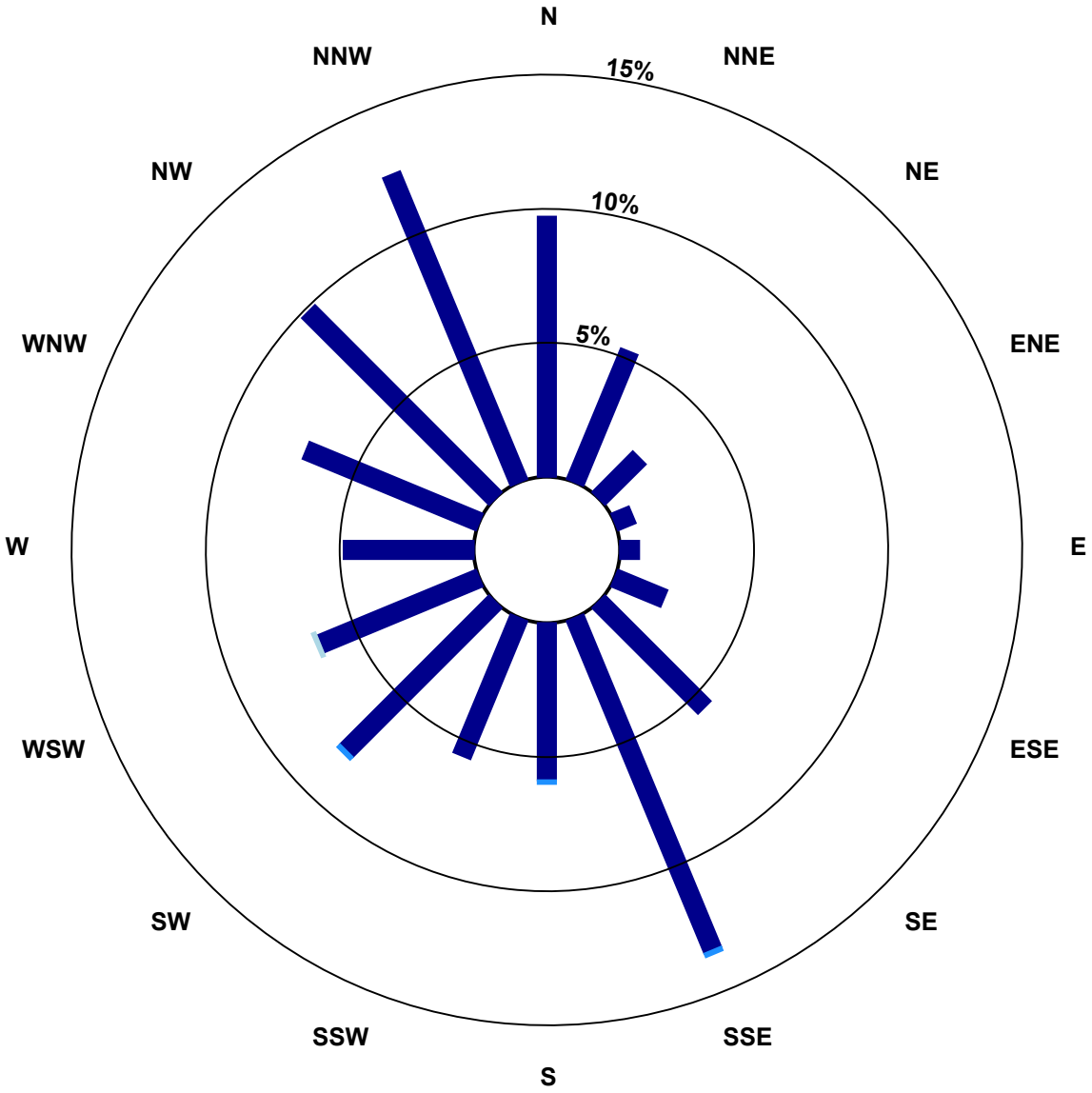
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Barge Landing




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

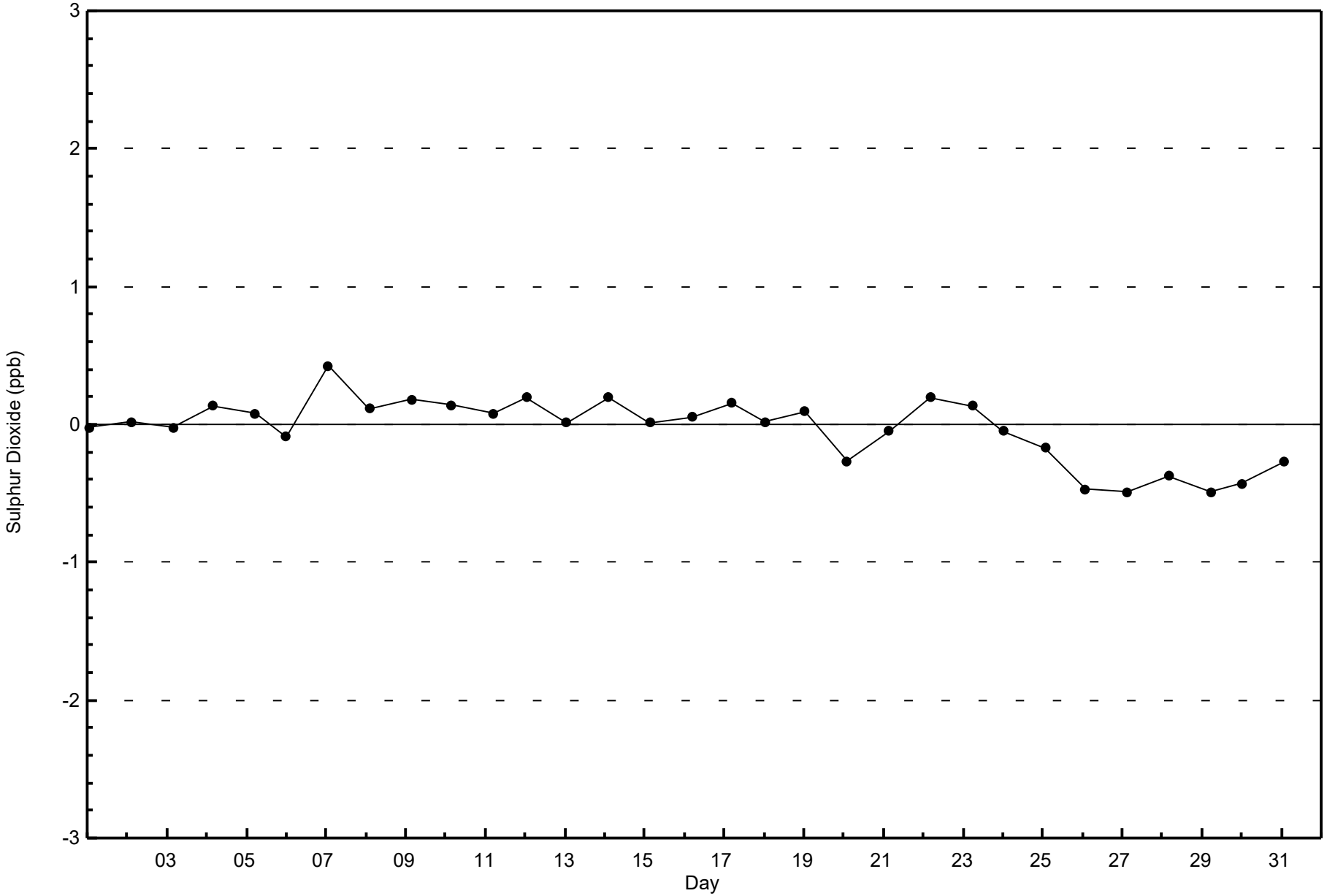
Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Barge Landing - August 2026**

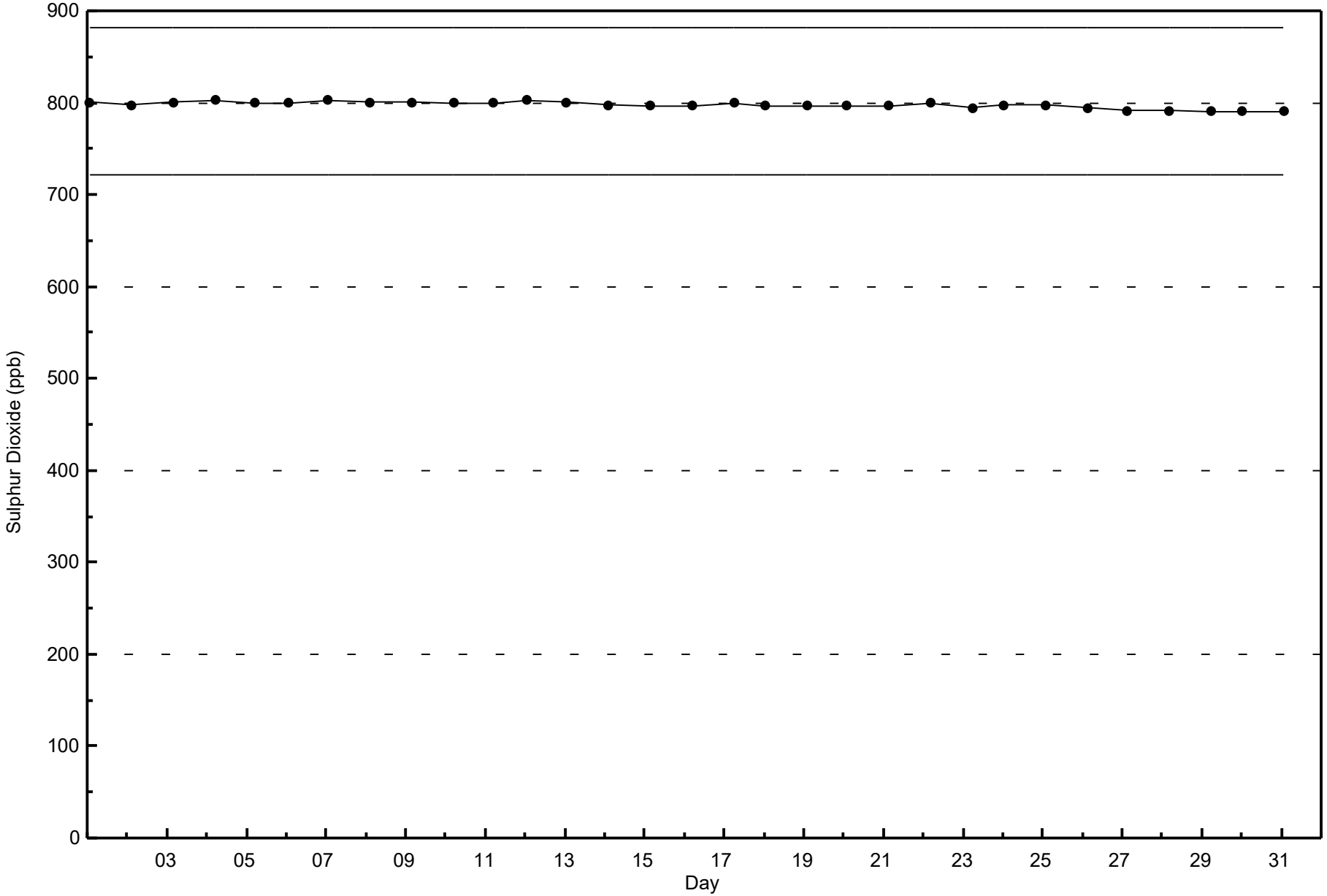


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Barge Landing - August 2026**



Number of Exceedences (AAAQG): 30-Min: 2

Maximum Value: 6.7 ppb on Aug 21 20:30 Maximum Daily Average: 1.3 ppb on Aug 21

Minimum Value: 0.1 ppb on Aug 8 17:00 Minimum Daily Average: 0.2 ppb on Aug 31

Maximum Diurnal Average: 0.8 ppb at hour 7 Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.54 ppb Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.2 $Q_1$ = 0.3 Median = 0.4 $Q_3$ = 0.6 $P_{90}$ = 1.1 $P_{99}$ = 2.6

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1393 |
| Periods of Invalid Data: | 95 |
| Periods of Calibration: | 74 |
| Percent Operational Time: | 98.6 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.5 | 0.4 | Z | 0.5 | 0.9 | 0.7 | 1.1 | 1.4 | 1.3 | 2.9 | 1.7 | 1.1 | 1.6 | 1.1 | 1.3 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.9 | 2.9 |
| | 0.5 | 0.4 | SP | 0.8 | 0.8 | 0.8 | 1.4 | 1.3 | 1.8 | 2.1 | 1.2 | 0.6 | 1.4 | 1.2 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | | |
| 2-Aug | 0.4 | 0.3 | 0.3 | Z | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | M | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.6 | 0.4 | 0.7 |
| | 0.3 | 0.3 | 0.3 | SP | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | M | M | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.7 | 0.3 | | |
| 3-Aug | 0.3 | 0.6 | 0.5 | 0.5 | Z | 0.5 | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.5 | 0.3 | 0.3 | 0.3 | 0.6 |
| | 0.3 | 0.6 | 0.5 | 0.5 | SP | 0.5 | 0.4 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | | |
| 4-Aug | 0.3 | 0.3 | 0.9 | 1.1 | 1.1 | Z | 2.2 | 2.8 | 1.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 3.2 |
| | 0.3 | 0.5 | 1.0 | 1.1 | 1.1 | SP | 3.2 | 1.9 | 0.7 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | | |
| 5-Aug | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 |
| | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | | |
| 6-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | C | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | -- | 0.4 |
| | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | C | C | C | C | C | C | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | | |
| 7-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 |
| | 0.2 | 0.2 | SP | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | | |
| 8-Aug | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.5 |
| | 0.3 | 0.4 | 0.3 | SP | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 0.5 | | |
| 9-Aug | 0.5 | 0.5 | 0.6 | 0.4 | Z | 0.3 | 0.4 | 0.5 | 0.6 | 0.5 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.9 | 0.5 | 0.5 | 0.4 | 0.9 |
| | 0.5 | 0.5 | 0.5 | 0.4 | SP | 0.4 | 0.5 | 0.5 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.6 | 0.5 | 0.6 | | |
| 10-Aug | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | Z | 1.3 | 1.5 | 0.8 | 0.8 | 1.3 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 1.5 |
| | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | SP | 1.3 | 1.2 | 0.7 | 1.1 | 0.8 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 11-Aug | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 |
| | SP | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | | |
| 12-Aug | 0.3 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 13-Aug | 0.2 | 0.3 | Z | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | M | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 |
| | 0.2 | 0.3 | SP | 0.4 | 0.5 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 14-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.5 | 1.9 | 0.9 | 0.9 | 0.7 | 0.8 | 0.5 | 2.0 |
| | 0.3 | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.6 | 0.3 | 0.2 | 0.2 | 2.0 | 1.4 | 0.9 | 0.9 | 0.7 | 0.7 | | |
| 15-Aug | 0.7 | 0.8 | 0.9 | 0.5 | Z | 1.1 | 1.2 | 1.2 | 0.8 | 0.6 | 0.6 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.3 |
| | 0.7 | 0.9 | 0.8 | 1.0 | SP | 1.2 | 1.3 | 1.0 | 0.6 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Barge Landing - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | Z | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.5 |
| | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 17-Aug | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.8 |
| | SP | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | | |
| 18-Aug | 0.8 | Z | 1.7 | 1.8 | 1.8 | 2.2 | 2.1 | 1.0 | 0.9 | 1.5 | 1.4 | 1.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 | 2.3 |
| | 1.0 | SP | 1.8 | 1.9 | 1.9 | 2.3 | 1.8 | 0.8 | 1.2 | 1.3 | 1.2 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | | |
| 19-Aug | 0.3 | 0.3 | Z | 0.6 | 1.3 | 1.8 | 1.7 | 1.6 | 1.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 0.6 | 0.7 | 1.9 |
| | 0.3 | 0.3 | SP | 0.9 | 1.4 | 1.8 | 1.7 | 1.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 0.7 | 0.5 | | |
| 20-Aug | 0.5 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 0.8 |
| | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | | |
| 21-Aug | 0.5 | 0.4 | 0.4 | 0.4 | Z | 0.9 | 3.2 | 2.5 | 2.8 | 2.2 | 2.2 | 1.7 | 0.7 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 6.7 | 1.5 | 2.2 | 1.4 | 1.3 | 6.7 |
| | 0.4 | 0.4 | 0.4 | 0.4 | SP | 2.1 | 2.9 | 2.6 | 1.5 | 2.1 | 2.1 | 0.7 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | UO | 0.3 | 1.2 | 3.5 | 1.6 | 2.0 | 1.2 | | |
| 22-Aug | 1.2 | 0.8 | 0.9 | 1.4 | 1.5 | Z | 0.8 | 0.6 | 1.6 | 1.2 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 0.5 | 0.4 | 1.9 | 0.7 | 0.4 | 0.8 | 1.9 |
| | 1.0 | 0.7 | 1.2 | 1.5 | 1.4 | SP | 0.6 | 0.9 | 1.7 | 0.9 | 0.5 | 0.6 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 1.1 | 0.7 | 0.4 | 1.1 | 1.1 | 0.6 | 0.5 | | |
| 23-Aug | Z | 1.0 | 1.2 | 1.3 | 1.3 | 1.9 | 1.7 | 1.9 | 1.1 | 0.6 | 0.6 | 0.5 | 0.9 | 2.1 | 0.9 | 1.5 | 1.5 | 0.7 | 0.3 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | 1.0 | 2.1 |
| | SP | 1.1 | 1.3 | 1.4 | 1.6 | 1.9 | 1.6 | 1.6 | 0.7 | 0.7 | 0.5 | 1.4 | 1.4 | 1.3 | 1.4 | 1.6 | 0.9 | 0.5 | 0.3 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | | |
| 24-Aug | 0.3 | Z | 0.5 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.3 | 0.6 |
| | 0.3 | SP | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | | |
| 25-Aug | 0.6 | 0.7 | Z | 0.5 | 0.6 | 0.5 | 0.4 | 0.6 | 0.9 | 1.0 | 0.6 | M | 0.4 | 0.5 | 0.6 | PF | PF | PF | PF | PF | PF | PF | 0.5 | 0.6 | -- | 1.1 |
| | 0.7 | 0.7 | SP | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 1.1 | 0.6 | M | 0.4 | 0.4 | 0.5 | 0.5 | PF | PF | PF | PF | PF | PF | PF | 0.5 | 0.6 | | |
| 26-Aug | 0.7 | 0.6 | 0.4 | Z | 0.3 | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.9 | 0.8 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 1.8 | 0.5 | 0.2 | 0.5 | 4.0 | 5.7 | 1.0 | 5.7 |
| | 0.7 | 0.5 | 0.4 | SP | 0.4 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 2.9 | 0.2 | 0.3 | 1.9 | 5.0 | 4.2 | | |
| 27-Aug | 2.6 | 1.4 | 2.4 | 0.6 | Z | 0.5 | 0.5 | 0.3 | 0.8 | 2.8 | 0.4 | 0.3 | 1.0 | 0.4 | 1.2 | 0.6 | 1.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.8 | 2.8 |
| | 1.9 | 1.8 | 1.6 | 0.5 | SP | 0.7 | 0.4 | 0.4 | 1.3 | 2.0 | 0.3 | 0.4 | 0.8 | 0.5 | 1.5 | 0.5 | 1.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 28-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 1.1 | Z | 0.4 | 0.5 | 2.4 | 0.8 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 2.4 |
| | 0.3 | 0.3 | 0.3 | 1.3 | 0.5 | SP | 0.8 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | | |
| 29-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.6 |
| | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 0.4 | 0.5 | | |
| 30-Aug | 0.6 | Z | 0.9 | 1.0 | 0.9 | 1.6 | 2.1 | 0.9 | 1.0 | 1.9 | 1.9 | 0.8 | 0.7 | 0.5 | 0.6 | 0.4 | 0.4 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.8 | 2.2 |
| | 0.8 | SP | 1.0 | 0.9 | 0.9 | 2.2 | 1.2 | 1.0 | 0.9 | 1.8 | 1.2 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | | |
| 31-Aug | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.6 | 0.2 | 0.6 |
| | 0.3 | 0.4 | SP | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.4 | 0.6 | 0.5 | | |
| | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.6 | Diurnal Average | |
| | 2.6 | 1.8 | 2.4 | 1.9 | 1.9 | 2.3 | 3.2 | 2.8 | 2.8 | 2.9 | 2.2 | 1.7 | 1.6 | 2.1 | 1.5 | 1.6 | 1.5 | 1.1 | 2.9 | 1.9 | 6.7 | 1.9 | 5.0 | 5.7 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation PF - Power Failure SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Reduced Sulphur (TRS) - ppb

## Barge Landing - August 2026

Maximum Value: 5.1 ppb on Aug 21 21:00

Maximum Daily Average: 1.3 ppb on Aug 21

Minimum Value: 0.1 ppb on Aug 8 17:00

Minimum Daily Average: 0.2 ppb on Aug 31

Maximum Diurnal Average: 0.8 ppb at hour 7

Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.54 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.2 $Q_1$ = 0.3 Median = 0.4 $Q_3$ = 0.6 $P_{90}$ = 1.1 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 696 |
| Hours of Missing Data: | 48 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 98.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.5 | 0.4 | Z | 0.6 | 0.8 | 0.8 | 1.2 | 1.3 | 1.6 | 2.5 | 1.5 | 0.9 | 1.5 | 1.1 | 1.1 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.9 | 2.5 |
| 2-Aug | 0.3 | 0.3 | 0.3 | Z | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | M | M | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.6 |
| 3-Aug | 0.3 | 0.6 | 0.5 | 0.5 | Z | 0.5 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 |
| 4-Aug | 0.3 | 0.4 | 1.0 | 1.1 | 1.1 | Z | 2.7 | 2.3 | 1.1 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.6 | 2.7 |
| 5-Aug | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 |
| 6-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | C | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | -- | 0.4 |
| 7-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.5 |
| 8-Aug | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.3 | 0.5 |
| 9-Aug | 0.5 | 0.5 | 0.5 | 0.4 | Z | 0.3 | 0.5 | 0.5 | 0.6 | 0.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 |
| 10-Aug | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | Z | 1.3 | 1.3 | 0.8 | 1.0 | 1.0 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 1.3 |
| 11-Aug | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.5 |
| 12-Aug | 0.3 | Z | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| 13-Aug | 0.2 | 0.3 | Z | 0.4 | 0.5 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | M | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 |
| 14-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 1.3 | 1.7 | 0.9 | 0.9 | 0.7 | 0.7 | 0.5 | 1.7 |
| 15-Aug | 0.7 | 0.9 | 0.8 | 0.8 | Z | 1.1 | 1.2 | 1.1 | 0.7 | 0.6 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.2 |
| 16-Aug | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | Z | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 |
| 17-Aug | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.5 | 0.8 |
| 18-Aug | 0.9 | Z | 1.7 | 1.9 | 1.9 | 2.3 | 1.9 | 0.9 | 1.1 | 1.4 | 1.3 | 0.9 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 | 2.3 |
| 19-Aug | 0.3 | 0.3 | Z | 0.8 | 1.4 | 1.8 | 1.7 | 1.8 | 0.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.7 | 1.8 |
| 20-Aug | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 |
| 21-Aug | 0.5 | 0.4 | 0.4 | 0.4 | Z | 1.5 | 3.0 | 2.6 | 2.1 | 2.1 | 2.2 | 1.2 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.7 | 5.1 | 1.6 | 2.1 | 1.3 | 1.3 | 5.1 |
| 22-Aug | 1.1 | 0.8 | 1.0 | 1.5 | 1.5 | Z | 0.7 | 0.8 | 1.7 | 1.0 | 0.5 | 0.6 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 1.0 | 0.8 | 0.5 | 0.7 | 1.5 | 0.6 | 0.5 | 0.8 | 1.7 |
| 23-Aug | Z | 1.0 | 1.3 | 1.3 | 1.4 | 1.9 | 1.7 | 1.8 | 0.9 | 0.7 | 0.6 | 1.0 | 1.1 | 1.7 | 1.1 | 1.5 | 1.2 | 0.6 | 0.3 | 0.6 | 0.6 | 0.6 | 0.5 | 0.3 | 1.0 | 1.9 |
| 24-Aug | 0.3 | Z | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.3 | 0.6 |
| 25-Aug | 0.6 | 0.7 | Z | 0.5 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 0.8 | 0.6 | M | 0.4 | 0.5 | 0.6 | PF | PF | PF | PF | PF | PF | PF | 0.5 | 0.6 | -- | 1.0 |
| 26-Aug | 0.7 | 0.6 | 0.4 | Z | 0.3 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 2.3 | 0.4 | 0.2 | 1.2 | 4.5 | 5.0 | 1.0 | 5.0 |
| 27-Aug | 2.2 | 1.6 | 2.0 | 0.6 | Z | 0.6 | 0.4 | 0.4 | 1.1 | 2.4 | 0.4 | 0.4 | 0.9 | 0.5 | 1.3 | 0.6 | 1.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.8 | 2.4 |
| 28-Aug | 0.3 | 0.3 | 0.3 | 0.8 | 0.8 | Z | 0.6 | 0.7 | 1.4 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 1.4 |
| 29-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 |
| 30-Aug | 0.7 | Z | 1.0 | 1.0 | 0.9 | 1.9 | 1.7 | 1.0 | 0.9 | 1.8 | 1.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.8 | 1.9 |
| 31-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.5 | 0.2 | 0.5 |
| | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.6 | Diurnal Average | |
| | 2.2 | 1.6 | 2.0 | 1.9 | 1.9 | 2.3 | 3.0 | 2.6 | 2.1 | 2.5 | 2.2 | 1.2 | 1.5 | 1.7 | 1.3 | 1.5 | 1.2 | 1.0 | 2.3 | 1.7 | 5.1 | 1.6 | 4.5 | 5.0 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance PF - Power Failure

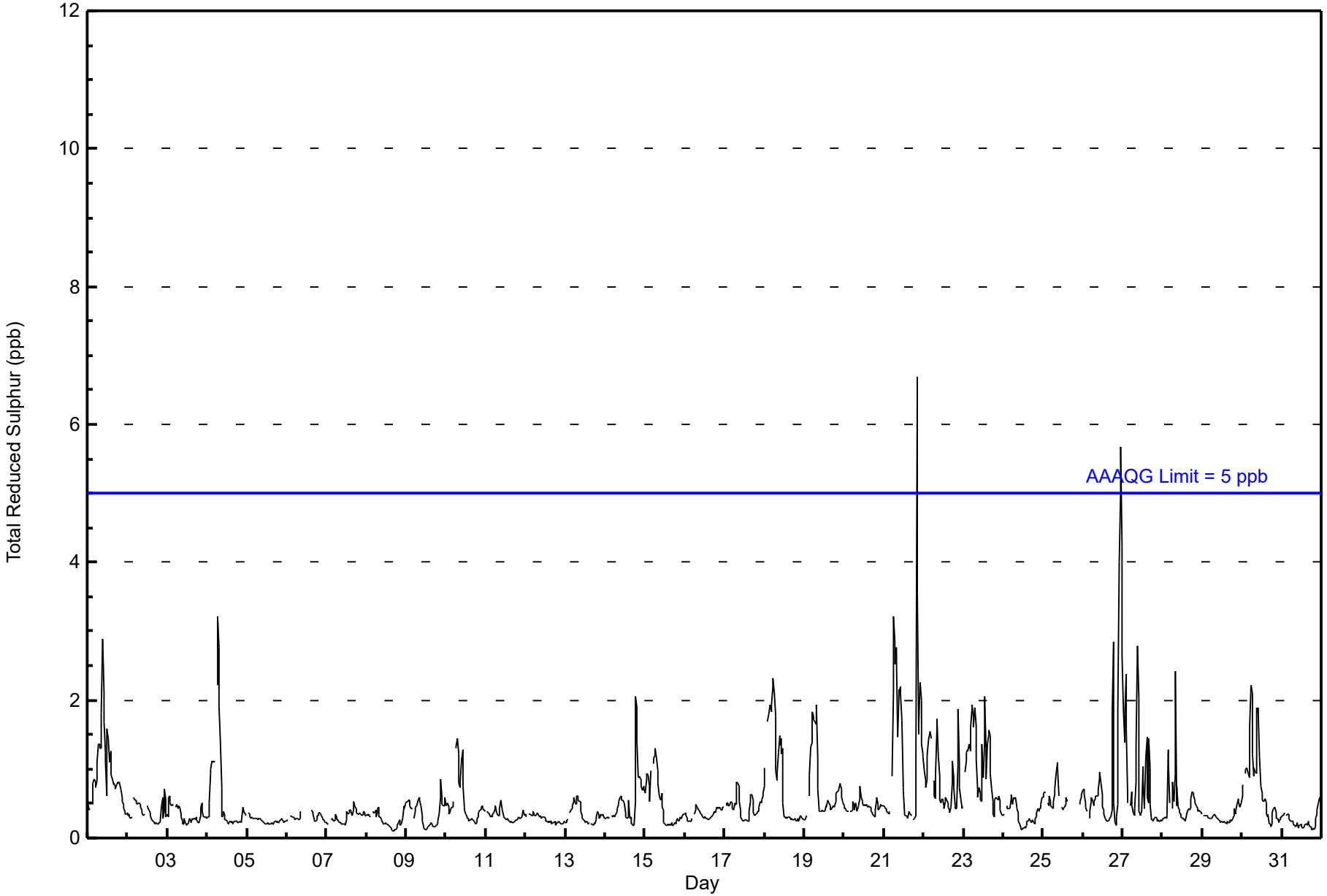
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Barge Landing - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 689 | 98.99 | 98.99 |
| 3 - 4 | 4 | 0.57 | 99.57 |
| 5 - 7 | 3 | 0.43 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 696

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Barge Landing - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 66 | 37 | 16 | 6 | 5 | 16 | 34 | 90 | 40 | 41 | 58 | 45 | 34 | 45 | 70 | 85 | 688 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 66 | 37 | 16 | 6 | 5 | 17 | 36 | 94 | 40 | 41 | 58 | 45 | 34 | 45 | 70 | 85 | 695 |

Total Number of Valid Hours: 695

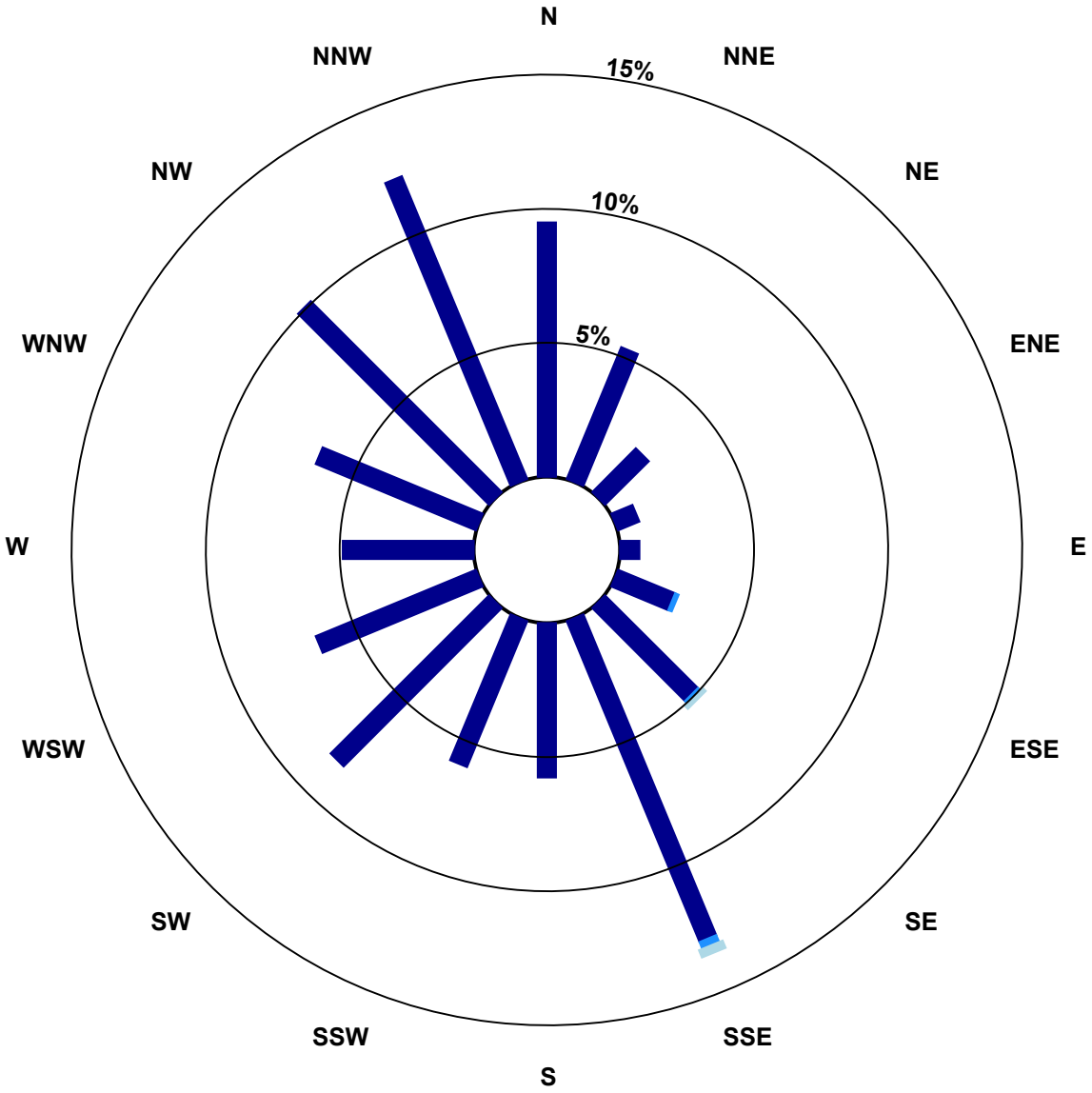
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Reduced Sulphur (TRS) - ppb

Barge Landing




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

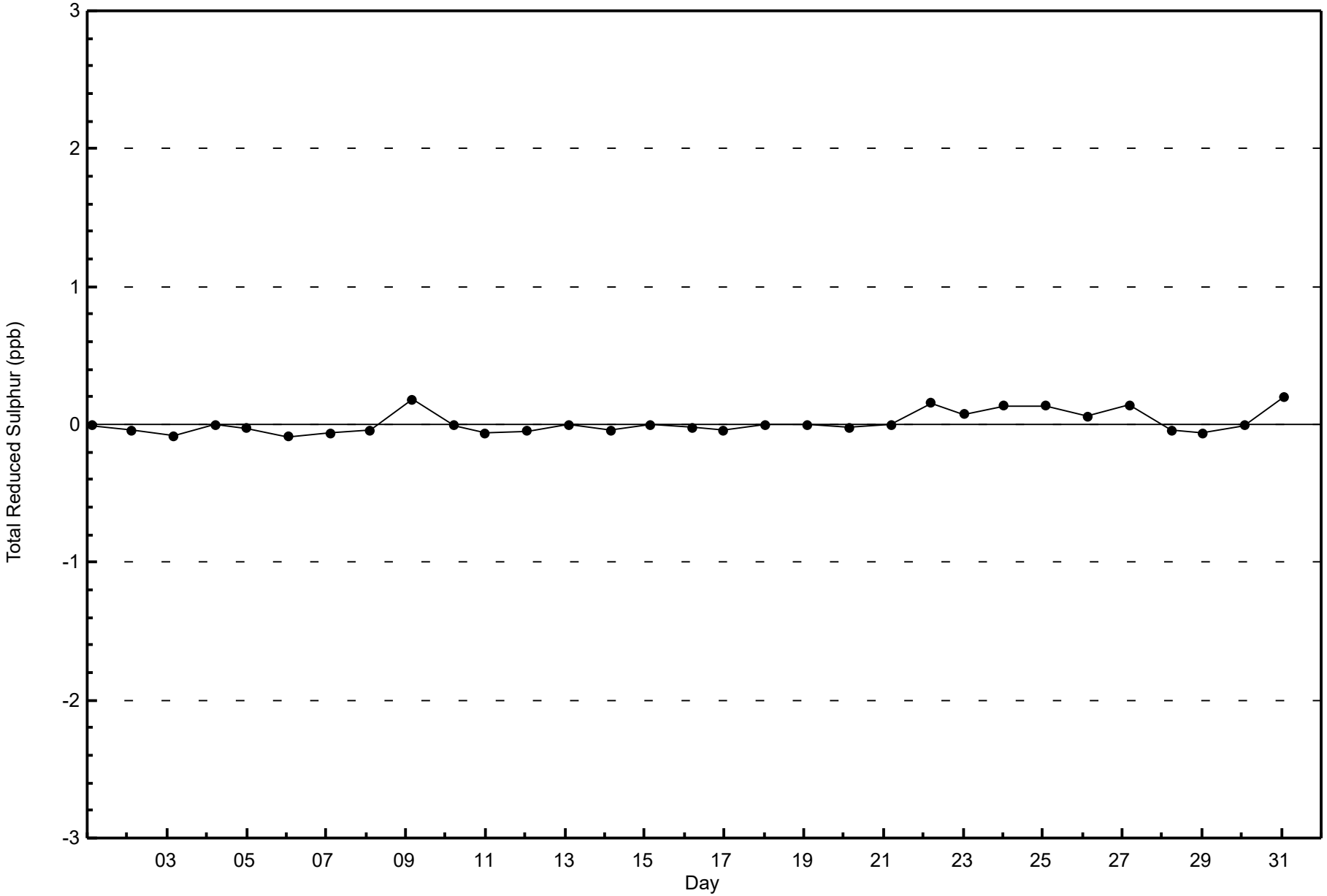
Total Number of Valid Hours: 695

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Barge Landing - August 2026**

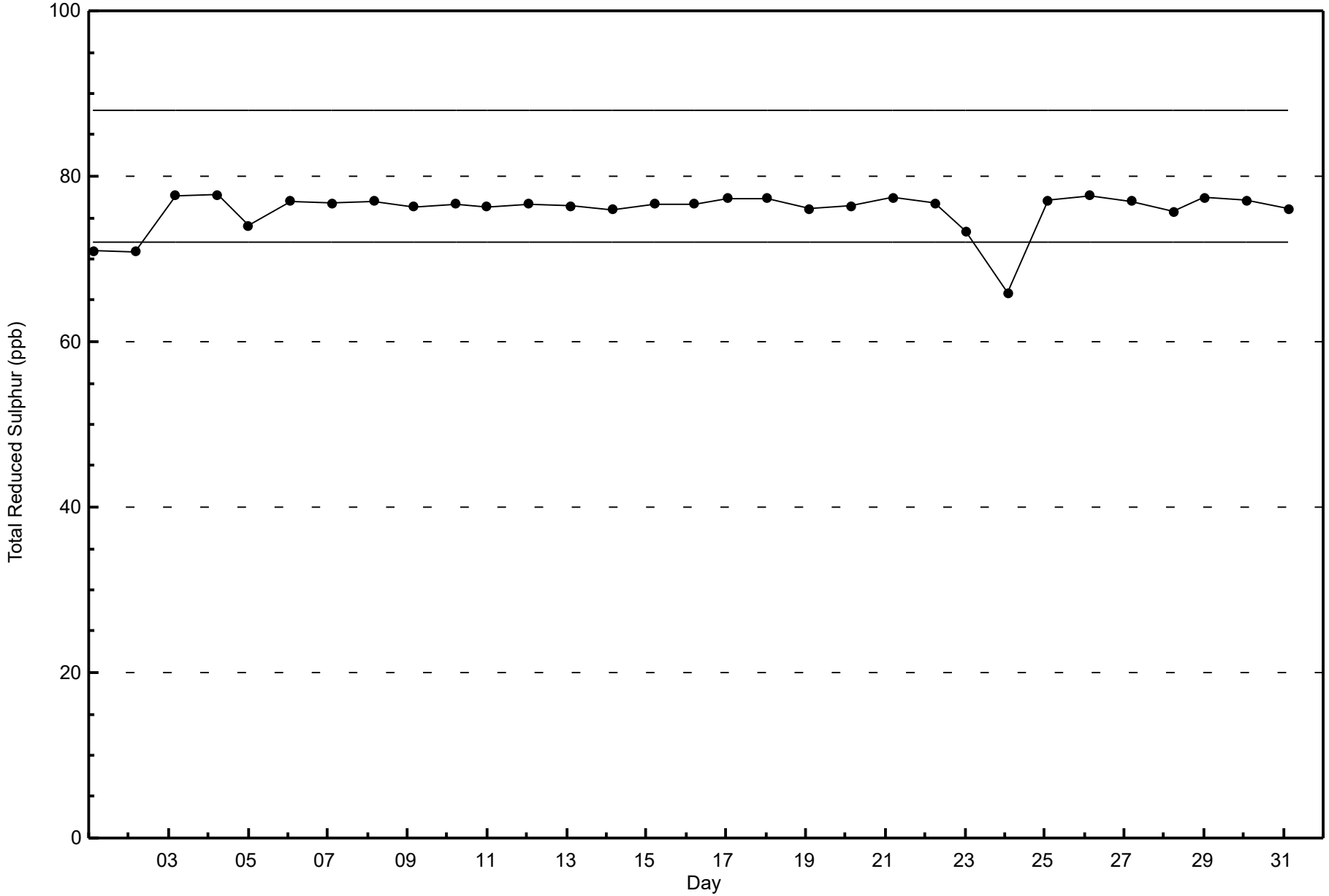


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Barge Landing - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Barge Landing - August 2026

Maximum Value: 3.2 ppm on Aug 9 01:00

Maximum Daily Average: 2.4 ppm on Aug 9

Minimum Value: 2.0 ppm on Aug 18 17:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.4 ppm at hour 7

Minimum Diurnal Average: 2.1 ppm at hour 16

Monthly Average: 2.23 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.4 $P_{90}$ = 2.5 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.4 | Z | 2.4 | 2.4 | 2.6 | 2.7 | 2.5 | 2.6 | 2.9 | 2.7 | 2.5 | 2.4 | 2.7 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 | 2.9 |
| 2-Aug | 2.3 | 2.1 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 3-Aug | 2.1 | 2.2 | 2.2 | Z | 2.4 | 2.2 | 2.3 | 2.4 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.4 |
| 4-Aug | 2.4 | 2.3 | 2.4 | 2.4 | Z | 2.4 | 2.7 | 2.7 | 2.5 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.4 | 2.2 | 2.7 |
| 5-Aug | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 |
| 6-Aug | Z | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 7-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.4 | 2.2 | 2.2 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.4 |
| 8-Aug | 2.5 | 2.4 | Z | 2.4 | 2.5 | 2.5 | 2.2 | 2.8 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.6 | 2.9 | 2.3 | 2.9 |
| 9-Aug | 3.2 | 3.0 | 2.7 | Z | 2.6 | 2.8 | 2.9 | 2.6 | 2.6 | 2.3 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 | 2.5 | 2.6 | 2.4 | 3.2 |
| 10-Aug | 2.6 | 2.6 | 2.6 | 2.5 | Z | 2.6 | 2.7 | 2.5 | 2.6 | 2.7 | 2.6 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.7 |
| 11-Aug | 2.4 | 2.2 | 2.3 | 2.4 | 2.5 | Z | 2.2 | 2.2 | 2.4 | 2.6 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.6 |
| 12-Aug | Z | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 |
| 13-Aug | 2.3 | Z | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | M | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.4 |
| 14-Aug | 2.3 | 2.3 | Z | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.5 |
| 15-Aug | 2.4 | 2.3 | 2.4 | Z | 2.5 | 2.7 | 2.6 | 2.5 | 2.3 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 |
| 16-Aug | 2.2 | 2.3 | 2.2 | 2.2 | Z | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.2 | 2.4 |
| 17-Aug | 2.4 | 2.3 | 2.5 | 2.4 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.5 |
| 18-Aug | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.0 | 2.2 | 2.5 |
| 19-Aug | 2.0 | Z | 2.3 | 2.4 | 2.5 | 2.7 | 2.6 | 2.6 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.4 | 2.4 | 2.4 | 2.1 | 2.2 | 2.7 |
| 20-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.2 | 2.3 | 2.5 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.4 | 2.2 | 2.5 |
| 21-Aug | 2.4 | 2.4 | 2.4 | Z | 2.4 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.7 |
| 22-Aug | 2.4 | 2.3 | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.4 | 2.3 | 2.3 | 2.4 |
| 23-Aug | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | Z | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 | 2.4 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.4 | 2.1 | 2.3 | 2.2 | 2.2 | 2.2 | 2.0 | 2.4 | 2.7 |
| 24-Aug | Z | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.4 | 2.4 | 2.5 | 2.2 | 2.5 |
| 25-Aug | 2.6 | Z | 2.5 | 2.6 | 2.3 | 2.3 | 2.4 | 2.6 | 2.7 | 2.5 | C | C | C | C | 2.3 | PF | PF | PF | PF | PF | PF | PF | 2.4 | 2.5 | -- | 2.7 |
| 26-Aug | 2.5 | 2.4 | Z | 2.3 | 2.3 | 2.5 | 2.7 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 | 2.5 | 2.3 | 2.7 |
| 27-Aug | 2.4 | 2.3 | 2.4 | Z | 2.2 | 2.2 | 2.5 | 2.3 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 28-Aug | 2.1 | 2.2 | 2.1 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.3 |
| 30-Aug | Z | 2.3 | 2.3 | 2.6 | 2.6 | 2.6 | 2.6 | 2.8 | 2.5 | 2.7 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.2 | 2.3 | 2.8 |
| 31-Aug | 2.2 | Z | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.5 | 2.6 | 2.6 | 2.2 | 2.6 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | Diurnal Average | |
| | 3.2 | 3.0 | 2.7 | 2.6 | 2.6 | 2.8 | 2.9 | 2.8 | 2.9 | 2.7 | 2.6 | 2.4 | 2.7 | 2.7 | 2.6 | 2.6 | 2.6 | 2.4 | 2.3 | 2.3 | 2.5 | 2.6 | 2.6 | 2.9 | Diurnal Maximum | |

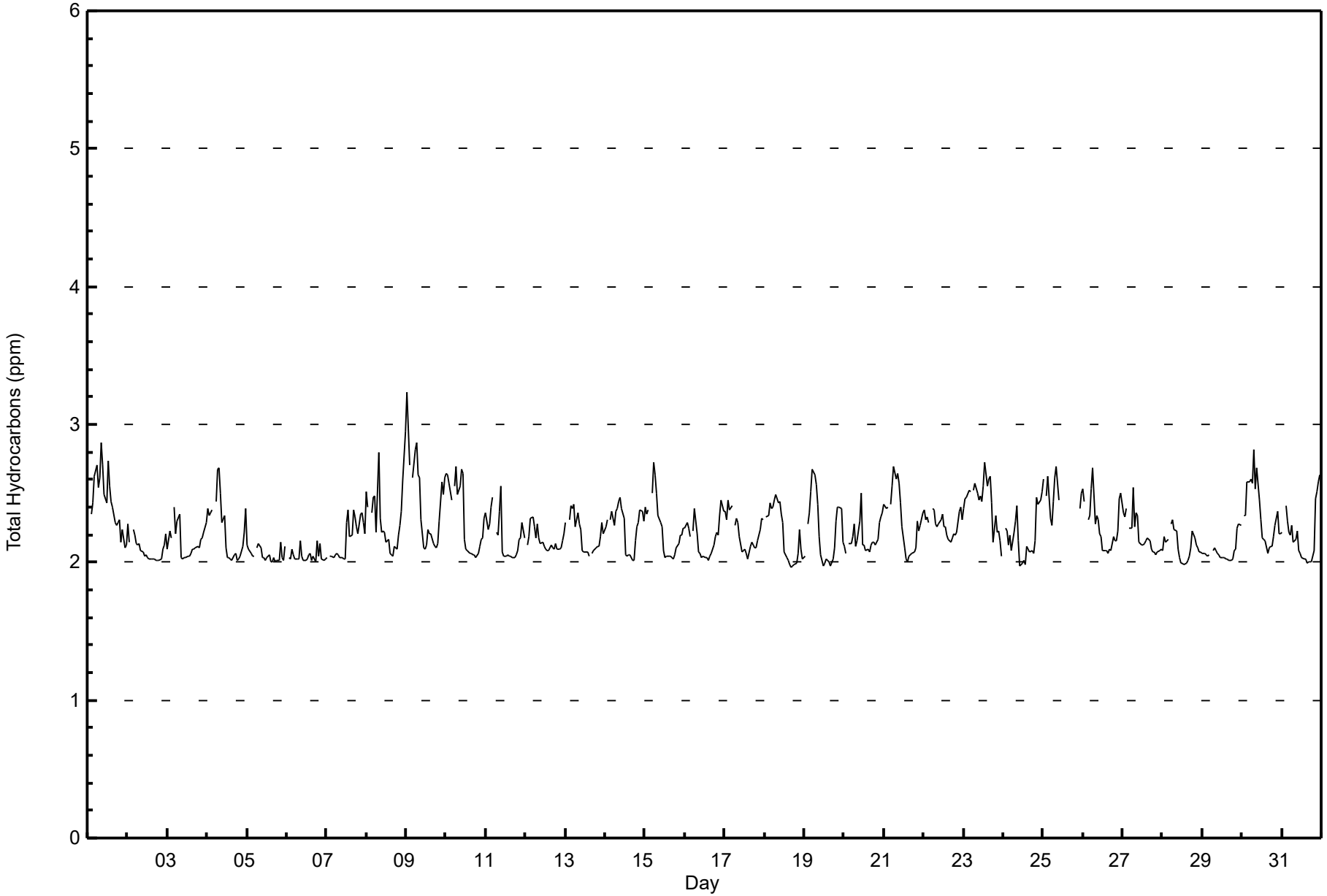
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Barge Landing - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 136 | 19.40 | 19.40 |
| 2.1 - 3.0 | 564 | 80.46 | 99.86 |
| 3.1 - 10.0 | 1 | 0.14 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Barge Landing - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 18 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 27 | 16 | 10 | 17 | 16 | 26 | 136 |
| 2.1 - 3.0 | 50 | 36 | 15 | 5 | 5 | 14 | 38 | 94 | 42 | 36 | 29 | 30 | 24 | 32 | 52 | 61 | 563 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 68 | 37 | 15 | 5 | 5 | 14 | 39 | 95 | 42 | 39 | 56 | 46 | 34 | 49 | 69 | 87 | 700 |

Total Number of Valid Hours: 700

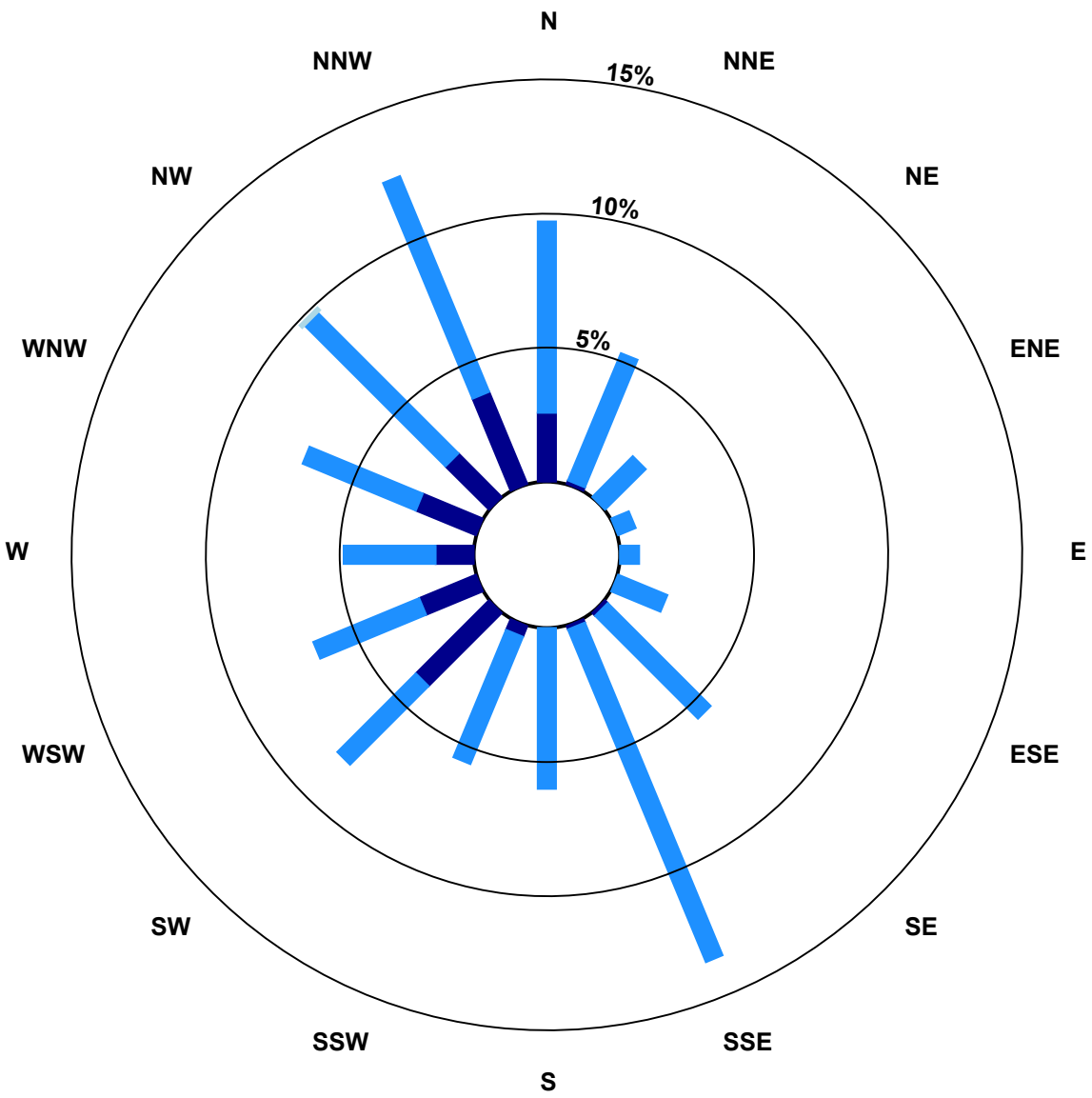
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Barge Landing




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

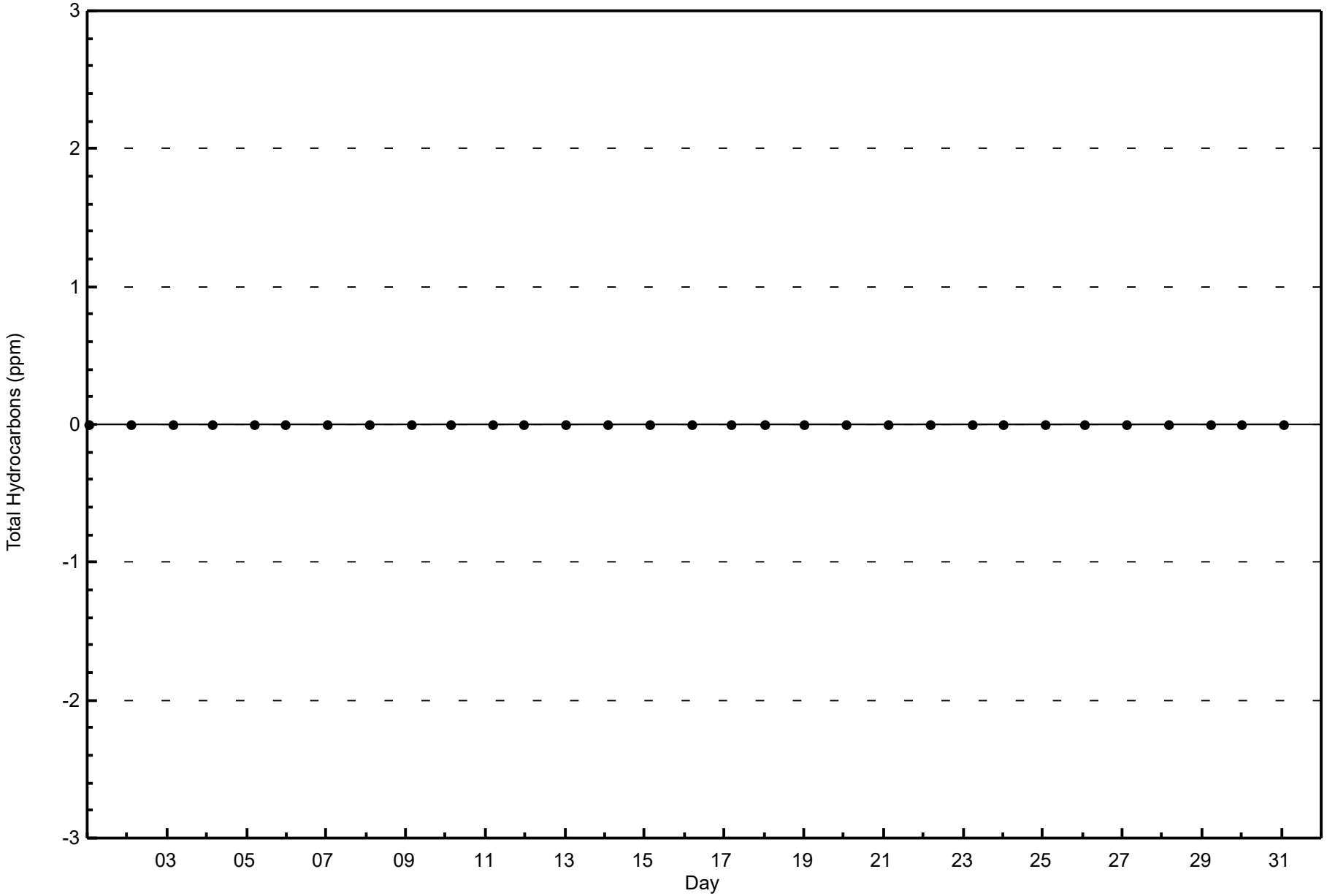
Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Barge Landing - August 2026**

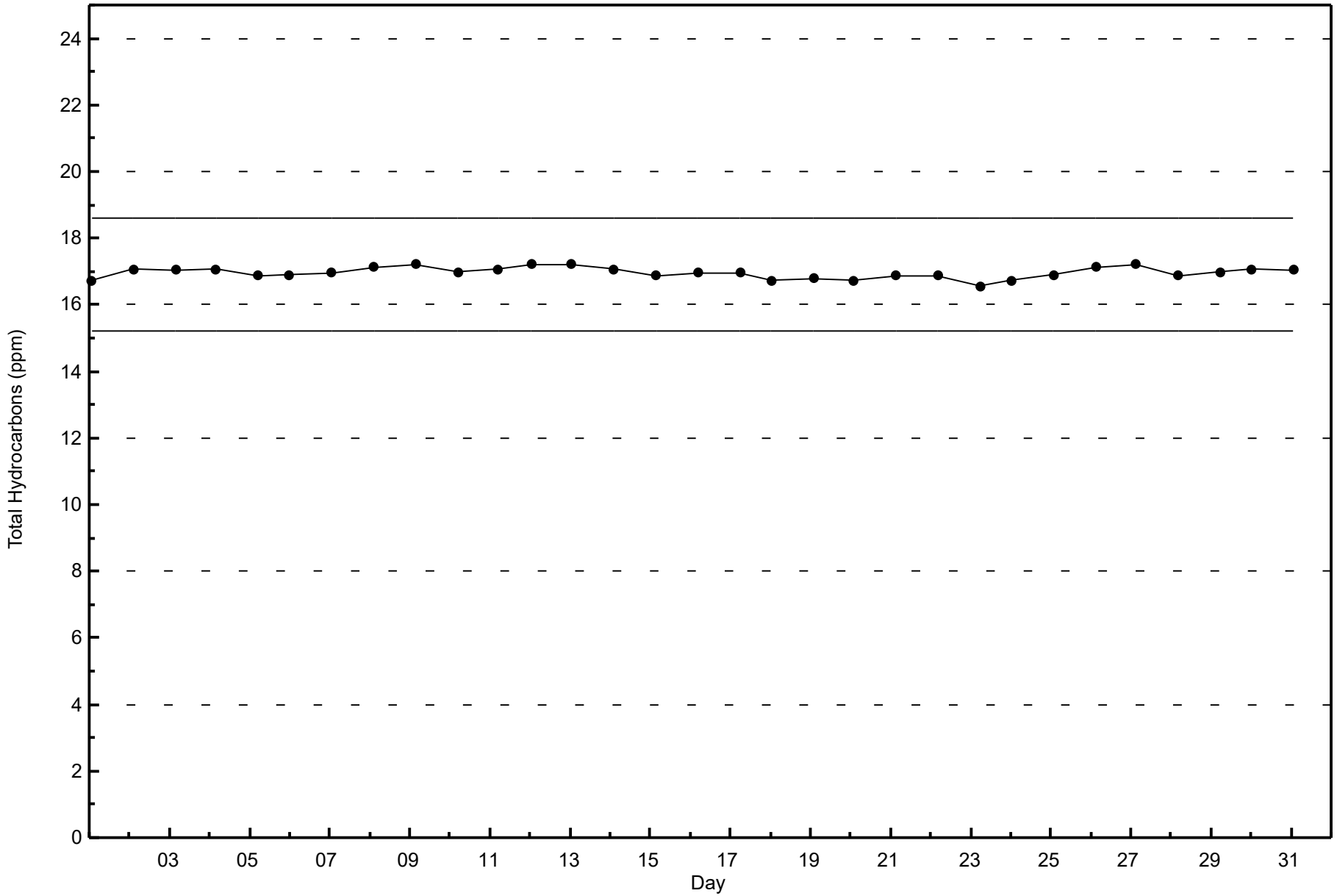


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Barge Landing - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Non Methane Hydrocarbons (NMHC) - ppm

## Barge Landing - August 2026

Maximum Value: 0.497 ppm on Aug 9 00:00

Maximum Daily Average: 0.080 ppm on Aug 8

Minimum Value: 0.000 ppm on Aug 1 18:00

Minimum Daily Average: 0.000 ppm on Aug 5

Maximum Diurnal Average: 0.053 ppm at hour 22

Minimum Diurnal Average: 0.012 ppm at hour 6

Monthly Average: 0.026 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.1 $P_{99}$ = 0.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.021 | Z | 0.003 | 0.018 | 0.047 | 0.018 | 0.009 | 0.037 | 0.106 | 0.038 | 0.035 | 0.042 | 0.001 | 0.084 | 0.102 | 0.125 | 0.002 | 0.000 | 0.003 | 0.000 | 0.000 | 0.050 | 0.013 | 0.039 | 0.034 | 0.125 |
| 2-Aug | 0.107 | 0.002 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.107 |
| 3-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.005 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 | 0.005 | 0.009 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.011 |
| 4-Aug | 0.000 | 0.010 | 0.008 | 0.000 | Z | 0.004 | 0.152 | 0.146 | 0.061 | 0.003 | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.017 | 0.152 |
| 5-Aug | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 6-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.032 | 0.000 | 0.000 | 0.000 | 0.102 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 | 0.102 |
| 7-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.108 | 0.203 | 0.102 | 0.020 | 0.010 | 0.024 | 0.026 | 0.003 | 0.110 | 0.113 | 0.080 | 0.008 | 0.035 | 0.203 |
| 8-Aug | 0.012 | 0.013 | Z | 0.002 | 0.002 | 0.001 | 0.008 | 0.014 | 0.002 | 0.081 | 0.153 | 0.137 | 0.068 | 0.092 | 0.003 | 0.000 | 0.000 | 0.034 | 0.006 | 0.135 | 0.178 | 0.196 | 0.197 | 0.497 | 0.080 | 0.497 |
| 9-Aug | 0.440 | 0.250 | 0.123 | Z | 0.001 | 0.002 | 0.003 | 0.011 | 0.002 | 0.003 | 0.000 | 0.000 | 0.018 | 0.113 | 0.075 | 0.054 | 0.004 | 0.000 | 0.015 | 0.009 | 0.000 | 0.001 | 0.001 | 0.001 | 0.049 | 0.440 |
| 10-Aug | 0.008 | 0.015 | 0.004 | 0.000 | Z | 0.005 | 0.013 | 0.008 | 0.023 | 0.099 | 0.091 | 0.029 | 0.030 | 0.010 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.017 | 0.000 | 0.000 | 0.001 | 0.000 | 0.016 | 0.099 |
| 11-Aug | 0.024 | 0.007 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.006 | 0.015 | 0.000 | 0.004 | 0.000 | 0.001 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.008 | 0.008 | 0.073 | 0.105 | 0.085 | 0.000 | 0.015 | 0.105 |
| 12-Aug | Z | 0.000 | 0.006 | 0.037 | 0.036 | 0.023 | 0.003 | 0.020 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.002 | 0.046 | 0.039 | 0.010 | 0.004 | 0.001 | 0.002 | 0.002 | 0.000 | 0.000 | 0.010 | 0.046 |
| 13-Aug | 0.000 | Z | 0.000 | 0.001 | 0.000 | 0.004 | 0.003 | 0.041 | 0.034 | 0.001 | 0.000 | 0.000 | 0.000 | 0.003 | 0.001 | M | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.041 |
| 14-Aug | 0.000 | 0.011 | Z | 0.015 | 0.008 | 0.002 | 0.004 | 0.003 | 0.001 | 0.000 | 0.000 | 0.002 | 0.003 | 0.000 | 0.003 | 0.000 | 0.000 | 0.000 | 0.025 | 0.054 | 0.050 | 0.074 | 0.072 | 0.046 | 0.016 | 0.074 |
| 15-Aug | 0.022 | 0.017 | 0.005 | Z | 0.013 | 0.035 | 0.079 | 0.069 | 0.023 | 0.011 | 0.009 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.006 | 0.011 | 0.002 | 0.004 | 0.003 | 0.000 | 0.014 | 0.079 |
| 16-Aug | 0.000 | 0.001 | 0.000 | 0.001 | Z | 0.001 | 0.019 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.000 | 0.000 | 0.006 | 0.013 | 0.006 | 0.004 | 0.002 | 0.019 |
| 17-Aug | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | Z | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.028 | 0.044 | 0.034 | 0.001 | 0.005 | 0.005 | 0.035 | 0.033 | 0.032 | 0.010 | 0.044 |
| 18-Aug | Z | 0.026 | 0.041 | 0.043 | 0.036 | 0.035 | 0.039 | 0.145 | 0.152 | 0.119 | 0.077 | 0.055 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.034 | 0.152 |
| 19-Aug | 0.000 | Z | 0.004 | 0.008 | 0.016 | 0.026 | 0.022 | 0.047 | 0.012 | 0.000 | 0.000 | 0.000 | 0.003 | 0.003 | 0.001 | 0.015 | 0.001 | 0.020 | 0.035 | 0.205 | 0.266 | 0.171 | 0.097 | 0.014 | 0.042 | 0.266 |
| 20-Aug | 0.001 | 0.002 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.013 | 0.070 | 0.155 | 0.074 | 0.090 | 0.047 | 0.049 | 0.038 | 0.081 | 0.091 | 0.095 | 0.000 | 0.000 | 0.005 | 0.012 | 0.003 | 0.036 | 0.155 |
| 21-Aug | 0.007 | 0.012 | 0.013 | Z | 0.011 | 0.005 | 0.024 | 0.027 | 0.050 | 0.113 | 0.092 | 0.080 | 0.048 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.053 | 0.028 | 0.040 | 0.058 | 0.029 | 0.113 |
| 22-Aug | 0.071 | 0.038 | 0.033 | 0.038 | Z | 0.031 | 0.004 | 0.013 | 0.042 | 0.044 | 0.088 | 0.110 | 0.053 | 0.074 | 0.044 | 0.006 | 0.004 | 0.000 | 0.000 | 0.001 | 0.015 | 0.107 | 0.202 | 0.070 | 0.047 | 0.202 |
| 23-Aug | 0.075 | 0.072 | 0.086 | 0.087 | 0.081 | Z | 0.049 | 0.037 | 0.054 | 0.086 | 0.163 | 0.081 | 0.087 | 0.190 | 0.134 | 0.144 | 0.166 | 0.111 | 0.042 | 0.015 | 0.019 | 0.016 | 0.012 | 0.010 | 0.079 | 0.190 |
| 24-Aug | Z | 0.010 | 0.011 | 0.007 | 0.003 | 0.004 | 0.000 | 0.002 | 0.002 | 0.002 | 0.000 | 0.000 | 0.002 | 0.000 | 0.106 | 0.078 | 0.032 | 0.027 | 0.000 | 0.101 | 0.343 | 0.206 | 0.127 | 0.087 | 0.050 | 0.343 |
| 25-Aug | 0.098 | Z | 0.047 | 0.036 | 0.029 | 0.013 | 0.007 | 0.009 | 0.001 | 0.037 | C | C | C | C | 0.077 | PF | PF | PF | PF | PF | PF | PF | 0.010 | 0.060 | -- | 0.098 |
| 26-Aug | 0.034 | 0.011 | Z | 0.000 | 0.000 | 0.011 | 0.002 | 0.002 | 0.035 | 0.047 | 0.052 | 0.042 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.012 | 0.000 | 0.000 | 0.033 | 0.121 | 0.149 | 0.024 | 0.149 |
| 27-Aug | 0.072 | 0.053 | 0.068 | Z | 0.025 | 0.013 | 0.000 | 0.006 | 0.046 | 0.065 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.015 | 0.072 |
| 28-Aug | 0.002 | 0.000 | 0.000 | 0.007 | Z | 0.000 | 0.004 | 0.020 | 0.040 | 0.012 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.023 | 0.080 | 0.047 | 0.007 | 0.002 | 0.000 | 0.000 | 0.011 | 0.080 |
| 29-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.012 | 0.009 | 0.034 | 0.002 | 0.034 |
| 30-Aug | Z | 0.044 | 0.042 | 0.046 | 0.048 | 0.078 | 0.065 | 0.050 | 0.055 | 0.062 | 0.075 | 0.094 | 0.045 | 0.058 | 0.059 | 0.004 | 0.000 | 0.000 | 0.001 | 0.025 | 0.038 | 0.114 | 0.005 | 0.002 | 0.044 | 0.114 |
| 31-Aug | 0.000 | Z | 0.020 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.016 | 0.071 | 0.017 | 0.004 | 0.000 | 0.000 | 0.016 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.239 | 0.299 | 0.263 | 0.269 | 0.053 | 0.299 |
| | 0.038 | 0.024 | 0.020 | 0.013 | 0.014 | 0.012 | 0.016 | 0.023 | 0.025 | 0.031 | 0.034 | 0.025 | 0.019 | 0.029 | 0.026 | 0.020 | 0.013 | 0.013 | 0.016 | 0.021 | 0.047 | 0.053 | 0.045 | 0.045 | Diurnal Average | |
| | 0.440 | 0.250 | 0.123 | 0.087 | 0.081 | 0.078 | 0.152 | 0.146 | 0.152 | 0.119 | 0.163 | 0.137 | 0.108 | 0.203 | 0.134 | 0.144 | 0.166 | 0.111 | 0.102 | 0.205 | 0.343 | 0.299 | 0.263 | 0.497 | Diurnal Maximum | |

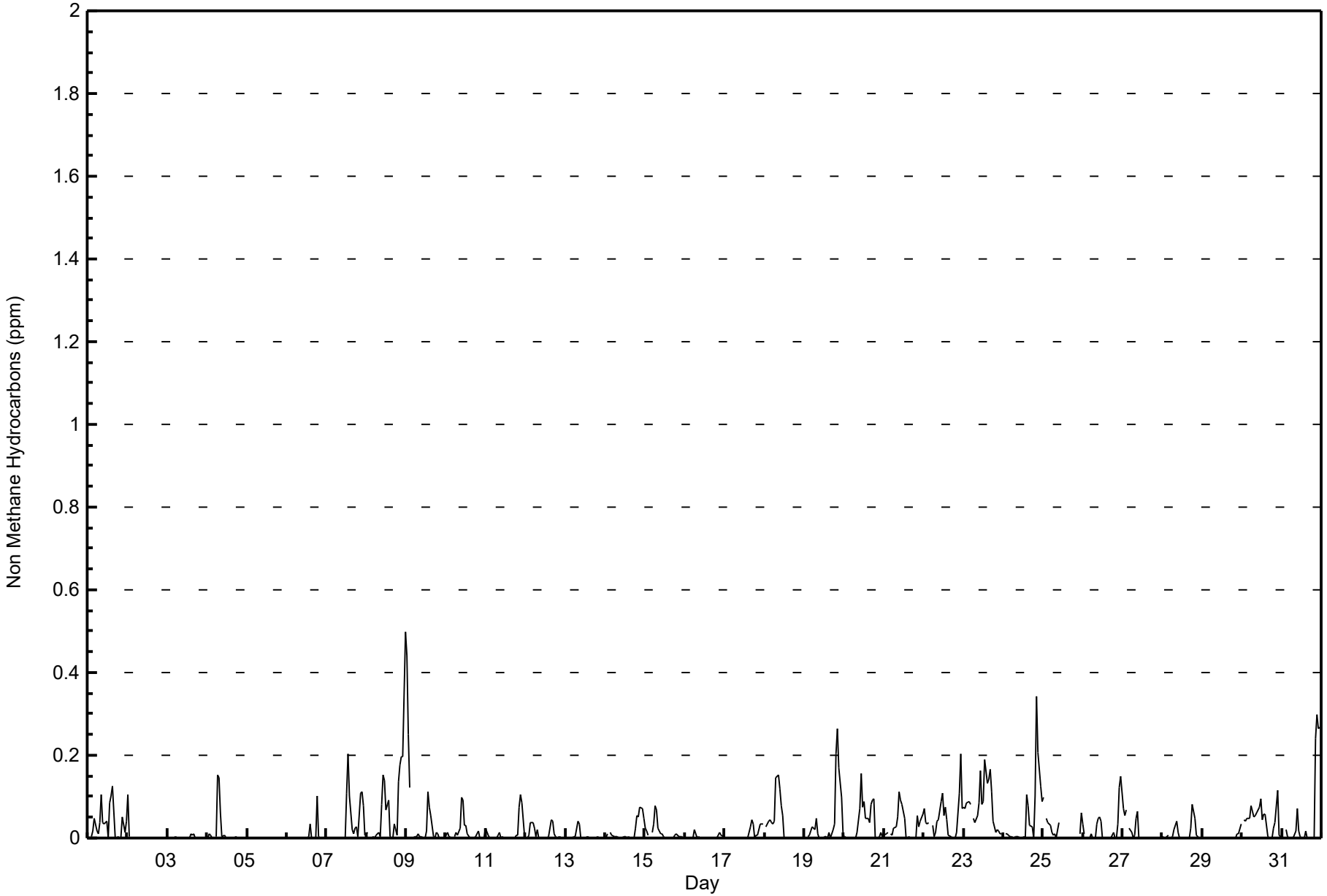
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Barge Landing - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Barge Landing - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 405 | 57.77 | 57.77 |
| 0.006 - 0.05 | 187 | 26.68 | 84.45 |
| 0.06 - 0.1 | 85 | 12.13 | 96.58 |
| > 0.1 | 24 | 3.42 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Barge Landing - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 35 | 15 | 10 | 3 | 3 | 9 | 18 | 29 | 11 | 22 | 46 | 33 | 21 | 36 | 49 | 64 | 404 |
| 0.006 - 0.05 | 16 | 12 | 2 | 1 | 0 | 4 | 18 | 44 | 13 | 12 | 9 | 9 | 9 | 8 | 16 | 14 | 187 |
| 0.06 - 0.1 | 11 | 8 | 2 | 1 | 1 | 1 | 3 | 18 | 14 | 4 | 1 | 4 | 3 | 4 | 3 | 7 | 85 |
| > 0.1 | 6 | 2 | 1 | 0 | 1 | 0 | 0 | 4 | 4 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 24 |
| **Totals** | 68 | 37 | 15 | 5 | 5 | 14 | 39 | 95 | 42 | 39 | 56 | 46 | 34 | 49 | 69 | 87 | 700 |

Total Number of Valid Hours: 700

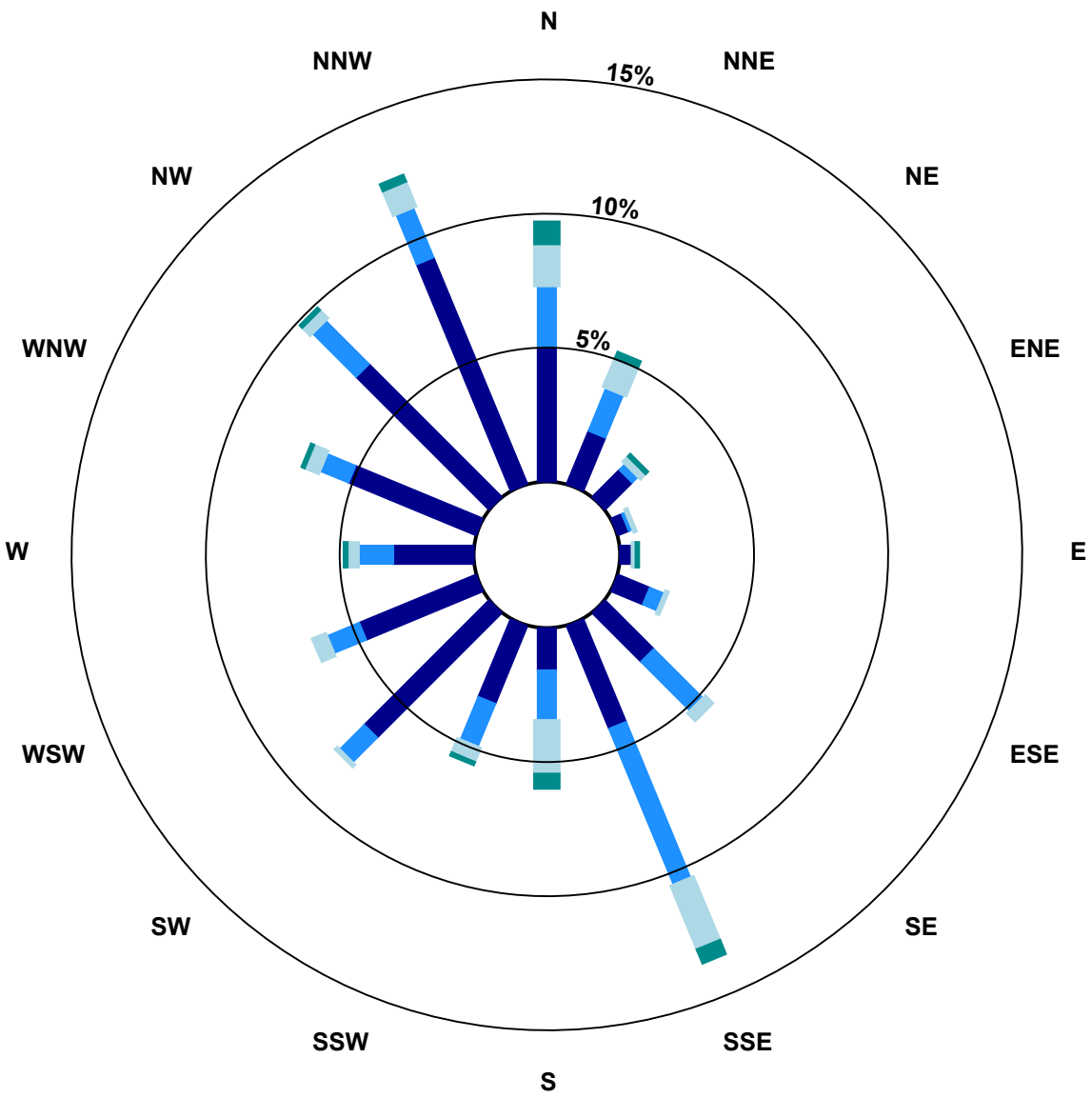
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Barge Landing**




**Classes (ppm)**

- 0 - 0.005
- 0.006 - 0.05
- 0.06 - 0.1
- > 0.1

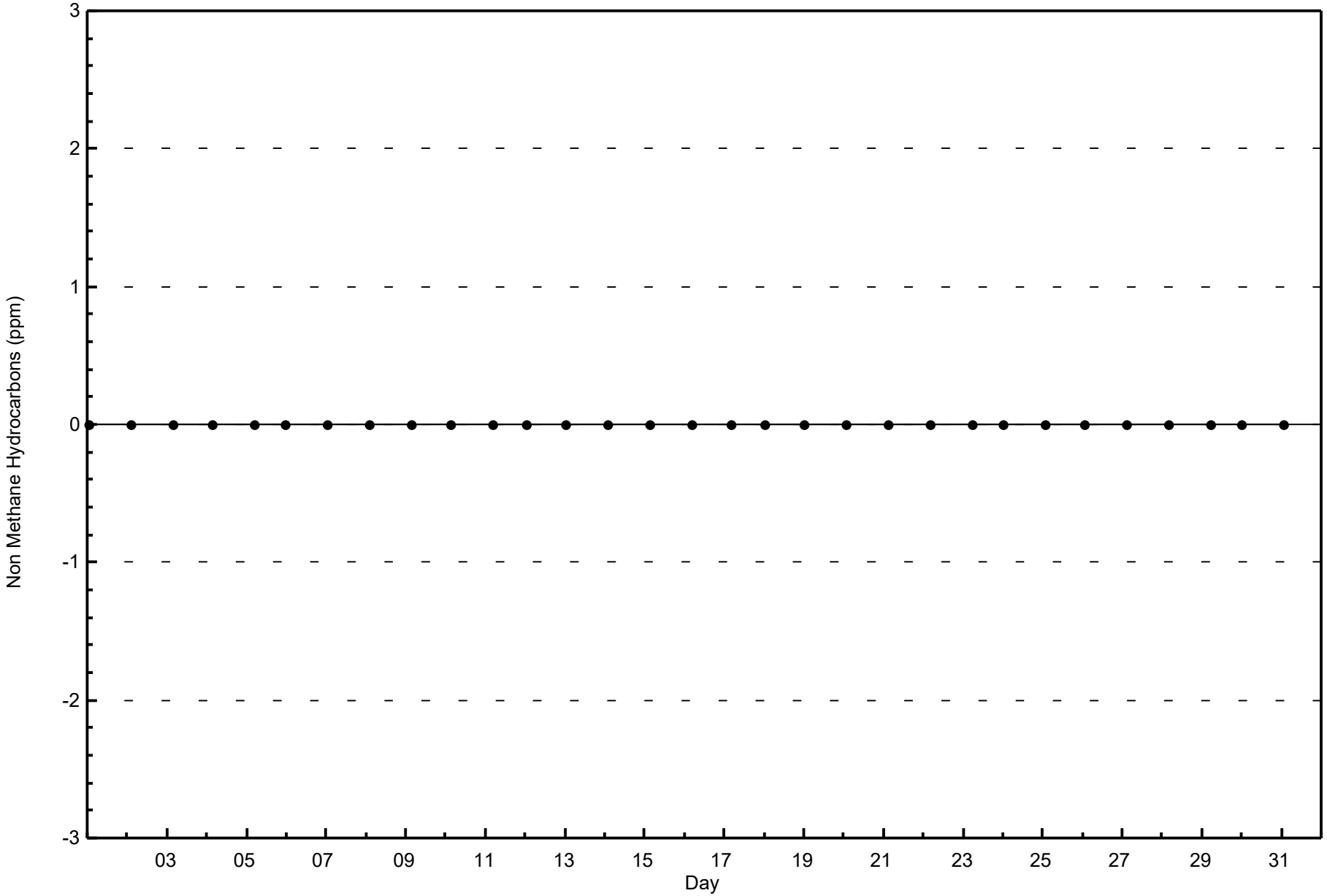
**Total Number of Valid Hours: 700**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Barge Landing - August 2026**

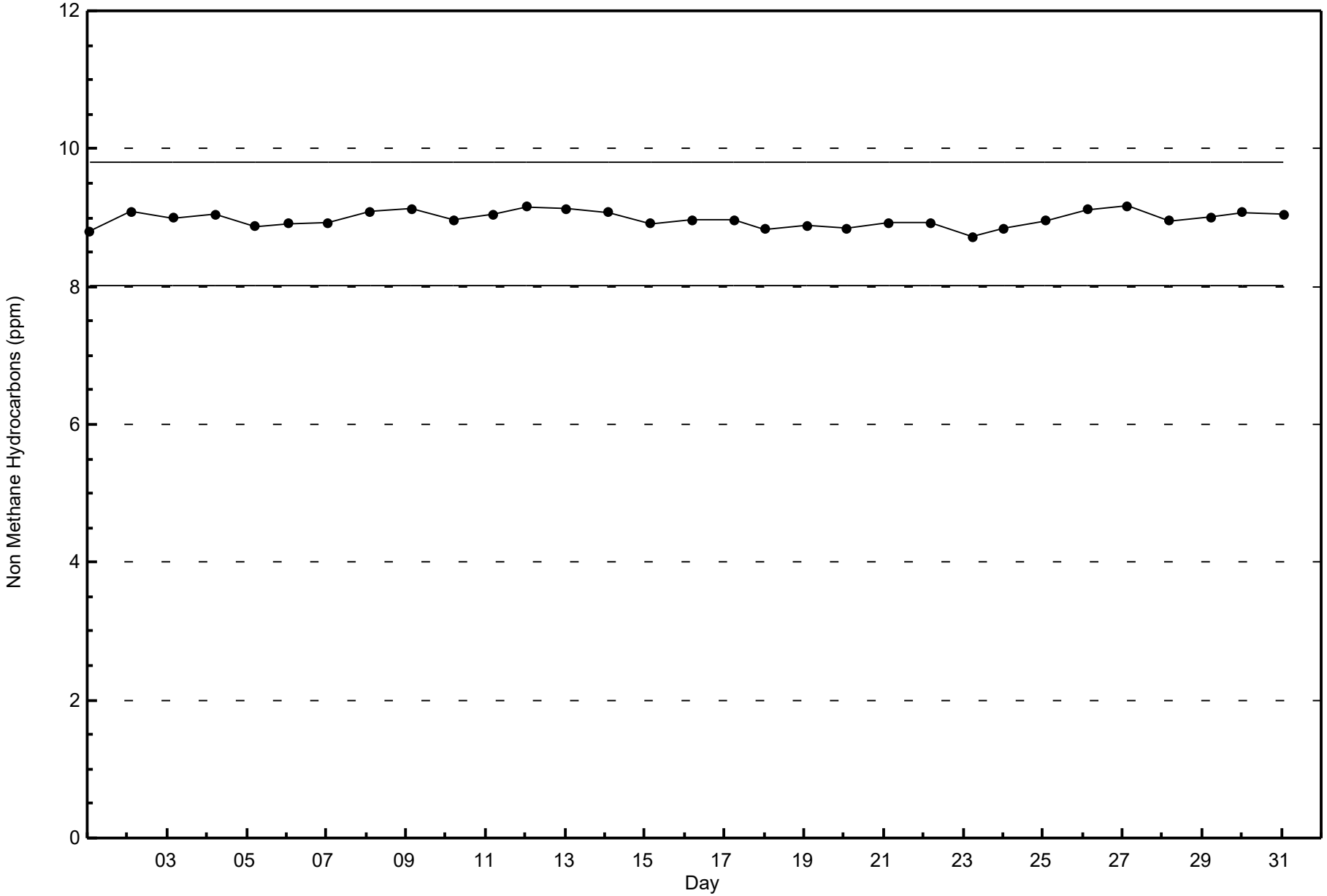


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Barge Landing - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Barge Landing - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.9 ppm on Aug 9 07:00 Maximum Daily Average: 2.4 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 18 17:00 Minimum Daily Average: 2.0 ppm on Aug 6
Maximum Diurnal Average: 2.4 ppm at hour 7 Minimum Diurnal Average: 2.1 ppm at hour 16
Monthly Average: 2.20 ppm Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 2.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.3 | Z | 2.3 | 2.4 | 2.6 | 2.7 | 2.5 | 2.6 | 2.8 | 2.7 | 2.5 | 2.4 | 2.7 | 2.5 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 | 2.8 |
| 2-Aug | 2.2 | 2.1 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 3-Aug | 2.1 | 2.2 | 2.2 | Z | 2.4 | 2.2 | 2.3 | 2.4 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.4 |
| 4-Aug | 2.4 | 2.3 | 2.4 | 2.4 | Z | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.4 | 2.2 | 2.5 |
| 5-Aug | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 |
| 6-Aug | Z | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 7-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.1 | 2.2 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.4 |
| 8-Aug | 2.5 | 2.4 | Z | 2.4 | 2.5 | 2.5 | 2.2 | 2.8 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.4 | 2.2 | 2.8 |
| 9-Aug | 2.8 | 2.7 | 2.6 | Z | 2.6 | 2.8 | 2.9 | 2.6 | 2.6 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 | 2.5 | 2.6 | 2.4 | 2.9 |
| 10-Aug | 2.6 | 2.6 | 2.6 | 2.5 | Z | 2.6 | 2.7 | 2.5 | 2.5 | 2.6 | 2.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.7 |
| 11-Aug | 2.3 | 2.2 | 2.3 | 2.4 | 2.5 | Z | 2.2 | 2.2 | 2.4 | 2.6 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.6 |
| 12-Aug | Z | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 13-Aug | 2.3 | Z | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | M | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.4 |
| 14-Aug | 2.3 | 2.3 | Z | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.5 |
| 15-Aug | 2.4 | 2.3 | 2.4 | Z | 2.5 | 2.7 | 2.6 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 |
| 16-Aug | 2.2 | 2.3 | 2.2 | 2.2 | Z | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.2 | 2.4 |
| 17-Aug | 2.4 | 2.3 | 2.5 | 2.4 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.5 |
| 18-Aug | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.0 | 2.2 | 2.4 |
| 19-Aug | 2.0 | Z | 2.3 | 2.4 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.2 | 2.6 |
| 20-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.4 | 2.1 | 2.4 |
| 21-Aug | 2.4 | 2.4 | 2.4 | Z | 2.4 | 2.5 | 2.7 | 2.6 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.7 |
| 22-Aug | 2.3 | 2.3 | 2.3 | 2.2 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 |
| 23-Aug | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | Z | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.4 | 2.5 | 2.5 | 2.4 | 2.5 | 2.5 | 2.3 | 2.1 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.4 | 2.5 |
| 24-Aug | Z | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.1 | 2.4 |
| 25-Aug | 2.5 | Z | 2.4 | 2.6 | 2.3 | 2.3 | 2.4 | 2.6 | 2.7 | 2.4 | C | C | C | C | 2.3 | PF | PF | PF | PF | PF | PF | PF | 2.4 | 2.4 | -- | 2.7 |
| 26-Aug | 2.5 | 2.4 | Z | 2.3 | 2.3 | 2.5 | 2.7 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.7 |
| 27-Aug | 2.3 | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.5 | 2.3 | 2.3 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 28-Aug | 2.1 | 2.2 | 2.1 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.1 | 2.3 |
| 30-Aug | Z | 2.3 | 2.3 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.5 | 2.6 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.8 |
| 31-Aug | 2.2 | Z | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.1 | 2.4 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | Diurnal Average | |
| | 2.8 | 2.7 | 2.6 | 2.6 | 2.6 | 2.8 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 | 2.4 | 2.7 | 2.5 | 2.4 | 2.5 | 2.5 | 2.3 | 2.3 | 2.3 | 2.3 | 2.6 | 2.5 | 2.6 | Diurnal Maximum | |

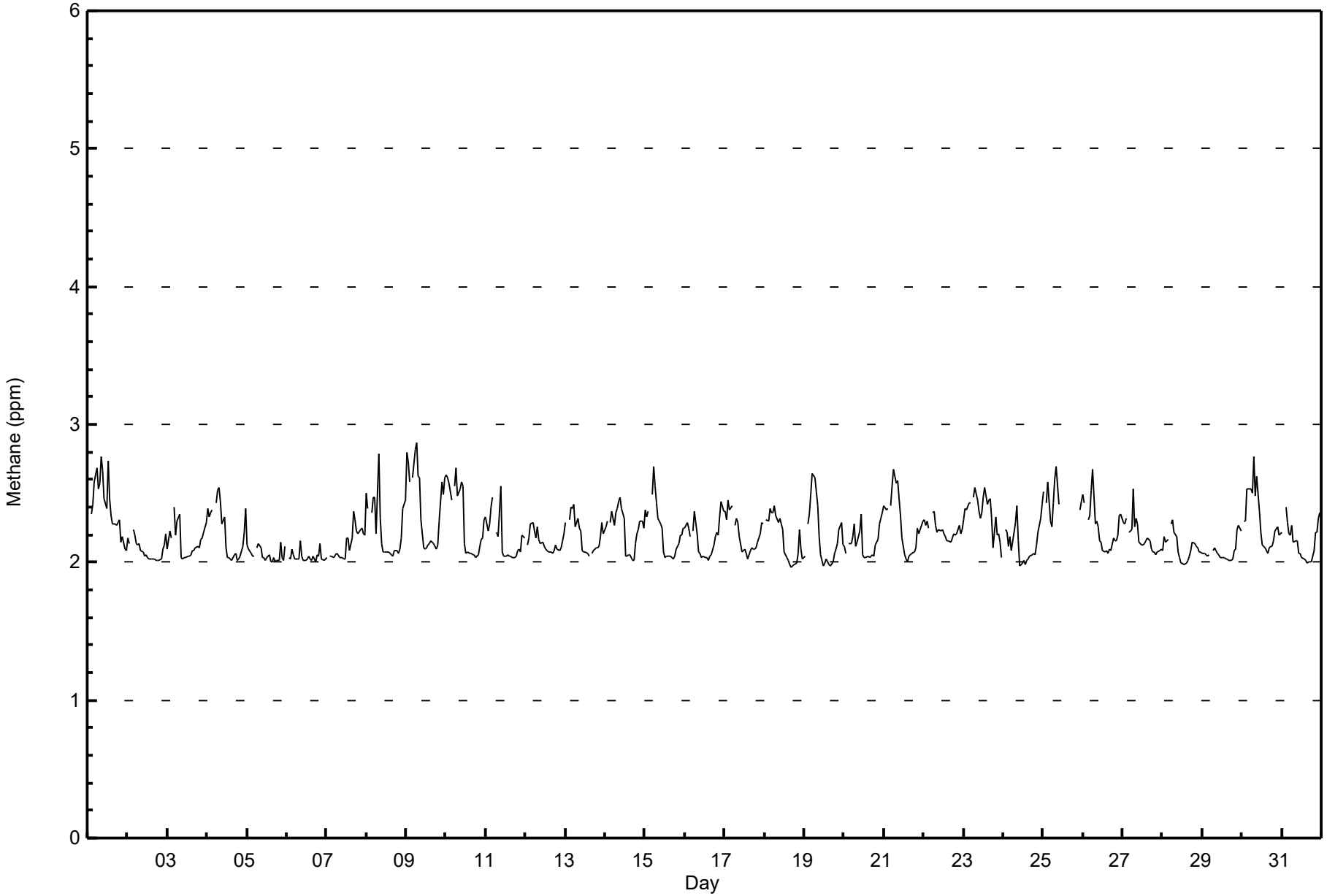
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Barge Landing - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 152 | 21.68 | 21.68 |
| 2.1 - 3.0 | 549 | 78.32 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Barge Landing - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 26 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 27 | 16 | 10 | 17 | 16 | 30 | 152 |
| 2.1 - 3.0 | 42 | 33 | 15 | 5 | 5 | 14 | 38 | 94 | 42 | 35 | 29 | 30 | 24 | 32 | 53 | 57 | 548 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 68 | 37 | 15 | 5 | 5 | 14 | 39 | 95 | 42 | 39 | 56 | 46 | 34 | 49 | 69 | 87 | 700 |

Total Number of Valid Hours: 700

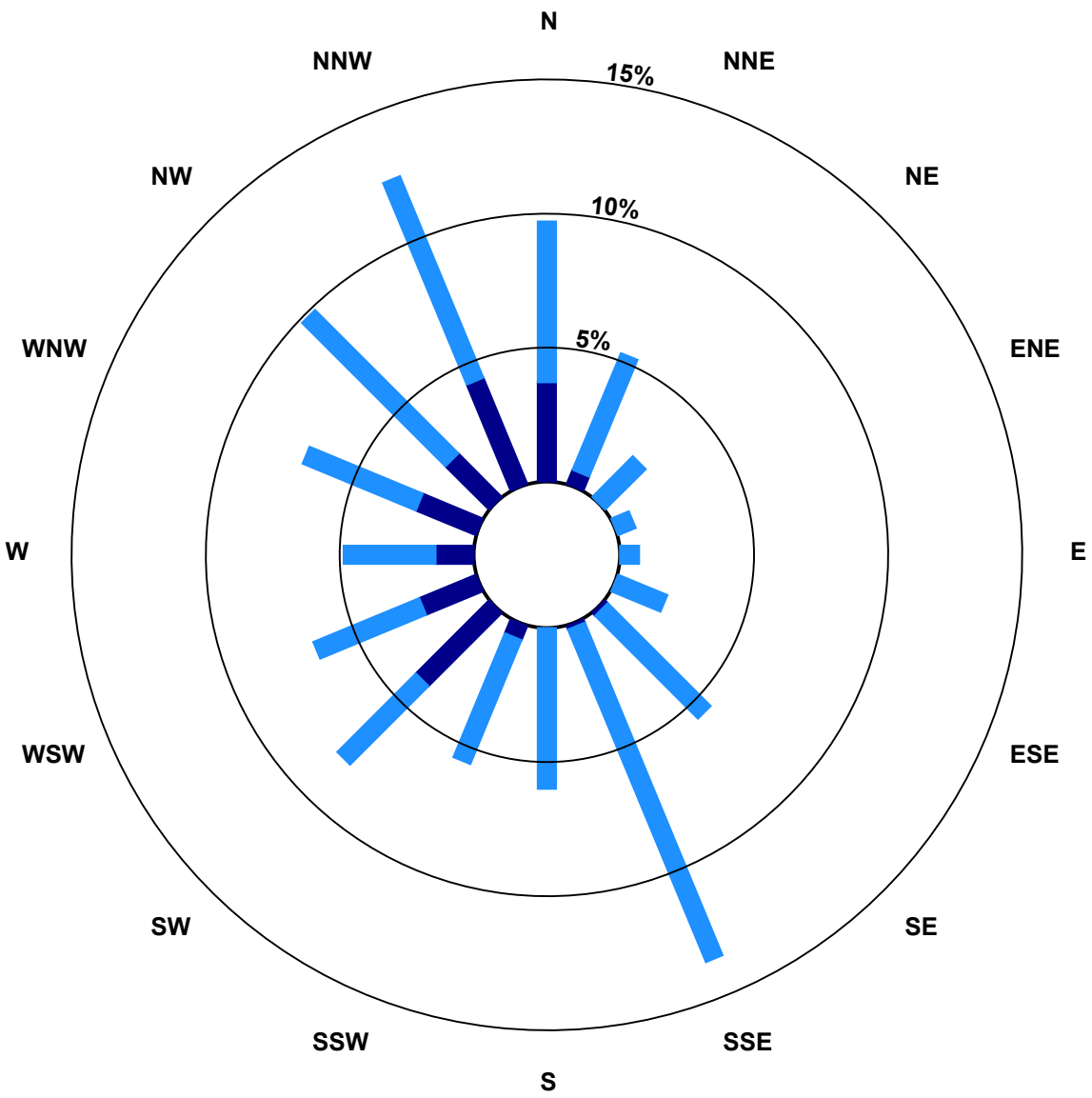
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Barge Landing




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

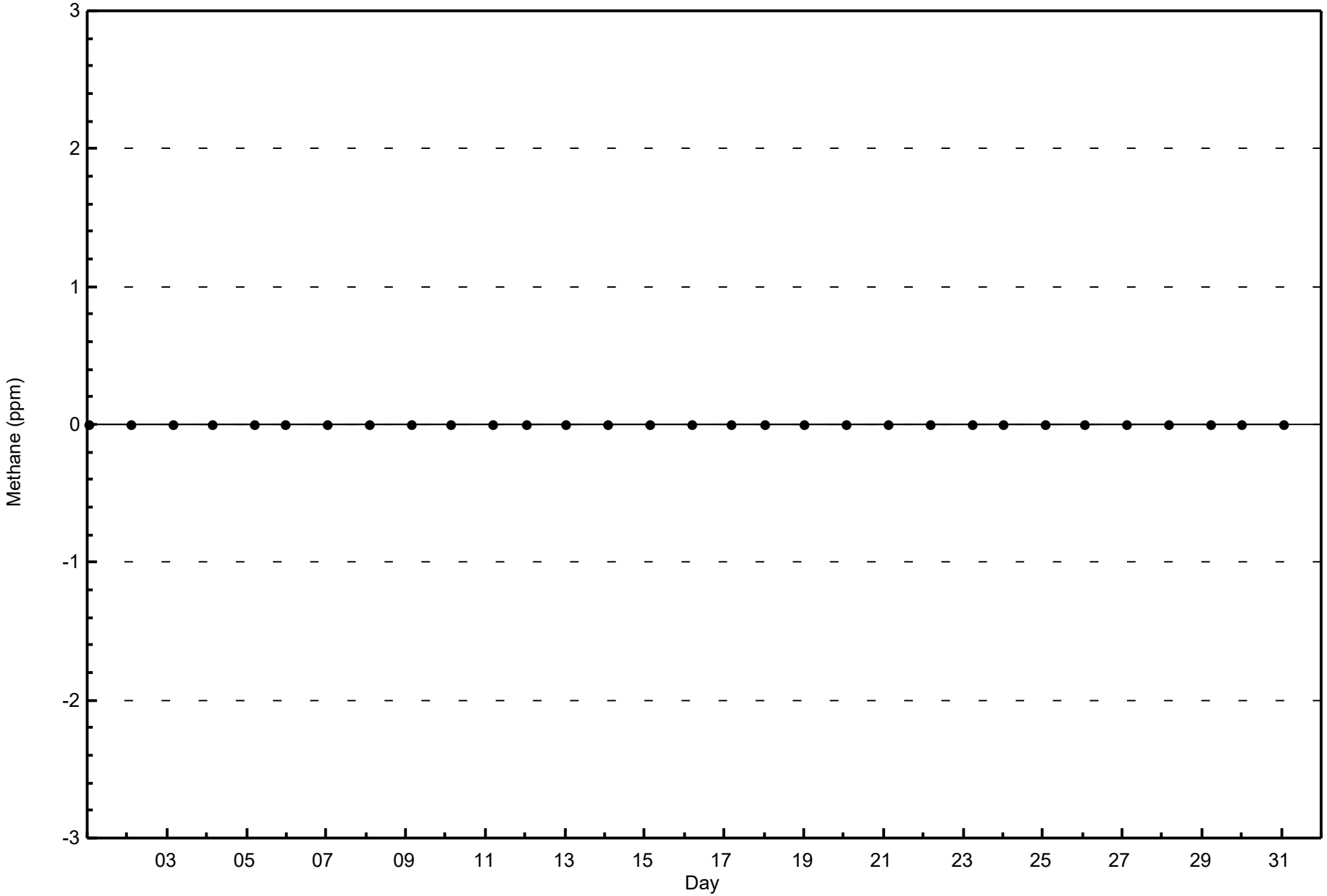
Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Barge Landing - August 2026**

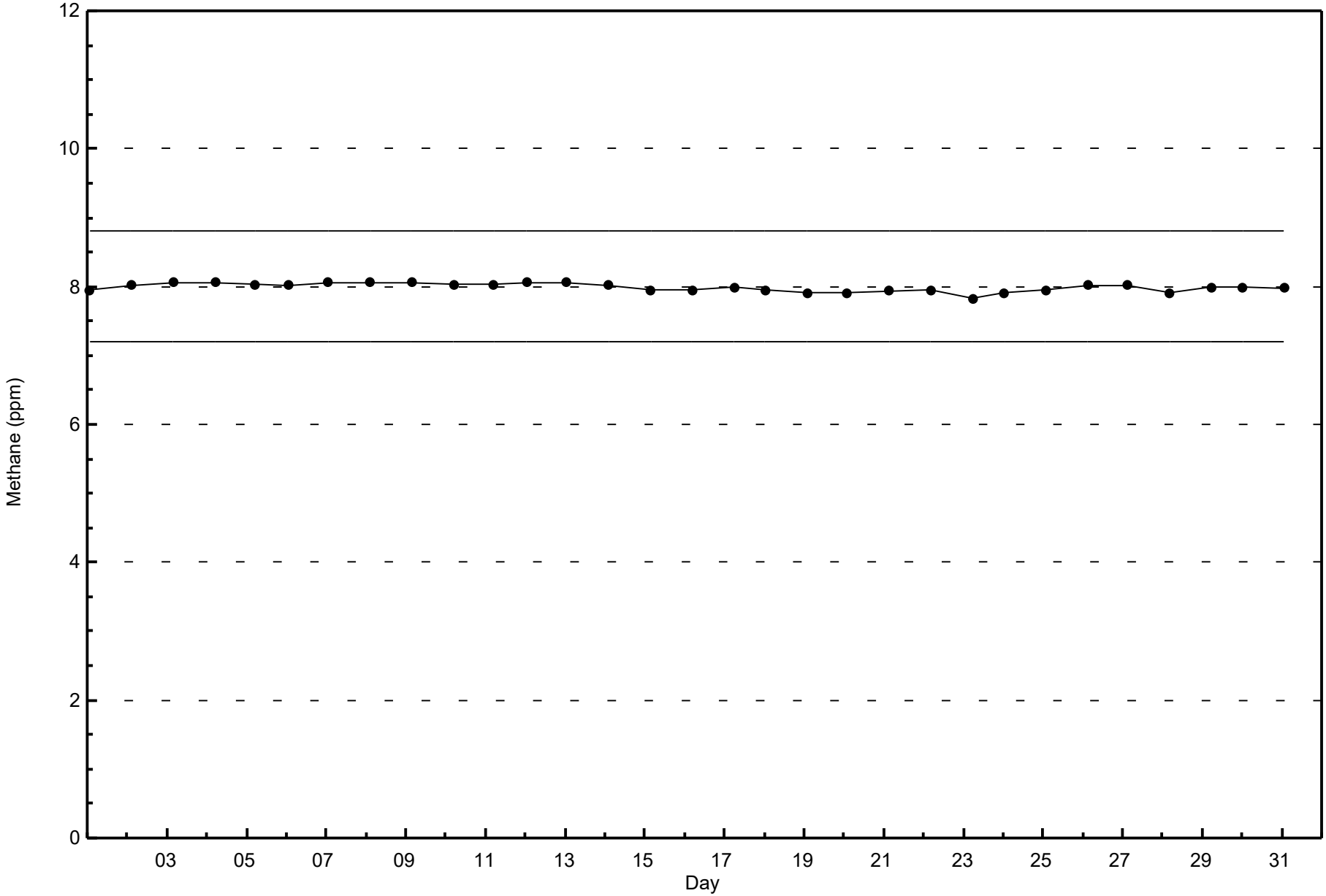


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Barge Landing - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Barge Landing - August 2026

Maximum Value: 62.8 ppb on Aug 21 06:00

Maximum Daily Average: 9.4 ppb on Aug 21

Minimum Value: 0.0 ppb on Aug 1 21:00

Minimum Daily Average: 0.0 ppb on Aug 2

Maximum Diurnal Average: 15.0 ppb at hour 6

Minimum Diurnal Average: 0.4 ppb at hour 19

Monthly Average: 3.50 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.7 $Q_3$ = 3.2 $P_{90}$ = 11.4 $P_{99}$ = 33.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 699 |
| Hours of Missing Data: | 45 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 4.0 | 14.2 | 15.3 | 13.2 | 16.4 | Z | 12.8 | 9.1 | 17.4 | 21.7 | 10.6 | 4.5 | 31.1 | 9.6 | 6.4 | 2.2 | 2.4 | 0.7 | 0.3 | 1.5 | 0.0 | 0.0 | 0.0 | 0.1 | 8.4 | 31.1 |
| 2-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 3-Aug | 0.0 | Z | 0.0 | 0.1 | 0.3 | 0.5 | 1.9 | 4.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.2 | 1.3 | 2.6 | 2.1 | 1.4 | 0.6 | 0.0 | 3.2 | 0.3 | 0.9 | 4.9 | 1.1 | 4.9 |
| 4-Aug | 5.4 | 3.9 | Z | 4.0 | 11.7 | 6.3 | 4.0 | 4.6 | 4.4 | 2.6 | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 2.3 | 11.7 |
| 5-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.0 | 0.4 | 2.2 | 1.5 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.3 | 2.2 |
| 6-Aug | 0.4 | 0.0 | 0.0 | 0.2 | Z | 0.4 | 0.0 | 0.4 | 2.4 | 1.1 | 0.3 | 0.0 | 0.3 | 0.9 | 1.0 | 0.1 | 0.4 | 0.0 | 0.6 | 0.3 | 0.2 | 0.0 | 0.1 | 0.0 | 0.4 | 2.4 |
| 7-Aug | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | Z | 0.3 | 0.2 | 0.3 | 0.0 | 0.1 | 0.0 | 5.1 | 4.5 | 1.9 | 1.7 | 9.5 | 4.1 | 2.8 | 1.2 | 0.4 | 0.2 | 0.1 | 0.1 | 1.4 | 9.5 |
| 8-Aug | Z | 3.2 | 2.1 | 4.0 | 15.1 | 7.4 | 1.1 | 14.2 | 4.8 | 6.0 | 3.3 | 3.0 | 3.1 | 3.2 | 1.3 | 1.0 | 0.6 | 1.6 | 0.9 | 0.8 | 0.7 | 1.3 | 25.1 | 27.6 | 5.7 | 27.6 |
| 9-Aug | 32.7 | Z | 20.3 | 12.8 | 11.2 | 11.5 | 14.8 | 11.6 | 20.4 | 9.4 | 1.6 | 1.0 | 1.2 | 2.5 | 2.1 | 3.0 | 2.0 | 1.1 | 0.7 | 0.6 | 0.3 | 8.9 | 15.6 | 14.4 | 8.7 | 32.7 |
| 10-Aug | 4.5 | 9.2 | Z | 3.4 | 6.1 | 18.0 | 25.3 | 16.7 | 8.8 | 13.0 | 29.6 | 2.2 | 1.2 | 1.1 | 0.6 | 0.7 | 0.7 | 0.5 | 0.3 | 0.5 | 0.3 | 0.5 | 0.4 | 1.9 | 6.3 | 29.6 |
| 11-Aug | 2.2 | 0.5 | 0.4 | Z | 7.4 | 1.8 | 0.6 | 1.0 | 6.2 | 17.1 | 2.0 | 1.6 | 1.3 | 1.0 | 0.8 | 0.9 | 0.5 | 1.4 | 0.6 | 0.7 | 0.5 | 0.5 | 4.0 | 1.1 | 2.4 | 17.1 |
| 12-Aug | 0.2 | 0.4 | 0.4 | 0.3 | Z | 0.6 | 0.5 | 0.8 | 0.8 | 1.4 | 2.0 | 1.1 | 0.9 | 0.8 | 1.4 | 1.1 | 0.9 | 1.2 | 1.2 | 0.6 | 0.4 | 0.2 | 0.4 | 2.6 | 0.9 | 2.6 |
| 13-Aug | 2.9 | 3.7 | 7.5 | 13.8 | 15.7 | Z | 6.7 | 18.8 | 14.1 | 10.9 | C | C | C | C | C | C | 0.7 | 0.5 | 0.8 | 1.2 | 0.4 | 0.3 | 2.1 | 0.7 | -- | 18.8 |
| 14-Aug | Z | 0.9 | 0.8 | 0.6 | 0.6 | 2.2 | 3.8 | 5.3 | 13.5 | 21.1 | 12.7 | 13.9 | 2.8 | 1.8 | 1.2 | 0.7 | 0.0 | 0.1 | 0.3 | 0.1 | 1.6 | 1.7 | 0.9 | 0.0 | 3.8 | 21.1 |
| 15-Aug | 1.9 | Z | 4.0 | 0.3 | 6.3 | 37.6 | 17.6 | 8.3 | 6.0 | 4.6 | 4.5 | 0.7 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.4 | 0.3 | 1.6 | 1.0 | 0.9 | 4.2 | 37.6 |
| 16-Aug | 0.9 | 0.5 | Z | 0.6 | 0.6 | 0.8 | 4.2 | 2.0 | 0.8 | 0.9 | 1.2 | 1.8 | 1.5 | 0.9 | 0.2 | 0.4 | 0.1 | 1.7 | 1.6 | 1.3 | 0.9 | 1.8 | 0.6 | 3.5 | 1.3 | 4.2 |
| 17-Aug | 3.2 | 1.2 | 2.4 | Z | 16.9 | 16.2 | 8.1 | 11.0 | 7.2 | 2.0 | 0.2 | 0.1 | 1.8 | 0.4 | 0.1 | 0.6 | 0.3 | 0.1 | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.2 | 3.2 | 16.9 |
| 18-Aug | 0.3 | 0.3 | 0.3 | 4.2 | Z | 9.8 | 12.5 | 4.5 | 3.0 | 3.1 | 1.4 | 0.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.7 | 0.2 | 0.2 | 1.9 | 12.5 |
| 19-Aug | 0.1 | 0.6 | 2.1 | 11.5 | 21.0 | Z | 16.7 | 9.4 | 6.4 | 0.4 | 0.1 | 0.0 | 0.3 | 0.6 | 0.4 | 0.0 | 0.0 | 0.5 | 0.4 | 0.6 | 1.8 | 5.5 | 2.4 | 0.0 | 3.5 | 21.0 |
| 20-Aug | Z | 0.0 | 0.0 | 3.0 | 4.9 | 26.0 | 12.9 | 1.1 | 2.0 | 5.4 | 21.6 | 2.1 | 1.5 | 1.7 | 1.3 | 0.8 | 0.6 | 0.7 | 0.2 | 0.8 | 0.4 | 0.4 | 5.8 | 1.6 | 4.1 | 26.0 |
| 21-Aug | 7.7 | Z | 0.9 | 6.9 | 23.9 | 62.8 | 60.2 | 21.8 | 15.6 | 8.0 | 3.6 | 0.9 | 0.5 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 1.0 | 1.0 | 9.4 | 62.8 |
| 22-Aug | 1.0 | 0.5 | Z | 1.4 | 14.9 | 29.7 | 8.0 | 4.1 | 4.9 | 3.3 | 2.2 | 3.1 | 2.4 | 3.6 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 29.7 |
| 23-Aug | 0.2 | 0.3 | 0.3 | Z | 1.3 | 3.1 | 4.8 | 6.4 | 3.7 | 1.5 | 3.3 | 1.0 | 1.1 | 0.7 | 0.6 | 0.6 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 0.0 | 0.1 | 1.3 | 6.4 |
| 24-Aug | 0.3 | 0.3 | 2.0 | 0.1 | Z | 0.4 | 32.7 | 17.7 | 6.0 | 2.3 | 0.3 | 0.3 | 0.4 | 0.0 | 1.2 | 0.6 | 0.5 | 0.0 | 0.0 | 0.1 | 1.8 | 8.5 | 2.0 | 6.6 | 3.7 | 32.7 |
| 25-Aug | 10.2 | 12.8 | 3.6 | 1.9 | 0.3 | Z | 2.6 | 13.7 | 27.1 | 14.7 | 8.7 | M | 2.7 | 2.4 | 2.6 | PF | PF | PF | PF | PF | PF | PF | 11.0 | 5.3 | -- | 27.1 |
| 26-Aug | Z | 5.3 | 3.2 | 5.7 | 6.5 | 62.5 | 33.8 | 4.6 | 2.9 | 3.5 | 4.3 | 3.8 | 0.8 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.5 | 6.0 | 62.5 |
| 27-Aug | 0.2 | Z | 1.2 | 0.3 | 12.2 | 35.3 | 11.4 | 1.1 | 3.8 | 4.0 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 35.3 |
| 28-Aug | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 1.0 | 0.2 | 0.7 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 3.3 | 0.7 | 2.2 | 0.6 | 0.2 | 0.4 | 3.3 |
| 30-Aug | 0.8 | 1.4 | 0.1 | 0.6 | Z | 42.4 | 36.9 | 19.9 | 21.6 | 9.7 | 2.6 | 2.0 | 1.8 | 3.1 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.6 | 2.0 | 0.3 | 0.7 | 6.5 | 42.4 |
| 31-Aug | 3.0 | 6.2 | 3.9 | 3.4 | 0.3 | Z | 3.6 | 1.5 | 2.7 | 3.3 | 1.3 | 0.9 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | 6.2 | 12.8 | 11.6 | 3.0 | 12.8 |
| | 3.2 | 2.5 | 2.7 | 3.5 | 7.5 | 15.0 | 10.9 | 7.0 | 6.8 | 5.5 | 4.1 | 1.6 | 2.1 | 1.3 | 0.9 | 0.6 | 0.7 | 0.5 | 0.4 | 0.6 | 0.8 | 1.5 | 2.8 | 2.8 | Diurnal Average | |
| | 32.7 | 14.2 | 20.3 | 13.8 | 23.9 | 62.8 | 60.2 | 21.8 | 27.1 | 21.7 | 29.6 | 13.9 | 31.1 | 9.6 | 6.4 | 3.0 | 9.5 | 4.1 | 2.8 | 3.3 | 7.0 | 8.9 | 25.1 | 27.6 | Diurnal Maximum | |

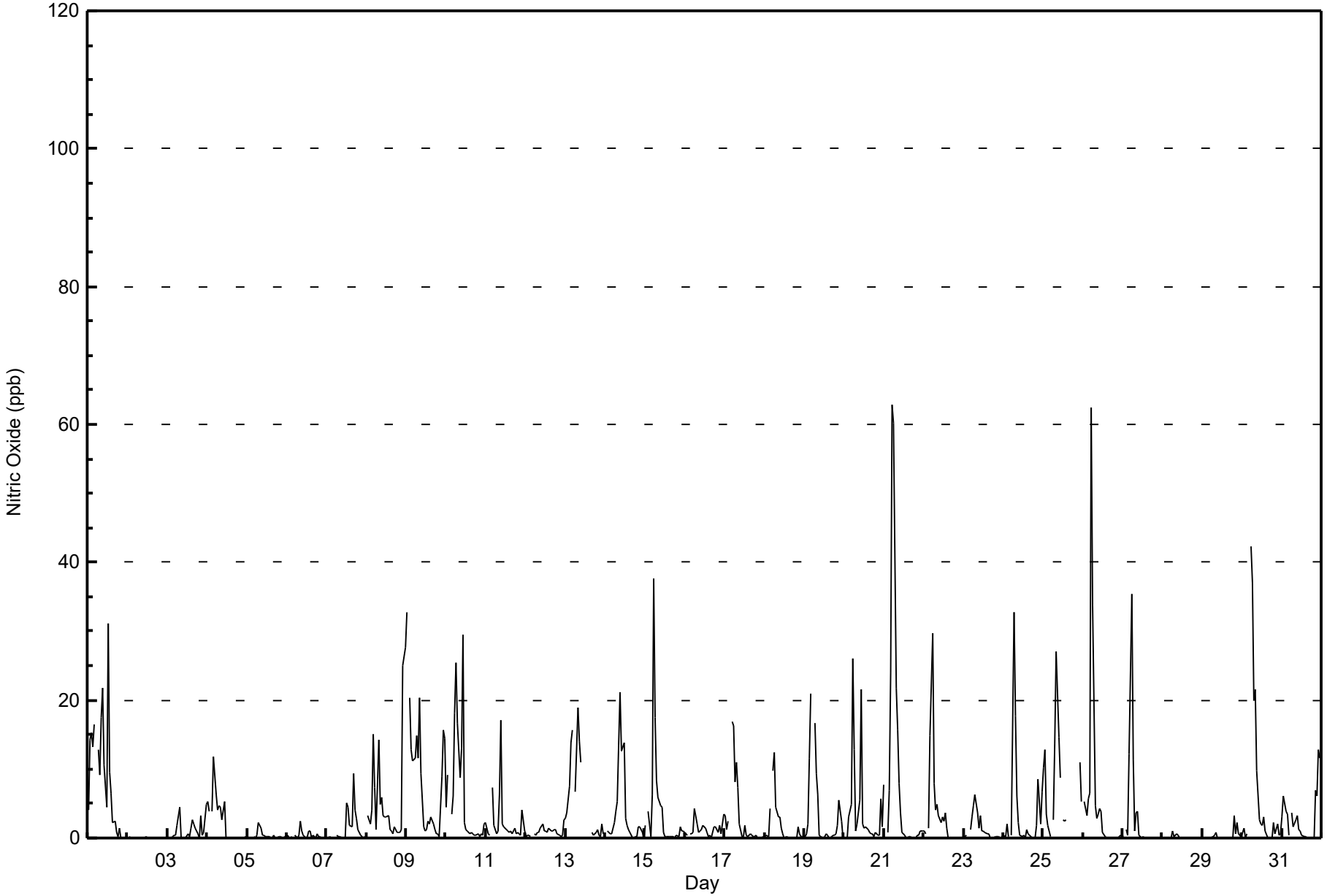
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Barge Landing - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 674 | 96.42 | 96.42 |
| 21 - 40 | 21 | 3.00 | 99.43 |
| 11 - 80 | 4 | 0.57 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 699

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Barge Landing - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 65 | 32 | 14 | 5 | 4 | 13 | 34 | 87 | 40 | 40 | 57 | 44 | 34 | 46 | 65 | 93 | 673 |
| 21 - 40 | 3 | 1 | 1 | 0 | 0 | 2 | 3 | 3 | 2 | 0 | 2 | 0 | 1 | 0 | 3 | 0 | 21 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 68 | 33 | 15 | 5 | 4 | 16 | 38 | 92 | 42 | 40 | 59 | 44 | 35 | 46 | 68 | 93 | 698 |

Total Number of Valid Hours: 698

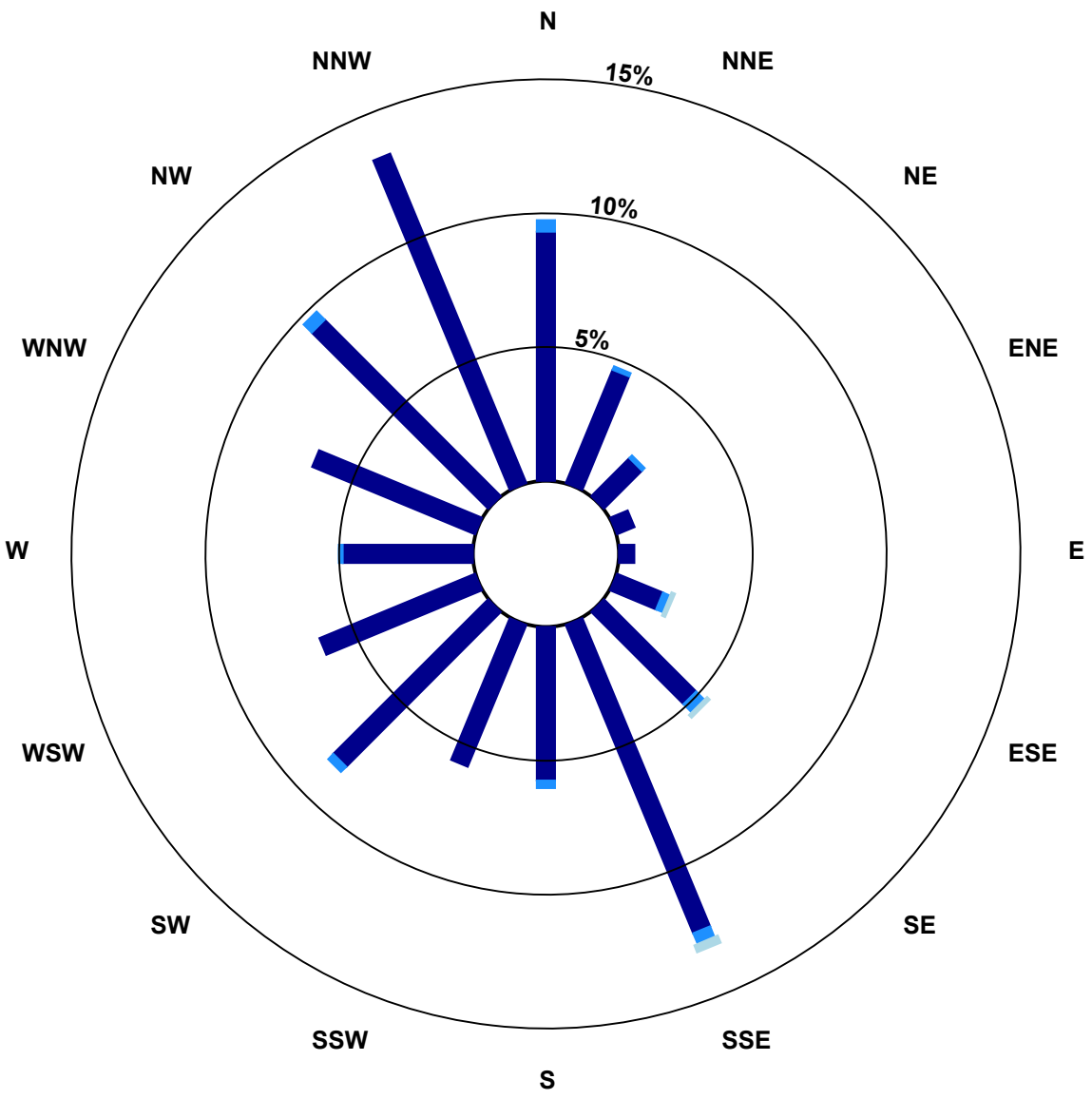
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Barge Landing




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

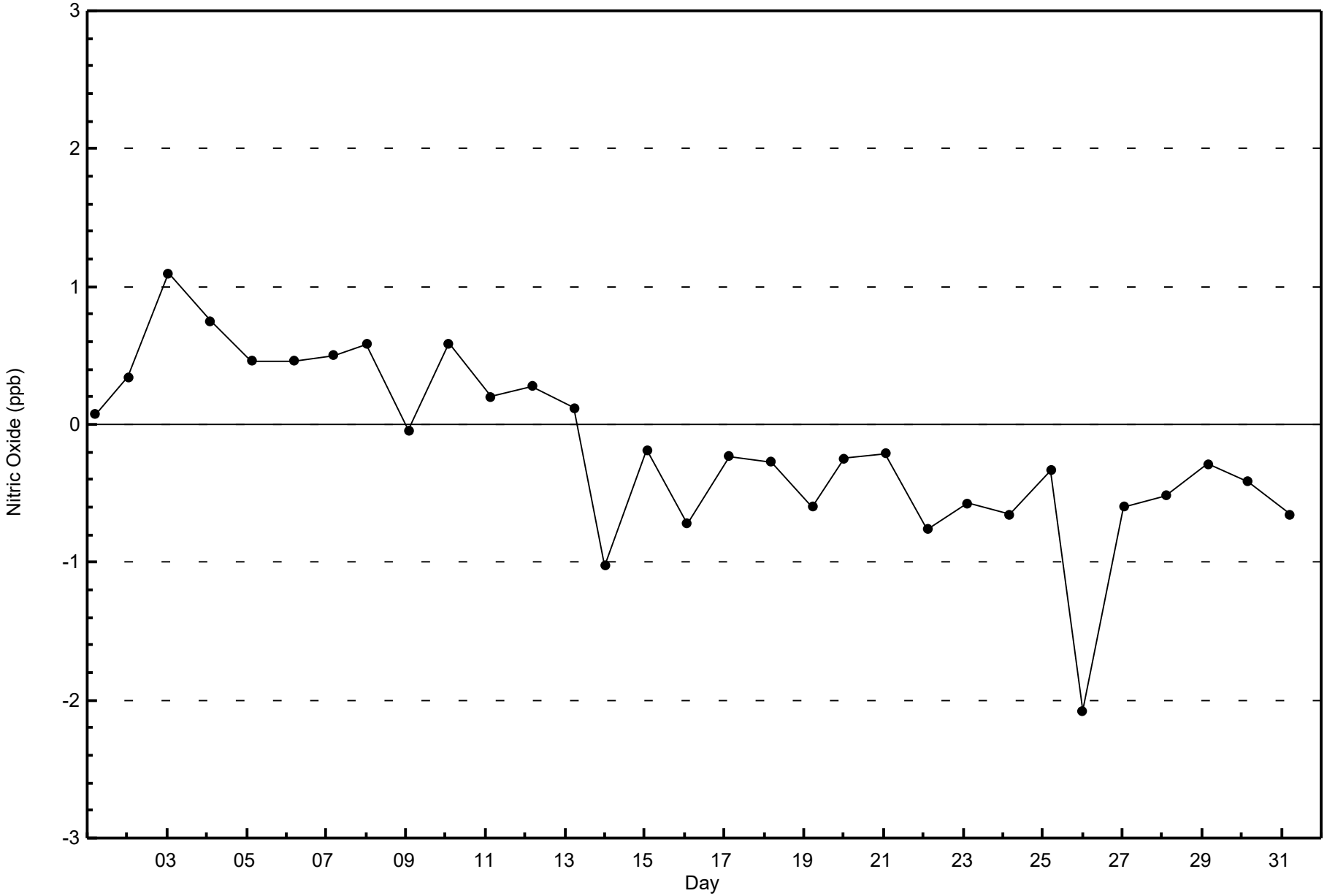
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Barge Landing - August 2026**

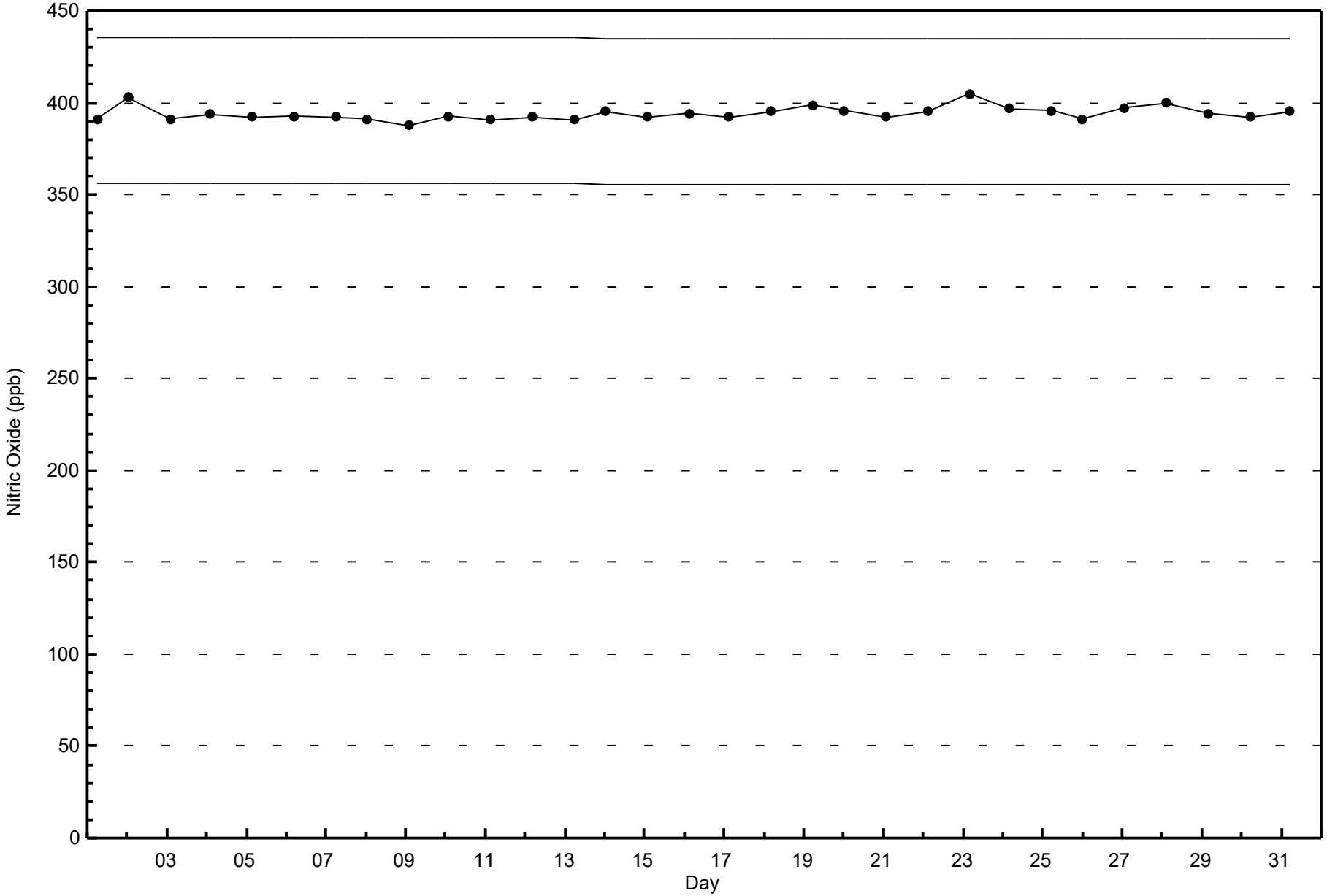


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Barge Landing - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Barge Landing - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 22.4 ppb on Aug 30 20:00
Maximum Daily Average: 8.4 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 2 15:00
Minimum Daily Average: 1.3 ppb on Aug 5
Maximum Diurnal Average: 7.8 ppb at hour 22
Minimum Diurnal Average: 2.9 ppb at hour 16
Monthly Average: 5.02 ppb
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.3 $Q_1$ = 1.7 Median = 4.2 $Q_3$ = 7.4 $P_{90}$ = 10.5 $P_{99}$ = 16.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 699 |
| Hours of Missing Data: | 45 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 4.6 | 5.7 | 6.9 | 5.9 | 3.9 | Z | 5.8 | 5.5 | 5.9 | 7.9 | 7.2 | 4.9 | 19.2 | 15.0 | 13.0 | 9.7 | 9.8 | 10.5 | 13.2 | 15.5 | 3.8 | 9.1 | 3.8 | 5.3 | 8.4 | 19.2 |
| 2-Aug | Z | 2.8 | 2.7 | 5.4 | 5.9 | 4.8 | 4.7 | 4.4 | 2.8 | 1.4 | 0.4 | 1.9 | 1.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 7.2 | 7.4 | 8.8 | 2.7 | 8.8 |
| 3-Aug | 4.1 | Z | 7.8 | 9.0 | 13.9 | 7.4 | 7.0 | 8.7 | 0.2 | 0.0 | 0.3 | 0.9 | 2.0 | 1.4 | 3.6 | 6.4 | 5.9 | 5.8 | 4.2 | 2.3 | 8.6 | 5.8 | 6.2 | 6.2 | 5.1 | 13.9 |
| 4-Aug | 5.3 | 5.0 | Z | 9.7 | 8.4 | 6.8 | 5.7 | 6.4 | 5.7 | 4.2 | 6.9 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.9 | 3.8 | 0.5 | 0.2 | 0.7 | 2.8 | 6.6 | 10.2 | 4.0 | 10.2 |
| 5-Aug | 2.3 | 0.4 | 0.2 | Z | 0.4 | 0.2 | 1.2 | 5.3 | 2.6 | 1.1 | 0.6 | 0.5 | 0.8 | 1.3 | 0.1 | 0.4 | 3.1 | 0.5 | 0.3 | 0.2 | 4.1 | 0.3 | 0.1 | 3.3 | 1.3 | 5.3 |
| 6-Aug | 5.3 | 0.0 | 0.2 | 2.0 | Z | 0.4 | 0.1 | 0.1 | 3.5 | 1.2 | 0.3 | 0.3 | 1.3 | 2.8 | 2.7 | 0.5 | 1.4 | 0.1 | 4.8 | 4.8 | 3.6 | 0.4 | 0.3 | 0.1 | 1.6 | 5.3 |
| 7-Aug | 0.4 | 0.1 | 0.4 | 0.1 | 0.2 | Z | 0.7 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 7.1 | 9.4 | 6.2 | 5.8 | 13.6 | 10.0 | 10.8 | 9.0 | 9.5 | 6.1 | 4.8 | 3.8 | 4.3 | 13.6 |
| 8-Aug | Z | 4.2 | 3.0 | 2.1 | 3.6 | 2.5 | 0.8 | 6.1 | 4.1 | 5.3 | 3.7 | 4.2 | 4.5 | 4.4 | 3.3 | 1.8 | 1.0 | 4.6 | 3.8 | 3.8 | 8.1 | 10.0 | 22.3 | 19.2 | 5.5 | 22.3 |
| 9-Aug | 13.8 | Z | 9.1 | 7.3 | 5.7 | 5.3 | 4.2 | 6.2 | 9.9 | 7.1 | 3.0 | 2.5 | 2.9 | 6.7 | 8.3 | 10.4 | 9.2 | 5.4 | 3.8 | 4.2 | 8.4 | 16.7 | 17.0 | 12.3 | 7.8 | 17.0 |
| 10-Aug | 7.2 | 6.8 | Z | 7.2 | 6.0 | 8.3 | 7.7 | 6.8 | 4.7 | 6.5 | 17.6 | 5.2 | 2.8 | 3.1 | 2.0 | 2.4 | 2.2 | 2.5 | 2.6 | 3.8 | 3.4 | 10.7 | 4.2 | 4.6 | 5.6 | 17.6 |
| 11-Aug | 4.8 | 1.2 | 0.2 | Z | 4.3 | 2.0 | 0.7 | 0.9 | 7.1 | 16.9 | 4.1 | 2.9 | 3.0 | 2.1 | 1.9 | 2.1 | 2.0 | 3.2 | 2.9 | 4.2 | 8.2 | 9.1 | 14.7 | 8.3 | 4.6 | 16.9 |
| 12-Aug | 1.3 | 0.3 | 1.6 | 3.4 | Z | 2.2 | 0.7 | 1.5 | 1.6 | 3.8 | 3.6 | 2.3 | 1.6 | 1.6 | 2.6 | 2.8 | 2.1 | 2.9 | 4.4 | 3.2 | 5.0 | 3.1 | 6.6 | 10.7 | 3.0 | 10.7 |
| 13-Aug | 9.2 | 10.3 | 12.3 | 13.1 | 12.8 | Z | 8.2 | 10.4 | 10.0 | 9.0 | C | C | C | C | C | C | 1.0 | 2.0 | 4.5 | 7.0 | 1.9 | 1.6 | 3.1 | 0.7 | -- | 13.1 |
| 14-Aug | Z | 2.8 | 2.4 | 2.4 | 1.8 | 3.0 | 2.4 | 4.3 | 9.1 | 14.5 | 13.6 | 15.1 | 5.1 | 4.2 | 3.4 | 2.8 | 0.5 | 0.6 | 2.9 | 4.2 | 8.4 | 10.0 | 6.5 | 5.2 | 5.4 | 15.1 |
| 15-Aug | 5.2 | Z | 8.2 | 6.3 | 7.8 | 7.0 | 6.9 | 6.2 | 5.5 | 5.6 | 6.1 | 1.4 | 0.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.2 | 0.5 | 3.1 | 3.9 | 7.5 | 5.2 | 5.9 | 4.0 | 8.2 |
| 16-Aug | 4.8 | 1.9 | Z | 0.0 | 2.2 | 3.5 | 8.3 | 8.4 | 6.3 | 5.6 | 3.0 | 4.1 | 3.8 | 3.0 | 1.0 | 1.8 | 2.7 | 9.0 | 9.1 | 8.5 | 7.4 | 8.6 | 5.6 | 6.2 | 5.0 | 9.1 |
| 17-Aug | 7.0 | 6.7 | 4.7 | Z | 5.2 | 4.8 | 4.6 | 6.6 | 5.4 | 2.9 | 1.1 | 0.6 | 3.4 | 2.2 | 1.5 | 3.6 | 3.4 | 3.8 | 4.2 | 6.5 | 2.8 | 4.0 | 4.9 | 5.3 | 4.1 | 7.0 |
| 18-Aug | 8.4 | 9.2 | 8.8 | 11.3 | Z | 13.4 | 12.1 | 7.7 | 6.7 | 5.6 | 3.8 | 2.6 | 0.5 | 0.6 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 8.0 | 14.6 | 6.9 | 0.7 | 5.3 | 14.6 |
| 19-Aug | 0.3 | 2.5 | 3.6 | 10.6 | 10.9 | Z | 9.1 | 7.2 | 6.1 | 0.6 | 0.3 | 0.1 | 0.7 | 2.8 | 2.8 | 2.1 | 0.2 | 5.5 | 6.4 | 10.6 | 13.7 | 13.2 | 9.8 | 1.6 | 5.2 | 13.7 |
| 20-Aug | Z | 1.1 | 1.7 | 4.5 | 3.7 | 7.4 | 3.8 | 1.4 | 2.9 | 5.6 | 14.9 | 4.9 | 4.1 | 4.9 | 4.8 | 4.3 | 5.4 | 5.8 | 6.8 | 10.6 | 10.7 | 11.2 | 10.3 | 9.5 | 6.1 | 14.9 |
| 21-Aug | 7.0 | Z | 3.7 | 4.3 | 5.6 | 9.1 | 9.2 | 7.3 | 8.9 | 9.0 | 7.2 | 3.4 | 1.5 | 0.9 | 0.4 | 2.3 | 2.2 | 1.6 | 1.8 | 3.9 | 6.6 | 10.3 | 13.2 | 8.1 | 5.5 | 13.2 |
| 22-Aug | 6.9 | 5.4 | Z | 8.4 | 15.7 | 15.7 | 10.9 | 7.5 | 8.2 | 7.6 | 6.0 | 7.8 | 6.6 | 9.2 | 6.4 | 3.0 | 2.9 | 3.4 | 3.6 | 4.7 | 4.0 | 5.6 | 5.5 | 3.1 | 6.9 | 15.7 |
| 23-Aug | 2.8 | 4.9 | 6.0 | Z | 7.2 | 8.7 | 8.5 | 8.5 | 6.0 | 4.0 | 7.8 | 2.7 | 3.9 | 5.4 | 6.0 | 6.6 | 5.5 | 2.1 | 0.5 | 10.9 | 7.1 | 4.1 | 2.2 | 0.4 | 5.3 | 10.9 |
| 24-Aug | 1.9 | 1.7 | 3.2 | 3.1 | Z | 2.8 | 9.5 | 8.0 | 10.4 | 5.4 | 0.1 | 0.2 | 1.2 | 0.3 | 4.7 | 4.4 | 3.2 | 3.3 | 4.7 | 7.8 | 13.9 | 14.0 | 10.5 | 10.8 | 5.4 | 14.0 |
| 25-Aug | 7.1 | 6.7 | 5.9 | 3.6 | 2.5 | Z | 1.4 | 7.6 | 12.6 | 12.0 | 9.9 | M | 6.7 | 7.7 | 10.9 | PF | PF | PF | PF | PF | PF | PF | 16.4 | 9.9 | -- | 16.4 |
| 26-Aug | Z | 7.8 | 8.5 | 10.2 | 9.7 | 9.2 | 7.7 | 5.0 | 4.5 | 6.4 | 9.9 | 10.1 | 4.0 | 3.3 | 1.9 | 1.1 | 2.3 | 2.1 | 4.3 | 2.2 | 2.8 | 9.4 | 16.8 | 16.7 | 6.8 | 16.8 |
| 27-Aug | 11.5 | Z | 12.8 | 8.8 | 15.7 | 19.2 | 14.0 | 4.0 | 8.1 | 10.3 | 2.6 | 1.1 | 4.1 | 3.5 | 4.9 | 6.2 | 4.9 | 1.3 | 0.4 | 0.0 | 0.0 | 0.2 | 0.2 | 1.2 | 5.9 | 19.2 |
| 28-Aug | 0.5 | 2.6 | Z | 3.9 | 3.9 | 1.7 | 6.6 | 4.3 | 5.2 | 2.6 | 1.4 | 0.2 | 0.8 | 1.0 | 0.3 | 0.6 | 0.8 | 1.5 | 0.6 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 | 1.8 | 6.6 |
| 29-Aug | 0.6 | 0.4 | 0.5 | Z | 0.8 | 1.8 | 2.6 | 1.9 | 2.3 | 0.9 | 0.6 | 0.6 | 0.3 | 0.3 | 0.1 | 0.5 | 0.4 | 0.5 | 2.1 | 9.3 | 9.0 | 9.1 | 5.8 | 4.5 | 2.4 | 9.3 |
| 30-Aug | 6.9 | 7.1 | 6.3 | 4.1 | Z | 9.4 | 7.7 | 6.1 | 11.8 | 10.1 | 5.6 | 5.5 | 6.5 | 11.0 | 6.3 | 2.7 | 2.0 | 1.4 | 3.7 | 22.4 | 15.0 | 16.9 | 10.3 | 11.2 | 8.3 | 22.4 |
| 31-Aug | 13.4 | 14.4 | 12.5 | 10.9 | 3.2 | Z | 2.9 | 0.9 | 2.6 | 4.1 | 2.2 | 1.9 | 1.0 | 0.6 | 0.5 | 0.2 | 0.1 | 0.1 | 0.0 | 0.9 | 11.0 | 12.3 | 11.0 | 6.9 | 4.9 | 14.4 |
| | 5.5 | 4.3 | 5.1 | 6.1 | 6.2 | 6.3 | 5.7 | 5.3 | 5.8 | 5.7 | 4.8 | 3.0 | 3.4 | 3.6 | 3.3 | 2.9 | 3.0 | 3.1 | 3.6 | 5.5 | 6.3 | 7.8 | 7.7 | 6.5 | Diurnal Average | |
| | 13.8 | 14.4 | 12.8 | 13.1 | 15.7 | 19.2 | 14.0 | 10.4 | 12.6 | 16.9 | 17.6 | 15.1 | 19.2 | 15.0 | 13.0 | 10.4 | 13.6 | 10.5 | 13.2 | 22.4 | 15.0 | 16.9 | 22.3 | 19.2 | Diurnal Maximum | |

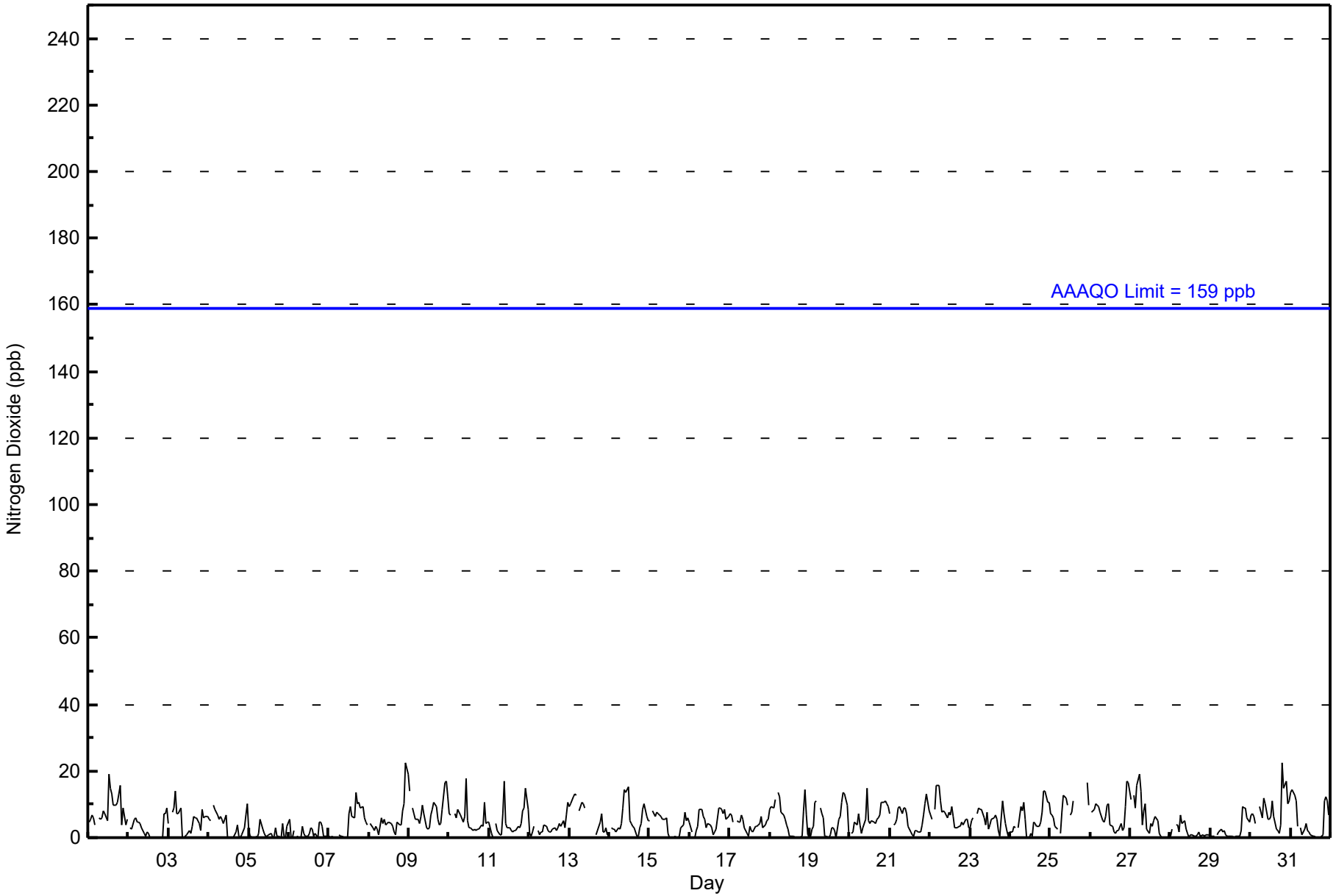
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Barge Landing - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Barge Landing - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 697 | 99.71 | 99.71 |
| 21 - 40 | 2 | 0.29 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 699

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Barge Landing - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 67 | 33 | 15 | 5 | 4 | 16 | 38 | 92 | 41 | 40 | 59 | 44 | 35 | 46 | 68 | 93 | 696 |
| 21 - 40 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 68 | 33 | 15 | 5 | 4 | 16 | 38 | 92 | 42 | 40 | 59 | 44 | 35 | 46 | 68 | 93 | 698 |

Total Number of Valid Hours: 698

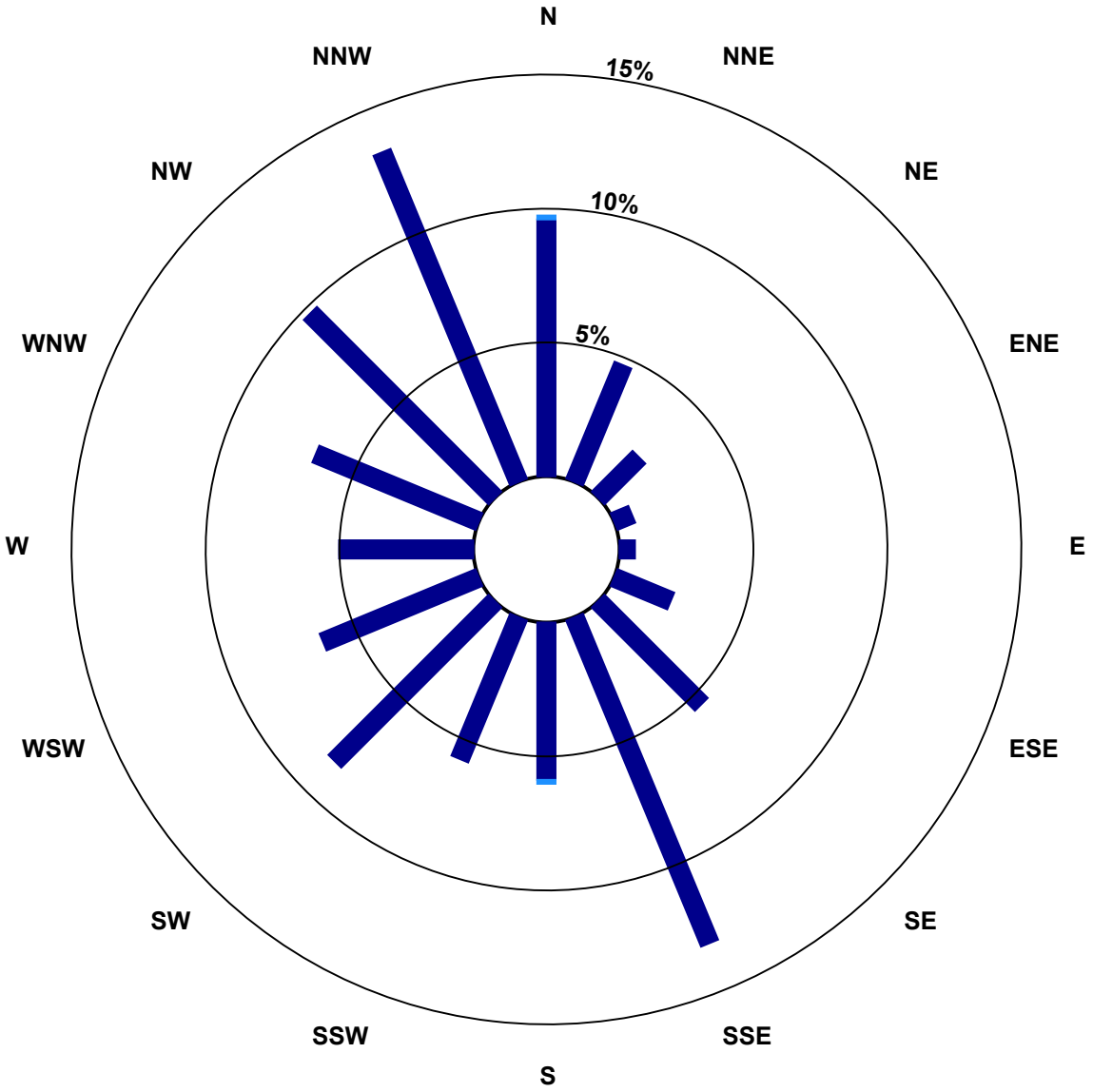
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Barge Landing




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

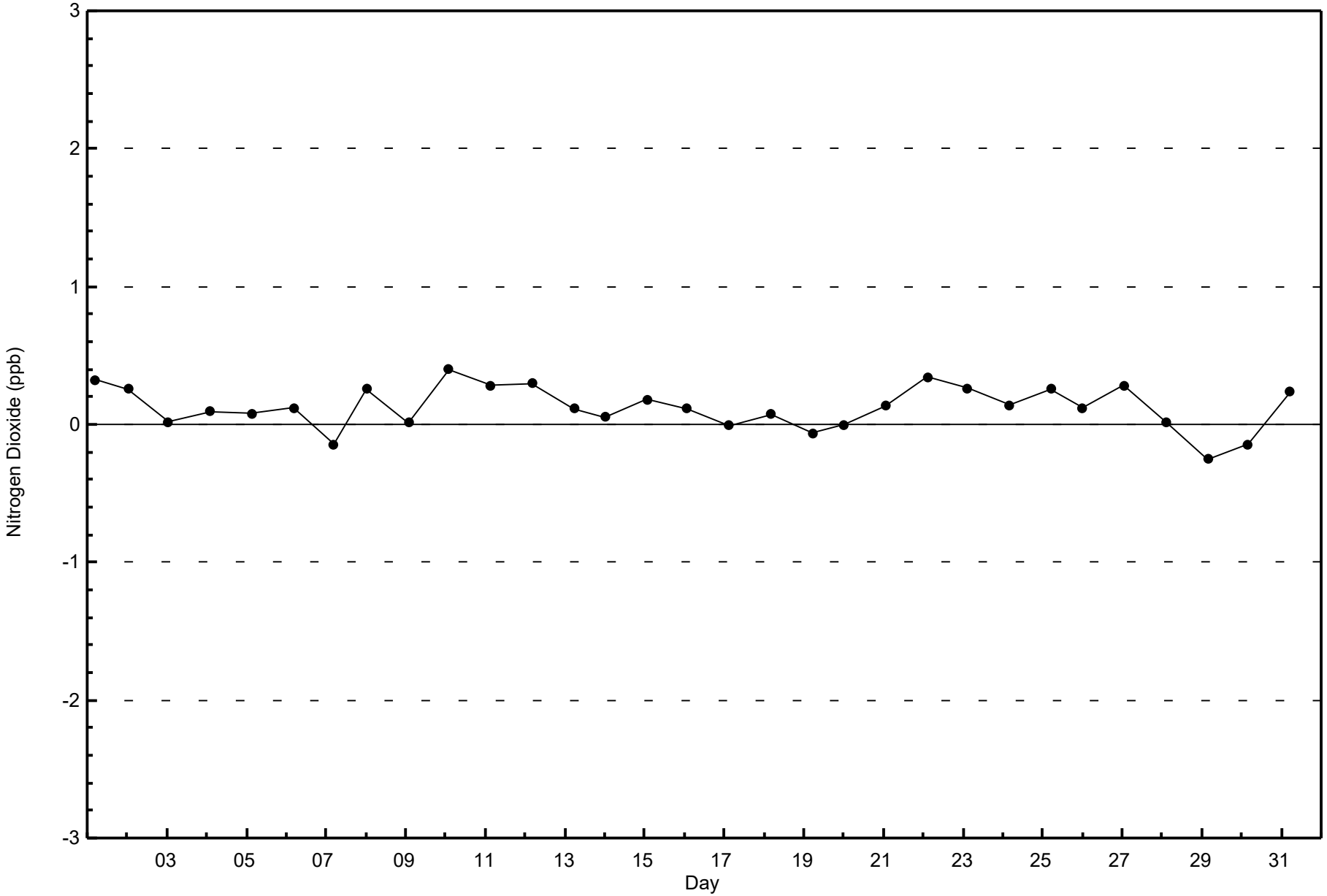
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Barge Landing - August 2026**

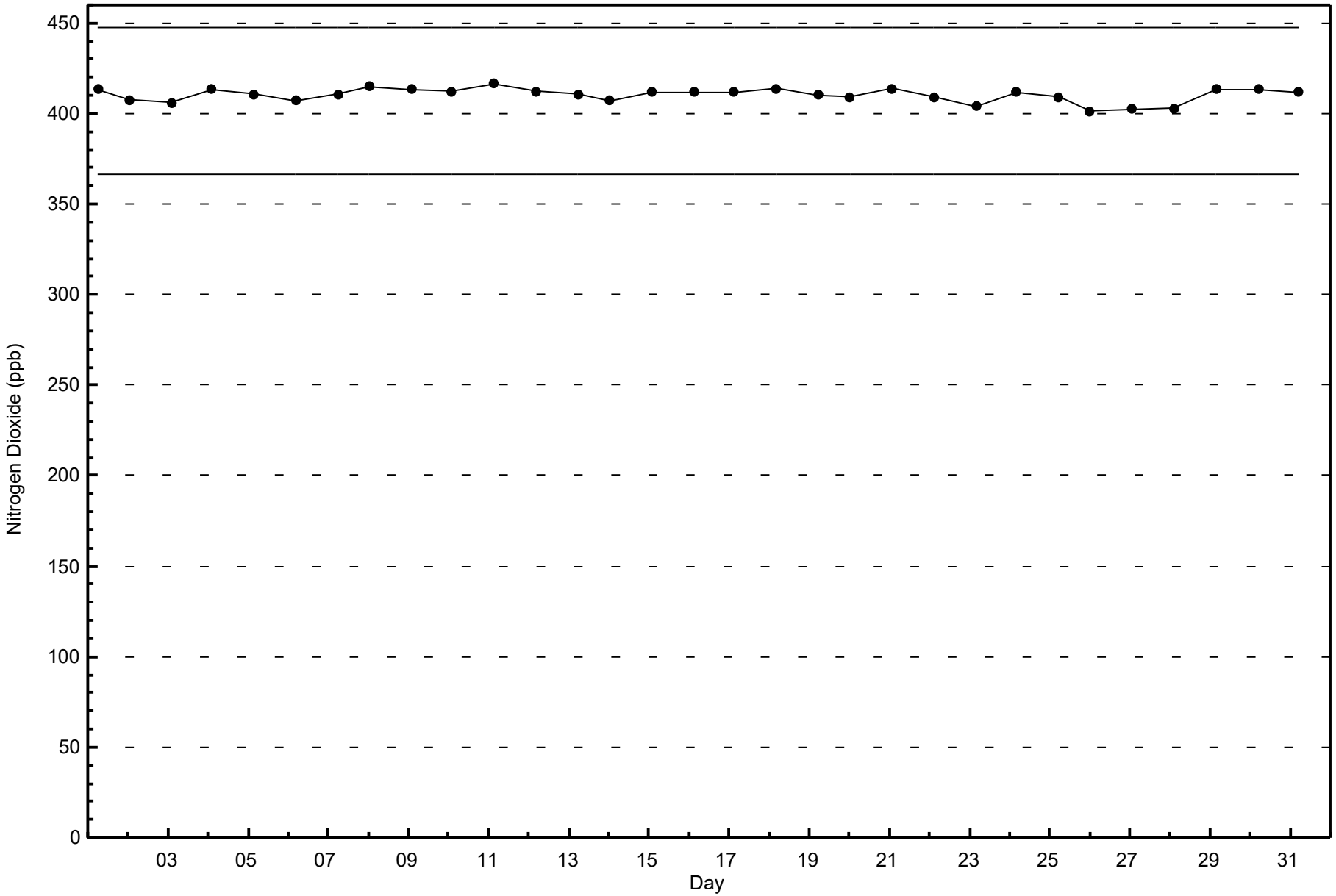


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Barge Landing - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Barge Landing - August 2026

Maximum Value: 71.9 ppb on Aug 21 06:00

Maximum Daily Average: 16.8 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 2 15:00

Minimum Daily Average: 1.6 ppb on Aug 5

Maximum Diurnal Average: 21.3 ppb at hour 6

Minimum Diurnal Average: 3.5 ppb at hour 16

Monthly Average: 8.52 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.4 $Q_1$ = 2.1 Median = 5.3 $Q_3$ = 11.3 $P_{90}$ = 19.8 $P_{99}$ = 47.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 699 |
| Hours of Missing Data: | 45 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 8.6 | 19.9 | 22.2 | 19.1 | 20.3 | Z | 18.6 | 14.6 | 23.3 | 29.6 | 17.8 | 9.4 | 50.3 | 24.6 | 19.4 | 11.9 | 12.2 | 11.2 | 13.5 | 17.0 | 3.8 | 9.1 | 3.8 | 5.4 | 16.8 | 50.3 |
| 2-Aug | Z | 2.9 | 2.7 | 5.4 | 5.9 | 4.8 | 4.7 | 4.5 | 2.8 | 1.4 | 0.4 | 2.1 | 1.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 7.2 | 7.4 | 8.8 | 2.7 | 8.8 |
| 3-Aug | 4.1 | Z | 7.8 | 9.1 | 14.2 | 7.9 | 8.9 | 13.1 | 0.2 | 0.0 | 0.3 | 1.0 | 2.7 | 1.6 | 4.9 | 9.0 | 8.0 | 7.2 | 4.8 | 2.3 | 11.8 | 6.1 | 7.1 | 11.1 | 6.2 | 14.2 |
| 4-Aug | 10.7 | 8.9 | Z | 13.7 | 20.1 | 13.1 | 9.7 | 11.0 | 10.1 | 6.8 | 12.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.9 | 3.9 | 0.5 | 0.2 | 0.7 | 2.8 | 6.7 | 10.3 | 6.3 | 20.1 |
| 5-Aug | 2.4 | 0.5 | 0.3 | Z | 0.7 | 0.2 | 1.6 | 7.5 | 4.1 | 1.5 | 1.0 | 0.7 | 0.9 | 1.5 | 0.2 | 0.5 | 3.4 | 0.6 | 0.3 | 0.3 | 4.3 | 0.3 | 0.1 | 3.4 | 1.6 | 7.5 |
| 6-Aug | 5.7 | 0.0 | 0.2 | 2.2 | Z | 0.8 | 0.1 | 0.5 | 5.9 | 2.3 | 0.6 | 0.3 | 1.6 | 3.7 | 3.7 | 0.6 | 1.8 | 0.1 | 5.4 | 5.1 | 3.8 | 0.4 | 0.4 | 0.1 | 2.0 | 5.9 |
| 7-Aug | 0.4 | 0.1 | 0.5 | 0.1 | 0.2 | Z | 1.0 | 0.6 | 0.7 | 0.2 | 0.2 | 0.2 | 12.2 | 13.9 | 8.1 | 7.5 | 23.1 | 14.1 | 13.6 | 10.2 | 9.9 | 6.3 | 4.9 | 3.9 | 5.7 | 23.1 |
| 8-Aug | Z | 7.4 | 5.1 | 6.1 | 18.7 | 9.9 | 1.9 | 20.3 | 8.9 | 11.3 | 7.0 | 7.2 | 7.6 | 7.6 | 4.6 | 2.8 | 1.6 | 6.2 | 4.7 | 4.6 | 8.8 | 11.3 | 47.4 | 46.8 | 11.2 | 47.4 |
| 9-Aug | 46.5 | Z | 29.4 | 20.1 | 16.9 | 16.8 | 19.0 | 17.8 | 30.3 | 16.5 | 4.6 | 3.5 | 4.1 | 9.2 | 10.4 | 13.4 | 11.2 | 6.5 | 4.5 | 4.8 | 8.7 | 25.6 | 32.6 | 26.7 | 16.5 | 46.5 |
| 10-Aug | 11.7 | 16.0 | Z | 10.6 | 12.1 | 26.3 | 33.0 | 23.5 | 13.5 | 19.5 | 47.2 | 7.4 | 4.0 | 4.2 | 2.6 | 3.1 | 2.9 | 3.0 | 2.9 | 4.3 | 3.7 | 11.2 | 4.6 | 6.5 | 11.9 | 47.2 |
| 11-Aug | 7.0 | 1.7 | 0.6 | Z | 11.7 | 3.8 | 1.3 | 1.9 | 13.3 | 34.0 | 6.1 | 4.5 | 4.3 | 3.1 | 2.7 | 3.0 | 2.5 | 4.6 | 3.5 | 4.9 | 8.7 | 9.6 | 18.7 | 9.4 | 7.0 | 34.0 |
| 12-Aug | 1.5 | 0.7 | 2.0 | 3.7 | Z | 2.8 | 1.2 | 2.3 | 2.4 | 5.2 | 5.6 | 3.4 | 2.5 | 2.4 | 4.0 | 3.9 | 3.0 | 4.1 | 5.6 | 3.8 | 5.4 | 3.3 | 7.0 | 13.3 | 3.9 | 13.3 |
| 13-Aug | 12.1 | 14.0 | 19.8 | 26.9 | 28.5 | Z | 14.9 | 29.2 | 24.1 | 19.9 | C | C | C | C | C | C | 1.7 | 2.5 | 5.3 | 8.2 | 2.3 | 1.9 | 5.2 | 1.4 | -- | 29.2 |
| 14-Aug | Z | 3.7 | 3.2 | 3.0 | 2.4 | 5.2 | 6.2 | 9.6 | 22.6 | 35.6 | 26.3 | 29.0 | 7.9 | 6.0 | 4.6 | 3.5 | 0.5 | 0.7 | 3.2 | 4.3 | 10.0 | 11.7 | 7.4 | 5.2 | 9.2 | 35.6 |
| 15-Aug | 7.1 | Z | 12.2 | 6.6 | 14.1 | 44.6 | 24.5 | 14.5 | 11.5 | 10.2 | 10.6 | 2.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.6 | 3.5 | 4.2 | 9.1 | 6.2 | 6.8 | 8.3 | 44.6 |
| 16-Aug | 5.7 | 2.4 | Z | 0.6 | 2.8 | 4.3 | 12.5 | 10.4 | 7.1 | 6.5 | 4.2 | 5.9 | 5.3 | 3.9 | 1.2 | 2.2 | 2.8 | 10.7 | 10.7 | 9.8 | 8.3 | 10.4 | 6.2 | 9.7 | 6.2 | 12.5 |
| 17-Aug | 10.2 | 7.9 | 7.1 | Z | 22.1 | 21.0 | 12.7 | 17.6 | 12.6 | 4.9 | 1.3 | 0.7 | 5.2 | 2.6 | 1.6 | 4.2 | 3.7 | 3.9 | 4.4 | 6.9 | 2.9 | 4.0 | 4.9 | 5.5 | 7.3 | 22.1 |
| 18-Aug | 8.7 | 9.5 | 9.1 | 15.5 | Z | 23.2 | 24.6 | 12.2 | 9.7 | 8.7 | 5.2 | 3.2 | 0.5 | 0.7 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 9.6 | 15.3 | 7.1 | 0.9 | 7.2 | 24.6 |
| 19-Aug | 0.4 | 3.1 | 5.7 | 22.1 | 31.9 | Z | 25.8 | 16.6 | 12.5 | 1.0 | 0.4 | 0.1 | 1.0 | 3.4 | 3.2 | 2.1 | 0.2 | 6.0 | 6.8 | 11.2 | 15.5 | 18.7 | 12.2 | 1.6 | 8.8 | 31.9 |
| 20-Aug | Z | 1.1 | 1.7 | 7.5 | 8.6 | 33.4 | 16.7 | 2.5 | 4.9 | 11.0 | 36.5 | 7.0 | 5.6 | 6.6 | 6.1 | 5.1 | 6.0 | 6.5 | 7.0 | 11.4 | 11.1 | 11.6 | 16.1 | 11.1 | 10.2 | 36.5 |
| 21-Aug | 14.7 | Z | 4.6 | 11.2 | 29.5 | 71.9 | 69.4 | 29.1 | 24.5 | 17.0 | 10.8 | 4.3 | 2.0 | 0.9 | 0.4 | 2.6 | 2.3 | 1.6 | 1.8 | 3.9 | 7.0 | 10.7 | 14.2 | 9.1 | 14.9 | 71.9 |
| 22-Aug | 7.9 | 5.9 | Z | 9.8 | 30.6 | 45.4 | 18.9 | 11.6 | 13.1 | 10.9 | 8.2 | 10.9 | 9.0 | 12.8 | 7.8 | 3.0 | 2.9 | 3.4 | 3.6 | 4.7 | 4.0 | 5.6 | 5.5 | 3.1 | 10.4 | 45.4 |
| 23-Aug | 3.0 | 5.2 | 6.3 | Z | 8.5 | 11.8 | 13.3 | 14.9 | 9.7 | 5.5 | 11.1 | 3.7 | 5.0 | 6.1 | 6.6 | 7.2 | 5.6 | 2.1 | 0.5 | 11.1 | 7.3 | 4.4 | 2.2 | 0.5 | 6.6 | 14.9 |
| 24-Aug | 2.2 | 2.0 | 5.2 | 3.2 | Z | 3.2 | 42.2 | 25.7 | 16.4 | 7.7 | 0.4 | 0.5 | 1.6 | 0.3 | 5.9 | 5.0 | 3.7 | 3.3 | 4.7 | 7.9 | 15.7 | 22.5 | 12.5 | 17.4 | 9.1 | 42.2 |
| 25-Aug | 17.3 | 19.5 | 9.5 | 5.5 | 2.8 | Z | 4.0 | 21.3 | 39.7 | 26.7 | 18.6 | M | 9.4 | 10.1 | 13.5 | PF | PF | PF | PF | PF | PF | PF | 27.4 | 15.2 | -- | 39.7 |
| 26-Aug | Z | 13.1 | 11.7 | 15.9 | 16.2 | 71.7 | 41.5 | 9.6 | 7.4 | 9.9 | 14.2 | 13.9 | 4.8 | 3.6 | 1.9 | 1.1 | 2.3 | 2.1 | 4.3 | 2.2 | 2.8 | 9.4 | 17.1 | 17.2 | 12.8 | 71.7 |
| 27-Aug | 11.7 | Z | 14.0 | 9.1 | 27.9 | 54.5 | 25.4 | 5.1 | 11.9 | 14.3 | 3.1 | 1.1 | 4.2 | 3.5 | 4.9 | 6.2 | 4.9 | 1.3 | 0.4 | 0.0 | 0.0 | 0.2 | 0.2 | 1.2 | 8.9 | 54.5 |
| 28-Aug | 0.5 | 2.7 | Z | 3.9 | 3.9 | 1.7 | 7.6 | 4.5 | 5.9 | 3.0 | 1.4 | 0.2 | 0.8 | 1.0 | 0.3 | 0.6 | 0.8 | 1.5 | 0.6 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 | 1.9 | 7.6 |
| 29-Aug | 0.6 | 0.4 | 0.5 | Z | 0.8 | 1.8 | 2.7 | 2.3 | 3.0 | 0.9 | 0.6 | 0.6 | 0.3 | 0.3 | 0.1 | 0.6 | 0.4 | 0.5 | 2.1 | 12.6 | 9.7 | 11.3 | 6.4 | 4.7 | 2.7 | 12.6 |
| 30-Aug | 7.7 | 8.5 | 6.4 | 4.7 | Z | 51.8 | 44.6 | 26.0 | 33.4 | 19.8 | 8.2 | 7.5 | 8.3 | 14.1 | 7.3 | 2.7 | 2.0 | 1.4 | 3.7 | 24.6 | 15.6 | 18.9 | 10.6 | 11.9 | 14.8 | 51.8 |
| 31-Aug | 16.4 | 20.6 | 16.4 | 14.3 | 3.5 | Z | 6.5 | 2.4 | 5.3 | 7.4 | 3.5 | 2.8 | 1.5 | 0.8 | 0.7 | 0.2 | 0.1 | 0.1 | 0.0 | 0.9 | 18.0 | 18.5 | 23.8 | 18.5 | 7.9 | 23.8 |
| | 8.7 | 6.8 | 7.9 | 9.6 | 13.6 | 21.3 | 16.6 | 12.3 | 12.6 | 11.3 | 8.9 | 4.6 | 5.5 | 5.0 | 4.3 | 3.5 | 3.7 | 3.7 | 4.0 | 6.1 | 7.2 | 9.3 | 10.5 | 9.3 | Diurnal Average | |
| | 46.5 | 20.6 | 29.4 | 26.9 | 31.9 | 71.9 | 69.4 | 29.2 | 39.7 | 35.6 | 47.2 | 29.0 | 50.3 | 24.6 | 19.4 | 13.4 | 23.1 | 14.1 | 13.6 | 24.6 | 18.0 | 25.6 | 47.4 | 46.8 | Diurnal Maximum | |

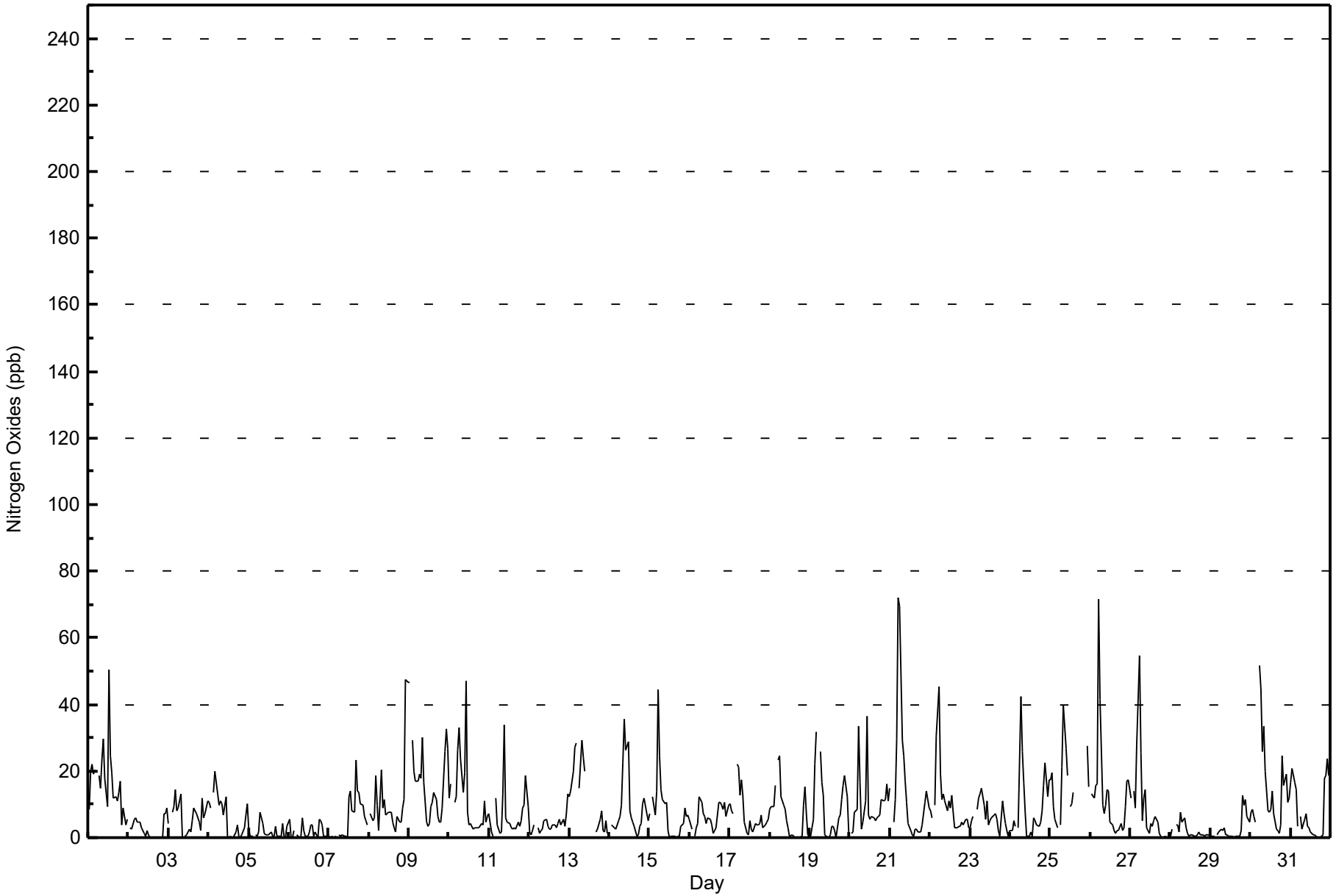
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Barge Landing - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Barge Landing - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 635 | 90.84 | 90.84 |
| 21 - 40 | 49 | 7.01 | 97.85 |
| 11 - 80 | 15 | 2.15 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 699

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Barge Landing - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 63 | 29 | 13 | 3 | 4 | 13 | 32 | 81 | 34 | 37 | 56 | 43 | 32 | 45 | 61 | 88 | 634 |
| 21 - 40 | 3 | 3 | 1 | 2 | 0 | 2 | 4 | 7 | 7 | 3 | 2 | 1 | 2 | 1 | 6 | 5 | 49 |
| 11 - 80 | 2 | 1 | 1 | 0 | 0 | 1 | 2 | 4 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 15 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 68 | 33 | 15 | 5 | 4 | 16 | 38 | 92 | 42 | 40 | 59 | 44 | 35 | 46 | 68 | 93 | 698 |

Total Number of Valid Hours: 698

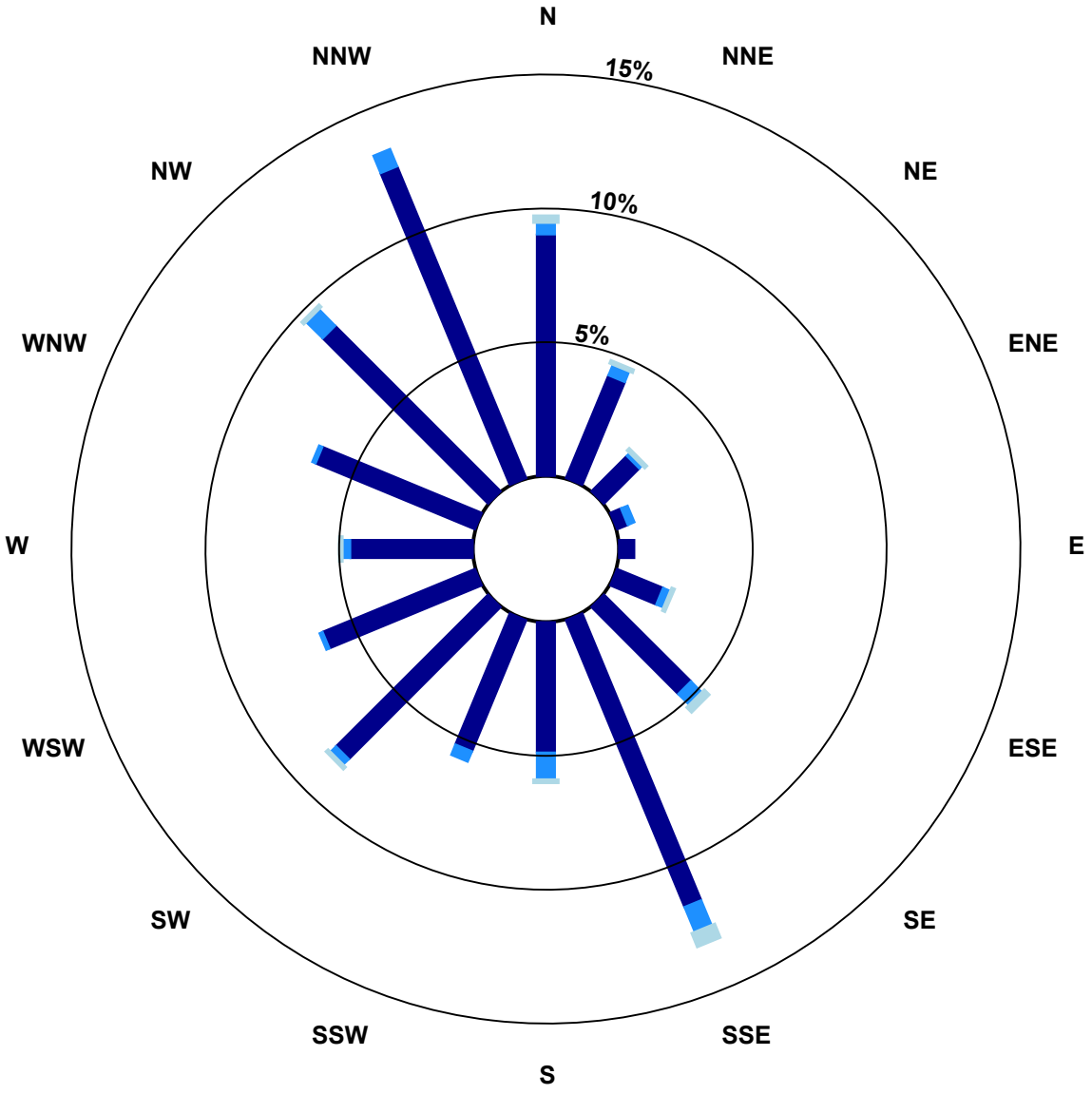
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Barge Landing




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

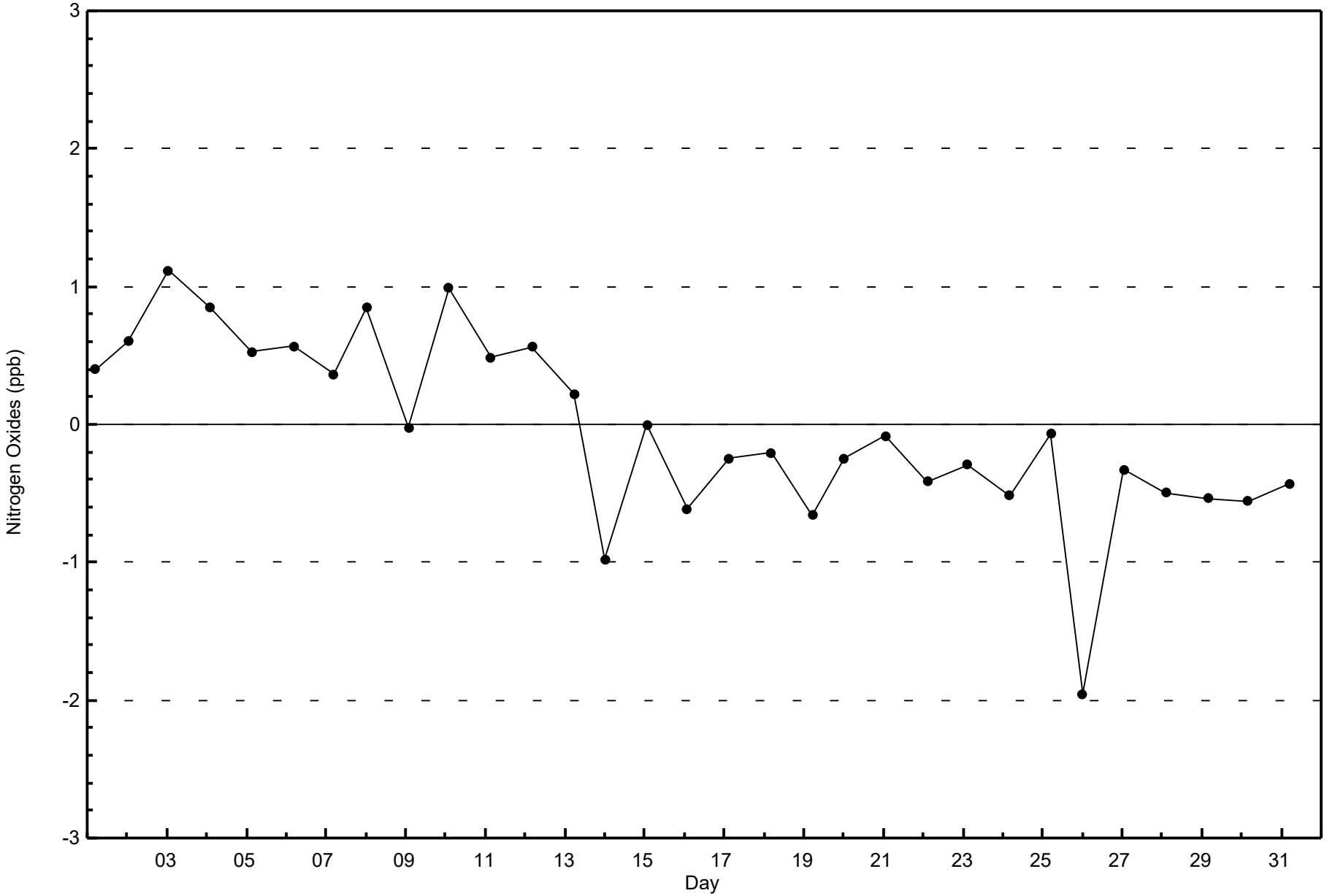
Total Number of Valid Hours: 698

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Barge Landing - August 2026**

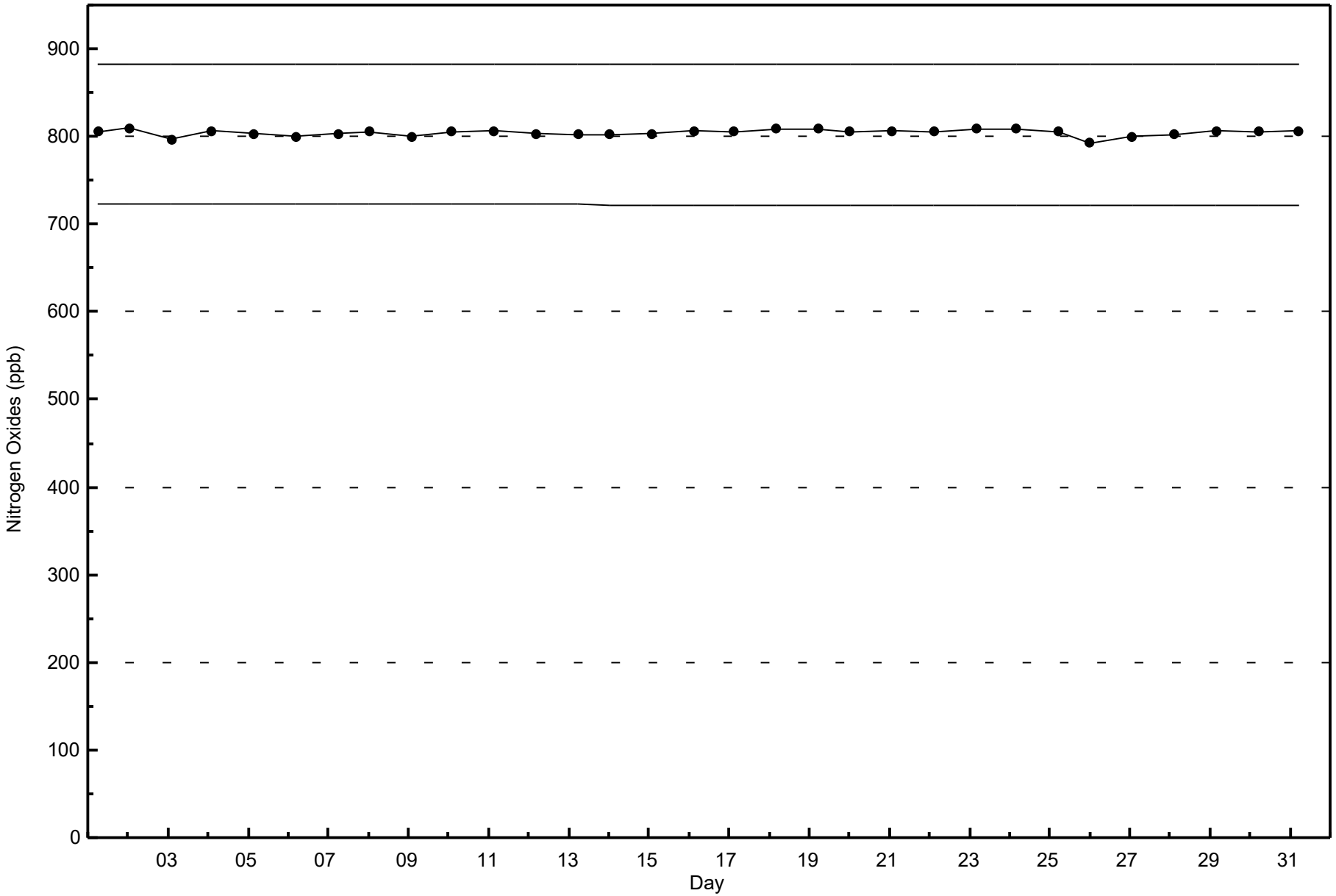


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Barge Landing - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Barge Landing - August 2026

Number of Exceedances (AAAQO): 1-hr: 3 24-hr: 0

Maximum Value: 98.9 $\mu g/m^3$ on Aug 19 21:00

Maximum Daily Average: 26.3 $\mu g/m^3$ on Aug 17

Minimum Value: 0.7 $\mu g/m^3$ on Aug 6 08:00

Minimum Daily Average: 1.6 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 15.2 $\mu g/m^3$ at hour 6

Minimum Diurnal Average: 10.6 $\mu g/m^3$ at hour 13

Monthly Average: 12.50 $\mu g/m^3$

Percentiles: $P_1$ = 0.9 $P_{10}$ = 3.0 $Q_1$ = 5.2 Median = 9.1 $Q_3$ = 17.0 $P_{90}$ = 24.8 $P_{99}$ = 48.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 735 |
| Hours of Missing Data: | 9 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 6.5 | 7.2 | 8.2 | 8.7 | 9.9 | 10.3 | 8.4 | 7.7 | 7.4 | 11.5 | 13.6 | 18.1 | 22.3 | 23.2 | 24.3 | 26.7 | 26.8 | 27.8 | 28.1 | 25.3 | 20.8 | 20.1 | 16.9 | 9.6 | 16.2 | 28.1 |
| 2-Aug | 10.0 | 12.4 | 15.5 | 15.4 | 13.0 | 10.5 | 9.8 | 8.3 | 6.2 | 6.1 | 5.6 | 4.0 | 3.3 | 3.6 | 3.5 | 3.5 | 3.3 | 2.8 | 3.1 | 2.9 | 2.3 | 3.8 | 3.4 | 3.2 | 6.5 | 15.5 |
| 3-Aug | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 2.8 | 2.6 | 3.0 | 1.8 | 2.1 | 4.8 | 4.9 | 5.9 | 3.9 | 5.5 | 7.2 | 9.0 | 7.7 | 6.3 | 5.3 | 9.4 | 8.1 | 8.1 | 8.9 | 5.1 | 9.4 |
| 4-Aug | 9.2 | 8.4 | 9.3 | 9.2 | 9.9 | 9.4 | 7.2 | 9.0 | 12.5 | 16.5 | 19.5 | 10.1 | 7.3 | 8.0 | 5.7 | 6.7 | 7.6 | 7.2 | 5.5 | 4.9 | 6.1 | 6.8 | 10.4 | 12.0 | 9.1 | 19.5 |
| 5-Aug | 13.9 | 16.1 | 16.4 | 14.9 | 13.4 | 10.8 | 9.0 | 6.2 | 5.5 | 5.4 | 5.4 | 4.7 | 4.4 | 4.3 | 3.3 | 2.6 | 3.4 | 3.0 | 2.5 | 2.4 | 2.7 | 2.7 | 2.2 | 1.6 | 6.5 | 16.4 |
| 6-Aug | 1.5 | 1.1 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 1.2 | 0.8 | 1.4 | 1.9 | 2.3 | 1.8 | 2.5 | 2.0 | 2.8 | 2.8 | 2.9 | 2.4 | 2.3 | 2.5 | 1.6 | 2.9 |
| 7-Aug | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.9 | 4.9 | 6.3 | 6.9 | 6.9 | 7.3 | 8.0 | 9.1 | 6.8 | 5.1 | 3.1 | 3.4 | 3.6 | 3.8 | 4.0 | 4.5 | 9.1 |
| 8-Aug | 6.2 | 6.9 | 5.0 | 5.7 | 9.6 | 10.3 | 5.0 | 3.5 | 2.5 | 3.0 | 3.3 | 4.3 | 5.0 | 5.5 | 4.3 | 2.6 | 3.9 | 4.7 | 4.2 | 5.9 | 9.0 | 8.0 | 12.8 | 11.3 | 5.9 | 12.8 |
| 9-Aug | 12.9 | 14.2 | 12.1 | 7.8 | 6.7 | 6.6 | 7.7 | 5.4 | 5.8 | 4.6 | 4.5 | 6.6 | 5.1 | 7.1 | 7.7 | 8.8 | 8.8 | 5.7 | 4.9 | 4.8 | 6.2 | 10.0 | 10.7 | 15.1 | 7.9 | 15.1 |
| 10-Aug | 7.8 | 14.5 | 8.8 | 6.9 | 7.6 | 9.8 | 8.4 | 8.1 | 6.6 | 7.3 | 11.4 | 6.3 | 5.5 | 6.5 | 6.2 | 7.5 | 6.6 | 6.2 | 5.4 | 6.4 | 6.5 | 9.7 | 7.3 | 7.5 | 7.7 | 14.5 |
| 11-Aug | 8.0 | 5.8 | 5.4 | 5.3 | 8.4 | 6.3 | 5.1 | 5.0 | 8.0 | 12.5 | 10.2 | 10.6 | 13.6 | 10.7 | 10.7 | 9.0 | 6.3 | 8.2 | 7.6 | 6.0 | 6.1 | 5.5 | 7.1 | 5.5 | 7.8 | 13.6 |
| 12-Aug | 3.7 | 3.5 | 3.8 | 3.7 | 3.3 | 4.5 | 3.8 | 2.8 | 2.6 | 1.7 | 1.3 | 1.2 | 1.3 | 1.6 | 1.7 | 1.8 | 2.4 | 2.6 | 2.9 | 3.1 | 3.2 | 2.9 | 3.2 | 3.2 | 2.7 | 4.5 |
| 13-Aug | 3.2 | 3.2 | 3.2 | 3.4 | 3.3 | 3.6 | 3.6 | 3.8 | 3.5 | 3.7 | 3.2 | 3.3 | 3.5 | 4.6 | 3.5 | 3.1 | 3.6 | 3.4 | 5.0 | 7.1 | 5.3 | 4.7 | 6.4 | 4.8 | 4.0 | 7.1 |
| 14-Aug | 4.6 | 4.8 | 4.7 | 4.8 | 4.8 | 5.6 | 5.6 | 5.4 | 6.4 | 8.2 | 8.1 | 11.9 | 8.7 | 10.6 | 9.7 | 11.7 | 5.8 | 5.7 | 7.6 | 10.5 | 12.4 | 15.0 | 15.2 | 11.7 | 8.3 | 15.2 |
| 15-Aug | 13.8 | 14.0 | 15.1 | 10.6 | 11.9 | 17.3 | 12.0 | 8.4 | 7.8 | 8.4 | 10.6 | 6.5 | 5.8 | 6.3 | 8.0 | 5.9 | 8.2 | 11.2 | 9.9 | 7.1 | 7.0 | 9.8 | 7.5 | 9.0 | 9.7 | 17.3 |
| 16-Aug | 7.0 | 5.6 | 4.5 | 4.0 | 4.4 | 4.6 | 5.4 | 12.7 | 19.4 | 21.7 | 27.3 | 25.7 | 17.2 | 32.6 | 35.9 | 50.1 | 60.3 | 38.9 | 33.5 | 35.4 | 32.8 | 32.8 | 33.4 | 37.7 | 24.3 | 60.3 |
| 17-Aug | 38.4 | 38.5 | 39.1 | 37.0 | 37.6 | 31.6 | 27.7 | 23.6 | 21.8 | UO | 25.9 | 21.2 | 23.8 | 21.2 | 22.3 | 27.6 | 26.1 | 25.2 | 21.0 | 20.4 | 18.9 | 18.7 | 18.8 | 19.5 | 26.3 | 39.1 |
| 18-Aug | 18.2 | 18.9 | 16.5 | 16.6 | 18.0 | 20.1 | 16.2 | 15.6 | 14.8 | 15.0 | 15.4 | 14.5 | 10.0 | 9.1 | 8.3 | 5.9 | 6.3 | 14.3 | 5.4 | 5.7 | 9.0 | 14.0 | 8.3 | 5.1 | 12.5 | 20.1 |
| 19-Aug | 5.2 | 6.5 | 9.1 | 10.2 | 11.6 | 17.2 | 12.5 | 10.0 | 8.2 | 5.6 | 5.2 | 3.8 | 4.9 | 4.6 | 4.7 | 7.0 | 13.2 | 46.6 | 37.8 | 72.9 | 98.9 | 97.8 | 92.8 | 38.7 | 26.0 | 98.9 |
| 20-Aug | 24.0 | 20.2 | 21.3 | 22.8 | 21.6 | 24.0 | 19.6 | 16.4 | 17.3 | 19.5 | 23.5 | 20.7 | 17.4 | 21.5 | 21.7 | 18.5 | 15.0 | 13.0 | 10.6 | 10.8 | 10.9 | 15.4 | 18.3 | 19.3 | 18.5 | 24.0 |
| 21-Aug | 19.0 | 14.0 | 13.0 | 13.1 | 17.6 | 31.5 | 31.6 | 15.4 | 18.1 | 21.7 | 20.4 | 17.5 | 13.7 | 11.9 | 11.8 | 15.5 | 12.4 | 12.6 | 12.7 | 14.0 | 15.6 | 17.0 | 17.2 | 15.5 | 16.8 | 31.6 |
| 22-Aug | 15.3 | 13.4 | 12.6 | 12.8 | 18.2 | 46.0 | 19.8 | 13.0 | 14.5 | 16.6 | 21.4 | 22.0 | 17.5 | 25.2 | 23.3 | 15.7 | 15.3 | 17.8 | 19.8 | 17.6 | 18.7 | 21.3 | 22.6 | 16.2 | 19.0 | 46.0 |
| 23-Aug | 14.1 | 14.1 | 14.6 | 15.3 | 15.9 | 17.0 | 17.0 | 15.8 | 18.2 | 18.9 | 25.6 | 21.2 | 25.6 | 31.9 | 25.2 | 27.1 | 32.9 | 31.7 | 15.1 | 13.2 | 9.9 | 15.8 | 8.6 | 7.2 | 18.8 | 32.9 |
| 24-Aug | 6.9 | 5.9 | 5.2 | 4.2 | 4.2 | 3.5 | 15.7 | 8.7 | 5.5 | 4.5 | 2.5 | 2.4 | 7.5 | 2.9 | 6.7 | 8.5 | 6.2 | 8.5 | 10.9 | 15.8 | 24.7 | 25.3 | 19.5 | 19.7 | 9.4 | 25.3 |
| 25-Aug | 19.5 | 19.6 | 14.5 | 14.9 | 17.3 | 23.3 | 23.1 | 32.1 | 35.2 | 31.5 | 26.8 | 34.1 | C | 43.0 | 51.2 | PF | PF | PF | PF | PF | PF | PF | 37.4 | 33.5 | -- | 51.2 |
| 26-Aug | 34.5 | 34.8 | 34.1 | 36.2 | 33.7 | 49.5 | 46.4 | 27.3 | 23.2 | 25.8 | 21.8 | 21.1 | 12.3 | 10.4 | 8.1 | 7.9 | 6.8 | 7.0 | 11.0 | 8.7 | 6.8 | 11.6 | 15.0 | 14.7 | 21.2 | 49.5 |
| 27-Aug | 11.3 | 11.6 | 13.1 | 11.3 | 15.7 | 22.2 | 21.1 | 14.1 | 15.7 | 18.5 | 16.8 | 17.1 | 26.5 | 23.3 | 24.0 | 25.4 | 23.3 | 19.6 | 17.4 | 18.2 | 18.8 | 19.3 | 19.6 | 20.4 | 18.5 | 26.5 |
| 28-Aug | 20.9 | 21.1 | 21.7 | 22.0 | 20.4 | 14.2 | 16.0 | 15.0 | 15.9 | 17.5 | 15.6 | 10.0 | 7.3 | 7.6 | 5.2 | 7.4 | 15.5 | 28.5 | 32.7 | 18.9 | 10.6 | 7.2 | 3.6 | 2.6 | 14.9 | 32.7 |
| 29-Aug | 2.7 | 2.1 | 2.3 | 2.9 | 3.5 | 4.4 | 6.0 | 8.4 | 8.7 | 11.2 | 10.6 | 11.0 | 8.4 | 8.4 | 10.7 | 8.5 | 9.1 | 8.7 | 11.1 | 18.4 | 15.9 | 18.7 | 14.1 | 11.1 | 9.0 | 18.7 |
| 30-Aug | 12.5 | 13.0 | 14.0 | 12.4 | 17.1 | 40.3 | 33.6 | 23.7 | 18.3 | 19.9 | 17.3 | 21.3 | 19.1 | 26.1 | 20.5 | 15.0 | 13.4 | 13.3 | 16.8 | 24.8 | 24.6 | 13.5 | 6.5 | 6.5 | 18.5 | 40.3 |
| 31-Aug | 6.8 | 5.2 | 6.6 | 5.9 | 5.2 | 10.7 | 9.2 | 7.0 | 6.5 | 7.0 | 6.9 | 6.7 | 8.0 | 5.8 | 10.8 | 6.3 | 3.1 | 5.3 | 4.9 | 5.0 | 10.0 | 9.3 | 10.5 | 14.3 | 7.4 | 14.3 |
| | 11.7 | 11.7 | 11.5 | 11.1 | 11.9 | 15.2 | 13.3 | 10.9 | 11.0 | 11.7 | 12.6 | 11.9 | 10.6 | 12.6 | 12.7 | 11.8 | 12.2 | 13.2 | 12.1 | 13.2 | 14.3 | 15.0 | 15.0 | 12.6 | Diurnal Average | |
| | 38.4 | 38.5 | 39.1 | 37.0 | 37.6 | 49.5 | 46.4 | 32.1 | 35.2 | 31.5 | 27.3 | 34.1 | 26.5 | 43.0 | 51.2 | 50.1 | 60.3 | 46.6 | 37.8 | 72.9 | 98.9 | 97.8 | 92.8 | 38.7 | Diurnal Maximum | |

C - Calibration UO - Unstable Operation PF - Power Failure

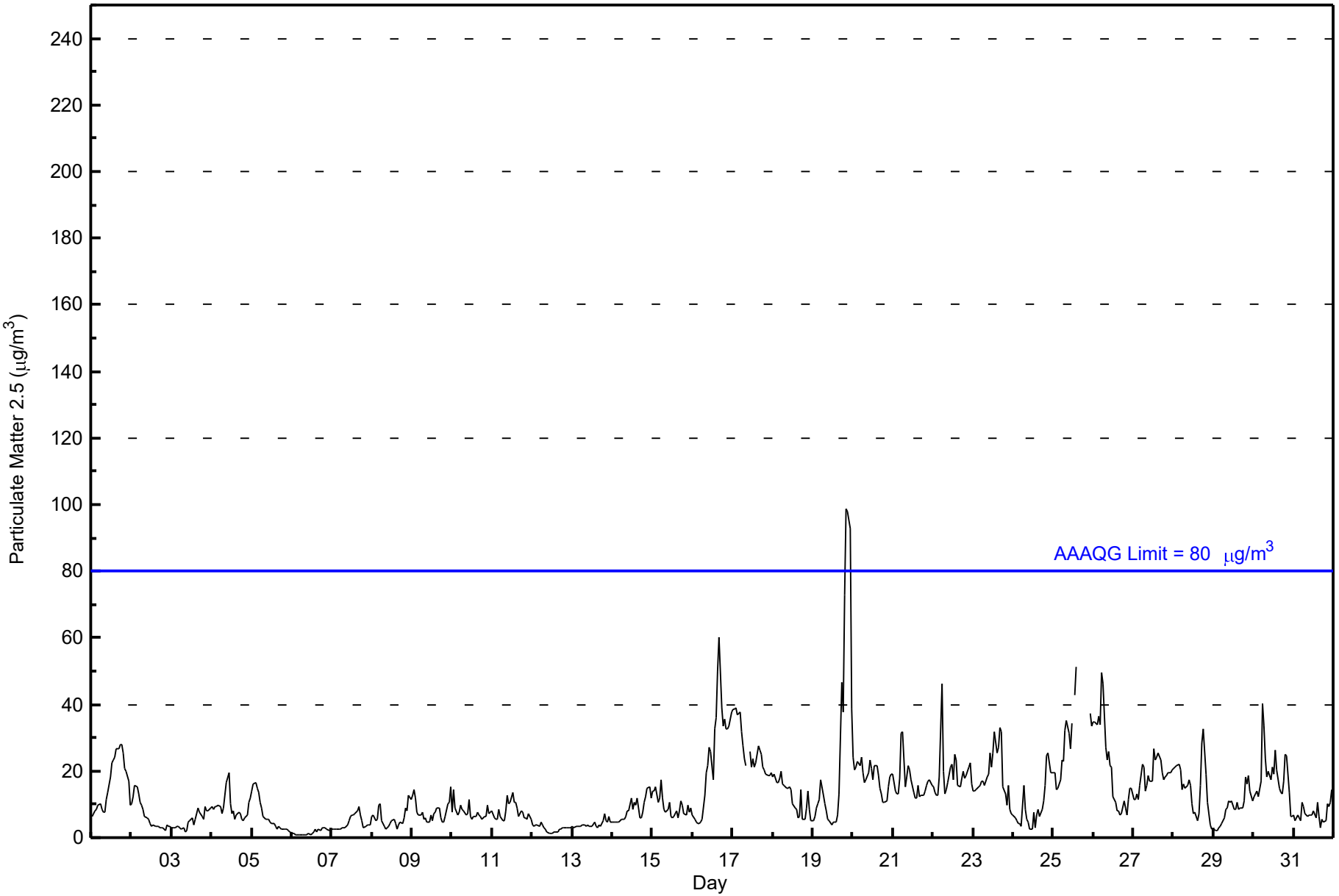
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Barge Landing - August 2026**



| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 199 | 27.07 | 27.07 |
| 6 - 15 | 322 | 43.81 | 70.88 |
| 16 - 25 | 147 | 20.00 | 90.88 |
| 26 - 80 | 64 | 8.71 | 99.59 |
| > 81.0 | 3 | 0.41 | 100.00 |

Total Number of Valid Hours: 735

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Barge Landing - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 17 | 13 | 7 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 9 | 12 | 16 | 34 | 38 | 50 | 199 |
| 6 - 15 | 32 | 20 | 7 | 3 | 2 | 7 | 16 | 45 | 22 | 24 | 37 | 23 | 14 | 13 | 28 | 29 | 322 |
| 16 - 25 | 11 | 3 | 2 | 0 | 0 | 8 | 19 | 46 | 14 | 12 | 10 | 5 | 3 | 3 | 2 | 8 | 146 |
| 26 - 80 | 8 | 2 | 0 | 3 | 2 | 2 | 5 | 8 | 5 | 5 | 3 | 7 | 1 | 1 | 6 | 6 | 64 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 |
| **Totals** | 68 | 38 | 16 | 6 | 5 | 17 | 40 | 100 | 42 | 42 | 59 | 47 | 36 | 51 | 74 | 93 | 734 |

Total Number of Valid Hours: 734

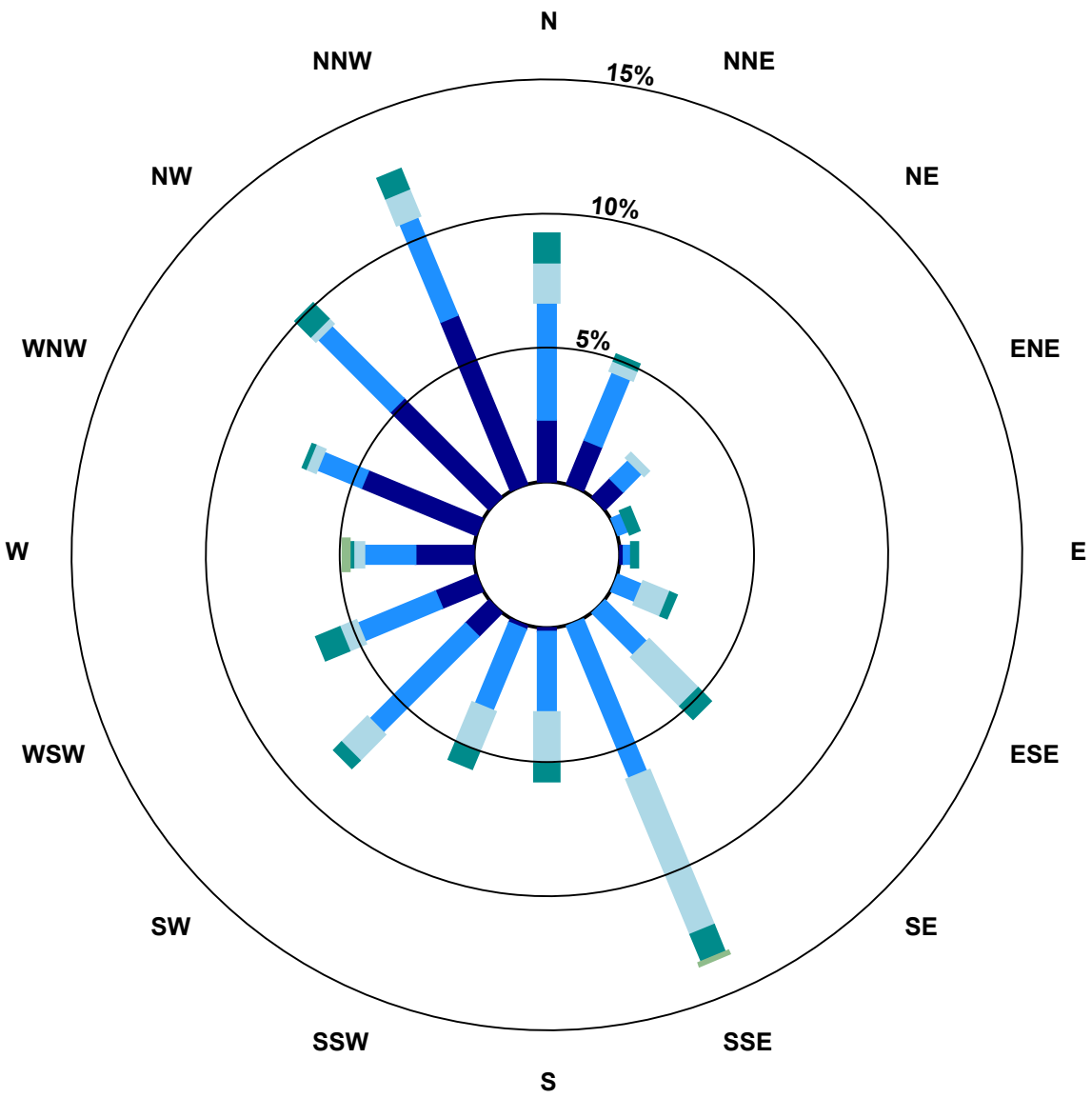
Total Number of Hours: 744

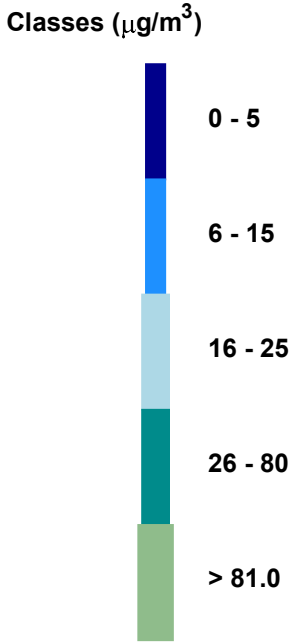
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Barge Landing




Total Number of Valid Hours: 734

Maximum Value: 30.6 C on Aug 26 16:00
Maximum Daily Average: 21.8 C on Aug 27

Minimum Value: 5.3 C on Aug 17 06:00
Minimum Daily Average: 13.4 C on Aug 12
Maximum Diurnal Average: 23.2 C at hour 16
Minimum Diurnal Average: 11.4 C at hour 6
Monthly Average: 17.03 C
Percentiles: $P_1$ = 7.8 $P_{10}$ = 10.5 $Q_1$ = 12.7 Median = 16.4 $Q_3$ = 21.2 $P_{90}$ = 24.5 $P_{99}$ = 29.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

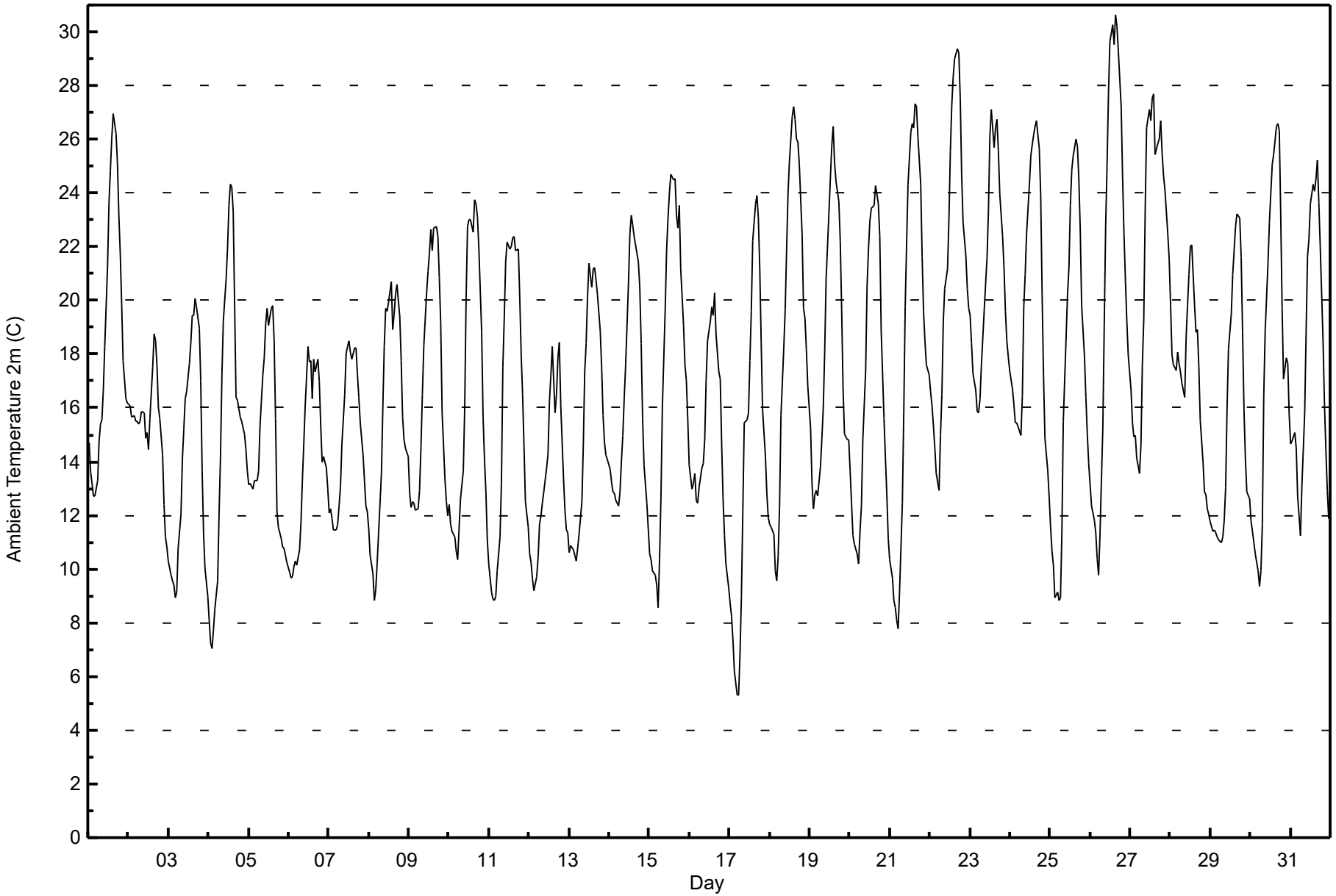
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 14.7 | 13.6 | 13.2 | 12.7 | 12.7 | 13.3 | 14.7 | 15.4 | 15.6 | 16.6 | 18.3 | 21.3 | 23.6 | 24.9 | 26.1 | 27.0 | 26.2 | 25.1 | 23.2 | 21.7 | 19.9 | 17.7 | 16.3 | 16.2 | 18.7 | 27.0 |
| 2-Aug | 16.1 | 16.1 | 15.6 | 15.7 | 15.5 | 15.5 | 15.4 | 15.5 | 15.8 | 15.8 | 14.9 | 15.1 | 14.5 | 15.6 | 17.6 | 18.8 | 18.5 | 17.6 | 16.0 | 15.6 | 14.2 | 12.4 | 11.2 | 10.8 | 15.4 | 18.8 |
| 3-Aug | 10.3 | 9.8 | 9.5 | 9.4 | 8.9 | 9.2 | 10.8 | 12.0 | 14.1 | 15.2 | 16.3 | 16.6 | 17.7 | 18.4 | 19.5 | 19.4 | 20.1 | 19.8 | 19.0 | 17.0 | 13.7 | 11.3 | 10.1 | 9.0 | 14.0 | 20.1 |
| 4-Aug | 8.1 | 7.3 | 7.1 | 7.7 | 8.5 | 9.6 | 12.1 | 14.2 | 17.2 | 19.2 | 20.8 | 22.0 | 23.5 | 24.3 | 24.2 | 23.3 | 16.4 | 16.3 | 16.0 | 15.6 | 15.5 | 15.0 | 14.5 | 13.7 | 15.5 | 24.3 |
| 5-Aug | 13.1 | 13.2 | 13.0 | 13.3 | 13.3 | 13.3 | 13.6 | 15.3 | 17.2 | 17.9 | 19.1 | 19.7 | 19.1 | 19.7 | 19.8 | 18.5 | 15.6 | 12.1 | 11.6 | 11.2 | 10.8 | 10.8 | 10.5 | 10.2 | 14.7 | 19.8 |
| 6-Aug | 9.9 | 9.7 | 9.7 | 10.1 | 10.3 | 10.1 | 10.7 | 11.7 | 13.3 | 14.7 | 16.1 | 18.3 | 17.7 | 17.7 | 16.4 | 17.8 | 17.4 | 17.8 | 17.0 | 15.4 | 14.0 | 14.2 | 13.8 | 13.0 | 14.0 | 18.3 |
| 7-Aug | 12.1 | 12.2 | 11.9 | 11.4 | 11.5 | 11.7 | 12.3 | 13.1 | 14.7 | 16.5 | 18.0 | 18.3 | 18.5 | 18.1 | 17.8 | 18.2 | 18.2 | 17.2 | 16.4 | 15.4 | 14.2 | 13.3 | 12.3 | 12.1 | 14.8 | 18.5 |
| 8-Aug | 11.5 | 10.5 | 9.8 | 8.8 | 9.2 | 10.3 | 11.3 | 13.6 | 16.0 | 18.3 | 19.7 | 19.6 | 19.9 | 20.7 | 18.9 | 19.5 | 20.2 | 20.6 | 19.4 | 17.8 | 15.7 | 14.8 | 14.5 | 14.2 | 15.6 | 20.7 |
| 9-Aug | 12.8 | 12.3 | 12.5 | 12.5 | 12.2 | 12.3 | 12.9 | 14.5 | 16.5 | 18.3 | 20.3 | 21.1 | 21.7 | 22.7 | 21.9 | 22.7 | 22.7 | 22.4 | 20.8 | 19.2 | 15.8 | 13.3 | 12.5 | 12.0 | 16.9 | 22.7 |
| 10-Aug | 12.4 | 11.7 | 11.4 | 11.2 | 10.7 | 10.3 | 11.5 | 12.6 | 13.7 | 16.0 | 20.1 | 22.7 | 23.0 | 23.0 | 22.6 | 23.8 | 23.6 | 23.1 | 22.0 | 18.8 | 15.7 | 14.1 | 12.9 | 11.1 | 16.6 | 23.8 |
| 11-Aug | 10.2 | 9.1 | 8.9 | 8.9 | 9.0 | 9.9 | 11.2 | 13.2 | 17.5 | 19.4 | 21.4 | 22.2 | 21.9 | 22.0 | 22.3 | 22.4 | 21.9 | 21.9 | 20.1 | 18.0 | 16.5 | 14.5 | 12.5 | 11.6 | 16.1 | 22.4 |
| 12-Aug | 10.6 | 10.2 | 9.6 | 9.2 | 9.7 | 10.4 | 11.7 | 12.0 | 12.5 | 12.9 | 13.8 | 14.3 | 16.2 | 17.2 | 18.3 | 15.8 | 16.5 | 17.9 | 18.4 | 16.1 | 13.3 | 12.2 | 11.5 | 11.4 | 13.4 | 18.4 |
| 13-Aug | 10.6 | 10.9 | 10.7 | 10.5 | 10.3 | 10.8 | 11.3 | 12.5 | 14.6 | 17.4 | 18.4 | 20.1 | 21.4 | 20.5 | 21.2 | 21.2 | 20.7 | 20.2 | 18.9 | 17.5 | 15.7 | 14.7 | 14.2 | 14.1 | 15.8 | 21.4 |
| 14-Aug | 13.7 | 13.3 | 12.9 | 12.8 | 12.5 | 12.4 | 12.9 | 14.0 | 15.0 | 16.4 | 17.6 | 20.6 | 22.5 | 23.2 | 22.8 | 22.4 | 21.8 | 21.5 | 20.5 | 18.4 | 15.6 | 13.9 | 12.5 | 11.5 | 16.7 | 23.2 |
| 15-Aug | 10.5 | 10.4 | 9.9 | 9.8 | 9.4 | 8.6 | 10.3 | 12.7 | 16.0 | 19.6 | 21.9 | 23.0 | 24.0 | 24.7 | 24.5 | 24.5 | 23.2 | 22.7 | 23.5 | 21.2 | 19.1 | 17.6 | 17.0 | 15.6 | 17.5 | 24.7 |
| 16-Aug | 13.9 | 13.0 | 13.2 | 13.6 | 12.5 | 12.5 | 13.0 | 13.8 | 13.9 | 14.8 | 17.0 | 18.5 | 19.2 | 19.8 | 19.5 | 20.3 | 18.8 | 17.3 | 17.1 | 14.6 | 12.6 | 11.2 | 10.2 | 9.3 | 15.0 | 20.3 |
| 17-Aug | 8.7 | 8.2 | 7.4 | 6.2 | 5.3 | 5.3 | 6.8 | 9.0 | 12.2 | 15.4 | 15.5 | 15.8 | 17.8 | 19.6 | 22.2 | 23.6 | 23.9 | 23.0 | 21.2 | 18.4 | 15.9 | 14.2 | 12.8 | 11.9 | 14.2 | 23.9 |
| 18-Aug | 11.7 | 11.6 | 11.3 | 9.9 | 9.6 | 10.4 | 12.3 | 15.7 | 18.2 | 19.7 | 21.9 | 24.0 | 25.2 | 26.9 | 27.2 | 26.7 | 26.0 | 25.9 | 25.1 | 22.4 | 19.7 | 19.3 | 18.2 | 16.8 | 19.0 | 27.2 |
| 19-Aug | 15.2 | 13.2 | 12.2 | 12.8 | 12.9 | 12.7 | 13.8 | 14.9 | 16.0 | 18.2 | 20.8 | 23.3 | 24.5 | 25.8 | 26.5 | 25.1 | 24.4 | 23.7 | 22.2 | 19.6 | 16.7 | 15.0 | 14.8 | 14.8 | 18.3 | 26.5 |
| 20-Aug | 13.7 | 12.4 | 11.3 | 10.9 | 10.5 | 10.2 | 11.4 | 12.4 | 14.8 | 17.4 | 20.5 | 21.9 | 23.0 | 23.4 | 23.5 | 24.3 | 24.0 | 23.6 | 22.4 | 18.9 | 15.6 | 14.2 | 12.7 | 11.1 | 16.8 | 24.3 |
| 21-Aug | 10.4 | 9.7 | 8.8 | 8.6 | 8.1 | 7.8 | 9.2 | 12.5 | 15.8 | 19.7 | 22.1 | 24.3 | 26.3 | 26.6 | 26.4 | 27.3 | 27.2 | 26.1 | 24.3 | 21.6 | 19.6 | 18.5 | 17.6 | 17.3 | 18.2 | 27.3 |
| 22-Aug | 16.6 | 16.1 | 15.3 | 14.5 | 13.6 | 12.9 | 15.0 | 16.5 | 19.3 | 20.5 | 21.2 | 23.1 | 25.5 | 27.2 | 28.3 | 29.0 | 29.3 | 29.2 | 27.5 | 24.7 | 22.9 | 21.6 | 20.5 | 19.7 | 21.2 | 29.3 |
| 23-Aug | 19.5 | 18.4 | 17.3 | 16.6 | 15.9 | 15.8 | 16.3 | 17.6 | 19.7 | 20.6 | 21.6 | 23.4 | 26.1 | 27.1 | 25.7 | 26.4 | 26.7 | 25.6 | 23.9 | 22.4 | 21.2 | 19.6 | 18.5 | 17.9 | 21.0 | 27.1 |
| 24-Aug | 17.4 | 16.7 | 16.1 | 15.4 | 15.5 | 15.3 | 15.0 | 16.4 | 19.8 | 21.0 | 22.5 | 24.3 | 25.4 | 25.8 | 26.2 | 26.5 | 26.7 | 25.6 | 23.9 | 20.2 | 17.2 | 14.9 | 13.7 | 12.7 | 19.8 | 26.7 |
| 25-Aug | 11.6 | 10.7 | 10.1 | 8.9 | 9.1 | 8.8 | 9.0 | 11.3 | 15.5 | 18.7 | 20.2 | 21.2 | 23.5 | 24.8 | 25.4 | 26.0 | 25.8 | 24.5 | 22.6 | 19.8 | 17.9 | 16.4 | 15.0 | 13.9 | 17.1 | 26.0 |
| 26-Aug | 13.1 | 12.4 | 11.8 | 11.4 | 10.4 | 9.8 | 11.3 | 15.2 | 19.1 | 22.8 | 25.0 | 27.7 | 29.6 | 30.3 | 29.5 | 30.6 | 30.2 | 29.3 | 27.2 | 24.6 | 22.4 | 20.8 | 19.2 | 18.0 | 20.9 | 30.6 |
| 27-Aug | 16.6 | 15.5 | 14.9 | 15.0 | 14.1 | 13.5 | 14.6 | 17.6 | 19.3 | 23.3 | 26.4 | 27.1 | 26.7 | 27.5 | 27.7 | 25.4 | 25.9 | 26.0 | 26.7 | 25.5 | 24.6 | 24.1 | 22.5 | 21.5 | 21.8 | 27.7 |
| 28-Aug | 19.8 | 18.0 | 17.6 | 17.4 | 18.1 | 17.7 | 17.4 | 16.9 | 16.4 | 18.6 | 19.8 | 21.0 | 22.0 | 22.1 | 19.8 | 18.8 | 18.9 | 17.6 | 15.6 | 14.0 | 12.9 | 12.8 | 12.2 | 12.0 | 17.4 | 22.1 |
| 29-Aug | 11.8 | 11.4 | 11.4 | 11.3 | 11.2 | 11.1 | 11.0 | 11.2 | 11.8 | 13.0 | 16.0 | 18.2 | 19.5 | 20.9 | 21.9 | 22.8 | 23.2 | 23.0 | 21.6 | 18.8 | 15.9 | 14.1 | 12.8 | 12.6 | 15.7 | 23.2 |
| 30-Aug | 11.8 | 11.4 | 11.0 | 10.6 | 9.9 | 9.3 | 9.9 | 11.7 | 16.5 | 18.9 | 21.4 | 22.9 | 24.0 | 25.1 | 25.4 | 26.5 | 26.6 | 26.3 | 23.2 | 19.7 | 17.1 | 17.9 | 17.7 | 15.8 | 17.9 | 26.6 |
| 31-Aug | 14.6 | 14.8 | 15.1 | 14.5 | 12.7 | 12.0 | 11.3 | 13.1 | 15.8 | 18.8 | 21.7 | 22.3 | 23.6 | 24.3 | 24.1 | 24.6 | 25.2 | 23.6 | 22.0 | 18.5 | 16.1 | 14.5 | 12.9 | 11.9 | 17.8 | 25.2 |
| | 13.0 | 12.4 | 12.0 | 11.7 | 11.4 | 11.4 | 12.3 | 13.8 | 15.9 | 17.9 | 19.7 | 21.1 | 22.2 | 22.9 | 23.0 | 23.2 | 22.8 | 22.2 | 20.9 | 18.8 | 16.7 | 15.4 | 14.4 | 13.7 | Diurnal Average | |
| | 19.8 | 18.4 | 17.6 | 17.4 | 18.1 | 17.7 | 17.4 | 17.6 | 19.8 | 23.3 | 26.4 | 27.7 | 29.6 | 30.3 | 29.5 | 30.6 | 30.2 | 29.3 | 27.5 | 25.5 | 24.6 | 24.1 | 22.5 | 21.5 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Barge Landing - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 55 | 7.39 | 7.39 |
| 10 - 20 | 473 | 63.58 | 70.97 |
| > 20 | 216 | 29.03 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 100.0 % on Aug 1 06:00

Maximum Daily Average: 89.6 % on Aug 12

Minimum Value: 29.0 % on Aug 24 17:00

Minimum Daily Average: 61.1 % on Aug 27

Maximum Diurnal Average: 94.2 % at hour 6

Minimum Diurnal Average: 47.6 % at hour 16

Monthly Average: 72.87 %

Percentiles: $P_1$ = 32.6 $P_{10}$ = 43.2 $Q_1$ = 53.4 Median = 75.0 $Q_3$ = 93.1 $P_{90}$ = 98.9 $P_{99}$ = 100.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

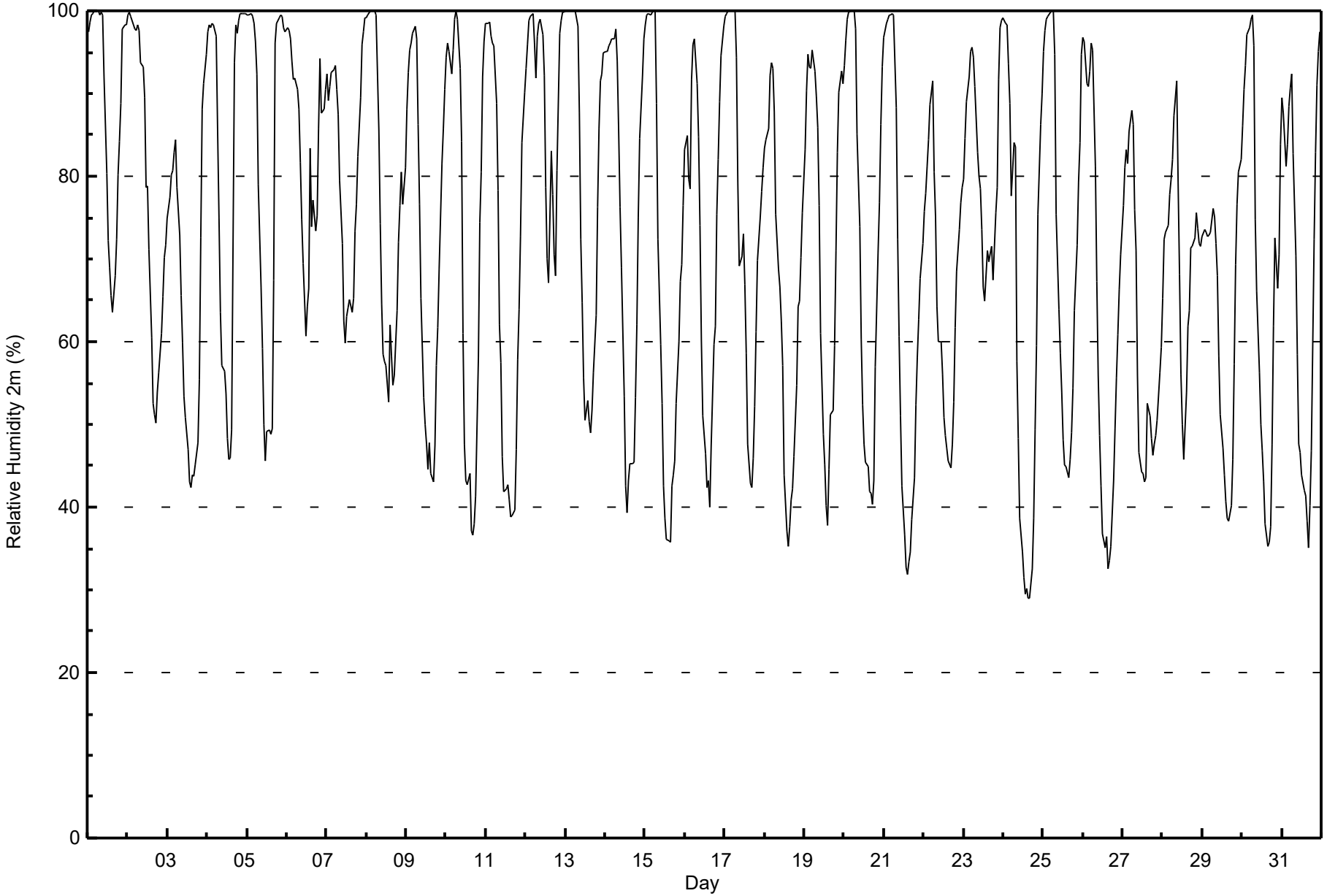
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 97.4 | 98.7 | 99.5 | 99.7 | 99.9 | 100.0 | 100.0 | 99.4 | 99.9 | 99.4 | 92.1 | 80.4 | 72.1 | 69.0 | 65.6 | 63.6 | 67.9 | 72.4 | 80.2 | 84.3 | 88.8 | 97.7 | 98.3 | 98.3 | 88.5 | 100.0 |
| 2-Aug | 99.5 | 99.8 | 99.3 | 98.4 | 97.8 | 97.7 | 98.3 | 97.7 | 93.7 | 93.2 | 89.5 | 78.6 | 78.8 | 71.1 | 60.4 | 52.5 | 51.2 | 50.2 | 53.8 | 56.3 | 60.9 | 65.3 | 70.1 | 71.7 | 78.6 | 99.8 |
| 3-Aug | 75.0 | 77.4 | 80.1 | 80.7 | 82.9 | 84.5 | 78.6 | 72.9 | 65.6 | 59.9 | 53.4 | 50.9 | 46.9 | 43.1 | 42.4 | 43.9 | 43.7 | 45.0 | 47.8 | 55.4 | 72.5 | 88.2 | 91.2 | 94.7 | 65.7 | 94.7 |
| 4-Aug | 97.4 | 98.3 | 97.9 | 98.4 | 98.3 | 96.9 | 85.5 | 75.0 | 63.6 | 57.1 | 56.5 | 53.8 | 48.3 | 45.8 | 46.0 | 49.4 | 93.7 | 98.3 | 97.3 | 98.8 | 99.7 | 99.7 | 99.7 | 99.7 | 81.5 | 99.7 |
| 5-Aug | 99.5 | 99.5 | 99.6 | 99.3 | 98.4 | 96.3 | 92.4 | 78.9 | 66.5 | 59.2 | 50.0 | 45.5 | 49.2 | 49.2 | 48.8 | 49.4 | 67.4 | 96.1 | 98.4 | 99.1 | 99.5 | 99.3 | 97.9 | 97.4 | 80.7 | 99.6 |
| 6-Aug | 97.9 | 97.7 | 96.5 | 93.9 | 91.6 | 91.8 | 90.5 | 88.2 | 81.6 | 74.8 | 69.5 | 60.6 | 64.2 | 66.5 | 83.5 | 73.8 | 77.2 | 73.3 | 75.3 | 85.8 | 94.3 | 87.6 | 88.2 | 90.6 | 83.1 | 97.9 |
| 7-Aug | 92.4 | 89.1 | 90.9 | 92.5 | 92.8 | 93.4 | 90.5 | 87.4 | 79.5 | 71.9 | 62.5 | 59.9 | 63.0 | 64.0 | 65.1 | 63.6 | 65.3 | 73.5 | 76.6 | 82.5 | 89.5 | 96.0 | 97.4 | 99.2 | 80.8 | 99.2 |
| 8-Aug | 99.1 | 99.4 | 99.9 | 100.0 | 100.0 | 100.0 | 99.4 | 85.6 | 74.2 | 64.6 | 58.5 | 57.6 | 57.2 | 52.8 | 61.9 | 58.4 | 54.7 | 56.0 | 63.7 | 72.0 | 76.5 | 80.6 | 76.6 | 81.0 | 76.2 | 100.0 |
| 9-Aug | 88.1 | 92.6 | 95.3 | 96.2 | 97.2 | 98.1 | 96.6 | 86.3 | 76.5 | 65.2 | 53.3 | 50.0 | 47.6 | 44.6 | 47.8 | 44.0 | 43.1 | 47.5 | 57.1 | 61.8 | 68.8 | 81.5 | 85.8 | 90.6 | 71.5 | 98.1 |
| 10-Aug | 94.5 | 96.0 | 95.1 | 92.4 | 95.3 | 99.0 | 100.0 | 98.9 | 93.1 | 84.2 | 61.1 | 47.7 | 43.2 | 42.8 | 44.1 | 37.2 | 36.5 | 38.0 | 41.4 | 58.1 | 74.4 | 80.6 | 92.0 | 96.2 | 72.6 | 100.0 |
| 11-Aug | 98.4 | 98.5 | 98.6 | 97.0 | 96.1 | 95.7 | 88.9 | 78.4 | 62.0 | 57.4 | 46.1 | 41.9 | 42.2 | 42.8 | 40.8 | 38.9 | 39.0 | 39.6 | 47.0 | 57.8 | 63.9 | 72.7 | 84.1 | 90.2 | 67.4 | 98.6 |
| 12-Aug | 93.1 | 95.9 | 98.8 | 99.3 | 99.7 | 96.2 | 91.9 | 97.0 | 98.5 | 98.9 | 97.1 | 92.2 | 78.7 | 70.1 | 67.1 | 83.1 | 77.7 | 70.5 | 67.9 | 80.7 | 97.3 | 98.9 | 99.8 | 99.8 | 89.6 | 99.8 |
| 13-Aug | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 98.1 | 87.7 | 72.4 | 64.7 | 55.7 | 50.5 | 52.8 | 50.4 | 49.0 | 51.7 | 56.2 | 63.3 | 76.2 | 85.8 | 91.5 | 92.4 | 95.0 | 78.9 | 100.0 |
| 14-Aug | 95.1 | 95.1 | 95.8 | 96.1 | 96.7 | 96.6 | 97.7 | 93.9 | 85.6 | 76.2 | 68.9 | 53.4 | 42.5 | 39.3 | 43.3 | 45.3 | 45.2 | 45.4 | 53.2 | 62.0 | 75.1 | 84.6 | 92.1 | 96.6 | 74.0 | 97.7 |
| 15-Aug | 98.4 | 99.4 | 99.7 | 99.6 | 99.8 | 100.0 | 100.0 | 88.7 | 72.3 | 59.6 | 52.5 | 42.5 | 38.6 | 36.1 | 36.0 | 35.8 | 42.5 | 43.8 | 45.5 | 52.6 | 60.0 | 67.3 | 69.4 | 76.4 | 67.4 | 100.0 |
| 16-Aug | 83.2 | 84.9 | 79.7 | 78.4 | 91.8 | 95.9 | 96.6 | 91.2 | 84.8 | 74.0 | 60.2 | 51.1 | 46.5 | 42.3 | 43.2 | 39.9 | 47.4 | 59.7 | 61.9 | 75.4 | 82.0 | 89.0 | 94.6 | 98.2 | 73.0 | 98.2 |
| 17-Aug | 99.4 | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 94.4 | 79.1 | 69.2 | 70.3 | 73.0 | 67.0 | 58.6 | 47.5 | 43.0 | 42.4 | 46.0 | 52.1 | 61.2 | 69.8 | 75.1 | 78.1 | 81.0 | 75.3 | 100.0 |
| 18-Aug | 83.4 | 84.4 | 85.8 | 92.2 | 93.8 | 93.0 | 87.8 | 75.4 | 68.8 | 66.5 | 62.5 | 57.1 | 44.0 | 37.2 | 35.3 | 37.7 | 40.8 | 42.3 | 46.1 | 54.7 | 64.3 | 64.9 | 70.1 | 75.7 | 65.1 | 93.8 |
| 19-Aug | 83.2 | 90.3 | 94.7 | 93.2 | 93.0 | 95.3 | 92.7 | 89.7 | 85.9 | 76.4 | 61.1 | 48.8 | 45.1 | 40.2 | 37.9 | 44.5 | 51.2 | 51.8 | 59.5 | 71.0 | 82.9 | 90.1 | 92.7 | 91.2 | 73.4 | 95.3 |
| 20-Aug | 93.4 | 96.5 | 99.0 | 99.8 | 100.0 | 100.0 | 100.0 | 97.8 | 85.2 | 73.9 | 60.3 | 52.4 | 47.6 | 45.3 | 44.9 | 41.9 | 41.7 | 40.3 | 43.3 | 56.9 | 70.7 | 76.8 | 86.3 | 93.3 | 72.8 | 100.0 |
| 21-Aug | 96.8 | 98.4 | 98.9 | 99.6 | 99.5 | 99.7 | 99.5 | 88.4 | 72.4 | 60.7 | 51.0 | 42.6 | 36.6 | 32.7 | 31.9 | 33.5 | 34.6 | 38.5 | 43.6 | 52.4 | 58.2 | 62.7 | 67.6 | 71.8 | 65.5 | 99.7 |
| 22-Aug | 75.7 | 78.0 | 81.2 | 84.5 | 88.6 | 91.5 | 80.6 | 75.0 | 64.3 | 60.1 | 60.1 | 56.1 | 50.9 | 48.7 | 47.1 | 45.6 | 44.8 | 47.6 | 52.7 | 61.8 | 68.6 | 73.6 | 76.7 | 78.7 | 66.3 | 91.5 |
| 23-Aug | 79.7 | 84.5 | 89.0 | 92.0 | 95.0 | 95.6 | 94.4 | 90.8 | 83.0 | 80.0 | 78.4 | 73.5 | 66.6 | 64.9 | 71.1 | 69.6 | 70.6 | 71.6 | 67.5 | 75.6 | 78.6 | 91.8 | 98.0 | 98.9 | 81.7 | 98.9 |
| 24-Aug | 99.1 | 98.5 | 98.3 | 93.6 | 88.8 | 77.7 | 84.1 | 83.5 | 57.6 | 48.3 | 38.6 | 34.6 | 31.5 | 29.4 | 30.2 | 29.1 | 29.0 | 32.5 | 38.7 | 49.3 | 59.6 | 75.5 | 86.3 | 90.0 | 61.8 | 99.1 |
| 25-Aug | 95.1 | 97.6 | 99.0 | 99.2 | 99.9 | 100.0 | 100.0 | 94.8 | 75.4 | 64.0 | 58.6 | 53.9 | 48.2 | 45.1 | 44.8 | 43.6 | 45.7 | 49.0 | 54.4 | 63.7 | 71.6 | 79.4 | 84.1 | 94.7 | 73.4 | 100.0 |
| 26-Aug | 96.7 | 96.3 | 91.2 | 90.9 | 92.7 | 96.2 | 95.3 | 81.2 | 67.2 | 55.9 | 48.6 | 42.6 | 36.8 | 35.1 | 36.5 | 32.5 | 33.5 | 35.3 | 43.3 | 49.6 | 55.6 | 60.9 | 66.3 | 70.5 | 62.9 | 96.7 |
| 27-Aug | 76.5 | 81.0 | 83.3 | 81.5 | 85.5 | 87.9 | 86.2 | 76.0 | 71.1 | 55.9 | 46.7 | 44.2 | 44.1 | 43.1 | 43.6 | 52.5 | 51.0 | 48.2 | 46.3 | 47.6 | 48.7 | 50.5 | 56.2 | 59.3 | 61.1 | 87.9 |
| 28-Aug | 65.2 | 72.4 | 73.2 | 74.1 | 77.8 | 79.7 | 82.1 | 87.3 | 91.6 | 79.1 | 68.1 | 56.1 | 50.0 | 45.8 | 53.9 | 61.8 | 63.8 | 71.3 | 71.5 | 72.6 | 75.6 | 73.6 | 71.9 | 71.5 | 70.4 | 91.6 |
| 29-Aug | 72.7 | 73.5 | 73.3 | 72.7 | 72.9 | 73.3 | 76.1 | 75.0 | 71.8 | 67.9 | 58.3 | 51.3 | 47.2 | 43.8 | 40.7 | 38.7 | 38.4 | 40.2 | 45.7 | 57.3 | 69.3 | 76.6 | 80.6 | 82.0 | 62.5 | 82.0 |
| 30-Aug | 86.1 | 90.5 | 93.4 | 97.1 | 98.0 | 98.9 | 99.5 | 95.8 | 74.7 | 66.2 | 56.3 | 50.1 | 46.8 | 43.1 | 38.0 | 35.2 | 35.8 | 37.6 | 47.7 | 61.8 | 72.6 | 66.5 | 70.5 | 83.9 | 68.6 | 99.5 |
| 31-Aug | 89.5 | 87.7 | 81.1 | 83.9 | 88.5 | 90.7 | 92.3 | 82.7 | 70.3 | 58.5 | 47.6 | 46.6 | 44.0 | 42.0 | 41.4 | 38.3 | 35.0 | 40.2 | 46.8 | 72.4 | 82.9 | 90.9 | 95.0 | 97.5 | 68.6 | 97.5 |
| | 90.4 | 92.0 | 92.5 | 92.8 | 93.9 | 94.2 | 92.8 | 87.3 | 77.5 | 69.4 | 61.4 | 55.0 | 50.8 | 48.0 | 48.1 | 47.6 | 50.4 | 53.5 | 57.7 | 66.7 | 74.8 | 80.3 | 84.2 | 87.6 | Diurnal Average | |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.4 | 99.9 | 99.4 | 97.1 | 92.2 | 78.8 | 71.1 | 83.5 | 83.1 | 93.7 | 98.3 | 98.4 | 99.1 | 99.7 | 99.7 | 99.8 | 99.8 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Barge Landing - August 2026**



Maximum Value: 29.2 inHg on Aug 13 11:00
Maximum Daily Average: 29.2 inHg on Aug 13

Minimum Value: 28.5 inHg on Aug 1 22:00
Minimum Daily Average: 28.6 inHg on Aug 28
Maximum Diurnal Average: 28.9 inHg at hour 8
Minimum Diurnal Average: 28.9 inHg at hour 18
Monthly Average: 28.90 inHg
Percentiles: $P_1$ = 28.5 $P_{10}$ = 28.7 $Q_1$ = 28.7 Median = 29.0 $Q_3$ = 29.0 $P_{90}$ = 29.1 $P_{99}$ = 29.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

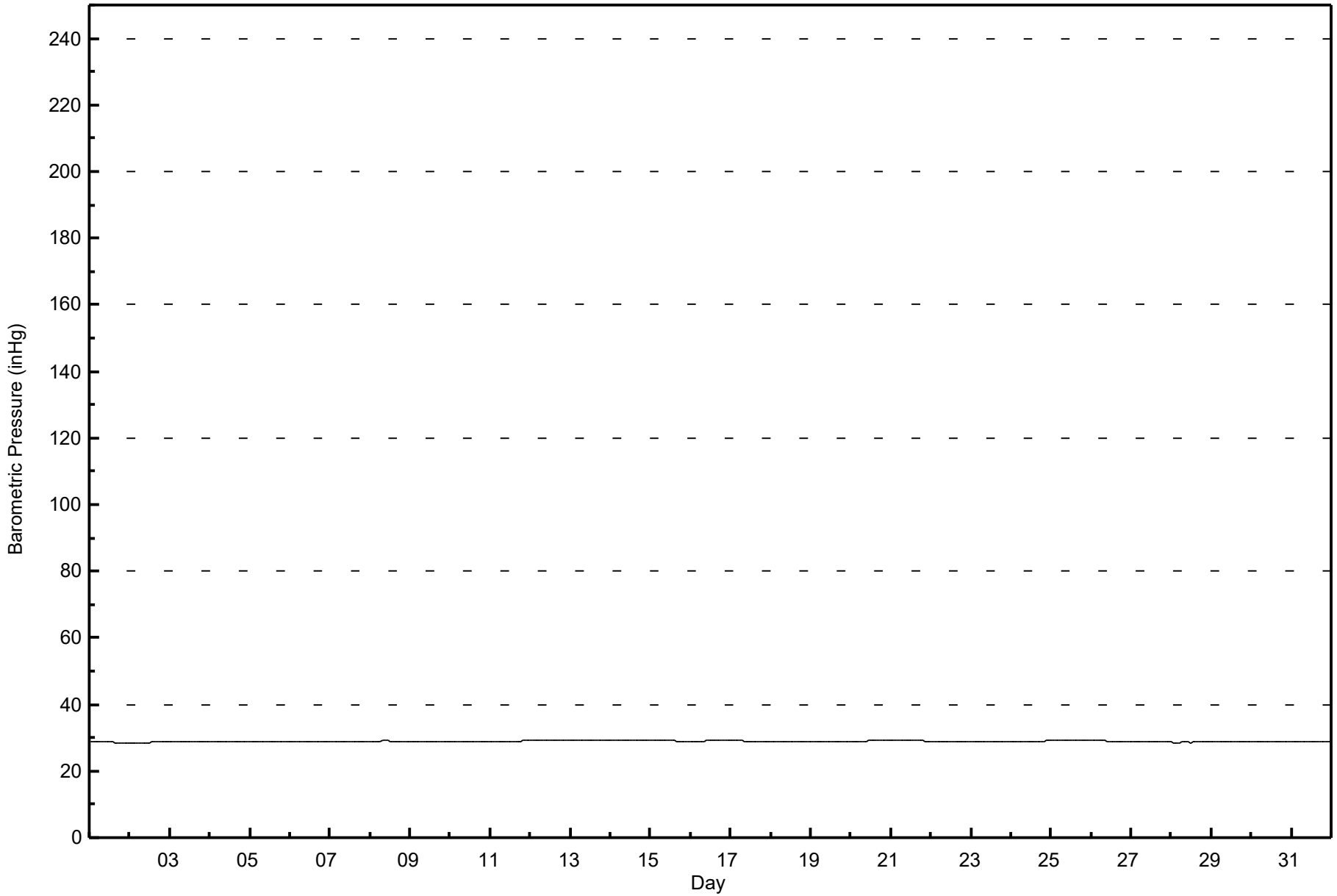
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.6 | 28.6 | 28.6 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.7 | 28.9 |
| 2-Aug | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.6 | 28.6 | 28.6 | 28.6 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.6 | 28.9 |
| 3-Aug | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 |
| 4-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.9 |
| 5-Aug | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.7 | 28.8 |
| 6-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 29.0 |
| 7-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 |
| 8-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 |
| 9-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 |
| 10-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 |
| 11-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.0 | 29.1 |
| 12-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 |
| 13-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 |
| 14-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 |
| 15-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 |
| 16-Aug | 29.0 | 28.9 | 29.0 | 29.0 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.1 | 29.1 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.1 |
| 17-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.1 |
| 18-Aug | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.9 |
| 19-Aug | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.9 |
| 20-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.1 |
| 21-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.2 |
| 22-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 29.0 |
| 23-Aug | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 |
| 24-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 28.9 | 29.1 |
| 25-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 |
| 26-Aug | 29.1 | 29.1 | 29.1 | 29.0 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.1 |
| 27-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.8 | 28.9 |
| 28-Aug | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.6 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.6 | 28.7 |
| 29-Aug | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 |
| 30-Aug | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 |
| 31-Aug | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.8 |
| | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | Diurnal Average | |
| | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Barometric Pressure (BP) - inHg**

**Barge Landing - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 20m (WS20) - km/h

## Barge Landing - August 2026

Maximum Speed: 30 km/h on Aug 2 16:00

Maximum Daily Speed Average: 20.8 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 9 08:00

Minimum Daily Speed Average: 2.4 km/h on Aug 9

Maximum Diurnal Speed Average: 3.8 km/h at hour 12

Minimum Diurnal Speed Average: 0.4 km/h at hour 22

Monthly Average Velocity: 1.7 km/h 285.9 deg

Percentiles: $P_1 = 2$ $P_{10} = 4$ $Q_1 = 6$ Median = 8 $Q_3 = 12$ $P_{90} = 16$ $P_{99} = 27$

Hours in Service: 744

Hours of Data: 743

Hours of Missing Data: 1

Percent Operational Time: 99.9

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | ESE1 | ESE7 | SE6 | SSW6 | SSE5 | SSE7 | SSE9 | S5 | ENE6 | ESE5 | NE2 | NE5 | NE11 | NNE11 | NNW11 | NNW13 | NW16 | NNW16 | NNW13 | NNW16 | NNW19 | N12 | N11 | N12 | N4.7 | NNW19 |
| 2-Aug | NW4 | NNW16 | NNW18 | N21 | N17 | NNW14 | NNW14 | N18 | NNW21 | NNW25 | NNW29 | NNW29 | NNW26 | NNW26 | NNW29 | N30 | NNW28 | NNW27 | NNW24 | NNW23 | NNW23 | NW17 | NW15 | NW12 | NNW20.8 | N30 |
| 3-Aug | NW14 | NW12 | NW14 | NW13 | WNW12 | NW11 | NW12 | NW12 | NNW13 | NNW17 | NNW15 | NNW13 | N8 | NNW9 | NNE9 | NNE12 | NNE9 | NE10 | ENE8 | E7 | SE7 | SE8 | SSE6 | S5 | NNW6.7 | NNW17 |
| 4-Aug | S4 | SSE7 | SSE9 | SSE8 | SSE8 | SSE8 | SSE11 | S12 | S9 | SSW9 | SW12 | SW13 | SW16 | SW16 | SW11 | WSW13 | NE5 | SE2 | WNW8 | WSW5 | NW8 | NW7 | NW7 | NW7 | SW5.5 | SW16 |
| 5-Aug | WNW5 | WSW7 | WSW8 | WSW10 | W9 | WNW12 | NW12 | NNW11 | NW15 | NW19 | NW22 | NW23 | NW19 | WNW13 | WNW13 | NNW16 | N15 | NNW10 | NW10 | NW10 | W8 | W9 | W11 | WNW10 | NW11.2 | NW23 |
| 6-Aug | WNW9 | W11 | W13 | WNW16 | WNW14 | WNW11 | W10 | WNW10 | NW13 | NNW15 | NNW14 | NNW13 | N11 | NNW8 | NNW6 | WNW4 | WNW10 | WNW7 | N8 | NNW4 | WSW4 | WNW9 | W8 | NW8 | NW8.6 | WNW16 |
| 7-Aug | NW8 | NW8 | NW5 | NW6 | WNW6 | W6 | WSW6 | WSW6 | W6 | WNW9 | WNW14 | W13 | NNE10 | NNE6 | WNW3 | NW3 | NNE8 | NNE6 | NNE11 | N6 | W4 | WNW4 | NW6 | W6 | NW5.0 | WNW14 |
| 8-Aug | WNW4 | NW3 | W7 | W5 | NW5 | NNW5 | WNW6 | NNW8 | NW6 | NE8 | NE10 | NNE8 | NNW7 | N6 | NNW8 | W5 | NW5 | NW5 | NW6 | N7 | NNW7 | N7 | N6 | N3 | NNW4.8 | NE10 |
| 9-Aug | NW3 | E3 | SSW3 | W3 | W4 | NNW2 | W3 | S0 | WSW3 | WSW7 | WNW5 | NW7 | NNW3 | NNW6 | NW8 | NW7 | NW7 | NE8 | NNW3 | NNE3 | NNE3 | NE9 | ENE2 | NW3 | NNW2.4 | NE9 |
| 10-Aug | N4 | ESE5 | ESE5 | SSE4 | ESE6 | SSE4 | ESE4 | S3 | W2 | WNW2 | NNE5 | NNE9 | N10 | N11 | NNW9 | NNE12 | NNE13 | NNE12 | N11 | NNW8 | N8 | NNW8 | NW8 | W5 | N4.4 | NNE13 |
| 11-Aug | SW6 | WSW8 | WSW6 | WSW6 | SW5 | SW5 | SSW4 | WSW3 | WNW4 | NNW9 | N15 | N18 | N17 | N17 | N20 | N19 | N17 | N15 | N19 | NNE16 | N12 | N9 | N10 | NNW10 | N8.4 | N20 |
| 12-Aug | NNW10 | NW9 | WNW9 | NW9 | NW6 | WNW9 | NW4 | NW6 | NNW9 | NNW9 | NNW11 | NNW12 | NNW15 | N16 | N17 | N13 | N11 | N8 | N6 | NNE7 | N11 | NNW9 | NW12 | NNW11 | NNW9.3 | N17 |
| 13-Aug | NNW9 | NNW5 | NNW6 | NNW8 | NNW6 | NNE10 | NNE9 | NNW7 | NNE5 | NE10 | NNE12 | NE11 | NNE15 | NNE14 | NNE17 | NNE14 | NE14 | NE11 | N8 | NNW6 | NNW6 | NNW6 | NW4 | WNW5 | NNE8.0 | NNE17 |
| 14-Aug | WNW4 | W5 | NW5 | WNW5 | WNW5 | NNW6 | NW4 | W2 | W3 | NW5 | NW5 | NW6 | N5 | NW7 | NNW13 | NW14 | WNW10 | SSW4 | SW8 | SW6 | SSW6 | S6 | SSE7 | S5 | WNW3.7 | NW14 |
| 15-Aug | SSE5 | SSE7 | S8 | SSW9 | S7 | S8 | S7 | SSW8 | SSW8 | S9 | SSW9 | SW13 | SW12 | SW13 | SSW15 | WSW10 | WSW10 | WSW5 | SSW5 | SSW8 | SW7 | SW7 | SW6 | SSW5 | SSW7.6 | SSW15 |
| 16-Aug | SSW3 | S5 | WNW5 | WNW6 | NE1 | WNW5 | NW7 | N16 | N18 | N19 | N16 | N17 | N14 | N13 | NNW11 | NW8 | N10 | NNE12 | ENE7 | E4 | NW1 | S4 | SSW4 | WSW4 | N6.1 | N19 |
| 17-Aug | WSW6 | WSW5 | WSW5 | SSW6 | SSW5 | SW7 | SSW6 | S7 | SSW6 | SW5 | SW6 | S4 | SSE5 | SE7 | SE8 | SSE6 | SSE10 | SSE12 | SSE11 | SSE12 | SSE12 | SSE12 | SE11 | SE10 | S6.4 | SSE12 |
| 18-Aug | SSE9 | SSE10 | SSE7 | SE7 | SSE11 | SSE11 | SSE8 | S10 | S10 | S11 | S11 | SSW11 | SW14 | SW13 | SW14 | SW14 | WSW15 | WSW14 | SW12 | SW7 | SSW8 | SSW7 | WNW6 | WNW5 | SSW8.0 | WSW15 |
| 19-Aug | W7 | SW7 | S7 | SSW7 | SSE6 | SSE5 | SE6 | SSE6 | SW5 | W4 | WSW5 | WNW6 | NNW7 | N10 | N5 | NNW10 | NNW16 | N13 | NNE12 | N9 | W3 | SSE6 | W6 | WNW5 | NW2.5 | NNW16 |
| 20-Aug | SSW8 | WNW3 | SSW2 | SSW6 | SW6 | SW5 | SSW3 | W3 | W2 | WNW5 | N12 | NNE14 | NNE11 | NNW10 | N11 | N9 | NNE11 | N9 | N8 | E5 | NE5 | NNE5 | SW5 | WSW4 | N3.2 | NNE14 |
| 21-Aug | SW7 | WSW6 | WSW6 | SW5 | SE5 | SSE5 | SSE4 | SE5 | S8 | S8 | S6 | SSW8 | S10 | SSW10 | SW12 | SSE12 | SSE13 | SSE14 | SSE14 | SE13 | SE13 | SE13 | SSE13 | SSE13 | S8.1 | SSE14 |
| 22-Aug | SSE11 | SE9 | SSE10 | SSE10 | SSE8 | SE8 | SE7 | SSE5 | SSE8 | SSE12 | SSE12 | SSE11 | SSE11 | S11 | SSE11 | SSE12 | SSE14 | SSE12 | SE11 | ESE10 | SE13 | SSE13 | SSE12 | SSE12 | SSE10.3 | SSE14 |
| 23-Aug | SSE10 | SSE11 | SSE12 | SSE11 | SSE11 | SE10 | SSE9 | SSE9 | SSE9 | S11 | SSE9 | S8 | S10 | S8 | SSE9 | SE2 | SSW6 | WSW8 | NW12 | NNW9 | NNW7 | W2 | W6 | NW8 | S4.9 | NW12 |
| 24-Aug | NW3 | NW4 | NW7 | NNW11 | NW9 | NNW8 | SW1 | W5 | NW6 | WNW7 | WNW12 | NW9 | NNW11 | NNW15 | NNE14 | N9 | N13 | NNE12 | NNE11 | N8 | N5 | WNW5 | NNW11 | NNW6 | NNW7.4 | NNW15 |
| 25-Aug | N4 | NNW3 | WSW6 | W5 | NW6 | NW6 | WSW2 | NW3 | NW3 | N4 | NNW6 | NW5 | NNE3 | ENE4 | E5 | NE9 | NE13 | NE13 | NE11 | NE10 | NNE6 | NNE5 | N4 | NNW6 | NNE3.9 | NE13 |
| 26-Aug | ENE4 | SE7 | ESE9 | SE8 | S1 | SE4 | SSE9 | SSE9 | SSE11 | SSE10 | SSE11 | SSE11 | SSE16 | SSE18 | SSE16 | SSE19 | SSE19 | SSE18 | SE14 | SE15 | SE13 | SE14 | SSE12 | SSE11 | SSE11.2 | SSE19 |
| 27-Aug | SE10 | SE8 | SE9 | SSE11 | SSE9 | SSE8 | SSE9 | SSE5 | SSW2 | SSE6 | ESE10 | SE11 | S15 | SSE13 | S12 | SE11 | ESE12 | ESE17 | ESE23 | ESE20 | ESE21 | SE21 | SE15 | SE13 | SE11.4 | ESE23 |
| 28-Aug | SE7 | ESE8 | SSE12 | SSE14 | SSW11 | WNW4 | SSE16 | S16 | SSE15 | S14 | SW18 | SW23 | SW25 | SW29 | SW27 | SW24 | SW23 | SW21 | WSW23 | WSW20 | WSW16 | SW20 | SW18 | SW17 | SW14.6 | SW29 |
| 29-Aug | SW16 | SW14 | SW16 | SW18 | SW18 | SW17 | SSW13 | SSW16 | SW17 | SW17 | SW17 | SW17 | WSW20 | SW18 | SW19 | SW16 | SW17 | SW14 | SW9 | S7 | SSE10 | SSE11 | SE11 | SSE10 | SW13.4 | WSW20 |
| 30-Aug | SSE6 | SSE10 | SSW2 | W2 | SE4 | ESE6 | W4 | S5 | S6 | SSE9 | SSE7 | SSW5 | SW6 | WSW8 | SW5 | SSW5 | SSW4 | S3 | UO | S6 | NNW3 | NE8 | N8 | NNW7 | S2.5 | SSE10 |
| 31-Aug | NNW9 | NNW6 | NE4 | WNW6 | WNW5 | WNW3 | WSW4 | SSW4 | W4 | WSW4 | NNW5 | WSW5 | SW4 | WSW4 | WSW3 | WSW7 | WSW7 | WSW10 | WNW13 | NNW10 | NNW7 | NNE3 | S2 | S5 | WNW3.4 | WNW13 |
| | WSW2.0 | SW1.8 | SW2.4 | WSW3.0 | SW2.6 | WSW2.1 | SSW2.2 | SW2.2 | W2.2 | W2.3 | NW3.3 | NW3.8 | NW3.1 | WNW3.5 | NW3.2 | NW3.4 | NNW3.1 | N2.2 | N3.0 | N1.8 | NNW1.1 | S0.4 | W1.6 | W2.0 | Diurnal Average | |
| | SW16 | NNW16 | NNW18 | N21 | SW18 | SW17 | SSE16 | N18 | NNW21 | NNW25 | NNW29 | NNW29 | NNW26 | SW29 | NNW29 | N30 | NNW28 | NNW27 | NNW24 | NNW23 | NNW23 | SE21 | WSW18 | SW17 | Diurnal Maximum | |

UO - Unstable Operation

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 13 km/h on Aug 27 18:00

Minimum Value: 0 km/h on Aug 14 00:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 4 $P_{90}$ = 5 $P_{99}$ = 8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 5 | 9 | 7 | 4 | 5 | 9 |
| 2-Aug | 3 | 5 | 4 | 6 | 5 | 3 | 3 | 5 | 5 | 7 | 9 | 8 | 7 | 8 | 9 | 9 | 9 | 8 | 7 | 7 | 7 | 4 | 4 | 3 | 9 |
| 3-Aug | 3 | 2 | 3 | 2 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 4-Aug | 0 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 8 | 6 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 8 |
| 5-Aug | 3 | 2 | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 7 | 6 | 5 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 7 |
| 6-Aug | 2 | 3 | 3 | 4 | 4 | 3 | 2 | 2 | 4 | 5 | 4 | 4 | 4 | 2 | 5 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 5 |
| 7-Aug | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 4 | 4 | 4 | 3 | 3 | 1 | 2 | 2 | 1 | 4 | 4 | 1 | 1 | 1 | 1 | 4 |
| 8-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 3 | 3 | 3 | 3 | 5 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 5 |
| 9-Aug | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 3 |
| 10-Aug | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 4 | 3 | 4 | 5 | 3 | 3 | 1 | 1 | 1 | 2 | 1 | 5 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 6 | 5 | 3 | 2 | 2 | 2 | 6 |
| 12-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 6 | 2 | 2 | 2 | 3 | 6 |
| 13-Aug | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 5 | 4 | 5 | 4 | 4 | 3 | 3 | 1 | 0 | 1 | 1 | 0 | 5 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 6 | 4 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 6 |
| 15-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 5 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 5 |
| 16-Aug | 2 | 1 | 3 | 3 | 3 | 1 | 2 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 4 | 2 | 3 | 5 | 1 | 1 | 2 | 1 | 1 | 1 | 6 |
| 17-Aug | 1 | 1 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 18-Aug | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 2 | 1 | 3 | 2 | 2 | 5 |
| 19-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 3 | 4 | 5 | 4 | 3 | 2 | 2 | 1 | 3 | 4 | 5 |
| 20-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 1 | 1 | 2 | 2 | 0 | 4 |
| 21-Aug | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 4 |
| 22-Aug | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 4 |
| 23-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 1 | 2 | 3 | 4 | 4 | 2 | 2 | 2 | 1 | 4 |
| 24-Aug | 2 | 3 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 6 | 4 | 3 | 5 | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 2 | 1 | 2 | 6 |
| 25-Aug | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 3 |
| 26-Aug | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | 4 | 5 | 5 | 6 | 5 | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 6 |
| 27-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 4 | 4 | 5 | 13 | 5 | 3 | 4 | 4 | 3 | 3 | 13 |
| 28-Aug | 2 | 1 | 3 | 3 | 5 | 4 | 4 | 4 | 3 | 4 | 6 | 7 | 8 | 9 | 8 | 7 | 6 | 7 | 6 | 6 | 5 | 6 | 5 | 5 | 9 |
| 29-Aug | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 6 | 6 | 5 | 6 | 5 | 5 | 4 | 3 | 1 | 1 | 1 | 1 | 2 | 6 |
| 30-Aug | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | UO | 1 | 4 | 3 | 2 | 1 | 4 |
| 31-Aug | 1 | 1 | 3 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 2 | 3 | 1 | 1 | 1 | 4 |
| | 4 | 5 | 4 | 6 | 5 | 5 | 4 | 5 | 5 | 7 | 9 | 8 | 8 | 9 | 9 | 9 | 9 | 13 | 7 | 7 | 9 | 7 | 5 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

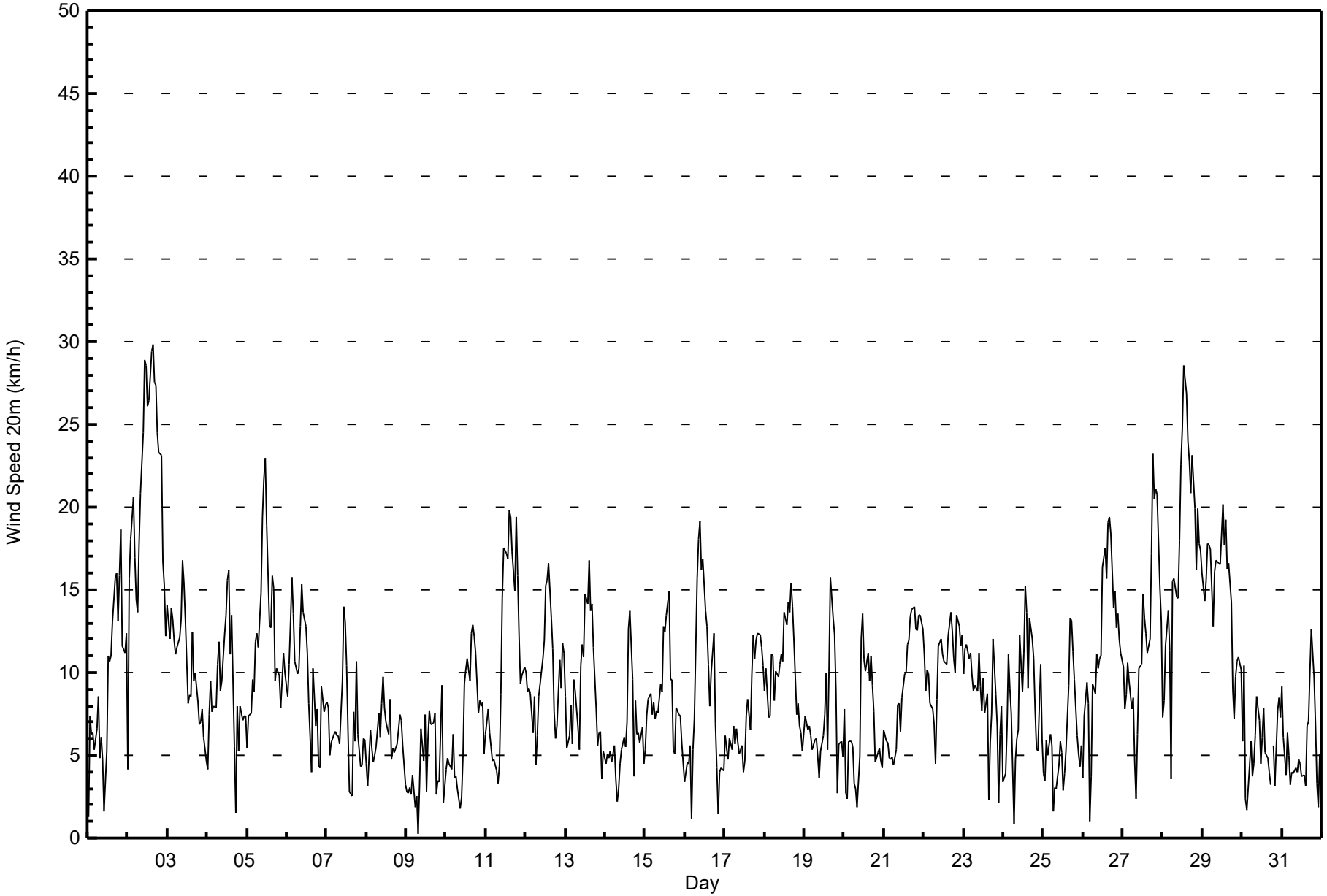
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 20m (WS20) - km/h**

**Barge Landing - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 179 | 24.09 | 24.09 |
| 6 - 11 | 350 | 47.11 | 71.20 |
| 12 - 19 | 182 | 24.50 | 95.69 |
| 20 - 28 | 27 | 3.63 | 99.33 |
| 29 - 38 | 5 | 0.67 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 20m (WS20) - km/h**

**Barge Landing - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 8 | 9 | 5 | 3 | 4 | 5 | 6 | 10 | 14 | 16 | 10 | 16 | 20 | 23 | 21 | 9 | 179 |
| 6 - 11 | 30 | 17 | 13 | 3 | 1 | 7 | 23 | 59 | 24 | 22 | 14 | 21 | 14 | 19 | 33 | 50 | 350 |
| 12 - 19 | 27 | 15 | 3 | 0 | 0 | 2 | 10 | 31 | 4 | 4 | 28 | 7 | 2 | 9 | 18 | 22 | 182 |
| 20 - 28 | 2 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 2 | 9 | 27 |
| 29 - 38 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 5 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 68 | 41 | 21 | 6 | 5 | 17 | 40 | 100 | 42 | 42 | 60 | 47 | 36 | 51 | 74 | 93 | 743 |

Total Number of Valid Hours: 743

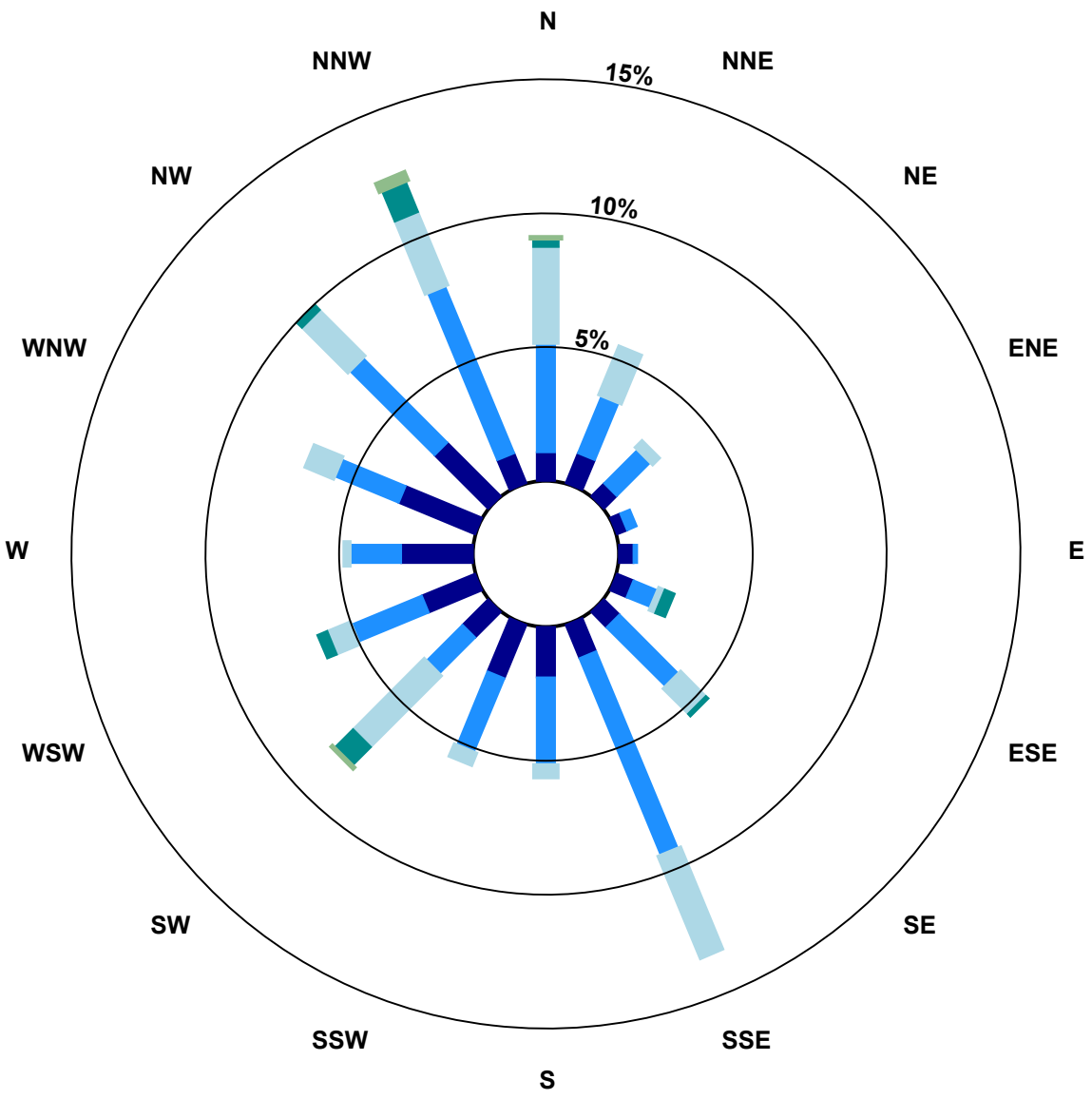
Total Number of Hours: 744

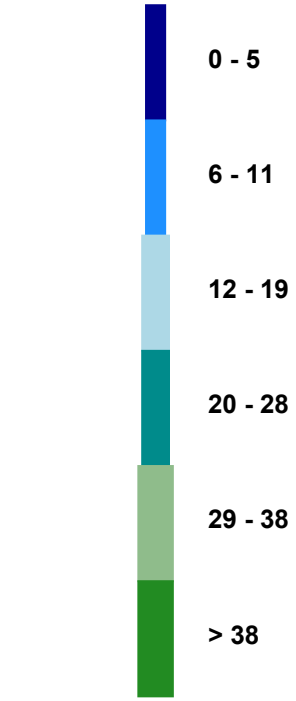
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 20m (WS20) - km/h**

**Barge Landing**




**Total Number of Valid Hours: 743**

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 20m (WD20) - deg

## Barge Landing - August 2026

Direction of Maximum Speed: 355 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 342.0 deg on Aug 2

Direction of Minimum Speed: 188 deg on Aug 9 08:00

Direction of Minimum Daily Speed Average: 2.4 deg on Aug 9

Monthly Average Direction: 285.9 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 107 | 121 | 141 | 204 | 164 | 162 | 154 | 190 | 75 | 104 | 39 | 55 | 40 | 32 | 348 | 337 | 326 | 338 | 341 | 331 | 338 | 2 | 4 | 360 | 2.0 |
| 2-Aug | 313 | 337 | 346 | 351 | 349 | 344 | 347 | 353 | 344 | 346 | 346 | 348 | 346 | 345 | 348 | 355 | 340 | 337 | 339 | 341 | 329 | 319 | 319 | 313 | 342.0 |
| 3-Aug | 319 | 312 | 314 | 313 | 301 | 309 | 309 | 312 | 333 | 335 | 336 | 338 | 4 | 344 | 22 | 33 | 26 | 35 | 68 | 93 | 125 | 140 | 160 | 174 | 340.9 |
| 4-Aug | 173 | 160 | 152 | 157 | 156 | 164 | 168 | 171 | 190 | 203 | 218 | 236 | 236 | 231 | 214 | 248 | 55 | 131 | 293 | 257 | 307 | 317 | 321 | 304 | 215.5 |
| 5-Aug | 301 | 254 | 250 | 255 | 276 | 292 | 312 | 335 | 306 | 305 | 309 | 307 | 311 | 302 | 294 | 340 | 355 | 343 | 322 | 315 | 278 | 272 | 279 | 299 | 304.6 |
| 6-Aug | 285 | 272 | 278 | 295 | 290 | 291 | 276 | 287 | 313 | 330 | 332 | 334 | 8 | 346 | 347 | 299 | 284 | 303 | 360 | 329 | 253 | 282 | 267 | 309 | 305.3 |
| 7-Aug | 310 | 306 | 315 | 306 | 297 | 259 | 258 | 243 | 273 | 283 | 290 | 280 | 17 | 17 | 287 | 315 | 23 | 29 | 18 | 10 | 264 | 289 | 311 | 262 | 308.9 |
| 8-Aug | 296 | 325 | 263 | 281 | 309 | 327 | 301 | 330 | 320 | 40 | 52 | 31 | 340 | 359 | 333 | 277 | 305 | 313 | 326 | 359 | 348 | 10 | 4 | 2 | 338.8 |
| 9-Aug | 314 | 100 | 207 | 271 | 270 | 333 | 267 | 188 | 239 | 257 | 290 | 323 | 345 | 341 | 321 | 307 | 307 | 47 | 334 | 28 | 30 | 55 | 68 | 307 | 326.4 |
| 10-Aug | 355 | 115 | 119 | 151 | 118 | 159 | 104 | 189 | 264 | 284 | 15 | 29 | 359 | 357 | 331 | 14 | 14 | 16 | 6 | 348 | 357 | 334 | 320 | 280 | 5.8 |
| 11-Aug | 236 | 243 | 240 | 238 | 236 | 218 | 208 | 245 | 302 | 327 | 3 | 359 | 3 | 3 | 4 | 7 | 4 | 5 | 9 | 13 | 4 | 1 | 351 | 345 | 351.1 |
| 12-Aug | 337 | 325 | 301 | 309 | 304 | 289 | 312 | 309 | 332 | 337 | 340 | 346 | 345 | 351 | 359 | 355 | 354 | 1 | 358 | 15 | 351 | 328 | 326 | 331 | 337.8 |
| 13-Aug | 341 | 340 | 347 | 343 | 329 | 17 | 13 | 346 | 14 | 49 | 21 | 44 | 25 | 18 | 23 | 24 | 52 | 40 | 8 | 330 | 338 | 343 | 310 | 300 | 12.1 |
| 14-Aug | 293 | 264 | 313 | 286 | 303 | 330 | 323 | 260 | 274 | 307 | 315 | 323 | 1 | 315 | 327 | 312 | 296 | 211 | 216 | 226 | 196 | 190 | 158 | 175 | 286.5 |
| 15-Aug | 160 | 148 | 185 | 195 | 186 | 172 | 175 | 192 | 192 | 182 | 194 | 229 | 224 | 224 | 203 | 252 | 255 | 249 | 209 | 207 | 220 | 227 | 215 | 199 | 206.1 |
| 16-Aug | 209 | 179 | 295 | 288 | 55 | 297 | 321 | 352 | 1 | 357 | 360 | 1 | 5 | 350 | 331 | 320 | 350 | 30 | 78 | 85 | 313 | 189 | 206 | 238 | 350.2 |
| 17-Aug | 241 | 252 | 250 | 197 | 207 | 216 | 202 | 186 | 213 | 228 | 226 | 185 | 147 | 133 | 132 | 156 | 161 | 157 | 150 | 154 | 157 | 150 | 140 | 144 | 171.3 |
| 18-Aug | 151 | 153 | 156 | 142 | 150 | 152 | 168 | 170 | 177 | 169 | 180 | 200 | 232 | 236 | 226 | 236 | 239 | 240 | 231 | 221 | 204 | 203 | 285 | 291 | 201.3 |
| 19-Aug | 263 | 236 | 190 | 199 | 163 | 166 | 141 | 165 | 222 | 270 | 248 | 283 | 329 | 351 | 354 | 330 | 335 | 4 | 17 | 358 | 280 | 148 | 275 | 294 | 304.1 |
| 20-Aug | 205 | 291 | 205 | 211 | 223 | 232 | 204 | 265 | 269 | 302 | 4 | 27 | 13 | 346 | 359 | 352 | 16 | 8 | 11 | 82 | 43 | 24 | 219 | 257 | 349.4 |
| 21-Aug | 233 | 241 | 242 | 218 | 136 | 166 | 149 | 133 | 187 | 169 | 187 | 198 | 172 | 201 | 219 | 162 | 154 | 154 | 150 | 145 | 143 | 145 | 150 | 158 | 169.1 |
| 22-Aug | 147 | 144 | 149 | 151 | 158 | 126 | 132 | 164 | 161 | 161 | 157 | 166 | 157 | 171 | 162 | 148 | 156 | 158 | 144 | 123 | 137 | 157 | 157 | 148 | 151.7 |
| 23-Aug | 160 | 152 | 154 | 154 | 153 | 145 | 149 | 161 | 164 | 170 | 153 | 181 | 170 | 171 | 159 | 129 | 205 | 251 | 325 | 332 | 338 | 259 | 263 | 309 | 172.3 |
| 24-Aug | 325 | 317 | 314 | 335 | 315 | 331 | 217 | 280 | 317 | 293 | 301 | 311 | 336 | 329 | 13 | 351 | 11 | 22 | 20 | 358 | 351 | 293 | 339 | 331 | 337.0 |
| 25-Aug | 8 | 336 | 247 | 264 | 315 | 310 | 256 | 312 | 318 | 4 | 333 | 311 | 26 | 68 | 95 | 55 | 54 | 44 | 45 | 36 | 16 | 22 | 7 | 346 | 13.4 |
| 26-Aug | 72 | 136 | 121 | 125 | 188 | 146 | 156 | 156 | 161 | 154 | 167 | 158 | 164 | 160 | 154 | 166 | 153 | 147 | 137 | 131 | 132 | 141 | 147 | 151 | 149.0 |
| 27-Aug | 142 | 131 | 126 | 153 | 157 | 159 | 152 | 159 | 208 | 149 | 120 | 142 | 174 | 160 | 170 | 133 | 105 | 121 | 115 | 109 | 114 | 125 | 140 | 137 | 135.2 |
| 28-Aug | 137 | 117 | 149 | 151 | 212 | 287 | 157 | 170 | 156 | 191 | 215 | 229 | 226 | 224 | 229 | 230 | 225 | 232 | 251 | 241 | 237 | 231 | 236 | 229 | 215.7 |
| 29-Aug | 226 | 221 | 228 | 231 | 218 | 215 | 201 | 198 | 214 | 229 | 236 | 232 | 238 | 230 | 228 | 231 | 229 | 229 | 218 | 191 | 159 | 149 | 144 | 147 | 216.6 |
| 30-Aug | 147 | 159 | 197 | 259 | 139 | 110 | 261 | 180 | 177 | 168 | 156 | 196 | 235 | 245 | 235 | 209 | 211 | 178 | UO | 185 | 330 | 48 | 353 | 337 | 187.8 |
| 31-Aug | 341 | 348 | 34 | 303 | 299 | 284 | 244 | 198 | 268 | 240 | 339 | 243 | 233 | 241 | 256 | 244 | 245 | 254 | 301 | 337 | 348 | 20 | 173 | 179 | 286.8 |
| | 251.4 | 218.9 | 227.0 | 242.0 | 233.9 | 240.2 | 206.4 | 224.7 | 260.7 | 279.6 | 307.7 | 304.1 | 312.7 | 302.8 | 304.8 | 316.6 | 335.0 | 358.8 | 357.4 | 6.2 | 337.2 | 190.1 | 263.8 | 267.0 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 100 deg on Aug 9 08:00

Minimum Value: 5 deg on Aug 17 21:00

Percentiles: $P_1$ = 6 $P_{10}$ = 10 $Q_1$ = 16 Median = 20 $Q_3$ = 31 $P_{90}$ = 49 $P_{99}$ = 81

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 76 | 5 | 19 | 9 | 21 | 19 | 16 | 25 | 40 | 49 | 76 | 33 | 26 | 30 | 41 | 23 | 19 | 14 | 14 | 16 | 35 | 50 | 25 | 35 | 76 |
| 2-Aug | 66 | 19 | 14 | 16 | 16 | 14 | 15 | 18 | 15 | 16 | 17 | 18 | 17 | 17 | 25 | 31 | 24 | 19 | 17 | 18 | 16 | 15 | 15 | 16 | 66 |
| 3-Aug | 13 | 13 | 11 | 11 | 8 | 11 | 12 | 16 | 23 | 21 | 23 | 24 | 39 | 32 | 51 | 20 | 26 | 19 | 21 | 12 | 10 | 8 | 10 | 14 | 51 |
| 4-Aug | 11 | 8 | 10 | 15 | 13 | 17 | 17 | 15 | 24 | 26 | 28 | 22 | 20 | 19 | 22 | 36 | 69 | 81 | 22 | 25 | 27 | 25 | 18 | 18 | 81 |
| 5-Aug | 46 | 19 | 14 | 11 | 22 | 15 | 23 | 19 | 20 | 19 | 18 | 19 | 16 | 22 | 23 | 18 | 18 | 19 | 15 | 17 | 16 | 17 | 16 | 20 | 46 |
| 6-Aug | 17 | 16 | 16 | 16 | 18 | 16 | 16 | 16 | 17 | 21 | 21 | 25 | 40 | 25 | 58 | 57 | 21 | 36 | 29 | 39 | 40 | 21 | 25 | 15 | 58 |
| 7-Aug | 17 | 25 | 30 | 22 | 21 | 15 | 15 | 21 | 40 | 29 | 21 | 22 | 24 | 24 | 32 | 61 | 21 | 17 | 17 | 35 | 12 | 20 | 8 | 18 | 61 |
| 8-Aug | 53 | 48 | 21 | 23 | 17 | 16 | 21 | 23 | 33 | 48 | 26 | 30 | 44 | 52 | 34 | 44 | 31 | 32 | 21 | 17 | 10 | 19 | 18 | 25 | 53 |
| 9-Aug | 49 | 55 | 49 | 28 | 29 | 44 | 46 | 100 | 57 | 37 | 59 | 26 | 79 | 41 | 20 | 32 | 27 | 30 | 50 | 24 | 23 | 8 | 79 | 50 | 100 |
| 10-Aug | 30 | 12 | 19 | 21 | 27 | 41 | 20 | 48 | 57 | 66 | 76 | 33 | 30 | 32 | 25 | 25 | 22 | 19 | 16 | 16 | 11 | 11 | 20 | 9 | 76 |
| 11-Aug | 14 | 6 | 15 | 14 | 27 | 42 | 21 | 43 | 37 | 23 | 23 | 22 | 23 | 20 | 20 | 19 | 17 | 21 | 16 | 15 | 15 | 13 | 12 | 12 | 43 |
| 12-Aug | 9 | 8 | 7 | 11 | 9 | 10 | 20 | 16 | 18 | 19 | 16 | 17 | 20 | 19 | 22 | 26 | 22 | 36 | 48 | 57 | 12 | 16 | 11 | 11 | 57 |
| 13-Aug | 11 | 17 | 17 | 20 | 18 | 17 | 17 | 23 | 51 | 19 | 24 | 22 | 18 | 18 | 19 | 22 | 20 | 17 | 19 | 21 | 6 | 11 | 29 | 21 | 51 |
| 14-Aug | 22 | 19 | 11 | 8 | 7 | 15 | 19 | 41 | 36 | 29 | 26 | 52 | 52 | 34 | 28 | 22 | 25 | 37 | 19 | 10 | 28 | 26 | 16 | 27 | 52 |
| 15-Aug | 21 | 14 | 16 | 13 | 13 | 11 | 18 | 19 | 24 | 23 | 31 | 24 | 30 | 26 | 22 | 29 | 19 | 24 | 28 | 12 | 9 | 10 | 21 | 37 | 37 |
| 16-Aug | 74 | 27 | 70 | 27 | 94 | 33 | 20 | 17 | 18 | 19 | 21 | 25 | 23 | 22 | 29 | 32 | 19 | 21 | 14 | 37 | 83 | 34 | 7 | 21 | 94 |
| 17-Aug | 5 | 11 | 14 | 13 | 25 | 23 | 21 | 25 | 34 | 31 | 23 | 17 | 26 | 17 | 31 | 39 | 25 | 20 | 11 | 6 | 5 | 7 | 6 | 7 | 39 |
| 18-Aug | 13 | 6 | 12 | 12 | 6 | 8 | 26 | 22 | 23 | 25 | 27 | 28 | 20 | 23 | 24 | 20 | 16 | 18 | 17 | 17 | 12 | 24 | 35 | 17 | 35 |
| 19-Aug | 15 | 13 | 22 | 17 | 29 | 57 | 46 | 28 | 32 | 60 | 33 | 49 | 45 | 26 | 68 | 15 | 15 | 20 | 15 | 18 | 57 | 33 | 53 | 79 | 79 |
| 20-Aug | 28 | 78 | 63 | 15 | 21 | 18 | 34 | 46 | 84 | 41 | 36 | 32 | 32 | 31 | 26 | 34 | 24 | 20 | 21 | 19 | 32 | 19 | 26 | 29 | 84 |
| 21-Aug | 17 | 7 | 10 | 31 | 16 | 17 | 28 | 21 | 25 | 28 | 39 | 38 | 35 | 38 | 32 | 31 | 23 | 15 | 11 | 8 | 7 | 6 | 7 | 9 | 39 |
| 22-Aug | 6 | 10 | 8 | 9 | 8 | 13 | 11 | 32 | 18 | 18 | 16 | 26 | 26 | 29 | 25 | 20 | 18 | 14 | 13 | 7 | 9 | 8 | 9 | 9 | 32 |
| 23-Aug | 11 | 9 | 9 | 10 | 7 | 16 | 15 | 13 | 16 | 17 | 22 | 32 | 27 | 35 | 18 | 38 | 30 | 23 | 28 | 31 | 34 | 72 | 27 | 17 | 72 |
| 24-Aug | 73 | 43 | 30 | 8 | 17 | 14 | 78 | 48 | 25 | 29 | 20 | 37 | 21 | 18 | 19 | 29 | 28 | 18 | 14 | 9 | 18 | 16 | 8 | 19 | 78 |
| 25-Aug | 40 | 39 | 12 | 18 | 12 | 16 | 47 | 24 | 66 | 52 | 44 | 48 | 76 | 59 | 50 | 19 | 16 | 15 | 13 | 11 | 16 | 25 | 25 | 17 | 76 |
| 26-Aug | 35 | 10 | 7 | 10 | 82 | 25 | 12 | 17 | 18 | 17 | 21 | 28 | 21 | 21 | 19 | 19 | 16 | 13 | 11 | 8 | 6 | 7 | 6 | 6 | 82 |
| 27-Aug | 10 | 8 | 10 | 11 | 6 | 8 | 10 | 50 | 82 | 41 | 23 | 34 | 22 | 19 | 19 | 32 | 31 | 57 | 12 | 9 | 10 | 11 | 11 | 11 | 82 |
| 28-Aug | 12 | 16 | 13 | 16 | 39 | 75 | 17 | 20 | 14 | 25 | 20 | 21 | 20 | 19 | 18 | 18 | 19 | 24 | 17 | 16 | 17 | 17 | 18 | 19 | 75 |
| 29-Aug | 19 | 19 | 18 | 17 | 17 | 17 | 21 | 20 | 19 | 19 | 20 | 23 | 21 | 22 | 19 | 21 | 20 | 22 | 15 | 19 | 9 | 8 | 10 | 7 | 23 |
| 30-Aug | 22 | 11 | 64 | 71 | 36 | 13 | 45 | 45 | 31 | 32 | 34 | 51 | 51 | 37 | 61 | 56 | 60 | 49 | UO | 18 | 85 | 43 | 29 | 18 | 85 |
| 31-Aug | 8 | 32 | 68 | 21 | 20 | 46 | 42 | 42 | 57 | 68 | 64 | 57 | 77 | 71 | 86 | 45 | 55 | 32 | 19 | 14 | 24 | 55 | 77 | 11 | 86 |
| | 76 | 78 | 70 | 71 | 94 | 75 | 78 | 100 | 84 | 68 | 76 | 57 | 79 | 71 | 86 | 61 | 69 | 81 | 50 | 57 | 85 | 72 | 79 | 79 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

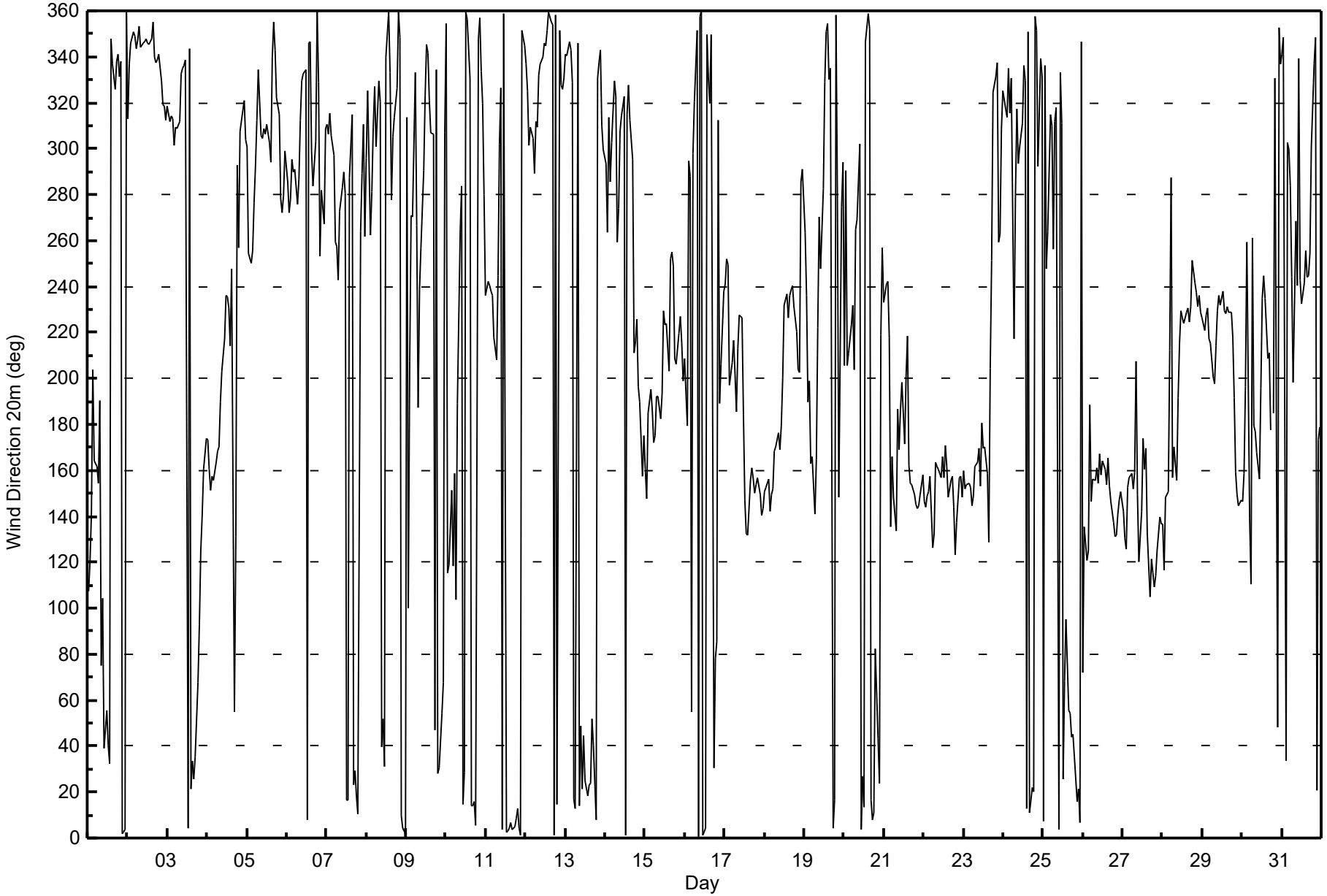
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 20m (WD20) - deg**

**Barge Landing - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS11
## LOWER CAMP
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 709 | 35 | 35 | 100 | 28.2 | 0 | 4.1 | 0 |
| H2S (ppb) Average | 708 | 36 | 36 | 100 | 14 | 1 | 2.9 | 0 |
| THC (ppm) Average | 709 | 35 | 35 | 100 | 3.4 | - | 2.5 | - |
| CH4(ppm) Average | 709 | 35 | 35 | 100 | 3.4 | - | 2.5 | - |
| NMHC(ppm) Average | 709 | 35 | 35 | 100 | 0.031 | - | 0.004 | - |
| Temperature (C) Average | 744 | 0 | 0 | 100 | 30 | - | 22.1 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 99.4 | - | 89 | - |
| Barometric Pressure (inHg) Average | 744 | 0 | 0 | 100 | 29.4 | - | 29.3 | - |
| Wind Speed 10 m (km/h) Average | 726 | 0 | 18 | 97.58 | 27 | - | 17 | - |
| Wind Direction 10 m (deg) Average | 726 | 0 | 18 | 97.58 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 709 | 0.72 | 2.1 | - | 0 | 0 | 0.1 | 0.1 | 0.4 | 1.5 | 28.2 |
| H2S (ppb) Average | 708 | 0.84 | 1.1 | - | 0 | 0.1 | 0.2 | 0.4 | 1.1 | 2 | 14 |
| THC (ppm) Average | 709 | 2.21 | 0.2 | - | 2 | 2 | 2.1 | 2.2 | 2.3 | 2.5 | 3.4 |
| CH4(ppm) Average | 709 | 2.21 | 0.2 | - | 2 | 2 | 2.1 | 2.2 | 2.3 | 2.5 | 3.4 |
| NMHC(ppm) Average | 709 | 0.001 | 0.002 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.031 |
| Temperature 2 m (C) Average | 744 | 17.56 | 4.6 | - | 8.4 | 11.9 | 13.9 | 16.9 | 20.8 | 24.4 | 30 |
| Relative Humidity (%) Average | 744 | 72.52 | 18.5 | - | 31.7 | 46.1 | 56.6 | 75.1 | 88.6 | 96 | 99.4 |
| Barometric Pressure (inHg) Average | 744 | 29.07 | 0.2 | - | 28.6 | 28.8 | 28.9 | 29.1 | 29.2 | 29.3 | 29.4 |
| Wind Speed 10 m (km/h) Average | 726 | 8.1 | 5 | - | 0 | 2 | 4 | 7 | 11 | 15 | 27 |
| Wind Direction 10 m (deg) Average | 726 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| Wind Speed, Wind Direction | 01 Aug 2026 03:00 | 26 Aug 2026 06:00 | 18 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Lower Camp - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 28.2 ppb on Aug 25 15:00
Maximum Daily Average: 4.1 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 1 02:00
Minimum Daily Average: 0.0 ppb on Aug 2
Maximum Diurnal Average: 1.4 ppb at hour 15
Minimum Diurnal Average: 0.3 ppb at hour 8
Monthly Average: 0.72 ppb
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.4 $P_{90}$ = 1.5 $P_{99}$ = 10.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 1.4 | 0.3 | 0.2 | 0.1 | 0.5 | 0.3 | 0.1 | 0.2 | 1.4 |
| 2-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 |
| 4-Aug | 0.2 | 0.2 | 0.3 | 1.0 | 0.9 | Z | 0.4 | 0.6 | 0.4 | 0.6 | 0.5 | 0.1 | 0.1 | 0.2 | 0.1 | 1.0 | 0.6 | 0.0 | 0.2 | 0.1 | 0.5 | 0.0 | 0.0 | 0.0 | 0.3 | 1.0 |
| 5-Aug | Z | 0.2 | 1.9 | 1.4 | 1.2 | 0.6 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.1 | 0.1 | 0.3 | 1.9 |
| 6-Aug | 0.1 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 |
| 7-Aug | 0.0 | 0.1 | Z | 0.2 | 0.8 | 0.2 | 0.2 | 1.5 | 6.4 | 9.0 | 1.1 | 7.4 | 5.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.0 | 0.1 | 0.7 | 2.6 | 1.6 | 9.0 |
| 8-Aug | 0.2 | 0.3 | 0.6 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 2.7 | 9.9 | 0.6 | 9.9 |
| 9-Aug | 1.7 | 0.4 | 0.5 | 0.3 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 0.5 | 0.5 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.6 | 1.2 | 0.3 | 0.4 | 1.7 |
| 10-Aug | 0.2 | 0.5 | 0.6 | 0.2 | 0.1 | Z | 0.2 | 0.3 | 0.4 | 4.3 | 2.0 | 1.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 12.5 | 5.3 | 1.2 | 12.5 |
| 11-Aug | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.0 | 0.9 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 |
| 12-Aug | 0.2 | Z | 0.7 | 0.4 | 0.3 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.7 |
| 13-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 14-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.8 | 0.2 | 0.1 | 2.2 | 0.9 | 0.9 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 2.2 |
| 15-Aug | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.7 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.3 | 0.0 | 2.2 | 0.3 | 0.1 | 6.0 | 1.5 | 0.1 | 0.6 | 6.0 |
| 16-Aug | 0.0 | 0.0 | 0.2 | 0.7 | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.7 |
| 17-Aug | Z | 0.2 | 0.2 | 0.8 | 2.2 | 0.5 | 0.1 | 0.4 | 1.3 | 6.3 | 4.4 | 0.7 | 0.4 | 1.9 | 4.6 | 4.0 | 1.9 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 1.3 | 6.3 |
| 18-Aug | 0.2 | Z | 1.3 | 1.4 | 1.0 | 1.0 | 1.9 | 2.0 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 | 0.7 | 0.5 | 0.0 | 0.0 | 0.1 | 4.9 | 11.3 | 4.3 | 4.2 | 3.0 | 1.7 | 11.3 |
| 19-Aug | 7.6 | 1.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 2.4 | 1.4 | 0.4 | 0.2 | 0.5 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 7.6 |
| 20-Aug | 0.1 | 0.2 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.1 | 0.0 | 0.1 | 0.7 |
| 21-Aug | 0.0 | 0.1 | 0.1 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 0.4 | 0.0 | 0.1 | 1.2 | 0.5 | 0.0 | 0.0 | 0.1 | 0.2 | 1.2 |
| 22-Aug | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.7 | 1.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 1.5 |
| 23-Aug | Z | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 24-Aug | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.3 |
| 25-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 4.4 | 11.2 | 10.1 | 28.2 | 22.7 | 12.2 | 4.4 | 0.6 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 4.1 | 28.2 |
| 26-Aug | 0.2 | 0.3 | 0.4 | Z | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | C | C | C | C | 0.9 | 0.5 | 2.1 | 1.4 | 1.6 | 3.2 | 3.2 | 0.7 | 0.2 | 0.1 | 0.1 | 0.8 | 3.2 |
| 27-Aug | 0.0 | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.7 | 1.9 | 0.5 | 0.6 | 1.1 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.3 | 0.5 | 0.3 | 0.2 | 0.4 | 1.9 |
| 28-Aug | 0.2 | 0.1 | 1.4 | 2.8 | 0.4 | 0.3 | Z | 0.1 | 0.1 | 1.4 | 1.0 | 0.7 | 3.1 | 3.5 | 0.1 | 0.0 | 0.1 | 2.5 | 0.2 | 0.1 | 0.1 | 0.8 | 0.8 | 1.0 | 0.9 | 3.5 |
| 29-Aug | Z | 4.5 | 2.9 | 7.5 | 6.2 | 4.1 | 3.8 | 0.6 | 0.9 | 0.9 | 1.0 | 0.4 | 0.3 | 0.7 | 0.2 | 0.4 | 0.5 | 1.8 | 5.6 | 1.7 | 1.2 | 0.7 | 0.5 | 0.4 | 2.0 | 7.5 |
| 30-Aug | 0.3 | Z | 0.3 | 0.3 | 2.0 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 1.2 | 3.8 | 6.6 | 8.5 | 11.7 | 3.8 | 1.1 | 0.6 | 0.3 | 3.7 | 1.2 | 2.1 | 11.7 |
| 31-Aug | 0.3 | 0.1 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 3.5 | 5.1 | 5.5 | 5.9 | 0.1 | 0.1 | 0.0 | 0.4 | 0.1 | 0.0 | 0.0 | 0.2 | 0.4 | 0.1 | 0.0 | 1.0 | 5.9 |
| | 0.5 | 0.4 | 0.5 | 0.7 | 0.6 | 0.3 | 0.3 | 0.3 | 0.5 | 1.0 | 0.7 | 0.8 | 1.0 | 0.7 | 1.4 | 1.3 | 1.0 | 0.9 | 0.6 | 0.5 | 0.6 | 0.6 | 1.0 | 0.8 | Diurnal Average | |
| | 7.6 | 4.5 | 2.9 | 7.5 | 6.2 | 4.1 | 3.8 | 2.0 | 6.4 | 9.0 | 5.1 | 7.4 | 11.2 | 10.1 | 28.2 | 22.7 | 12.2 | 11.7 | 5.6 | 4.9 | 11.3 | 6.0 | 12.5 | 9.9 | Diurnal Maximum | |

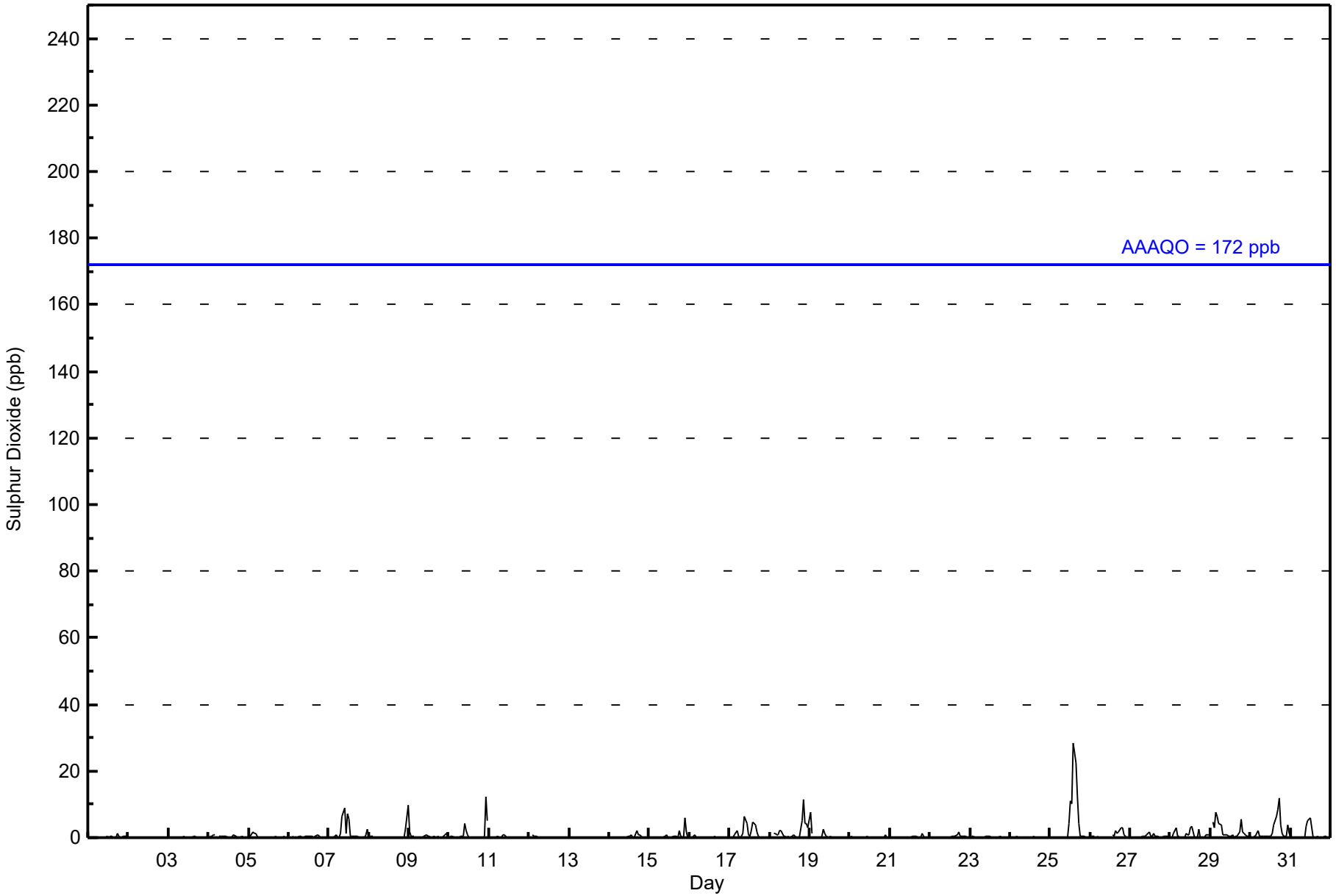
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Lower Camp - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Lower Camp - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 702 | 99.01 | 99.01 |
| 11 - 20 | 5 | 0.71 | 99.72 |
| 21 - 60 | 2 | 0.28 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Lower Camp - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 82 | 31 | 17 | 12 | 15 | 35 | 119 | 52 | 19 | 4 | 14 | 26 | 42 | 50 | 100 | 69 | 687 |
| 11 - 20 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 5 |
| 21 - 60 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 83 | 31 | 21 | 12 | 15 | 35 | 119 | 52 | 19 | 4 | 14 | 27 | 42 | 50 | 101 | 69 | 694 |

Total Number of Valid Hours: 694

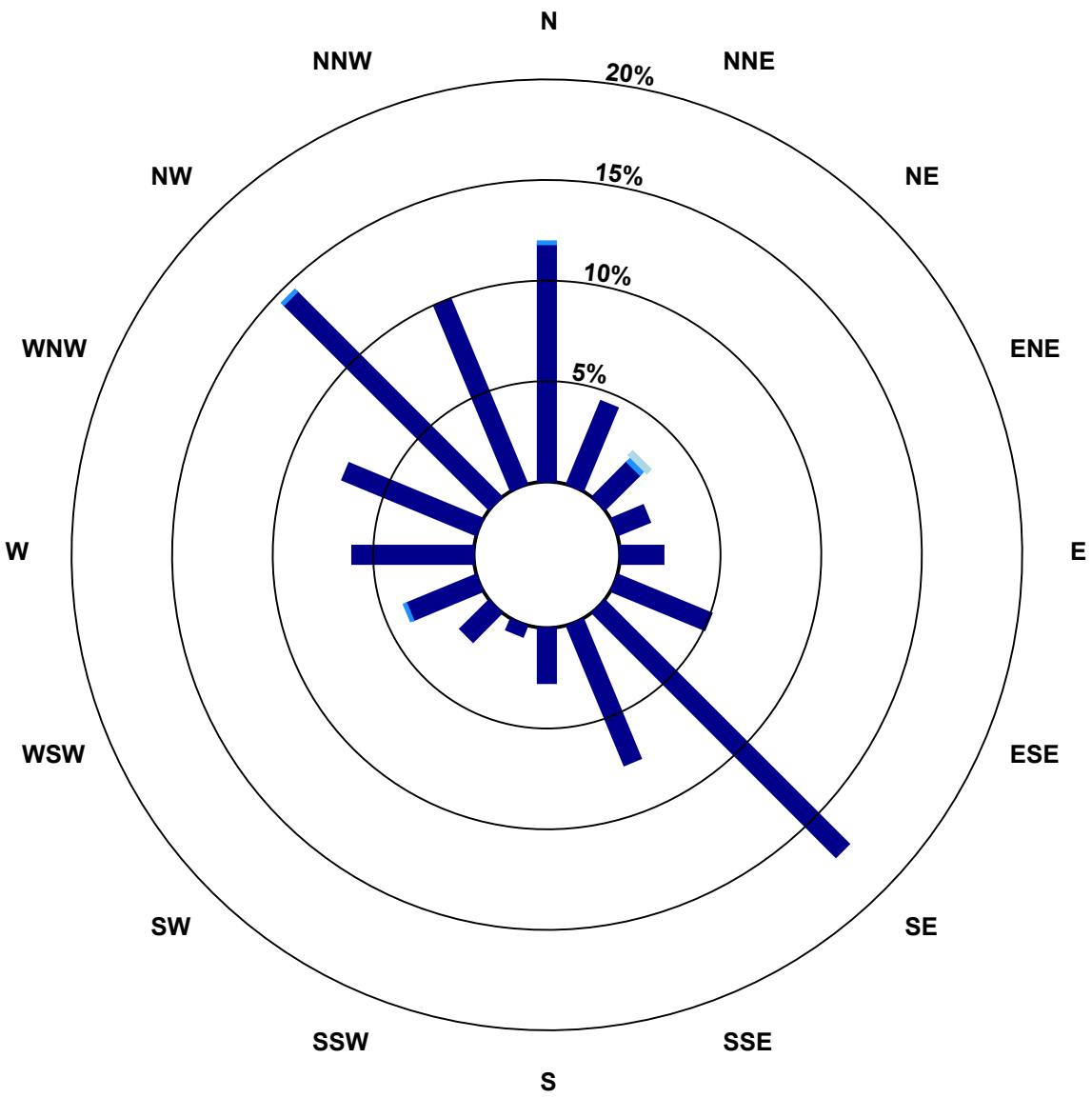
Total Number of Hours: 744

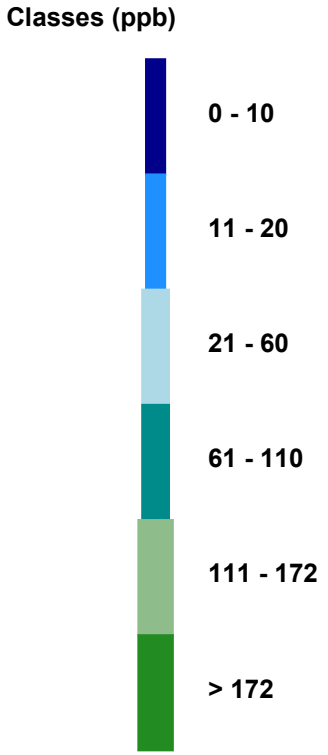
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Sulphur Dioxide ($SO_2$) - ppb**

**Lower Camp**



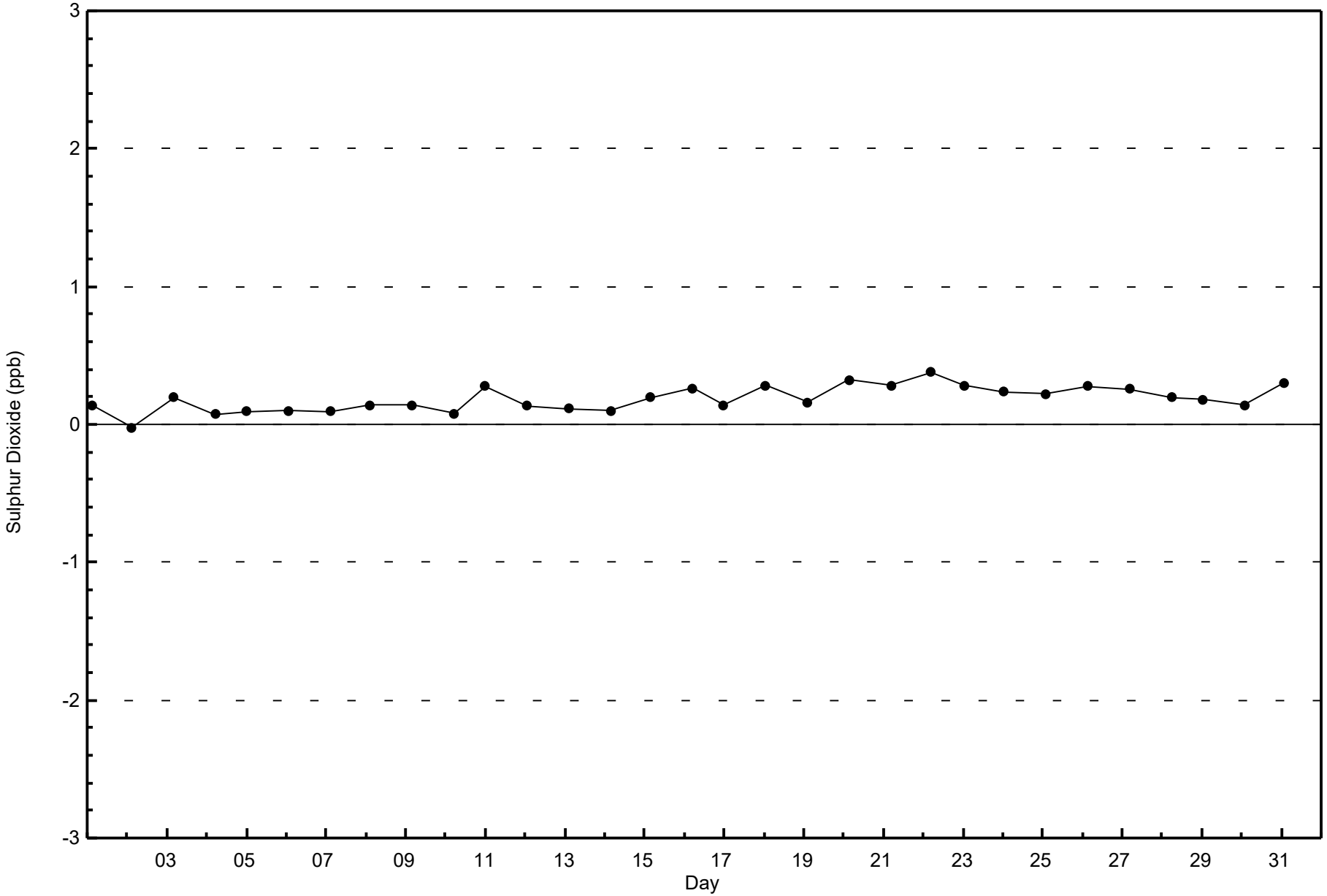

**Total Number of Valid Hours: 694**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Lower Camp - August 2026**

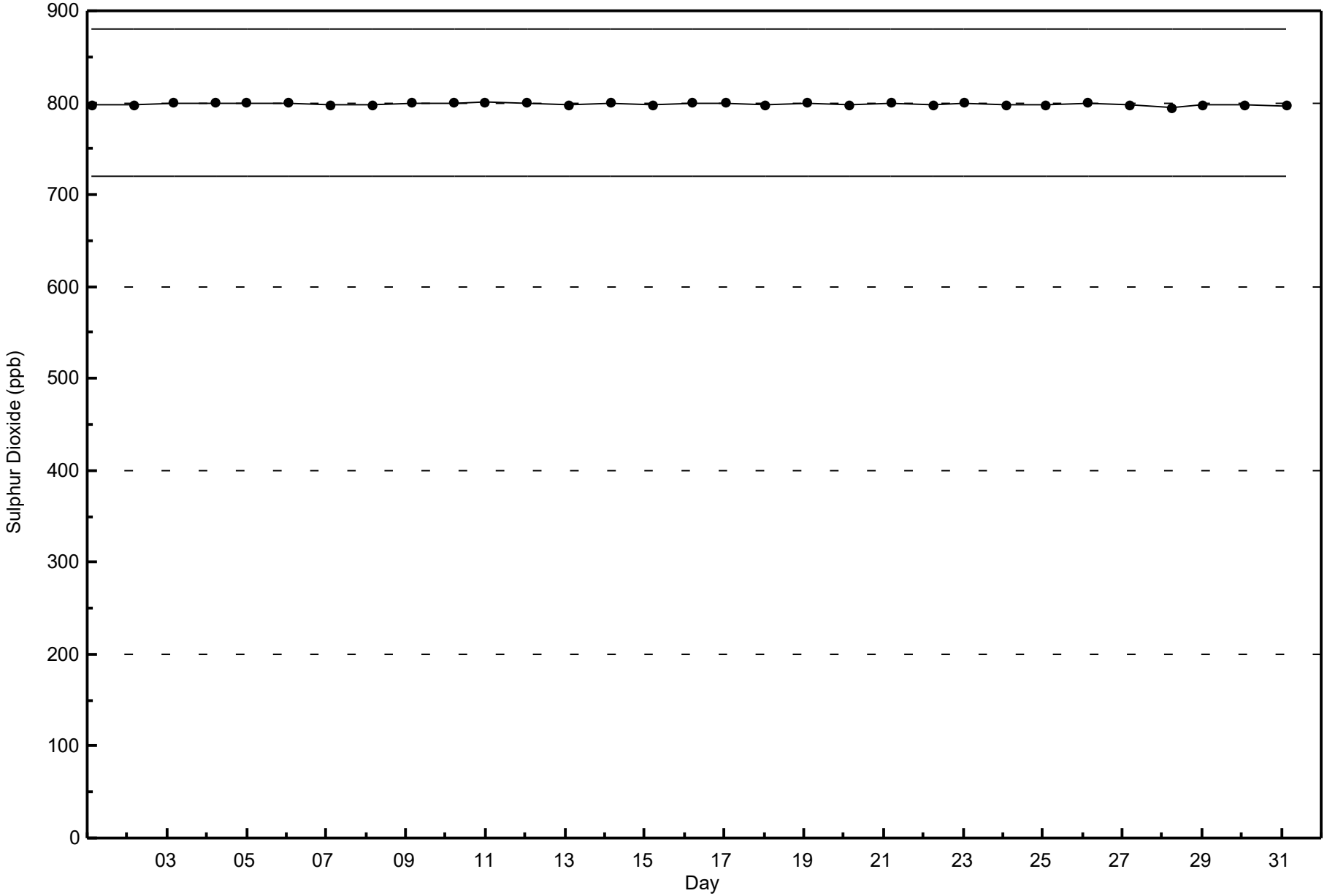


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Lower Camp - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Lower Camp - August 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 0
Maximum Value: 14.0 ppb on Aug 27 22:00 Maximum Daily Average: 2.9 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 18 15:00 Minimum Daily Average: 0.2 ppb on Aug 3
Maximum Diurnal Average: 1.4 ppb at hour 4 Minimum Diurnal Average: 0.2 ppb at hour 14
Monthly Average: 0.84 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.4 $Q_3$ = 1.1 $P_{90}$ = 2.0 $P_{99}$ = 5.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.4 | 1.8 | 1.2 | Z | 1.8 | 1.9 | 3.4 | 2.3 | 2.6 | 2.9 | 6.3 | 8.3 | 0.7 | 2.4 | 3.5 | 1.2 | 1.2 | 3.0 | 1.3 | 0.8 | 0.8 | 1.0 | 0.4 | 0.4 | 2.3 | 8.3 |
| 2-Aug | 0.8 | 0.4 | 0.4 | 0.3 | Z | 0.6 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.8 |
| 3-Aug | 0.1 | 0.2 | 0.2 | 0.2 | 0.6 | Z | 0.5 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 1.1 | 1.2 | 0.2 | 1.2 |
| 4-Aug | Z | 1.5 | 1.4 | 3.2 | 2.6 | 1.3 | 1.6 | 1.9 | 0.5 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.9 | 0.7 | 3.8 | 0.4 | 0.4 | 0.7 | 1.0 | 3.8 |
| 5-Aug | 2.8 | Z | 0.7 | 2.5 | 2.7 | 3.3 | 2.5 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 2.0 | 3.2 | 3.3 | 1.1 | 3.3 |
| 6-Aug | 2.3 | 2.5 | Z | 3.8 | 3.7 | 1.7 | 2.6 | 1.8 | 1.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 | 0.2 | 0.3 | 0.8 | 1.5 | 0.2 | 0.3 | 2.1 | 3.4 | 2.5 | 1.4 | 3.8 |
| 7-Aug | 1.1 | 0.3 | 0.3 | Z | 1.7 | 2.0 | 2.9 | 1.8 | 1.5 | 1.4 | 1.8 | 1.1 | 0.5 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.3 | 0.7 | 1.1 | 0.9 | 2.9 |
| 8-Aug | 0.6 | 0.9 | 1.2 | 1.0 | Z | 1.2 | 0.9 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.3 | 0.7 | 2.1 | 0.5 | 2.1 |
| 9-Aug | 0.9 | 0.8 | 0.9 | 0.4 | 0.3 | Z | 0.7 | 0.6 | 1.0 | 1.4 | 0.4 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 | 0.6 | 0.3 | 0.4 | 1.4 |
| 10-Aug | Z | 1.6 | 1.6 | 1.2 | 1.3 | 0.6 | 0.8 | 0.9 | 0.9 | 2.9 | 3.2 | 1.9 | 0.5 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 1.9 | 1.8 | 1.0 | 3.2 |
| 11-Aug | 0.8 | Z | 0.7 | 0.7 | 0.9 | 1.6 | 2.7 | 3.0 | 4.3 | 3.0 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.4 | 0.9 | 4.3 |
| 12-Aug | 0.4 | 1.0 | Z | 1.0 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 1.0 |
| 13-Aug | 0.3 | 0.3 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 1.9 | 0.4 | 0.5 | 0.3 | 1.9 |
| 14-Aug | 0.5 | 0.7 | 0.8 | 0.9 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.3 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.4 | 0.9 |
| 15-Aug | 0.6 | 0.5 | 0.7 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 1.1 | 0.6 | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.9 | 0.3 | 0.2 | 0.4 | 1.1 |
| 16-Aug | Z | 0.2 | 0.4 | 2.6 | 2.6 | 1.2 | 0.6 | 0.6 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.6 | 0.5 | 2.6 |
| 17-Aug | 1.7 | Z | 2.2 | 2.0 | 2.0 | 1.5 | 1.3 | 1.1 | 0.9 | 1.0 | 0.9 | 1.2 | 0.4 | 0.3 | 1.3 | 1.9 | 0.3 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 1.0 | 1.1 | 1.0 | 2.2 |
| 18-Aug | 1.1 | 1.4 | Z | 1.2 | 1.1 | 1.0 | 1.3 | 1.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.6 | 0.7 | 0.8 | 0.7 | 0.6 | 1.6 |
| 19-Aug | 1.9 | 1.0 | 1.5 | Z | 1.2 | 1.0 | 0.7 | 1.1 | 0.8 | 0.9 | 1.7 | 0.3 | 0.4 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.2 | 0.4 | 0.3 | 0.5 | 0.7 | 0.7 | 0.7 | 1.9 |
| 20-Aug | 1.8 | 2.9 | 1.3 | 1.5 | Z | 2.7 | 2.6 | 2.4 | 2.2 | 1.5 | 1.6 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 1.0 | 1.9 | 0.8 | 0.7 | 1.1 | 2.9 |
| 21-Aug | 0.8 | 2.7 | 2.6 | 1.6 | 1.7 | Z | 2.1 | 1.0 | 1.5 | 0.8 | 1.2 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.3 | 0.4 | 0.6 | 0.3 | 0.8 | 2.7 |
| 22-Aug | Z | 0.9 | 1.1 | 1.1 | 2.0 | 2.0 | 2.6 | 2.8 | 1.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 | 1.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 2.8 |
| 23-Aug | 0.9 | Z | 1.8 | 1.5 | 1.4 | 1.4 | 1.6 | 0.9 | 0.4 | 1.0 | 1.0 | 1.0 | 1.0 | 0.3 | 0.6 | 1.4 | 0.8 | 1.3 | 0.9 | 2.4 | 0.7 | 0.4 | 0.8 | 0.8 | 1.1 | 2.4 |
| 24-Aug | 1.0 | 0.9 | Z | 0.8 | 0.5 | 0.6 | 1.3 | 0.5 | 0.5 | 0.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.6 | 0.6 | 0.7 | 0.7 | 0.5 | 1.3 |
| 25-Aug | 1.9 | 0.5 | 0.5 | Z | 0.6 | 0.5 | 0.6 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.5 | 0.7 | 1.2 | 0.8 | 0.6 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.7 | 0.9 | 0.6 | 1.9 |
| 26-Aug | 0.9 | 0.9 | 1.2 | 1.1 | Z | 1.3 | 1.4 | 1.3 | 0.8 | 1.0 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.9 | 1.0 | 0.4 | 0.3 | 0.5 | 0.9 | 0.7 | 1.4 |
| 27-Aug | 1.1 | 1.6 | 2.5 | 2.3 | 1.8 | Z | 1.4 | 1.2 | 0.4 | 4.2 | 3.5 | 2.0 | 0.1 | 0.2 | 0.2 | 0.3 | 6.4 | 2.4 | 0.2 | 0.3 | 5.4 | 14.0 | 6.6 | 7.5 | 2.9 | 14.0 |
| 28-Aug | 4.3 | Z | 6.3 | 1.9 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | C | C | C | C | C | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.9 | 6.3 |
| 29-Aug | 0.4 | Z | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 4.2 | 4.1 | 0.5 | 0.7 | 0.7 | 0.6 | 4.2 |
| 30-Aug | 0.8 | 1.6 | Z | 2.4 | 1.8 | 2.5 | 2.9 | 2.8 | 2.4 | 1.3 | 0.5 | 0.6 | 0.2 | 0.3 | 0.6 | 0.2 | 0.0 | 0.1 | 0.2 | 0.6 | 0.4 | 1.3 | 0.9 | 1.0 | 1.1 | 2.9 |
| 31-Aug | 0.6 | 0.4 | 0.7 | Z | 1.2 | 0.6 | 0.4 | 1.2 | 0.8 | 1.9 | 2.0 | 0.6 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 1.3 | 2.2 | 1.2 | 0.9 | 0.7 | 2.2 |
| | 1.2 | 1.1 | 1.3 | 1.4 | 1.4 | 1.2 | 1.4 | 1.1 | 0.9 | 1.0 | 1.0 | 0.7 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.6 | 0.8 | 1.2 | 1.0 | 1.1 | Diurnal Average | |
| | 4.3 | 2.9 | 6.3 | 3.8 | 3.7 | 3.3 | 3.4 | 3.0 | 4.3 | 4.2 | 6.3 | 8.3 | 1.0 | 2.4 | 3.5 | 1.9 | 6.4 | 3.0 | 1.5 | 4.2 | 5.4 | 14.0 | 6.6 | 7.5 | Diurnal Maximum | |

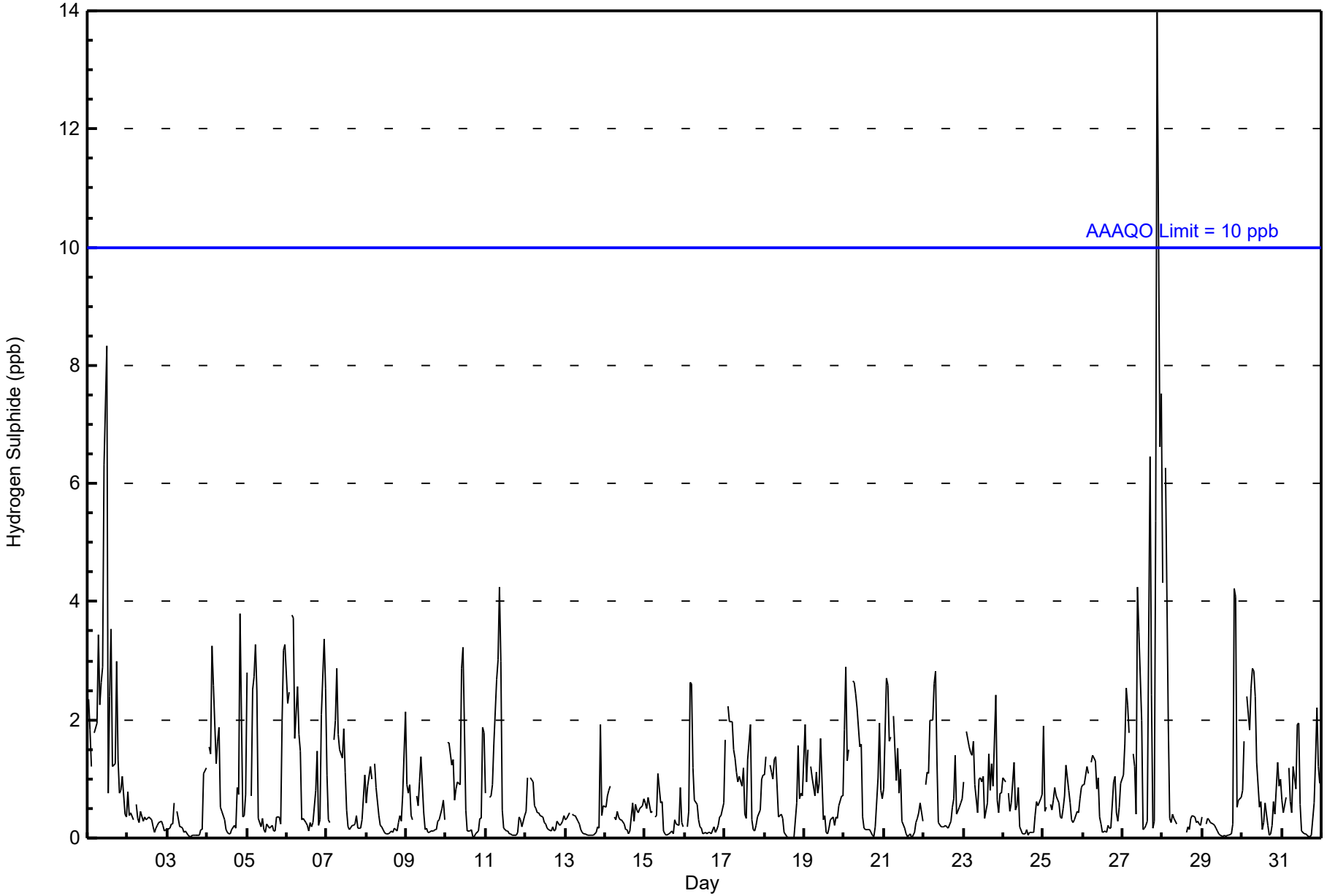
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Lower Camp - August 2026**



# Hydrogen Sulphide ($H_2S$) - ppb
## Lower Camp - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 656 | 92.66 | 92.66 |
| 3 - 4 | 44 | 6.21 | 98.87 |
| 5 - 7 | 5 | 0.71 | 99.58 |
| 8 - 11 | 2 | 0.28 | 99.86 |
| > 11 | 1 | 0.14 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Lower Camp - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 81 | 31 | 21 | 10 | 10 | 31 | 103 | 52 | 20 | 3 | 12 | 25 | 41 | 42 | 91 | 68 | 641 |
| 3 - 4 | 2 | 0 | 0 | 2 | 3 | 3 | 14 | 1 | 0 | 0 | 1 | 0 | 0 | 8 | 7 | 3 | 44 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 83 | 31 | 21 | 12 | 13 | 35 | 124 | 53 | 20 | 3 | 13 | 25 | 41 | 50 | 98 | 71 | 693 |

Total Number of Valid Hours: 693

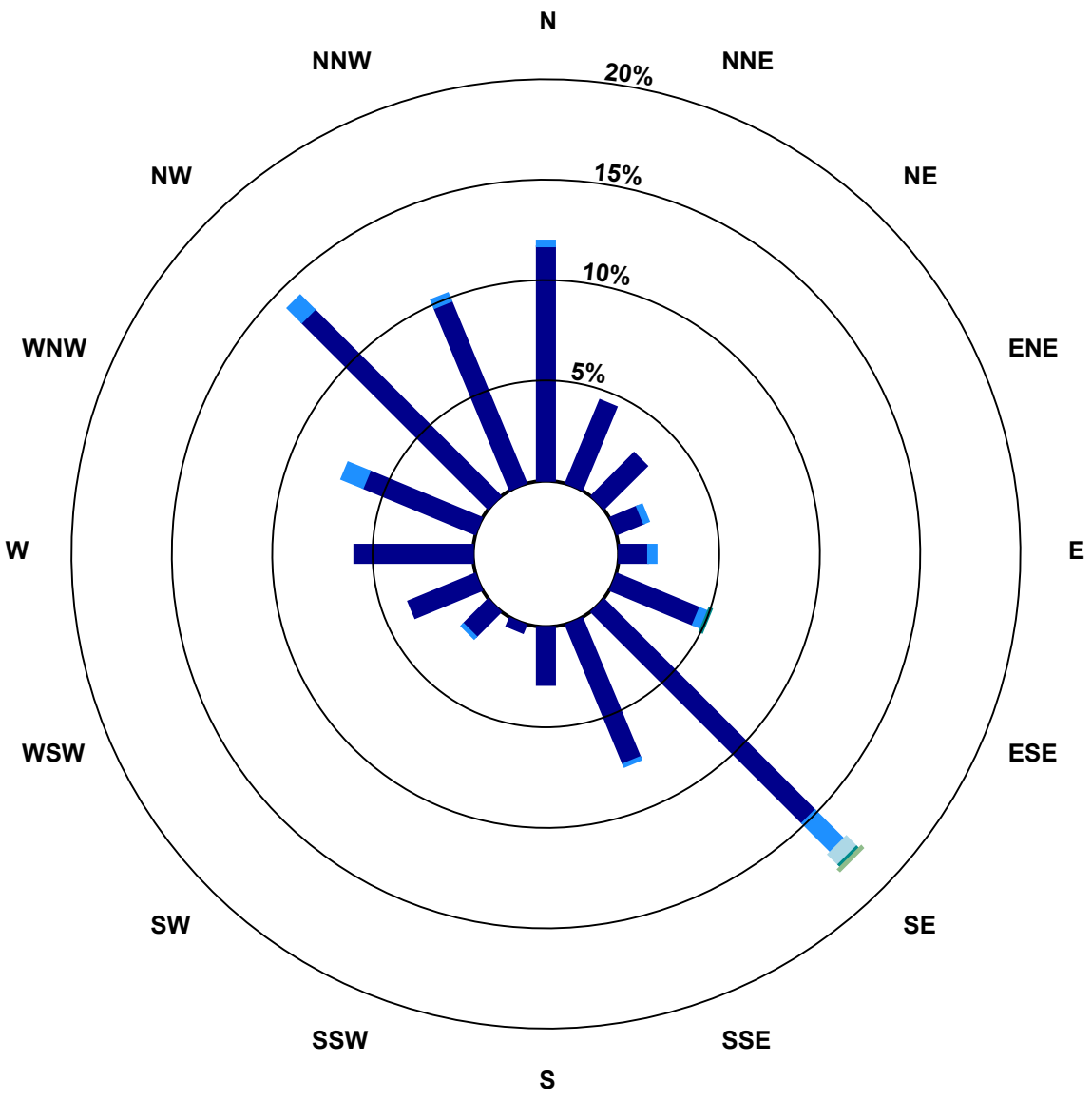
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Lower Camp




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

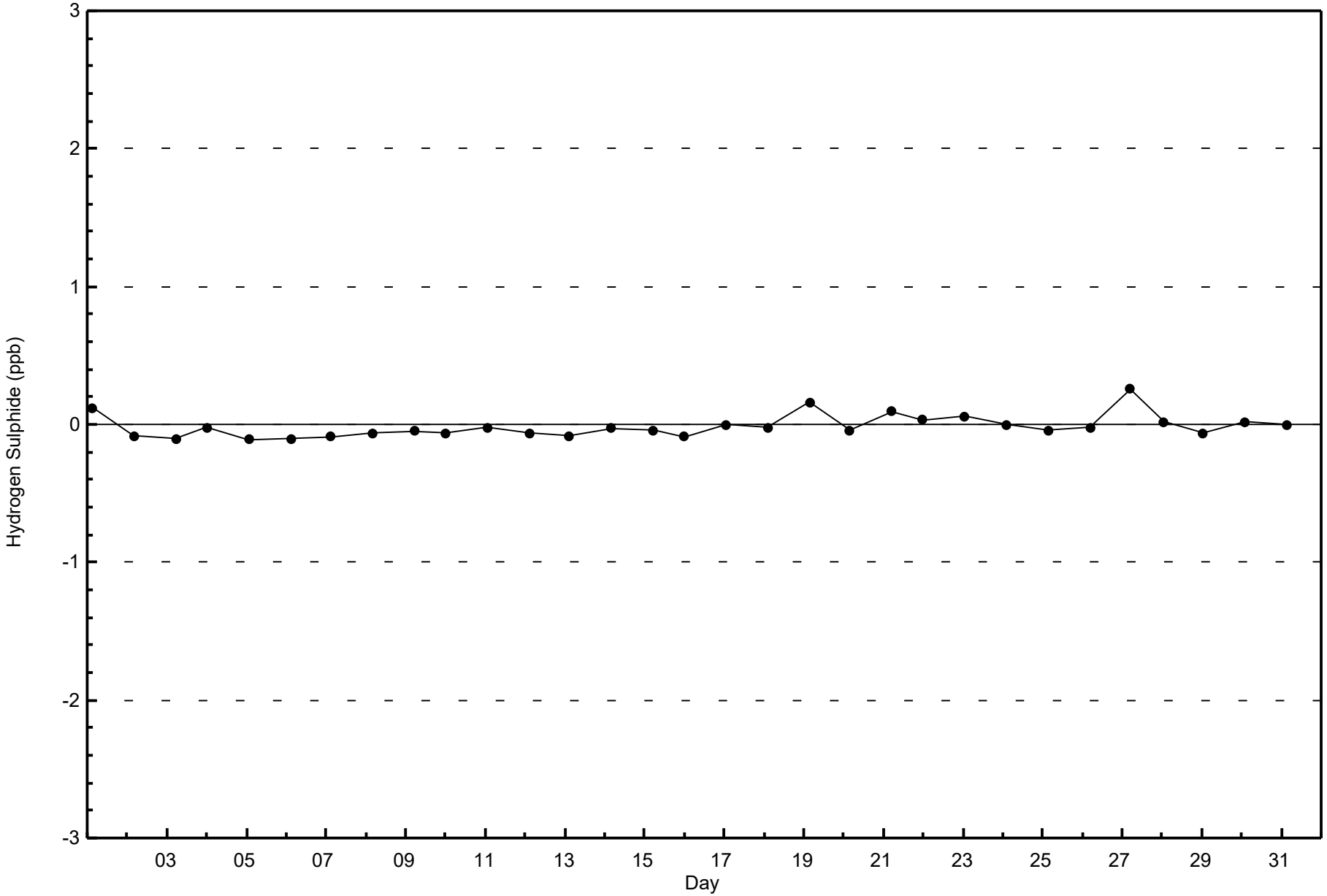
Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Lower Camp - August 2026**

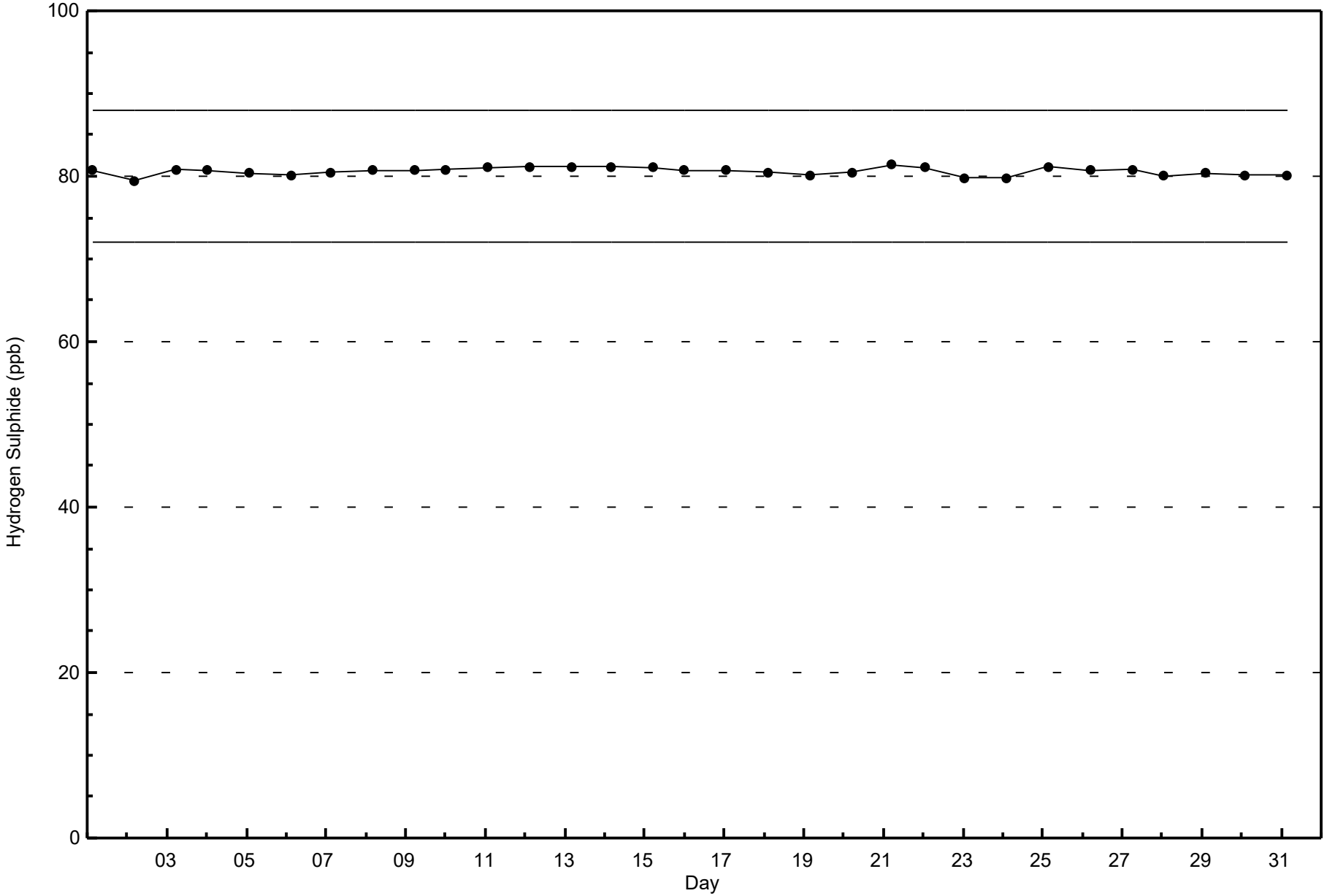


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Lower Camp - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Hydrocarbons (THC) - ppm

## Lower Camp - August 2026

Maximum Value: 3.4 ppm on Aug 1 01:00

Maximum Daily Average: 2.5 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 19 14:00

Minimum Daily Average: 2.1 ppm on Aug 2

Maximum Diurnal Average: 2.4 ppm at hour 6

Minimum Diurnal Average: 2.1 ppm at hour 14

Monthly Average: 2.21 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 3.4 | 3.0 | Z | 2.7 | 2.6 | 2.7 | 2.8 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.5 | 3.4 |
| 2-Aug | 2.1 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 |
| 3-Aug | 2.1 | 2.0 | 2.1 | 2.1 | Z | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.4 | 2.1 | 2.5 |
| 4-Aug | 2.5 | 2.5 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.2 | 2.5 |
| 5-Aug | Z | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 |
| 6-Aug | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.3 |
| 7-Aug | 2.2 | 2.1 | Z | 2.2 | 2.2 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.4 | 2.3 | 2.2 | 2.5 |
| 8-Aug | 2.4 | 2.7 | 2.5 | Z | 2.8 | 2.9 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.9 |
| 9-Aug | 2.6 | 2.6 | 2.4 | 2.3 | Z | 2.6 | 2.4 | 2.3 | 2.4 | 2.3 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | 2.6 |
| 10-Aug | 2.4 | 2.8 | 2.7 | 2.5 | 2.5 | Z | 2.3 | 2.4 | 2.3 | 2.6 | 2.9 | 2.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 | 2.3 | 2.4 | 2.3 | 2.9 |
| 11-Aug | Z | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.8 | 2.7 | 2.7 | 2.6 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.8 |
| 12-Aug | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 | 2.2 | 2.2 | 2.4 |
| 13-Aug | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.7 | 2.5 | 2.2 | 2.7 |
| 14-Aug | 2.7 | 2.7 | 3.0 | Z | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.3 | 2.1 | 2.1 | 2.3 | 3.0 |
| 15-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 16-Aug | 2.1 | 2.1 | 2.2 | 2.4 | 2.6 | Z | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.6 |
| 17-Aug | Z | 2.7 | 2.7 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.3 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.7 |
| 18-Aug | 2.3 | Z | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 |
| 19-Aug | 2.2 | 2.6 | Z | 2.6 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.4 | 2.2 | 2.6 |
| 20-Aug | 2.1 | 2.3 | 2.4 | Z | 2.4 | 2.6 | 2.7 | 2.6 | 2.5 | 2.6 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.4 | 2.5 | 2.4 | 2.3 | 2.7 |
| 21-Aug | 2.5 | 2.7 | 2.9 | 2.6 | Z | 2.6 | 2.5 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.9 |
| 22-Aug | 2.1 | 2.1 | 2.3 | 2.4 | 2.4 | Z | 2.5 | 2.5 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.6 | 2.4 | 2.2 | 2.2 | 2.6 |
| 23-Aug | Z | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.6 | 2.4 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.4 | 2.6 |
| 24-Aug | 2.5 | Z | 2.6 | 2.4 | 2.2 | 2.3 | 2.5 | 2.4 | 2.1 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.6 | 2.2 | 2.6 |
| 25-Aug | 2.8 | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 | 2.8 | 2.3 | 2.8 |
| 26-Aug | 2.6 | 2.6 | 2.6 | Z | 2.6 | 2.8 | 2.4 | 2.2 | 2.2 | C | C | C | C | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.8 |
| 27-Aug | 2.3 | 2.3 | 2.4 | 2.4 | Z | 2.4 | 2.3 | 2.3 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.1 | 2.2 | 2.2 | 2.4 |
| 28-Aug | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.7 | 2.3 | 2.2 | 2.1 | 2.7 |
| 30-Aug | 2.3 | Z | 2.2 | 2.3 | 2.3 | 2.5 | 2.6 | 2.7 | 2.5 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.7 |
| 31-Aug | 2.4 | 2.3 | Z | 2.3 | 2.4 | 2.2 | 2.2 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.4 | 2.6 | 2.5 | 2.4 | 2.2 | 2.6 |
| | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | Diurnal Average | |
| | 3.4 | 3.0 | 3.0 | 2.7 | 2.8 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | 2.9 | 2.6 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.3 | 2.5 | 2.5 | 2.7 | 2.7 | 2.8 | Diurnal Maximum | |

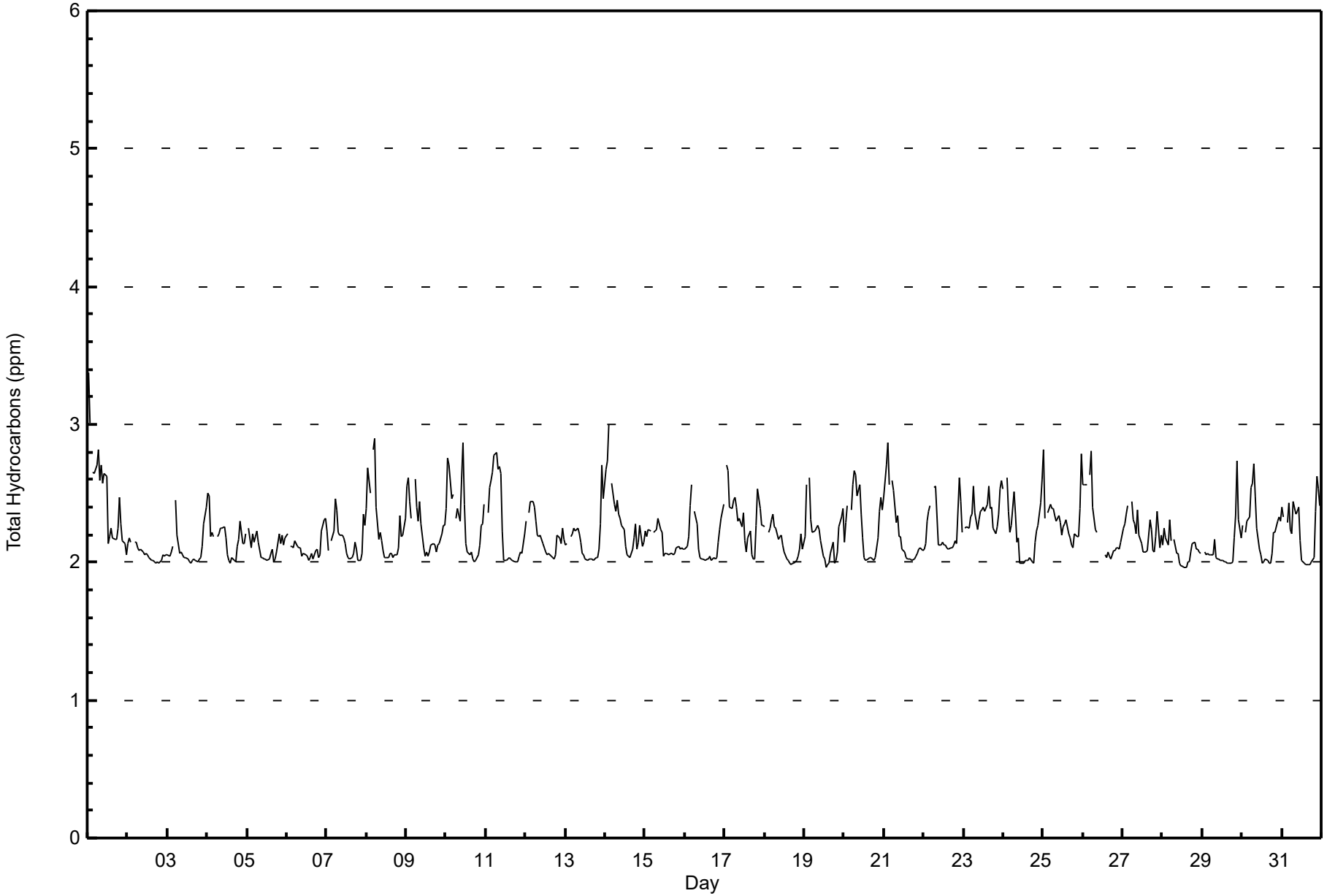
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Lower Camp - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Lower Camp - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 167 | 23.55 | 23.55 |
| 2.1 - 3.0 | 541 | 76.30 | 99.86 |
| 3.1 - 10.0 | 1 | 0.14 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Lower Camp - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 47 | 18 | 6 | 3 | 2 | 3 | 3 | 8 | 4 | 1 | 3 | 14 | 23 | 0 | 9 | 23 | 167 |
| 2.1 - 3.0 | 36 | 13 | 15 | 9 | 13 | 32 | 116 | 44 | 15 | 3 | 11 | 13 | 19 | 49 | 92 | 46 | 526 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 83 | 31 | 21 | 12 | 15 | 35 | 119 | 52 | 19 | 4 | 14 | 27 | 42 | 50 | 101 | 69 | 694 |

Total Number of Valid Hours: 694

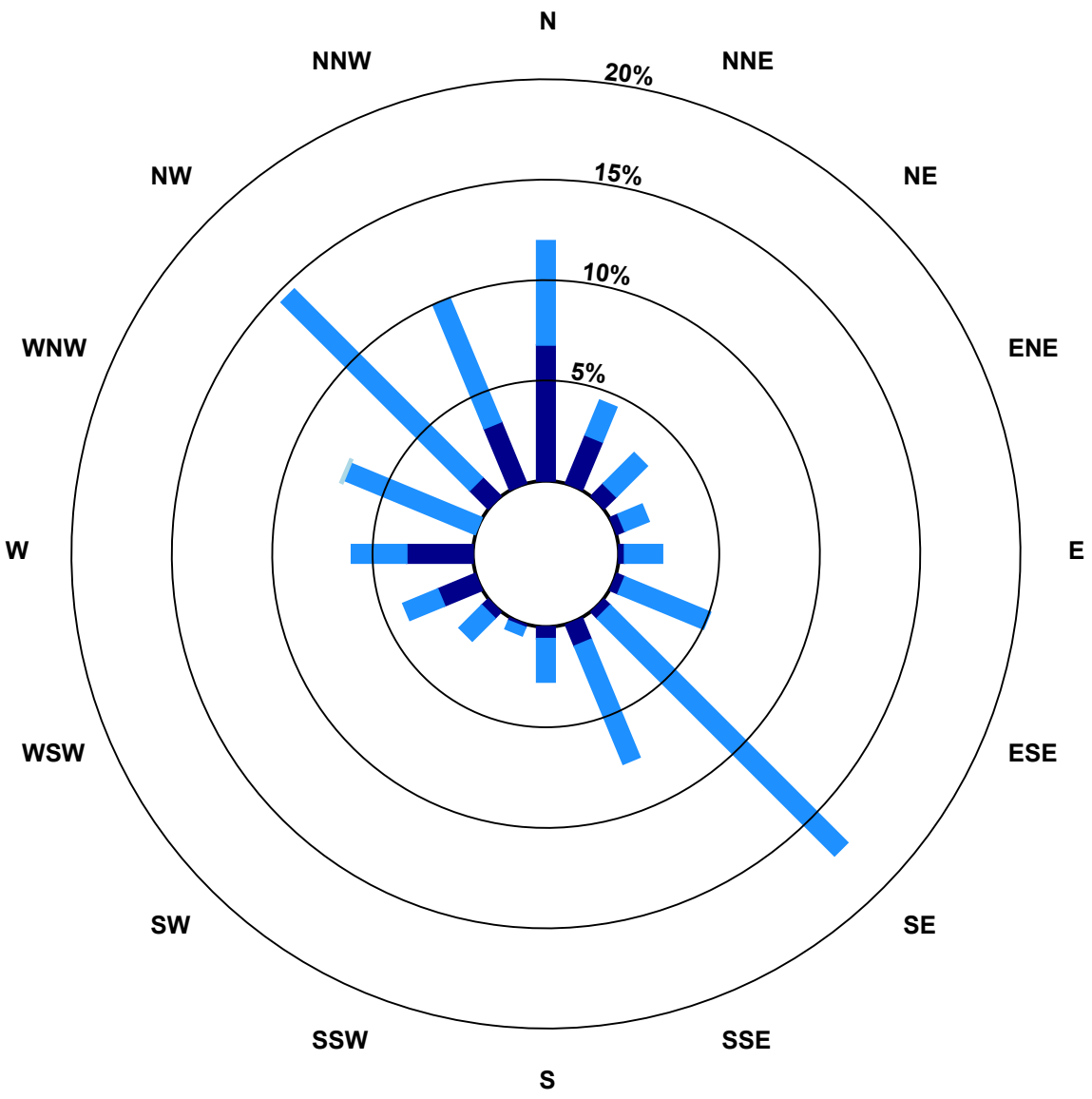
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Lower Camp




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

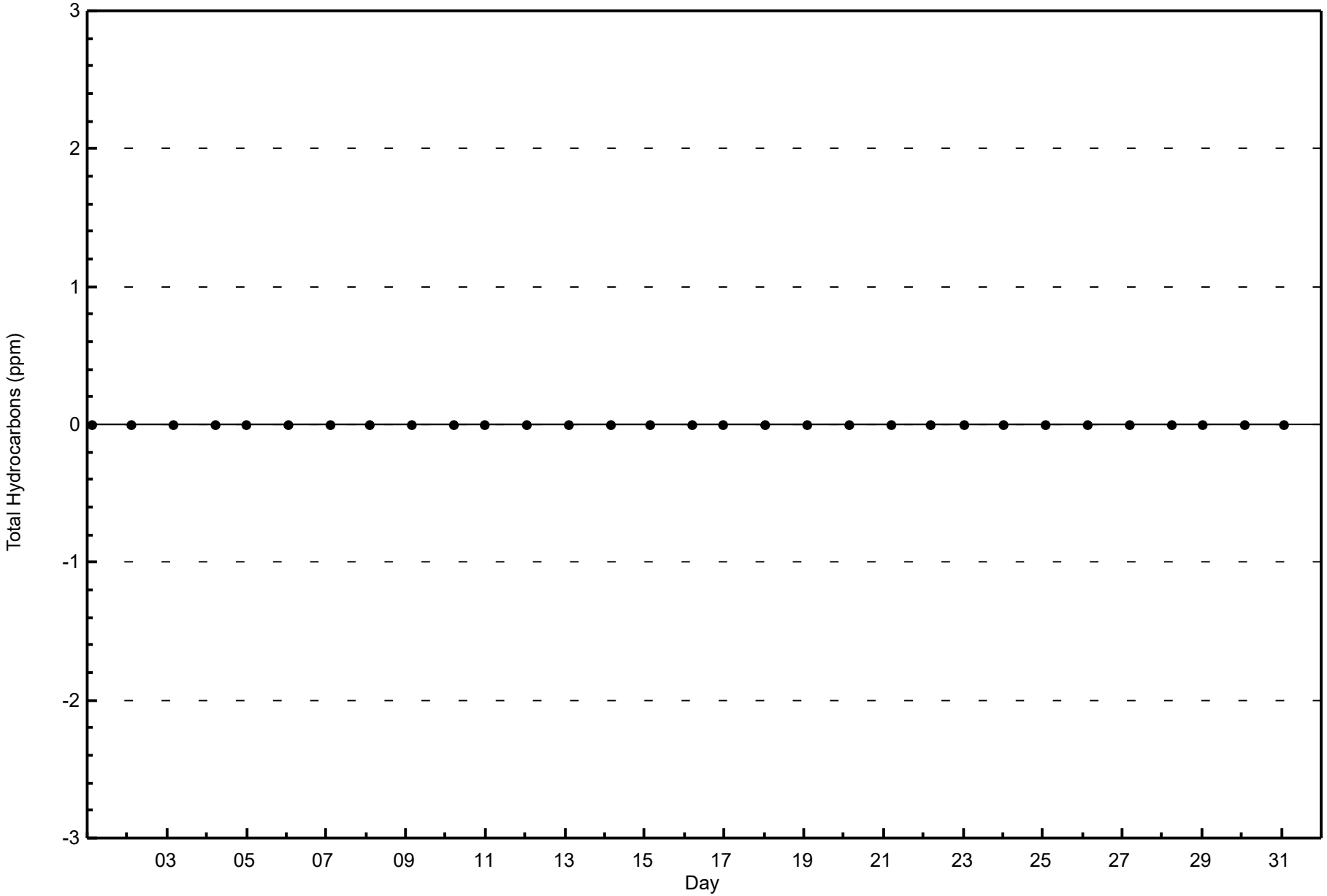
Total Number of Valid Hours: 694

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Lower Camp - August 2026**

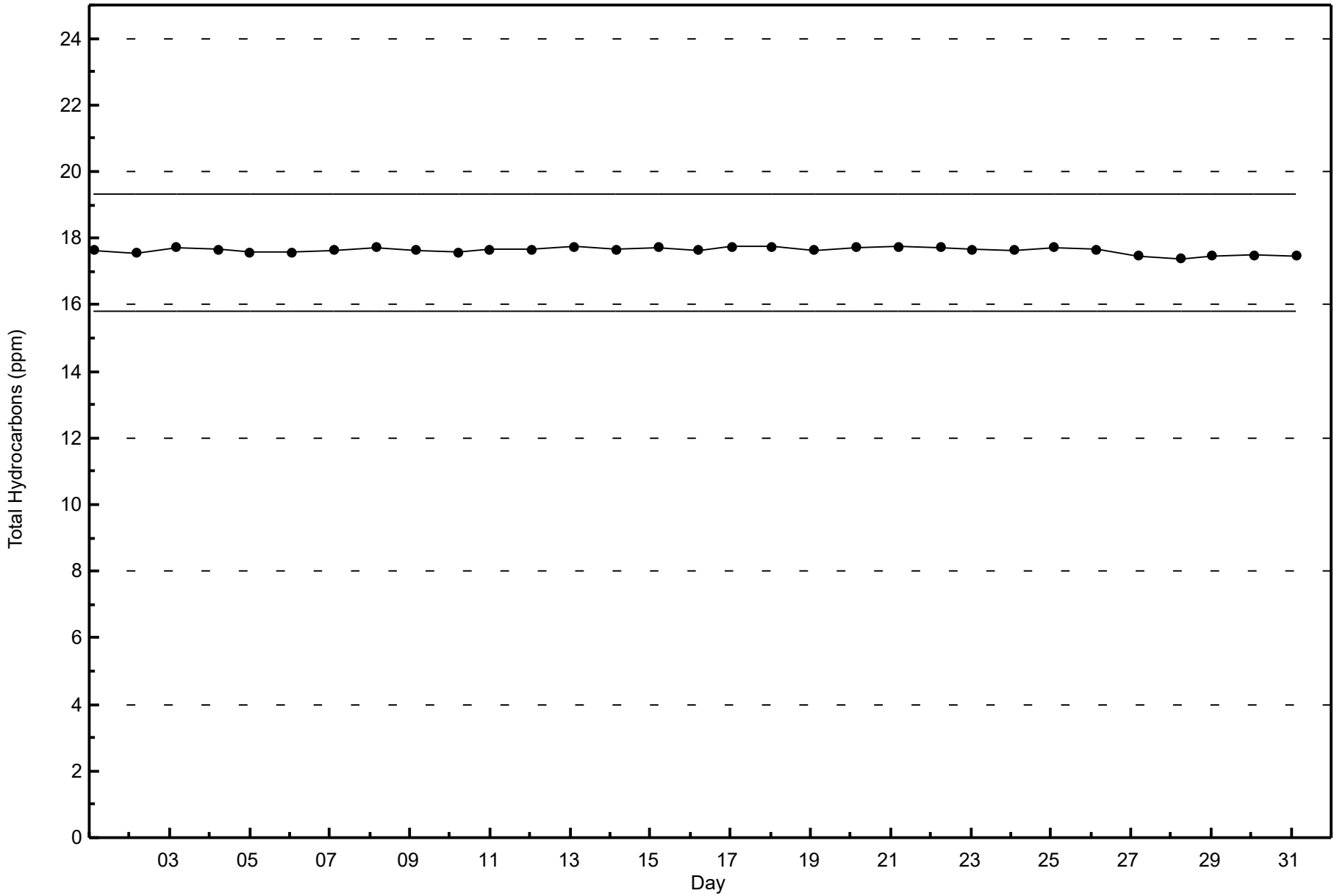


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Lower Camp - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Lower Camp - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 3.4 ppm on Aug 1 01:00

Maximum Daily Average: 2.5 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 19 14:00

Minimum Daily Average: 2.1 ppm on Aug 2

Maximum Diurnal Average: 2.4 ppm at hour 6

Minimum Diurnal Average: 2.1 ppm at hour 14

Monthly Average: 2.21 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 3.4 | 3.0 | Z | 2.7 | 2.6 | 2.7 | 2.8 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.5 | 3.4 |
| 2-Aug | 2.1 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 |
| 3-Aug | 2.1 | 2.0 | 2.1 | 2.1 | Z | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.4 | 2.1 | 2.5 |
| 4-Aug | 2.5 | 2.5 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.2 | 2.5 |
| 5-Aug | Z | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 |
| 6-Aug | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.3 |
| 7-Aug | 2.2 | 2.1 | Z | 2.2 | 2.2 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.4 | 2.3 | 2.2 | 2.5 |
| 8-Aug | 2.4 | 2.7 | 2.5 | Z | 2.8 | 2.9 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.9 |
| 9-Aug | 2.6 | 2.6 | 2.4 | 2.3 | Z | 2.6 | 2.4 | 2.3 | 2.4 | 2.3 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | 2.6 |
| 10-Aug | 2.4 | 2.8 | 2.7 | 2.5 | 2.5 | Z | 2.3 | 2.4 | 2.3 | 2.6 | 2.9 | 2.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 | 2.3 | 2.4 | 2.3 | 2.9 |
| 11-Aug | Z | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.8 | 2.7 | 2.7 | 2.6 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.8 |
| 12-Aug | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 | 2.2 | 2.2 | 2.4 |
| 13-Aug | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.7 | 2.5 | 2.2 | 2.7 |
| 14-Aug | 2.7 | 2.7 | 3.0 | Z | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.3 | 2.1 | 2.1 | 2.3 | 3.0 |
| 15-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 16-Aug | 2.1 | 2.1 | 2.2 | 2.4 | 2.6 | Z | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.2 | 2.6 |
| 17-Aug | Z | 2.7 | 2.7 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.3 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.7 |
| 18-Aug | 2.3 | Z | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 |
| 19-Aug | 2.2 | 2.6 | Z | 2.6 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.4 | 2.2 | 2.6 |
| 20-Aug | 2.1 | 2.3 | 2.4 | Z | 2.4 | 2.6 | 2.7 | 2.6 | 2.5 | 2.6 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.4 | 2.5 | 2.4 | 2.3 | 2.7 |
| 21-Aug | 2.5 | 2.7 | 2.9 | 2.6 | Z | 2.6 | 2.5 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.9 |
| 22-Aug | 2.1 | 2.1 | 2.3 | 2.4 | 2.4 | Z | 2.5 | 2.5 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.6 | 2.4 | 2.2 | 2.2 | 2.6 |
| 23-Aug | Z | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.6 | 2.4 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.4 | 2.6 |
| 24-Aug | 2.5 | Z | 2.6 | 2.4 | 2.2 | 2.3 | 2.5 | 2.4 | 2.1 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.6 | 2.2 | 2.6 |
| 25-Aug | 2.8 | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 | 2.8 | 2.3 | 2.8 |
| 26-Aug | 2.6 | 2.6 | 2.6 | Z | 2.6 | 2.8 | 2.4 | 2.2 | 2.2 | C | C | C | C | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.8 |
| 27-Aug | 2.3 | 2.3 | 2.4 | 2.4 | Z | 2.4 | 2.3 | 2.3 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.1 | 2.2 | 2.2 | 2.4 |
| 28-Aug | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.7 | 2.3 | 2.2 | 2.1 | 2.7 |
| 30-Aug | 2.3 | Z | 2.2 | 2.3 | 2.3 | 2.5 | 2.6 | 2.7 | 2.5 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.7 |
| 31-Aug | 2.4 | 2.3 | Z | 2.3 | 2.4 | 2.2 | 2.2 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.4 | 2.6 | 2.5 | 2.4 | 2.2 | 2.6 |
| | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | Diurnal Average | |
| | 3.4 | 3.0 | 3.0 | 2.7 | 2.8 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | 2.9 | 2.6 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.3 | 2.5 | 2.5 | 2.7 | 2.7 | 2.8 | Diurnal Maximum | |

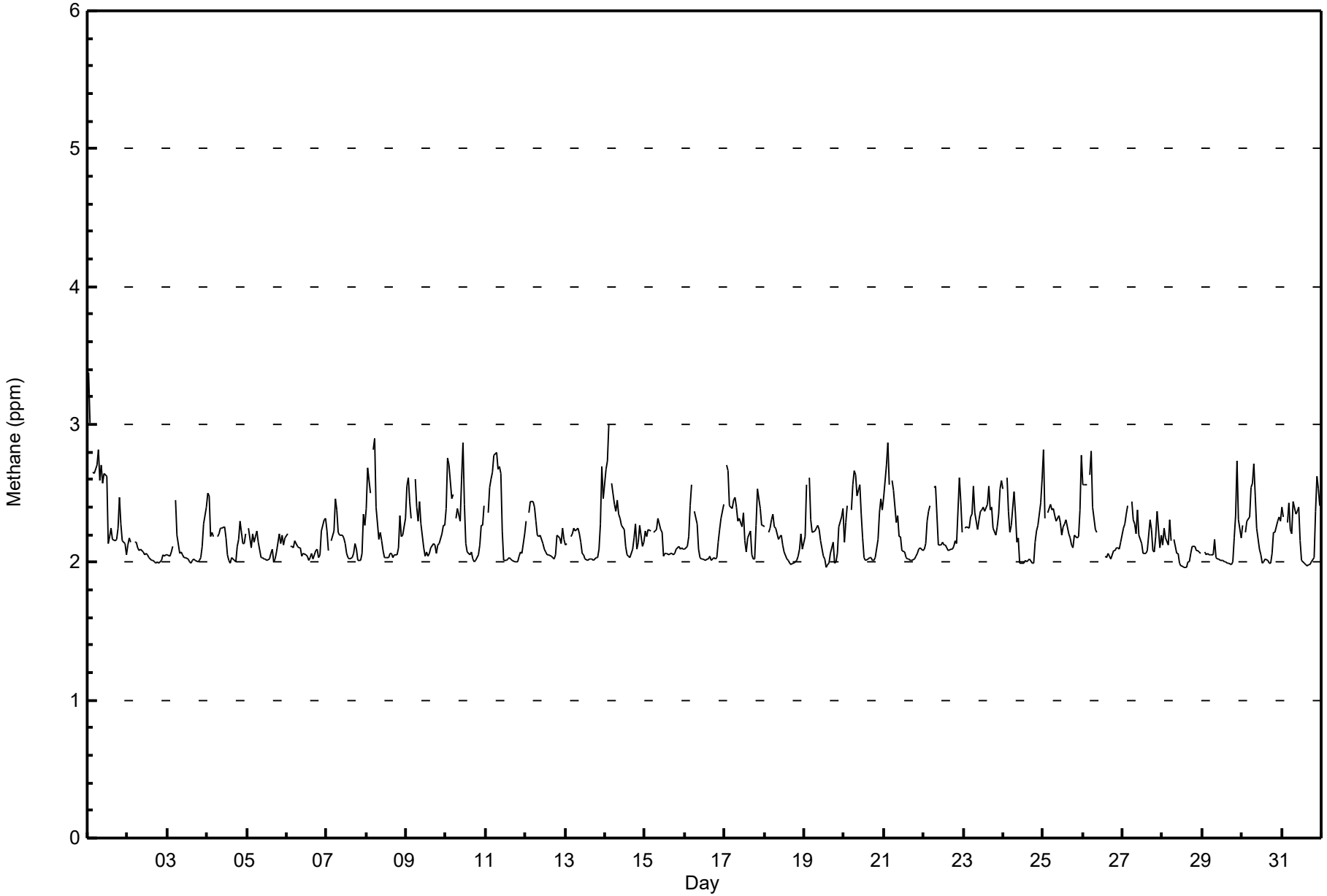
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Lower Camp - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 168 | 23.70 | 23.70 |
| 2.1 - 3.0 | 540 | 76.16 | 99.86 |
| 3.1 - 10.0 | 1 | 0.14 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Lower Camp - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 47 | 18 | 6 | 3 | 2 | 3 | 3 | 9 | 4 | 1 | 3 | 14 | 23 | 0 | 9 | 23 | 168 |
| 2.1 - 3.0 | 36 | 13 | 15 | 9 | 13 | 32 | 116 | 43 | 15 | 3 | 11 | 13 | 19 | 49 | 92 | 46 | 525 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 83 | 31 | 21 | 12 | 15 | 35 | 119 | 52 | 19 | 4 | 14 | 27 | 42 | 50 | 101 | 69 | 694 |

Total Number of Valid Hours: 694

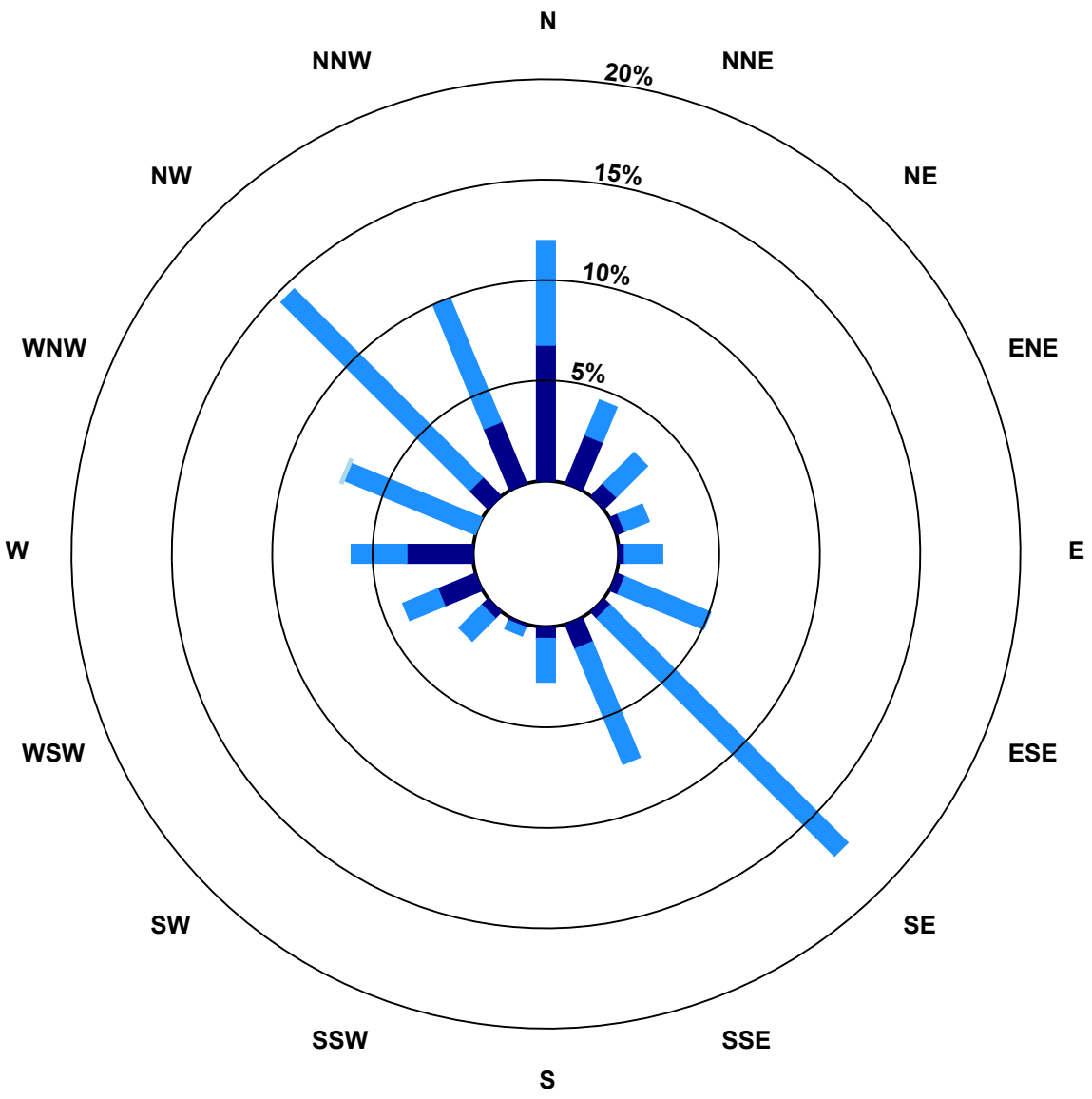
Total Number of Hours: 744

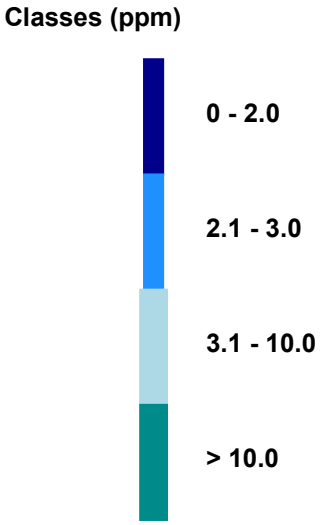
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Methane ($CH_4$) - ppm

## Lower Camp



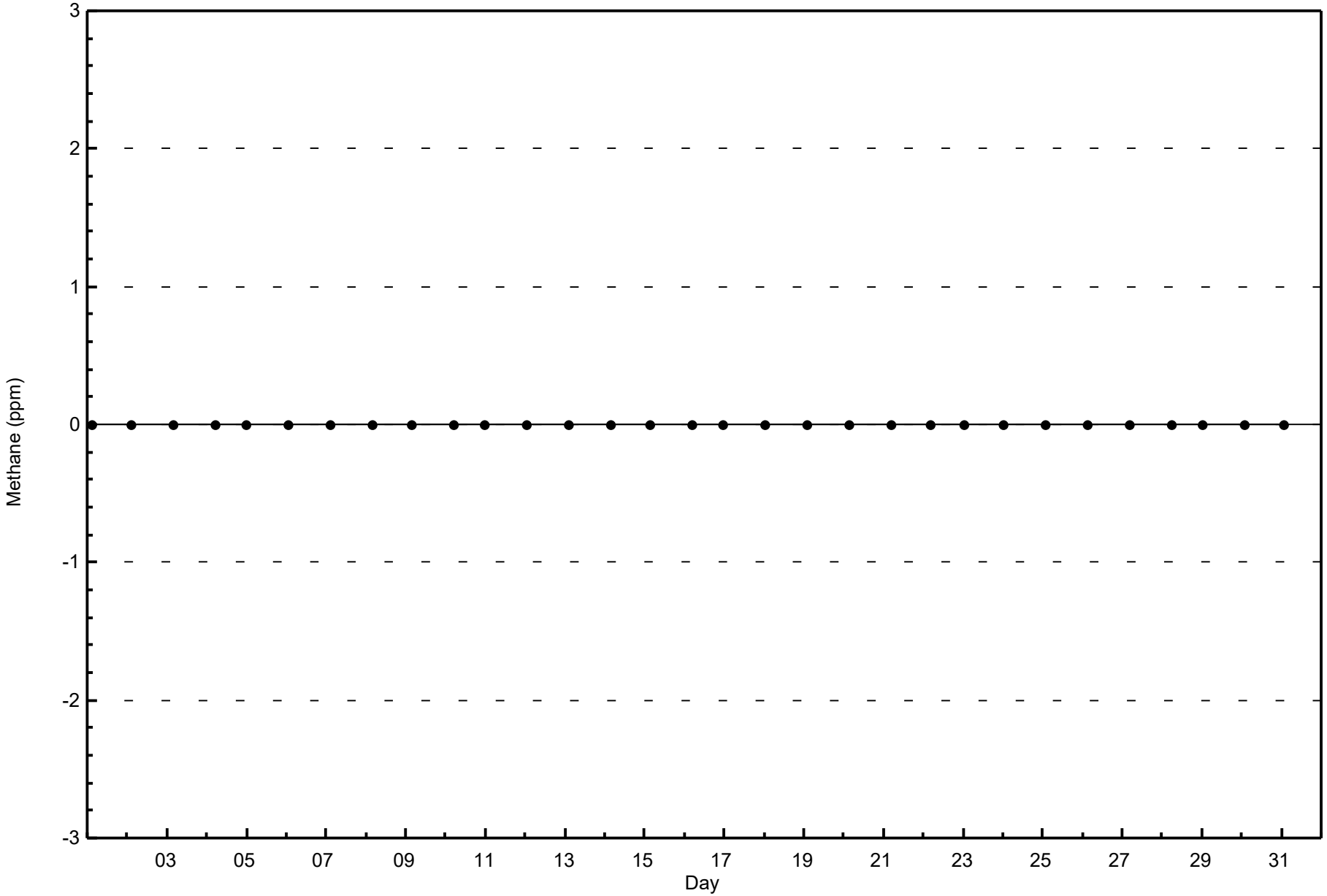

**Total Number of Valid Hours: 694**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Lower Camp - August 2026**

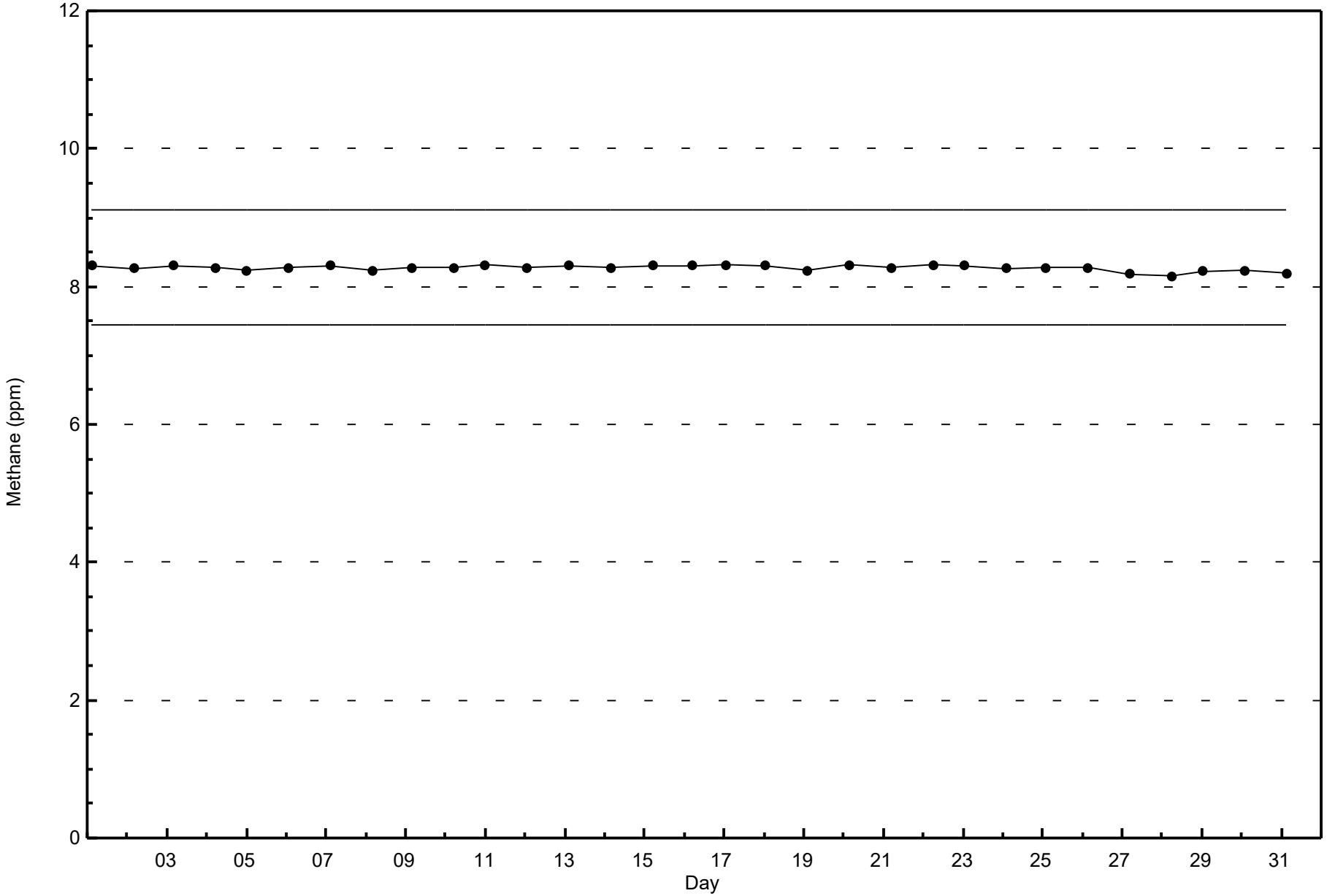


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Lower Camp - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Non Methane Hydrocarbons (NMHC) - ppm

## Lower Camp - August 2026

Maximum Value: 0.031 ppm on Aug 28 20:00

Maximum Daily Average: 0.004 ppm on Aug 28

Minimum Value: 0.000 ppm on Aug 1 01:00

Minimum Daily Average: 0.000 ppm on Aug 3

Maximum Diurnal Average: 0.002 ppm at hour 16

Minimum Diurnal Average: 0.000 ppm at hour 8

Monthly Average: 0.001 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.000 | 0.008 | 0.010 | 0.007 | 0.001 | 0.000 | 0.000 | 0.001 | 0.003 | 0.000 | 0.002 | 0.010 |
| 2-Aug | 0.001 | 0.000 | 0.000 | Z | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 3-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 5-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 6-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.008 |
| 7-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.005 | 0.001 | 0.005 |
| 8-Aug | 0.001 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.002 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 9-Aug | 0.002 | 0.000 | 0.001 | 0.000 | Z | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.016 | 0.000 | 0.000 | 0.000 | 0.003 | 0.002 | 0.003 | 0.000 | 0.000 | 0.002 | 0.016 |
| 10-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.006 | 0.002 | 0.001 | 0.006 |
| 11-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 12-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.002 |
| 13-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.002 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.009 | 0.000 | 0.001 | 0.009 |
| 14-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.002 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 15-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.000 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.003 |
| 16-Aug | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.001 |
| 17-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 18-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.000 | 0.000 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 19-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.000 | 0.001 | 0.002 |
| 20-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.002 | 0.003 | 0.003 | 0.000 | 0.000 | 0.003 | 0.004 | 0.003 | 0.003 | 0.001 | 0.001 | 0.004 |
| 21-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 |
| 22-Aug | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.002 | 0.003 | 0.005 | 0.008 | 0.010 | 0.006 | 0.006 | 0.002 | 0.007 | 0.000 | 0.000 | 0.000 | 0.002 | 0.010 |
| 23-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.003 | 0.000 | 0.001 | 0.004 | 0.005 | 0.002 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.005 |
| 24-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.001 | 0.002 | 0.005 | 0.013 | 0.004 | 0.000 | 0.002 | 0.003 | 0.002 | 0.003 | 0.001 | 0.002 | 0.013 |
| 25-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.011 | 0.014 | 0.007 | 0.006 | 0.009 | 0.002 | 0.014 |
| 26-Aug | 0.004 | 0.002 | 0.002 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | 0.004 | 0.002 | 0.008 | 0.003 | 0.003 | 0.001 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.002 | 0.008 |
| 27-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.002 | 0.007 | 0.008 | 0.005 | 0.004 | 0.000 | 0.002 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.008 |
| 28-Aug | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | Z | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.007 | 0.027 | 0.031 | 0.012 | 0.007 | 0.004 | 0.002 | 0.004 | 0.031 |
| 29-Aug | Z | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 30-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 31-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | Diurnal Average | |
| | 0.004 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.002 | 0.007 | 0.008 | 0.007 | 0.016 | 0.013 | 0.007 | 0.027 | 0.031 | 0.014 | 0.007 | 0.009 | 0.009 | Diurnal Maximum | |

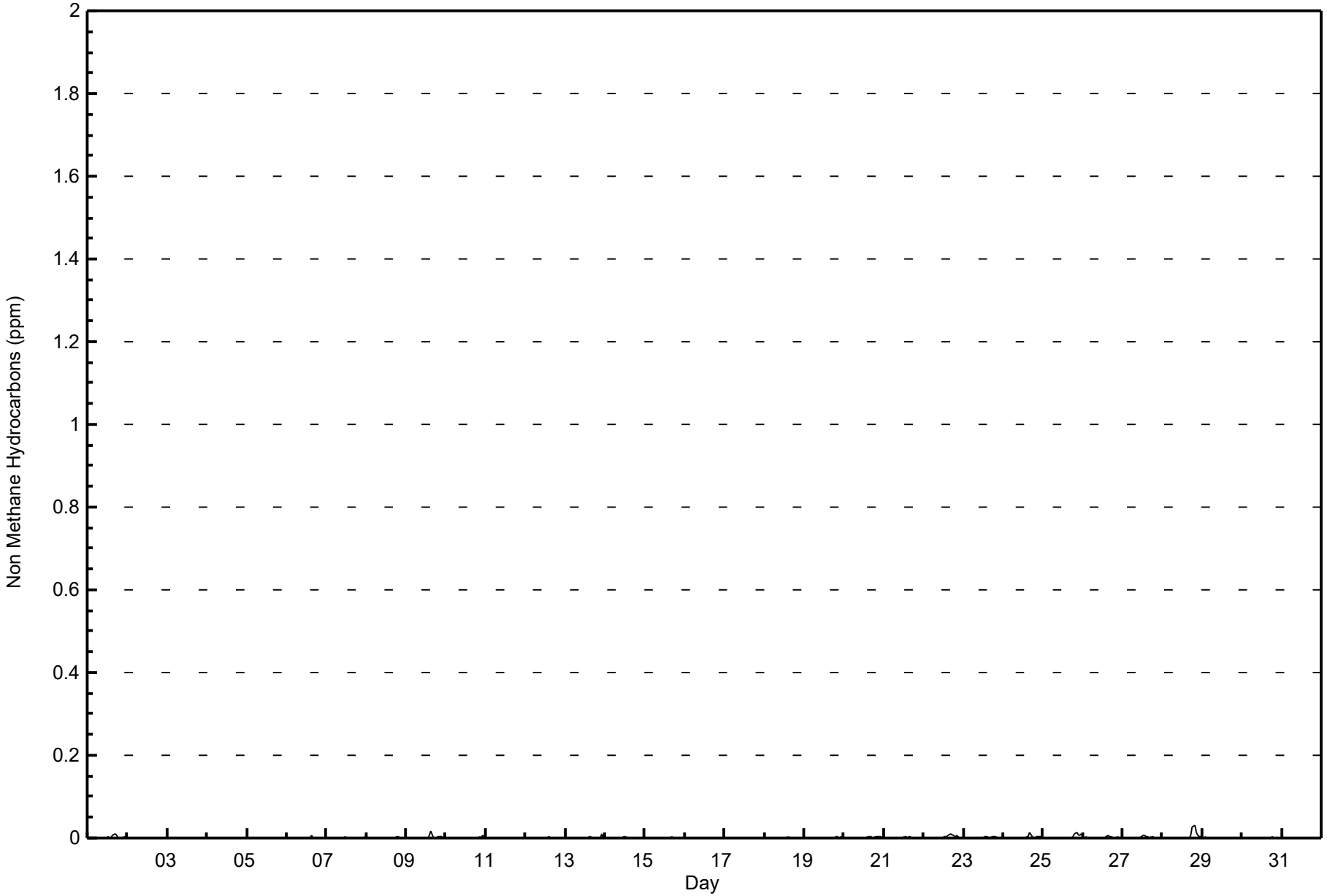
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Lower Camp - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Lower Camp - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 683 | 96.33 | 96.33 |
| 0.006 - 0.05 | 26 | 3.67 | 100.00 |
| 0.06 - 0.1 | 0 | 0.00 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Lower Camp - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 81 | 29 | 21 | 12 | 15 | 33 | 117 | 47 | 18 | 4 | 14 | 23 | 41 | 47 | 97 | 69 | 668 |
| 0.006 - 0.05 | 2 | 2 | 0 | 0 | 0 | 2 | 2 | 5 | 1 | 0 | 0 | 4 | 1 | 3 | 4 | 0 | 26 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 83 | 31 | 21 | 12 | 15 | 35 | 119 | 52 | 19 | 4 | 14 | 27 | 42 | 50 | 101 | 69 | 694 |

Total Number of Valid Hours: 694

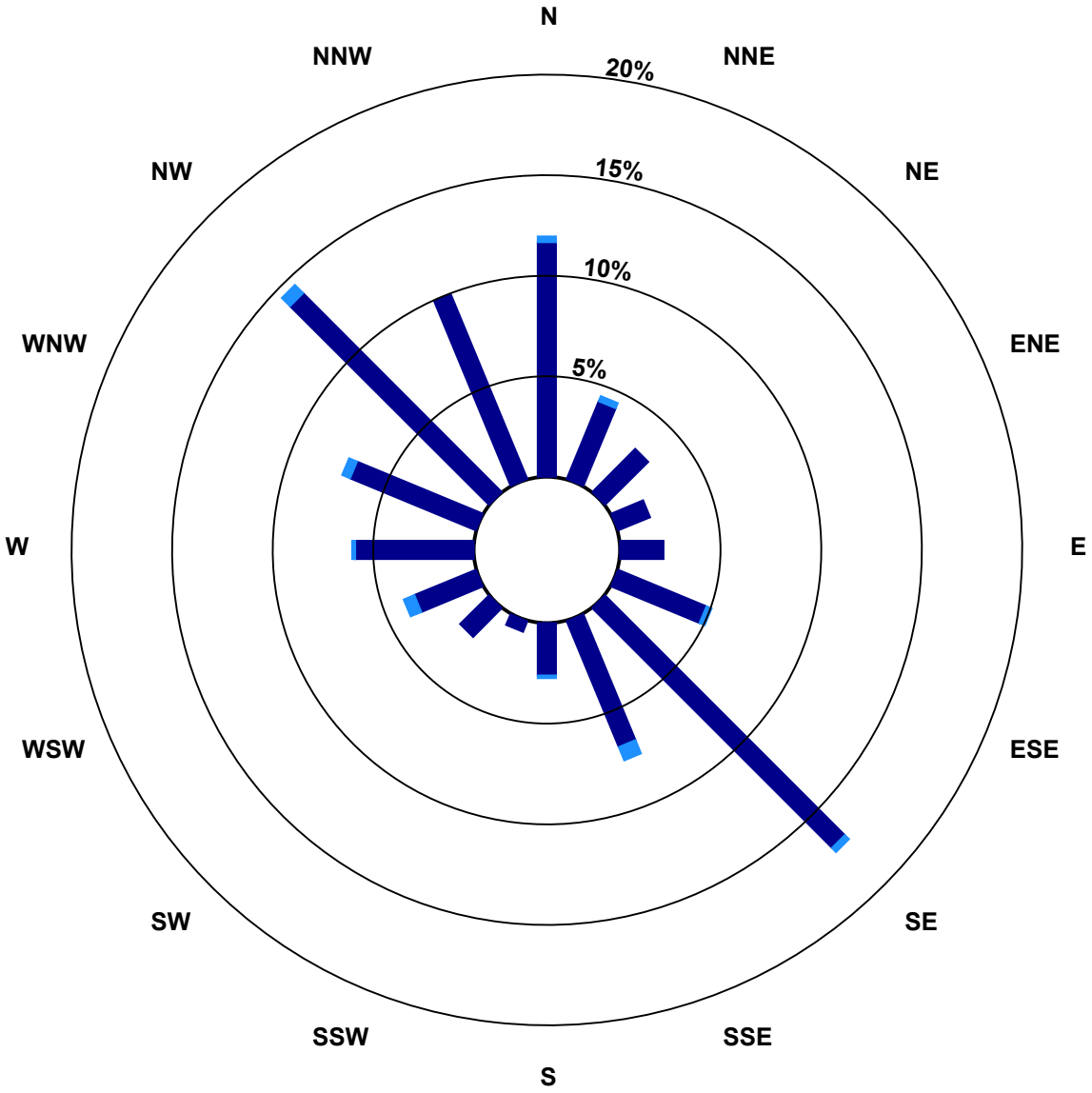
Total Number of Hours: 744

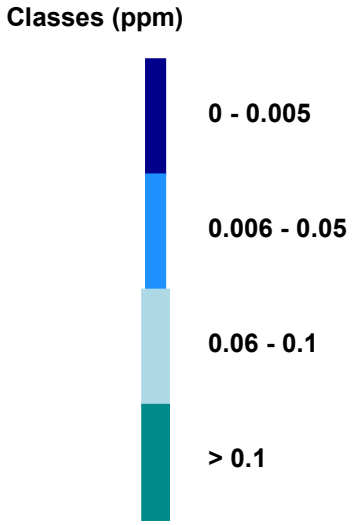
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp



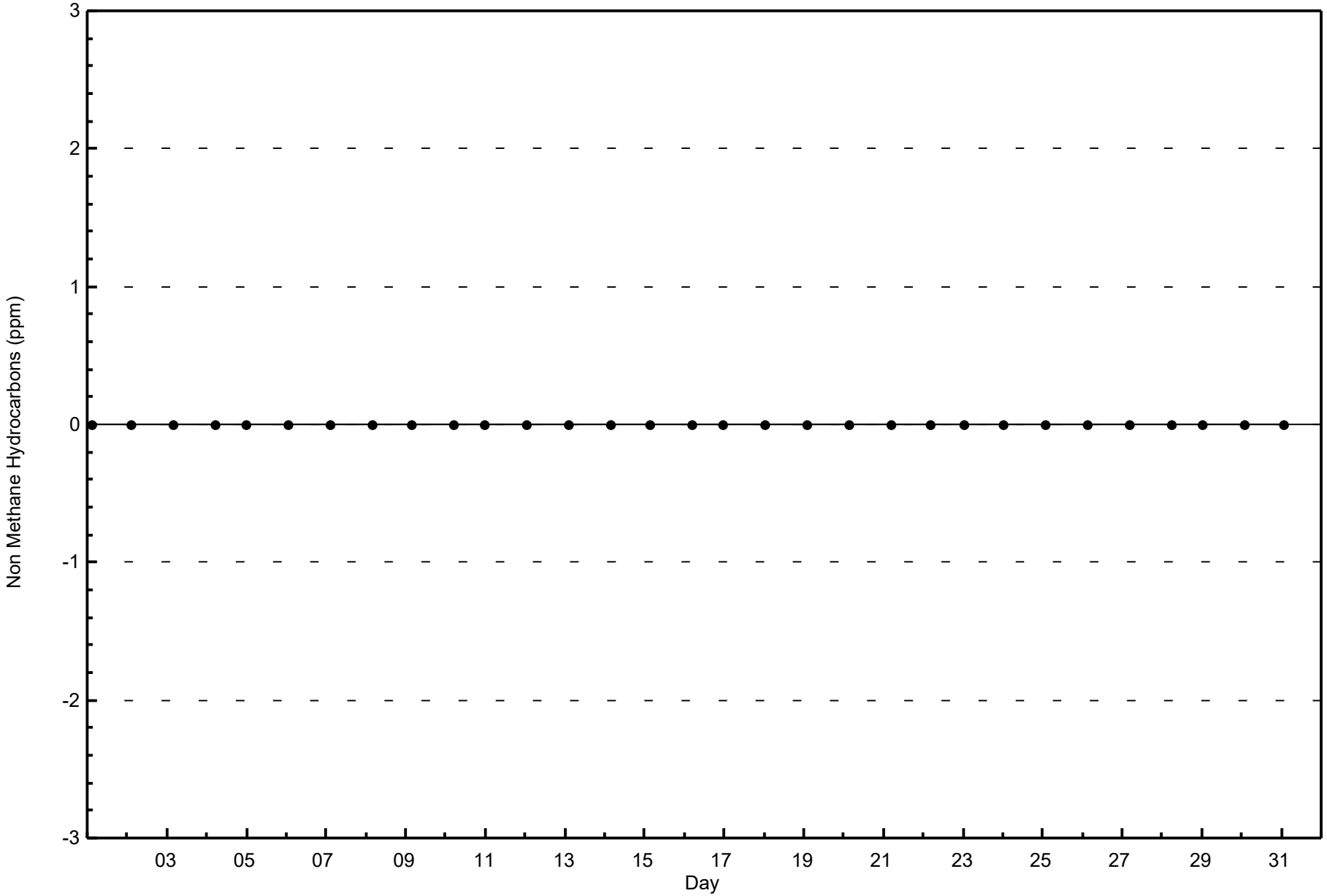

Total Number of Valid Hours: 694

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Lower Camp - August 2026**

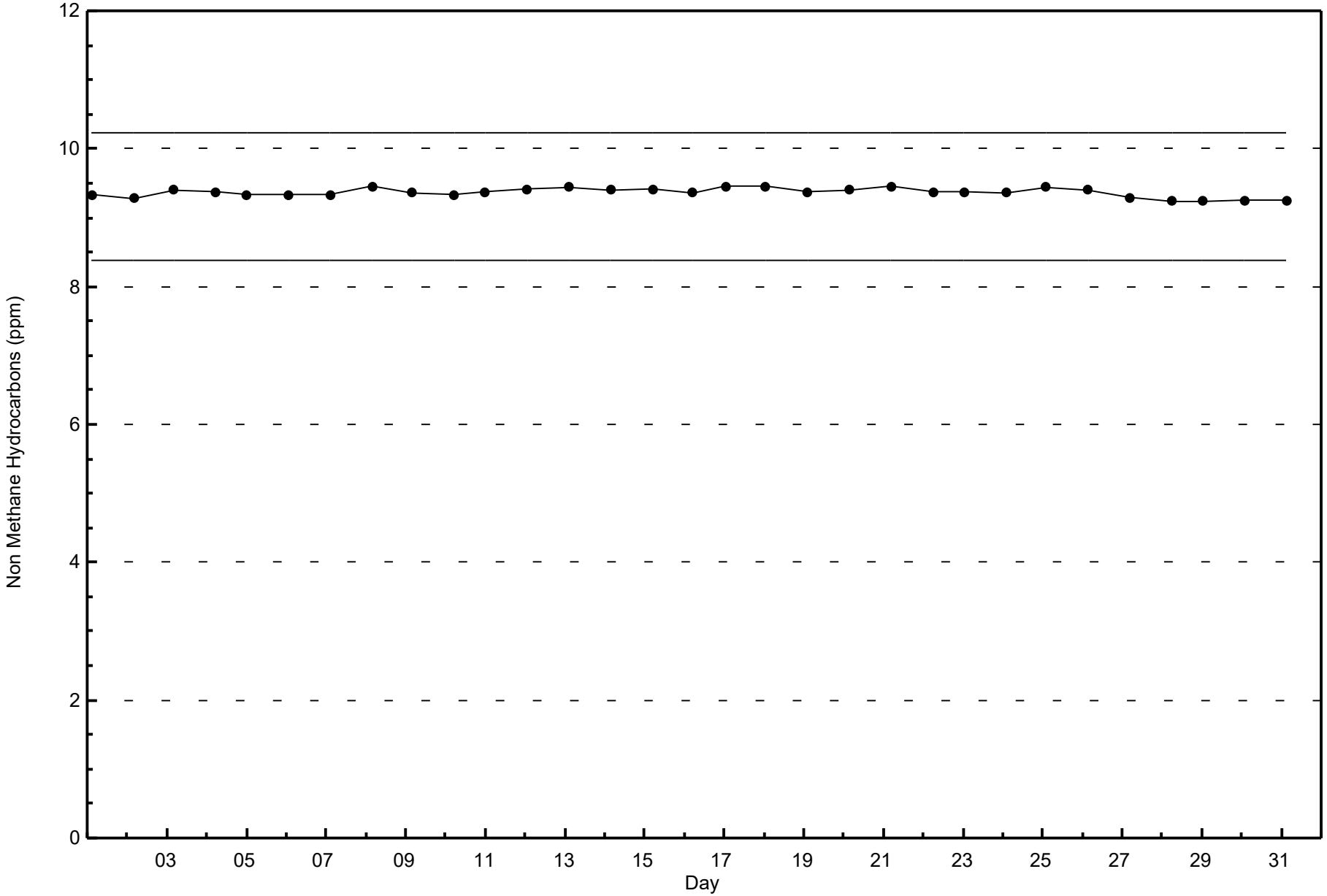


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Lower Camp - August 2026**



Maximum Value: 30.0 C on Aug 26 17:00

Maximum Daily Average: 22.1 C on Aug 27

Minimum Value: 8.4 C on Aug 17 06:00

Minimum Daily Average: 13.5 C on Aug 12

Maximum Diurnal Average: 22.5 C at hour 15

Minimum Diurnal Average: 12.9 C at hour 6

Monthly Average: 17.56 C

Percentiles: $P_1$ = 9.7 $P_{10}$ = 11.9 $Q_1$ = 13.9 Median = 16.9 $Q_3$ = 20.8 $P_{90}$ = 24.4 $P_{99}$ = 28.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

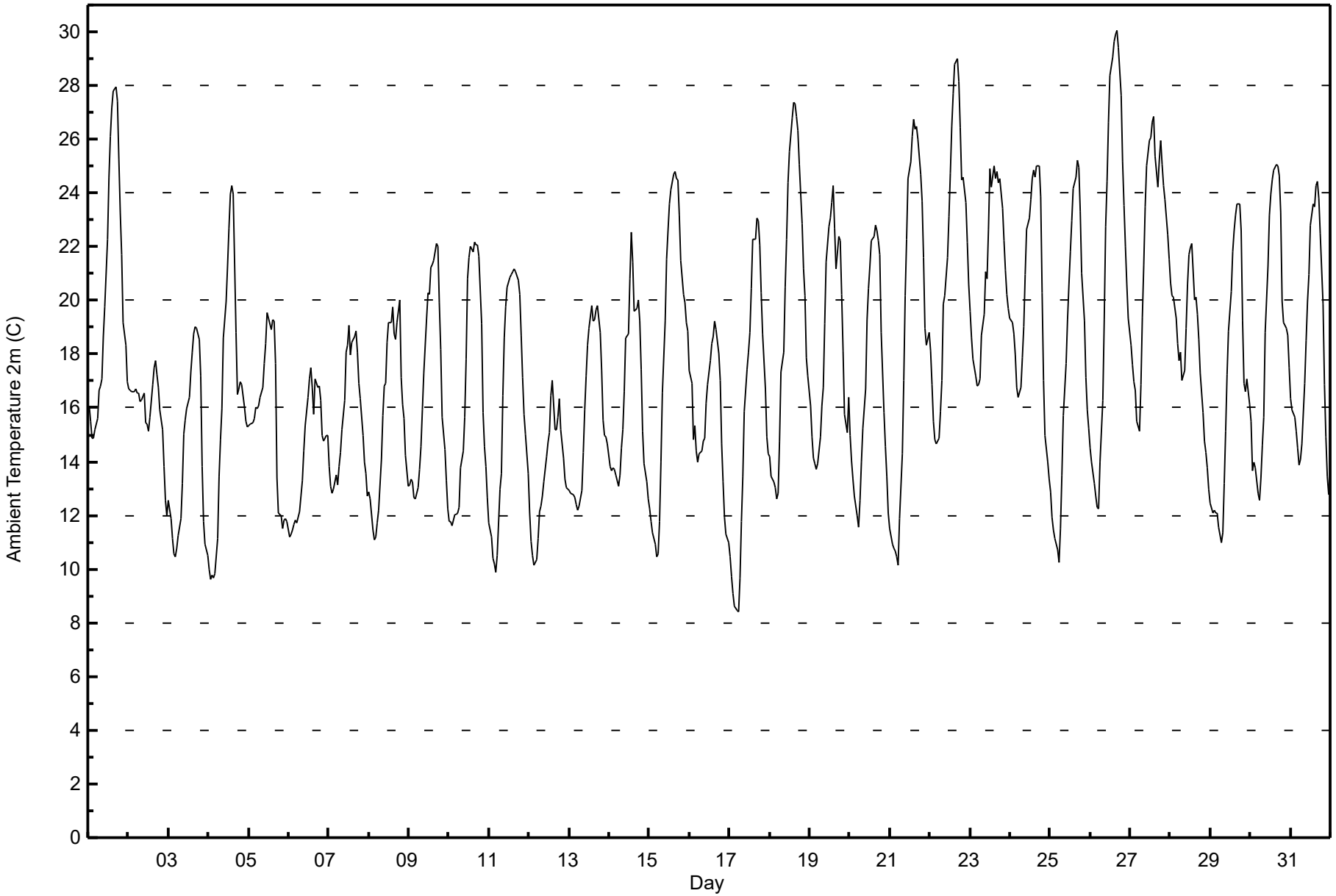
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 16.1 | 15.5 | 14.9 | 14.8 | 15.2 | 15.6 | 16.7 | 16.8 | 17.1 | 18.6 | 19.8 | 22.3 | 24.6 | 26.1 | 27.2 | 27.8 | 28.0 | 27.5 | 25.3 | 23.3 | 21.7 | 19.2 | 18.3 | 17.0 | 20.4 | 28.0 |
| 2-Aug | 16.7 | 16.6 | 16.6 | 16.6 | 16.7 | 16.5 | 16.5 | 16.2 | 16.3 | 16.6 | 15.4 | 15.4 | 15.1 | 15.7 | 16.9 | 17.5 | 17.7 | 17.2 | 16.7 | 15.9 | 15.2 | 13.8 | 12.5 | 12.0 | 15.9 | 17.7 |
| 3-Aug | 12.6 | 11.9 | 11.1 | 10.6 | 10.5 | 10.8 | 11.2 | 11.9 | 13.2 | 15.0 | 15.6 | 16.0 | 16.4 | 17.4 | 18.1 | 18.8 | 19.0 | 19.0 | 18.6 | 17.2 | 13.8 | 11.8 | 10.9 | 10.5 | 14.2 | 19.0 |
| 4-Aug | 10.0 | 9.6 | 9.8 | 9.7 | 9.8 | 11.1 | 13.5 | 14.8 | 16.0 | 18.6 | 20.0 | 21.3 | 22.7 | 24.0 | 24.3 | 23.9 | 18.8 | 16.5 | 16.7 | 17.0 | 16.9 | 16.0 | 15.5 | 15.3 | 16.3 | 24.3 |
| 5-Aug | 15.3 | 15.4 | 15.4 | 15.6 | 16.0 | 16.0 | 16.1 | 16.4 | 16.8 | 17.6 | 18.4 | 19.5 | 19.4 | 18.9 | 19.3 | 19.2 | 17.6 | 13.4 | 12.1 | 12.0 | 11.5 | 11.8 | 11.9 | 11.8 | 15.7 | 19.5 |
| 6-Aug | 11.2 | 11.3 | 11.5 | 11.7 | 11.8 | 11.7 | 12.1 | 12.7 | 13.3 | 14.4 | 15.3 | 16.4 | 17.1 | 17.5 | 16.7 | 15.8 | 17.1 | 16.8 | 16.8 | 16.3 | 15.0 | 14.8 | 15.0 | 15.0 | 14.5 | 17.5 |
| 7-Aug | 13.8 | 13.1 | 12.8 | 13.0 | 13.5 | 13.1 | 13.8 | 14.3 | 15.2 | 16.3 | 18.1 | 18.3 | 19.1 | 18.0 | 18.4 | 18.7 | 18.9 | 18.1 | 16.9 | 16.3 | 15.0 | 14.0 | 13.5 | 12.7 | 15.6 | 19.1 |
| 8-Aug | 12.9 | 12.6 | 11.4 | 11.1 | 11.2 | 11.7 | 12.2 | 14.1 | 15.7 | 16.8 | 16.9 | 18.5 | 19.2 | 19.2 | 19.7 | 18.8 | 18.5 | 19.2 | 20.0 | 17.2 | 16.1 | 15.6 | 14.2 | 13.1 | 15.7 | 20.0 |
| 9-Aug | 13.2 | 13.3 | 13.2 | 12.7 | 12.6 | 13.0 | 13.7 | 14.6 | 15.9 | 17.3 | 19.3 | 20.3 | 20.2 | 21.2 | 21.3 | 21.5 | 22.1 | 22.0 | 19.9 | 18.2 | 15.7 | 14.4 | 13.3 | 12.2 | 16.7 | 22.1 |
| 10-Aug | 11.8 | 11.8 | 11.6 | 12.0 | 12.0 | 12.1 | 12.3 | 13.7 | 14.4 | 15.7 | 17.8 | 20.8 | 21.6 | 22.0 | 21.8 | 22.2 | 22.1 | 22.1 | 21.7 | 19.1 | 15.8 | 14.5 | 13.8 | 12.6 | 16.5 | 22.2 |
| 11-Aug | 11.7 | 11.2 | 10.4 | 10.2 | 9.9 | 10.5 | 13.0 | 13.6 | 16.5 | 18.6 | 19.8 | 20.5 | 20.9 | 21.0 | 21.1 | 21.2 | 21.1 | 20.7 | 20.2 | 18.7 | 17.1 | 15.8 | 15.0 | 13.6 | 16.3 | 21.2 |
| 12-Aug | 12.1 | 11.1 | 10.5 | 10.2 | 10.4 | 11.1 | 12.1 | 12.3 | 12.7 | 13.3 | 14.2 | 14.7 | 15.1 | 16.4 | 17.0 | 15.2 | 15.2 | 15.6 | 16.3 | 15.2 | 14.1 | 13.4 | 13.0 | 13.0 | 13.5 | 17.0 |
| 13-Aug | 12.9 | 12.8 | 12.8 | 12.7 | 12.4 | 12.2 | 12.4 | 13.0 | 14.3 | 15.9 | 17.2 | 18.3 | 18.9 | 19.8 | 19.2 | 19.3 | 19.7 | 19.8 | 18.8 | 17.4 | 15.5 | 15.0 | 14.9 | 14.6 | 15.8 | 19.8 |
| 14-Aug | 13.8 | 13.7 | 13.8 | 13.7 | 13.5 | 13.1 | 13.5 | 14.5 | 15.2 | 16.6 | 18.6 | 18.8 | 20.8 | 22.5 | 21.5 | 19.6 | 19.7 | 20.0 | 19.2 | 17.4 | 15.1 | 13.9 | 13.2 | 12.6 | 16.4 | 22.5 |
| 15-Aug | 12.2 | 11.8 | 11.3 | 10.9 | 10.5 | 10.6 | 11.8 | 14.0 | 16.6 | 19.2 | 21.5 | 22.6 | 23.6 | 24.1 | 24.7 | 24.8 | 24.5 | 24.5 | 23.2 | 21.5 | 20.2 | 19.9 | 19.2 | 18.9 | 18.4 | 24.8 |
| 16-Aug | 17.4 | 16.9 | 14.8 | 15.4 | 14.4 | 14.0 | 14.3 | 14.4 | 14.7 | 14.8 | 16.2 | 16.9 | 17.7 | 18.4 | 18.7 | 19.2 | 18.9 | 18.0 | 17.0 | 14.6 | 13.2 | 11.9 | 11.3 | 11.0 | 15.6 | 19.2 |
| 17-Aug | 10.5 | 9.7 | 9.1 | 8.6 | 8.4 | 8.4 | 9.7 | 11.8 | 13.5 | 15.9 | 17.4 | 18.1 | 18.8 | 20.5 | 22.3 | 22.3 | 23.1 | 23.0 | 22.1 | 20.3 | 18.8 | 16.7 | 14.9 | 14.3 | 15.7 | 23.1 |
| 18-Aug | 14.2 | 13.5 | 13.2 | 13.0 | 12.6 | 12.8 | 14.8 | 17.3 | 18.1 | 20.5 | 22.3 | 24.4 | 25.5 | 26.8 | 27.4 | 27.3 | 26.8 | 26.3 | 25.1 | 22.9 | 21.2 | 20.2 | 17.9 | 17.2 | 20.1 | 27.4 |
| 19-Aug | 16.1 | 14.9 | 14.1 | 13.9 | 13.7 | 13.9 | 14.9 | 16.1 | 16.8 | 19.1 | 21.5 | 22.7 | 23.0 | 23.6 | 24.3 | 22.7 | 21.2 | 22.4 | 22.2 | 20.2 | 18.1 | 15.8 | 15.1 | 16.4 | 18.4 | 24.3 |
| 20-Aug | 15.0 | 14.0 | 13.3 | 12.7 | 12.0 | 11.6 | 12.5 | 14.0 | 15.2 | 16.7 | 19.3 | 20.4 | 21.3 | 22.2 | 22.4 | 22.8 | 22.6 | 22.2 | 21.7 | 18.8 | 15.8 | 14.6 | 13.5 | 12.1 | 16.9 | 22.8 |
| 21-Aug | 11.5 | 10.9 | 10.8 | 10.6 | 10.5 | 10.1 | 11.9 | 14.3 | 17.0 | 20.2 | 22.3 | 24.5 | 25.1 | 26.1 | 26.7 | 26.4 | 26.5 | 26.0 | 24.7 | 23.7 | 21.6 | 19.0 | 18.3 | 18.8 | 19.1 | 26.7 |
| 22-Aug | 18.1 | 16.9 | 15.5 | 14.8 | 14.6 | 14.8 | 15.9 | 17.0 | 19.9 | 20.2 | 21.6 | 23.1 | 24.8 | 26.5 | 27.7 | 28.8 | 29.0 | 28.1 | 26.4 | 24.5 | 24.6 | 23.6 | 22.2 | 20.6 | 21.6 | 29.0 |
| 23-Aug | 19.6 | 18.6 | 17.8 | 17.2 | 16.8 | 16.9 | 17.1 | 18.7 | 19.5 | 21.0 | 20.8 | 22.7 | 24.9 | 24.2 | 25.0 | 24.5 | 24.8 | 24.4 | 24.5 | 23.4 | 22.2 | 21.1 | 20.3 | 19.7 | 21.1 | 25.0 |
| 24-Aug | 19.3 | 19.2 | 18.7 | 18.0 | 16.8 | 16.4 | 16.8 | 17.9 | 19.0 | 21.0 | 22.6 | 23.1 | 23.8 | 24.5 | 24.8 | 24.6 | 25.0 | 25.0 | 23.9 | 20.3 | 17.0 | 15.0 | 14.0 | 13.3 | 20.0 | 25.0 |
| 25-Aug | 12.9 | 11.9 | 11.4 | 11.2 | 10.7 | 10.3 | 11.5 | 13.5 | 15.7 | 17.6 | 19.3 | 20.6 | 21.8 | 23.0 | 24.2 | 24.6 | 25.2 | 25.0 | 23.3 | 21.0 | 19.2 | 17.2 | 15.9 | 15.2 | 17.6 | 25.2 |
| 26-Aug | 14.5 | 14.0 | 13.2 | 12.7 | 12.3 | 12.3 | 14.0 | 16.3 | 19.3 | 22.8 | 24.4 | 26.6 | 28.4 | 29.1 | 29.7 | 29.9 | 30.0 | 29.4 | 27.7 | 25.2 | 23.6 | 22.0 | 20.6 | 19.3 | 21.5 | 30.0 |
| 27-Aug | 18.4 | 17.6 | 17.0 | 16.7 | 15.5 | 15.2 | 16.9 | 19.4 | 21.3 | 23.5 | 25.0 | 26.0 | 26.0 | 26.6 | 26.8 | 25.4 | 24.2 | 25.2 | 26.0 | 25.0 | 24.2 | 23.7 | 22.4 | 21.5 | 22.1 | 26.8 |
| 28-Aug | 20.6 | 20.2 | 20.1 | 19.3 | 18.4 | 17.7 | 18.1 | 17.0 | 17.4 | 19.0 | 20.6 | 21.7 | 22.0 | 22.1 | 20.0 | 20.1 | 19.5 | 18.6 | 17.3 | 15.8 | 14.7 | 14.3 | 13.7 | 13.0 | 18.4 | 22.1 |
| 29-Aug | 12.4 | 12.1 | 12.2 | 12.1 | 12.1 | 11.5 | 11.0 | 11.3 | 13.2 | 15.1 | 17.2 | 18.9 | 20.3 | 21.8 | 22.6 | 23.2 | 23.6 | 23.6 | 22.6 | 19.2 | 16.9 | 16.6 | 17.1 | 16.1 | 16.8 | 23.6 |
| 30-Aug | 15.5 | 13.7 | 14.0 | 13.8 | 12.8 | 12.6 | 13.4 | 14.6 | 15.7 | 18.8 | 21.3 | 23.2 | 24.0 | 24.5 | 24.9 | 25.1 | 25.0 | 24.6 | 23.3 | 20.0 | 19.2 | 19.0 | 18.7 | 17.5 | 19.0 | 25.1 |
| 31-Aug | 16.4 | 15.9 | 15.7 | 15.1 | 14.5 | 13.9 | 14.1 | 14.6 | 16.9 | 18.5 | 20.0 | 21.0 | 22.8 | 23.6 | 23.5 | 24.3 | 24.4 | 23.8 | 22.5 | 19.9 | 16.9 | 14.9 | 13.5 | 12.7 | 18.3 | 24.4 |
| | 14.5 | 13.9 | 13.5 | 13.2 | 13.0 | 12.9 | 13.8 | 14.9 | 16.2 | 17.9 | 19.3 | 20.6 | 21.4 | 22.2 | 22.5 | 22.4 | 22.3 | 21.9 | 21.1 | 19.3 | 17.6 | 16.4 | 15.6 | 15.0 | Diurnal Average | |
| | 20.6 | 20.2 | 20.1 | 19.3 | 18.4 | 17.7 | 18.1 | 19.4 | 21.3 | 23.5 | 25.0 | 26.6 | 28.4 | 29.1 | 29.7 | 29.9 | 30.0 | 29.4 | 27.7 | 25.2 | 24.6 | 23.7 | 22.4 | 21.5 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Lower Camp - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 12 | 1.61 | 1.61 |
| 10 - 20 | 516 | 69.35 | 70.97 |
| > 20 | 216 | 29.03 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Lower Camp - August 2026

Maximum Value: 99.4 % on Aug 8 06:00

Maximum Daily Average: 89.0 % on Aug 12

Minimum Value: 31.7 % on Aug 24 15:00

Minimum Daily Average: 60.3 % on Aug 29

Maximum Diurnal Average: 91.0 % at hour 6

Minimum Diurnal Average: 50.2 % at hour 15

Monthly Average: 72.52 %

Percentiles: $P_1$ = 35.7 $P_{10}$ = 46.1 $Q_1$ = 56.6 Median = 75.1 $Q_3$ = 88.6 $P_{90}$ = 96.0 $P_{99}$ = 99.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

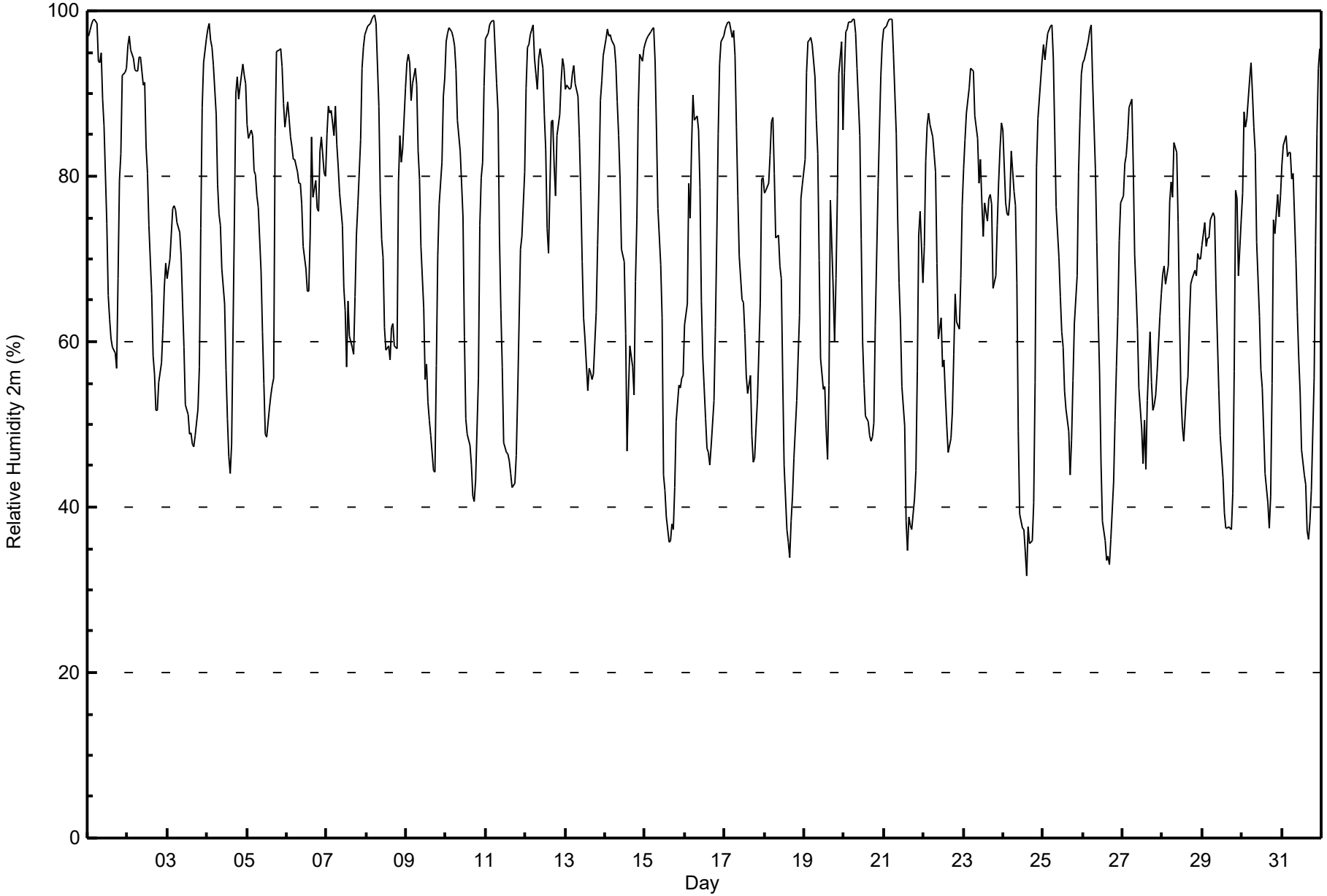
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 97.0 | 97.7 | 98.4 | 98.9 | 99.0 | 98.5 | 93.9 | 93.7 | 94.9 | 89.3 | 86.0 | 74.2 | 65.6 | 62.8 | 60.3 | 59.3 | 58.7 | 56.8 | 67.7 | 79.5 | 82.7 | 92.2 | 92.5 | 93.0 | 83.0 | 99.0 |
| 2-Aug | 95.8 | 96.9 | 95.2 | 94.2 | 92.8 | 92.7 | 92.6 | 94.5 | 94.4 | 91.1 | 91.4 | 83.5 | 80.4 | 74.0 | 65.7 | 58.3 | 56.0 | 51.6 | 51.6 | 55.2 | 57.5 | 61.6 | 66.6 | 69.5 | 77.6 | 96.9 |
| 3-Aug | 67.6 | 70.0 | 73.1 | 76.2 | 76.4 | 75.9 | 74.4 | 73.2 | 70.4 | 64.7 | 59.4 | 52.4 | 51.1 | 48.8 | 49.0 | 47.6 | 47.3 | 48.7 | 51.9 | 57.0 | 73.6 | 88.4 | 93.7 | 96.6 | 66.1 | 96.6 |
| 4-Aug | 97.8 | 98.5 | 96.5 | 95.6 | 93.5 | 87.4 | 79.0 | 75.4 | 74.1 | 68.7 | 64.5 | 56.6 | 50.6 | 46.1 | 44.1 | 47.6 | 74.9 | 90.0 | 92.0 | 89.4 | 90.9 | 93.5 | 92.2 | 91.1 | 78.8 | 98.5 |
| 5-Aug | 86.2 | 84.6 | 85.7 | 84.9 | 80.7 | 80.2 | 77.7 | 76.3 | 68.4 | 61.2 | 54.9 | 48.8 | 48.5 | 52.1 | 53.6 | 54.8 | 55.5 | 84.7 | 95.1 | 95.3 | 95.4 | 93.2 | 88.8 | 85.9 | 74.7 | 95.4 |
| 6-Aug | 88.9 | 86.9 | 84.8 | 83.5 | 82.0 | 82.0 | 80.5 | 79.1 | 79.2 | 76.6 | 71.6 | 68.8 | 66.0 | 66.2 | 72.7 | 84.7 | 77.4 | 79.4 | 76.1 | 75.7 | 83.0 | 84.7 | 80.3 | 79.9 | 78.8 | 88.9 |
| 7-Aug | 85.1 | 88.5 | 87.7 | 88.0 | 84.9 | 88.5 | 83.9 | 81.1 | 77.9 | 74.1 | 66.6 | 63.7 | 56.9 | 65.0 | 60.7 | 59.4 | 58.5 | 65.4 | 72.9 | 76.4 | 84.5 | 93.1 | 95.6 | 97.1 | 77.3 | 97.1 |
| 8-Aug | 97.7 | 98.2 | 98.5 | 99.1 | 99.4 | 99.4 | 98.4 | 88.4 | 77.9 | 72.4 | 70.1 | 61.7 | 58.9 | 59.6 | 57.8 | 61.8 | 62.2 | 59.5 | 59.2 | 79.4 | 84.9 | 81.7 | 83.4 | 90.8 | 79.2 | 99.4 |
| 9-Aug | 93.7 | 94.7 | 93.7 | 89.1 | 91.2 | 93.1 | 91.1 | 83.0 | 79.6 | 71.4 | 64.2 | 55.4 | 57.4 | 52.7 | 50.6 | 48.6 | 44.5 | 44.2 | 57.2 | 70.3 | 76.6 | 81.6 | 89.7 | 91.8 | 73.6 | 94.7 |
| 10-Aug | 96.3 | 97.3 | 98.0 | 97.4 | 96.8 | 95.7 | 92.8 | 86.8 | 83.0 | 79.1 | 75.1 | 60.8 | 50.6 | 48.9 | 47.4 | 45.0 | 41.3 | 40.6 | 43.3 | 55.7 | 74.1 | 79.8 | 81.7 | 90.8 | 73.3 | 98.0 |
| 11-Aug | 96.6 | 97.3 | 98.3 | 98.7 | 98.8 | 98.8 | 91.2 | 87.7 | 72.7 | 63.8 | 56.9 | 47.8 | 46.5 | 46.5 | 45.6 | 44.1 | 42.5 | 42.8 | 46.3 | 53.8 | 62.3 | 71.2 | 72.7 | 80.5 | 69.3 | 98.8 |
| 12-Aug | 90.6 | 95.5 | 96.0 | 97.1 | 98.4 | 94.3 | 92.3 | 90.5 | 94.3 | 95.4 | 93.0 | 87.5 | 83.3 | 73.6 | 70.6 | 86.6 | 86.7 | 81.4 | 77.6 | 85.0 | 87.5 | 91.5 | 94.3 | 93.3 | 89.0 | 98.4 |
| 13-Aug | 90.6 | 91.0 | 90.5 | 90.6 | 92.3 | 93.4 | 91.2 | 89.7 | 84.6 | 78.1 | 69.6 | 62.8 | 60.3 | 54.0 | 56.8 | 56.3 | 55.5 | 56.1 | 63.6 | 71.8 | 79.3 | 89.1 | 91.6 | 94.5 | 77.2 | 94.5 |
| 14-Aug | 96.6 | 97.8 | 96.9 | 97.1 | 96.5 | 95.8 | 93.5 | 89.0 | 84.9 | 79.7 | 71.2 | 69.7 | 61.0 | 46.8 | 53.8 | 59.4 | 57.0 | 53.6 | 67.3 | 74.8 | 88.4 | 94.7 | 93.8 | 95.4 | 79.8 | 97.8 |
| 15-Aug | 96.0 | 96.6 | 97.0 | 97.5 | 97.8 | 98.0 | 93.9 | 85.4 | 76.2 | 69.4 | 62.9 | 43.8 | 42.1 | 38.8 | 35.8 | 35.9 | 38.0 | 37.4 | 42.4 | 50.3 | 54.8 | 54.4 | 55.5 | 56.0 | 64.8 | 98.0 |
| 16-Aug | 62.1 | 64.6 | 79.1 | 74.9 | 83.5 | 89.8 | 86.8 | 87.3 | 85.5 | 78.7 | 65.0 | 58.1 | 50.7 | 47.1 | 46.6 | 45.1 | 47.4 | 52.9 | 61.7 | 72.7 | 85.0 | 93.6 | 96.3 | 96.9 | 71.3 | 96.9 |
| 17-Aug | 97.8 | 98.2 | 98.6 | 98.6 | 96.8 | 97.7 | 94.5 | 85.9 | 77.6 | 70.4 | 65.2 | 64.7 | 61.0 | 55.9 | 53.8 | 55.8 | 48.6 | 45.5 | 45.9 | 49.7 | 53.0 | 64.7 | 79.6 | 79.9 | 72.5 | 98.6 |
| 18-Aug | 78.0 | 78.2 | 79.2 | 82.5 | 86.6 | 87.2 | 80.4 | 72.6 | 73.0 | 69.1 | 67.6 | 55.8 | 45.2 | 37.3 | 35.8 | 33.9 | 38.3 | 41.4 | 45.9 | 52.9 | 58.2 | 63.1 | 77.2 | 78.9 | 63.3 | 87.2 |
| 19-Aug | 82.0 | 92.5 | 96.3 | 96.4 | 96.7 | 95.9 | 92.1 | 86.7 | 82.7 | 69.9 | 58.0 | 54.3 | 54.6 | 49.4 | 45.7 | 54.7 | 77.1 | 66.5 | 59.9 | 67.7 | 77.8 | 92.4 | 96.3 | 85.6 | 76.3 | 96.7 |
| 20-Aug | 92.6 | 97.4 | 97.9 | 98.6 | 98.7 | 99.0 | 99.1 | 97.2 | 93.1 | 85.0 | 72.4 | 60.1 | 54.9 | 50.9 | 50.4 | 48.6 | 48.0 | 48.5 | 50.1 | 61.8 | 78.7 | 85.7 | 92.2 | 96.1 | 77.4 | 99.1 |
| 21-Aug | 97.8 | 98.1 | 98.7 | 99.0 | 99.0 | 99.0 | 94.7 | 85.1 | 74.8 | 67.1 | 62.3 | 54.6 | 49.9 | 38.3 | 34.7 | 38.8 | 37.9 | 37.2 | 41.1 | 44.5 | 56.4 | 72.8 | 75.7 | 67.1 | 67.7 | 99.0 |
| 22-Aug | 71.5 | 81.8 | 86.1 | 87.7 | 86.2 | 84.8 | 82.7 | 80.5 | 69.4 | 60.3 | 62.9 | 57.0 | 57.9 | 53.5 | 49.7 | 46.6 | 48.2 | 51.6 | 58.5 | 65.7 | 62.4 | 61.6 | 67.5 | 76.4 | 67.1 | 87.7 |
| 23-Aug | 80.8 | 84.4 | 87.6 | 90.7 | 93.1 | 92.9 | 92.7 | 87.3 | 84.6 | 79.2 | 82.0 | 76.9 | 72.6 | 76.8 | 74.5 | 77.4 | 77.8 | 76.7 | 66.5 | 68.0 | 74.1 | 79.4 | 83.3 | 86.4 | 81.1 | 93.1 |
| 24-Aug | 85.6 | 76.8 | 75.4 | 75.2 | 77.4 | 83.0 | 78.1 | 76.4 | 67.1 | 49.2 | 39.1 | 37.5 | 37.2 | 34.6 | 31.7 | 37.7 | 35.6 | 35.9 | 40.5 | 55.1 | 81.0 | 87.0 | 91.6 | 94.1 | 61.8 | 94.1 |
| 25-Aug | 96.0 | 94.0 | 95.8 | 97.3 | 98.1 | 98.3 | 94.3 | 85.5 | 76.3 | 70.2 | 65.4 | 61.3 | 59.4 | 54.0 | 51.8 | 49.2 | 43.8 | 48.2 | 55.2 | 62.2 | 67.9 | 80.5 | 87.0 | 92.4 | 74.3 | 98.3 |
| 26-Aug | 93.7 | 94.1 | 95.6 | 96.4 | 97.7 | 98.3 | 91.6 | 80.8 | 72.0 | 63.2 | 55.9 | 45.4 | 38.3 | 36.0 | 33.5 | 34.0 | 33.0 | 36.1 | 43.0 | 50.6 | 56.9 | 63.0 | 72.2 | 76.8 | 64.9 | 98.3 |
| 27-Aug | 77.6 | 81.5 | 82.5 | 85.0 | 88.3 | 89.4 | 81.1 | 70.5 | 66.3 | 61.5 | 54.5 | 49.4 | 45.3 | 50.5 | 44.5 | 52.9 | 61.1 | 55.1 | 51.6 | 52.4 | 53.6 | 56.3 | 63.1 | 65.7 | 64.2 | 89.4 |
| 28-Aug | 68.2 | 69.1 | 66.9 | 69.1 | 76.9 | 79.3 | 77.5 | 84.1 | 82.9 | 74.4 | 63.1 | 53.7 | 49.9 | 48.0 | 54.1 | 55.8 | 62.1 | 66.9 | 67.6 | 68.6 | 67.9 | 70.6 | 70.0 | 70.0 | 67.4 | 84.1 |
| 29-Aug | 71.8 | 74.4 | 71.5 | 72.6 | 72.6 | 74.7 | 75.6 | 75.0 | 66.6 | 60.4 | 54.2 | 48.6 | 43.6 | 39.4 | 37.4 | 37.5 | 37.6 | 37.3 | 41.6 | 56.4 | 78.3 | 77.2 | 67.9 | 74.7 | 60.3 | 78.3 |
| 30-Aug | 77.9 | 87.8 | 86.0 | 87.0 | 91.8 | 93.8 | 90.0 | 86.0 | 82.9 | 72.1 | 63.0 | 56.6 | 54.5 | 49.4 | 44.1 | 40.5 | 37.5 | 41.3 | 54.9 | 74.7 | 73.1 | 77.8 | 75.0 | 77.6 | 69.8 | 93.8 |
| 31-Aug | 81.3 | 83.8 | 84.8 | 82.4 | 82.9 | 82.9 | 79.7 | 80.3 | 70.0 | 63.5 | 58.2 | 53.9 | 46.9 | 43.8 | 42.6 | 37.1 | 36.2 | 38.4 | 42.0 | 55.7 | 71.6 | 85.1 | 93.1 | 95.5 | 66.3 | 95.5 |
| | 86.8 | 88.6 | 89.4 | 89.7 | 90.5 | 91.0 | 87.7 | 83.7 | 78.6 | 71.9 | 66.0 | 58.9 | 54.9 | 51.6 | 50.2 | 51.5 | 52.5 | 53.9 | 57.8 | 65.4 | 73.3 | 79.4 | 82.6 | 84.5 | Diurnal Average | |
| | 97.8 | 98.5 | 98.7 | 99.1 | 99.4 | 99.4 | 99.1 | 97.2 | 94.9 | 95.4 | 93.0 | 87.5 | 83.3 | 76.8 | 74.5 | 86.6 | 86.7 | 90.0 | 95.1 | 95.3 | 95.4 | 94.7 | 96.3 | 97.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Lower Camp - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Barometric Pressure (BP) - inHg

## Lower Camp - August 2026

Maximum Value: 29.4 inHg on Aug 13 09:00

Maximum Daily Average: 29.3 inHg on Aug 13

Minimum Value: 28.6 inHg on Aug 1 22:00

Minimum Daily Average: 28.8 inHg on Aug 2

Maximum Diurnal Average: 29.1 inHg at hour 7

Minimum Diurnal Average: 29.0 inHg at hour 18

Monthly Average: 29.07 inHg

Percentiles: $P_1$ = 28.7 $P_{10}$ = 28.8 $Q_1$ = 28.9 Median = 29.1 $Q_3$ = 29.2 $P_{90}$ = 29.3 $P_{99}$ = 29.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

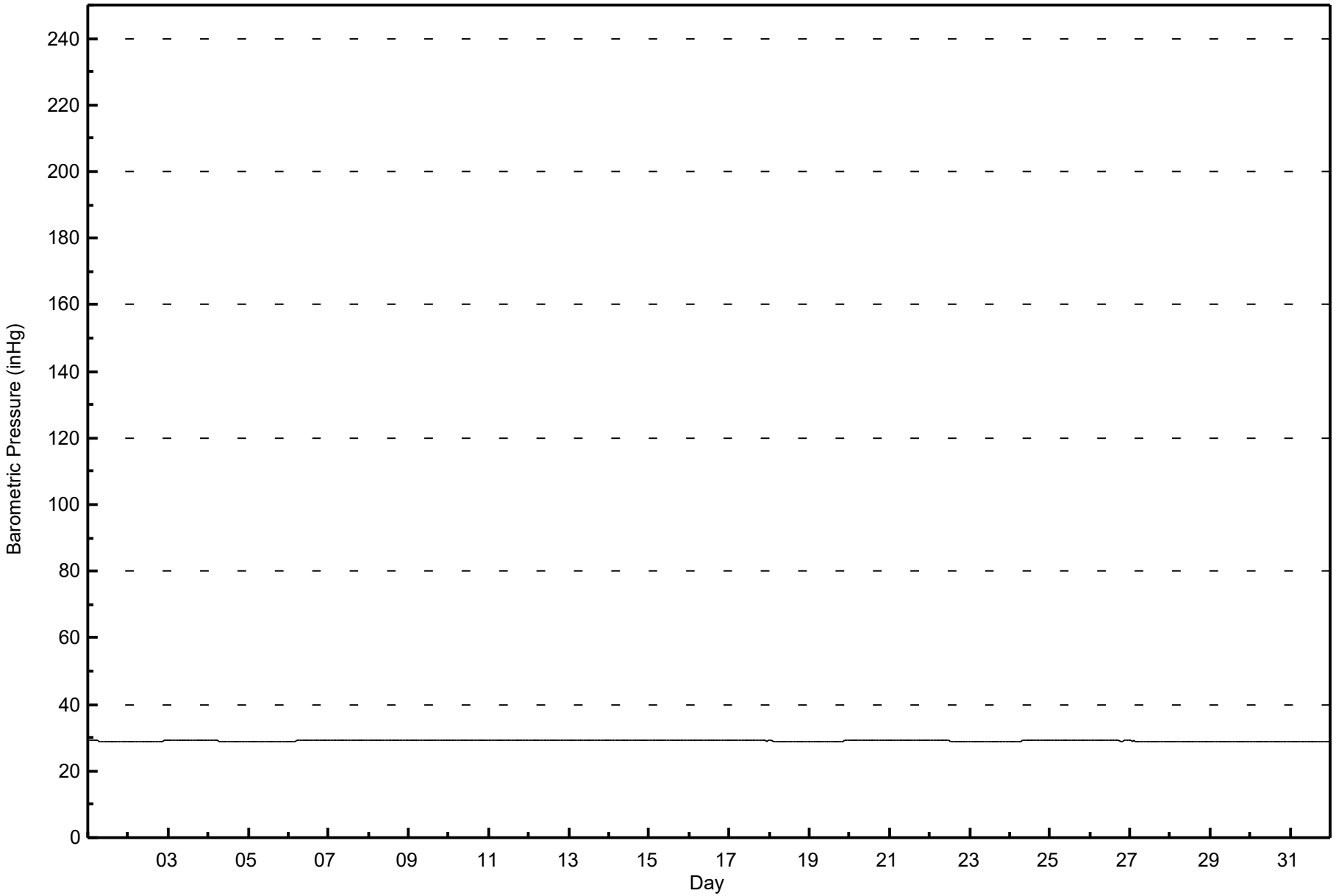
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.7 | 28.7 | 28.7 | 28.6 | 28.6 | 28.6 | 28.6 | 28.7 | 28.7 | 28.9 | 29.1 |
| 2-Aug | 28.7 | 28.7 | 28.7 | 28.6 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 28.8 | 29.1 |
| 3-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 |
| 4-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.1 |
| 5-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 |
| 6-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.2 |
| 7-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 |
| 8-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 |
| 9-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.1 | 29.2 | 29.2 | 29.2 |
| 10-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.1 | 29.2 |
| 11-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 |
| 12-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 |
| 13-Aug | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.4 |
| 14-Aug | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 |
| 15-Aug | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.3 |
| 16-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 |
| 17-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.2 |
| 18-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 |
| 19-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 28.9 | 29.1 |
| 20-Aug | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 | 29.3 | 29.2 | 29.3 |
| 21-Aug | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 |
| 22-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 29.0 | 29.2 |
| 23-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.9 |
| 24-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.2 |
| 25-Aug | 29.2 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.3 | 29.3 |
| 26-Aug | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.2 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.2 |
| 27-Aug | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 29.0 |
| 28-Aug | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.9 |
| 29-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 29.0 | 29.0 | 29.0 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 |
| 30-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.8 | 28.8 | 28.8 | 28.8 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 |
| 31-Aug | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 28.9 | 29.0 | 28.9 | 29.0 | 28.9 | 29.0 |
| | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.1 | 29.1 | 29.1 | 29.1 | Diurnal Average | |
| | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | 29.3 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Barometric Pressure (BP) - inHg**

**Lower Camp - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Lower Camp - August 2026

Maximum Speed: 27 km/h on Aug 28 15:00

Maximum Daily Speed Average: 16.2 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 3 23:00

Minimum Daily Speed Average: 0.5 km/h on Aug 14

Maximum Diurnal Speed Average: 4.7 km/h at hour 12

Minimum Diurnal Speed Average: 0.3 km/h at hour 6

Monthly Average Velocity: 1.8 km/h 317.8 deg

Percentiles: $P_1 = 0$ $P_{10} = 2$ $Q_1 = 4$ Median = 7 $Q_3 = 11$ $P_{90} = 15$ $P_{99} = 22$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 726 |
| Hours of Missing Data: | 18 |
| Percent Operational Time: | 97.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | WNW3 | W2 | UO | NW2 | S1 | SE5 | SE4 | ESE1 | E3 | SE2 | SE3 | ESE3 | E7 | ESE16 | SE16 | ESE15 | ESE15 | SE10 | NNW5 | NW6 | NW12 | N8 | NW10 | NNW8 | E2.4 | SE16 |
| 2-Aug | NW10 | NNW11 | NNW13 | N12 | N13 | NNW11 | N11 | N13 | N12 | N16 | NNW22 | N21 | N20 | NNW21 | NNW23 | NNW25 | N22 | NNW22 | NNW20 | NNW19 | NNW20 | NW17 | NW14 | NW11 | NNW16.2 | NNW25 |
| 3-Aug | NW13 | NW12 | NW10 | NW8 | NNW7 | NW7 | NW8 | NW9 | NW10 | N13 | N14 | NNW14 | N12 | N10 | NNE11 | N9 | N10 | N9 | NE11 | E6 | SE2 | SE2 | ENE0 | E1 | NNW7.1 | NNW14 |
| 4-Aug | WNW0 | SSE2 | SE5 | SE4 | SSE5 | SE8 | SE11 | SE10 | SE11 | SE11 | S6 | W15 | W17 | W17 | W13 | WSW12 | N10 | NE3 | WNW9 | NNW6 | NW15 | NW12 | NW8 | NNW7 | WSW2.9 | W17 |
| 5-Aug | NW10 | WNW9 | WNW12 | WNW13 | WNW18 | WNW18 | NW17 | NW15 | NW19 | NW19 | NW19 | NW19 | NNW19 | NW17 | NW14 | NW13 | N13 | N13 | NW10 | NW12 | NW10 | WNW15 | WNW19 | NW21 | NW14.4 | NW21 |
| 6-Aug | WNW18 | WNW21 | WNW23 | WNW21 | NW22 | NW20 | WNW20 | NW23 | NW18 | NW17 | NNW14 | NNW9 | NNW9 | N9 | N10 | NW3 | W7 | NNW8 | NW9 | NW12 | NW5 | NNW7 | NW10 | NW8 | NW13.0 | NW23 |
| 7-Aug | NNW7 | NW5 | WNW5 | WNW5 | NW6 | NW4 | NW8 | WNW9 | NW10 | NW11 | NW16 | NW16 | WNW15 | NNE8 | N8 | N9 | NNW7 | NNE7 | N5 | NNE5 | NNW1 | WNW1 | WNW3 | NE0 | NW6.3 | NW16 |
| 8-Aug | WNW2 | WNW2 | W1 | WNW2 | WNW2 | WNW4 | NW4 | N6 | N8 | NNE7 | N8 | N9 | N6 | NNW8 | NNW7 | NNW11 | N5 | NW3 | WNW1 | UO | W3 | W3 | WNW2 | WNW2 | NNW4.0 | NNW11 |
| 9-Aug | NW1 | W4 | ESE1 | UO | ESE1 | WNW3 | NNE4 | NNW4 | WNW5 | NNE4 | NE5 | NE5 | NNE6 | NNE6 | NNE9 | N9 | NNW6 | NNW7 | N5 | WNW2 | WNW2 | WNW1 | E0 | ESE1 | N3.0 | N9 |
| 10-Aug | N0 | WSW2 | SE2 | SE3 | SSE4 | SE6 | SE4 | ESE5 | ESE3 | N5 | NW5 | NNW5 | N8 | N11 | N12 | NNW10 | N10 | N9 | NNW7 | NW4 | NW2 | W4 | NW0 | NW1 | N2.8 | N12 |
| 11-Aug | N1 | E1 | ESE1 | ESE1 | ESE2 | ESE2 | ESE6 | SE6 | E2 | NNW6 | N10 | N15 | N15 | N17 | N17 | N16 | N16 | NNE14 | NNE12 | NNE12 | NNW5 | NNW5 | NNW6 | NW5 | N6.6 | N17 |
| 12-Aug | WNW2 | UO | UO | UO | UO | NNW4 | NW4 | NW7 | NW8 | NW9 | NNW11 | NNW11 | NNW11 | N12 | N11 | N6 | N8 | N8 | NW8 | NW6 | NW7 | WNW5 | NW4 | NW6 | NNW7.0 | N12 |
| 13-Aug | NNW7 | NNW7 | NNW7 | NNW6 | NW6 | NW7 | NNW7 | NNW7 | NNW7 | N8 | N11 | N10 | NNE8 | NNE11 | NNE13 | NE11 | ENE5 | ENE10 | NE9 | N3 | W3 | NW1 | WNW2 | UO | N5.9 | NNE13 |
| 14-Aug | UO | UO | WNW3 | WNW4 | NW2 | ESE1 | NNW1 | NW3 | N4 | NNE6 | NNE5 | WNW5 | E2 | ESE3 | ESE12 | SSE3 | WSW6 | SSW5 | ESE2 | SE3 | SE3 | ESE2 | SE4 | SE5 | ESE0.5 | ESE12 |
| 15-Aug | SE6 | SE8 | SE7 | SE6 | SE6 | SE10 | SE10 | SE9 | SE10 | SE9 | SE7 | W11 | W10 | W12 | W13 | WSW10 | SW9 | W14 | SW8 | SSW5 | SW7 | SW10 | WSW10 | W9 | SSW5.0 | W14 |
| 16-Aug | W8 | W8 | S2 | WNW5 | NNW0 | NNW4 | NW5 | NNW7 | N13 | N17 | N16 | N16 | N15 | NNW13 | NNW12 | NNW10 | N9 | NNE8 | ENE7 | ESE2 | UO | UO | ESE1 | ESE1 | N6.5 | N17 |
| 17-Aug | SE1 | ESE2 | SE2 | S2 | SSE1 | SSE3 | SE4 | SE8 | SE7 | SE6 | NW4 | N5 | NE3 | E4 | SE8 | SE9 | SE8 | SSE6 | SSE6 | S6 | S6 | SSE7 | SSE9 | SSE7 | SE4.0 | SE9 |
| 18-Aug | SE9 | SSE9 | SSE10 | SE11 | SE10 | ESE10 | SE11 | SE11 | SE12 | SE13 | SE10 | SW5 | W11 | W12 | SW7 | W14 | W18 | W16 | W13 | WSW10 | WSW9 | WSW6 | SE1 | SSE2 | SSW4.5 | W18 |
| 19-Aug | S2 | SE4 | SE4 | SE4 | SSE6 | SE8 | SE9 | SSE7 | S4 | NW7 | NNW8 | N8 | NNE6 | N9 | N7 | NNW6 | NE1 | NNW6 | N9 | N5 | NW2 | ESE1 | NNW2 | NNW6 | NNE1.6 | SE9 |
| 20-Aug | SE2 | SE1 | NW3 | WNW4 | E1 | SE2 | NNW2 | NW2 | N5 | NNW5 | N7 | N13 | N11 | NNW9 | N9 | N10 | NNE12 | NNE12 | NNE7 | NNW1 | NW2 | WNW2 | NNE1 | UO | N4.6 | N13 |
| 21-Aug | E1 | E2 | ESE2 | SE4 | SE4 | ESE3 | ESE6 | SE11 | SE10 | SE9 | SE10 | SE11 | SE10 | S5 | S6 | SE9 | SSE8 | S9 | S10 | SSE10 | SSE8 | SE9 | SSE9 | SSE9 | SSE6.8 | SE11 |
| 22-Aug | SSE9 | SE8 | ESE6 | SE5 | SSE5 | SSE6 | SE6 | SE7 | SE9 | S7 | SE8 | SSE7 | SE9 | SE8 | SSE8 | SSE8 | SSE8 | SSE8 | SSE7 | SSE7 | SSE8 | S9 | SSE8 | SE8 | SSE7.3 | SE9 |
| 23-Aug | SE9 | SSE7 | SSE8 | SE8 | SE8 | SE8 | SE8 | SE9 | SE11 | SE8 | SE10 | SE7 | SE11 | SE9 | SE6 | SE6 | SE6 | SW4 | WNW11 | NW9 | NW4 | WNW4 | NW4 | NW4 | SSE4.5 | SE11 |
| 24-Aug | NW3 | WNW3 | NW7 | NW4 | WNW1 | NW2 | NW3 | NNE3 | N3 | NW10 | NNW14 | NNW13 | N13 | N12 | NNW13 | NNE12 | N8 | NNE12 | NNE7 | WNW3 | ENE1 | UO | ENE0 | E1 | NNW5.8 | NNW14 |
| 25-Aug | NW3 | NE1 | UO | UO | NE0 | NE1 | ENE2 | NE3 | NNW4 | NW4 | NNW5 | NE6 | NE5 | NE5 | NE6 | NE4 | N8 | NE7 | NNE6 | NW5 | NW4 | NNE1 | WNW1 | WNW4 | N3.0 | N8 |
| 26-Aug | WNW4 | W5 | WNW3 | W3 | UO | UO | SE7 | SE9 | SE9 | SE11 | SE12 | SSE9 | SSE11 | SSE10 | SSE9 | SSE11 | SSE11 | SSE9 | SSE8 | SSE9 | SSE9 | SSE9 | SSE9 | SE9 | SSE7.3 | SE12 |
| 27-Aug | SE8 | SSE6 | SE6 | ESE7 | ESE6 | SE4 | ESE6 | SE5 | SE9 | SE12 | SE13 | SE12 | S10 | SE11 | S9 | SSE4 | SE10 | ESE15 | SE14 | SE17 | SE17 | SE17 | SE17 | SE16 | SE10.2 | SE17 |
| 28-Aug | SE15 | SE14 | SE15 | SSE11 | WSW3 | S2 | S10 | S10 | SSE10 | SW11 | WSW15 | W18 | WSW21 | WSW18 | WSW27 | W24 | W19 | WSW20 | WSW21 | W21 | WSW19 | WSW15 | WSW15 | WSW12 | WSW11.3 | WSW27 |
| 29-Aug | WSW10 | SSW6 | WSW11 | SW9 | SW10 | SW7 | SSW7 | S6 | WSW13 | WSW14 | WSW15 | W16 | W18 | W19 | W19 | WSW18 | WSW14 | WSW13 | SW7 | SW3 | ENE2 | ENE3 | SSE6 | SSE6 | WSW9.2 | W19 |
| 30-Aug | ESE5 | SE6 | SE8 | SSE6 | SSE2 | ESE4 | ENE2 | N4 | SE4 | SE8 | SE7 | SE7 | SE9 | ESE6 | E3 | N4 | N5 | NE1 | SE2 | ENE1 | SE3 | SE3 | SW3 | NW6 | ESE2.8 | SE9 |
| 31-Aug | WNW5 | NW4 | NW5 | NW6 | NW7 | NW7 | NW5 | NNW5 | NW6 | NW3 | NNE5 | NE4 | W9 | W9 | W8 | W11 | W11 | WSW14 | W13 | W7 | WNW3 | N1 | E1 | ENE1 | WNW5.1 | WSW14 |
| | W1.3 | WSW1.2 | WSW1.1 | W1.1 | WNW0.8 | W0.3 | ESE0.4 | ENE0.5 | N0.7 | NNW1.9 | NNW3.3 | NNW4.7 | NNW4.1 | NNW4.0 | NNW3.7 | NW3.3 | NNW3.1 | NNW2.6 | NW2.7 | WNW2.1 | W2.2 | W1.8 | W1.7 | W1.5 | Diurnal Average | |
| | WNW18 | WNW21 | WNW23 | WNW21 | NW22 | NW20 | WNW20 | NW23 | NW19 | NW19 | NNW22 | N21 | WSW21 | NNW21 | WSW27 | NNW25 | N22 | NNW22 | WSW21 | W21 | NNW20 | SE17 | WNW19 | NW21 | Diurnal Maximum | |

UO - Unstable Operation

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Aug 1 22:00

Minimum Value: 0 km/h on Aug 3 23:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 726 |
| Hours of Missing Data: | 18 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 97.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | UO | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 7 | 9 | 3 | 5 | 9 |
| 2-Aug | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 6 | 5 | 5 | 5 | 4 | 3 | 3 | 7 |
| 3-Aug | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 4 |
| 4-Aug | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 3 | 7 | 2 | 3 | 2 | 4 | 4 | 1 | 1 | 7 |
| 5-Aug | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 4 | 5 | 4 | 3 | 3 | 4 | 5 | 2 | 3 | 2 | 4 | 4 | 4 | 5 |
| 6-Aug | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 2 | 3 | 3 | 4 | 5 | 2 | 3 | 4 | 2 | 5 |
| 7-Aug | 2 | 1 | 2 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 4 |
| 8-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 2 | 1 | 2 | UO | 1 | 1 | 1 | 1 | 4 |
| 9-Aug | 2 | 2 | 2 | UO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 3 |
| 10-Aug | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 11-Aug | 2 | 1 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 1 | 1 | 2 | 2 | 5 |
| 12-Aug | 2 | UO | UO | UO | UO | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 5 |
| 13-Aug | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 4 | 5 | 3 | 5 | 3 | 4 | 1 | 1 | 1 | 1 | UO | 5 |
| 14-Aug | UO | UO | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 5 |
| 15-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 1 | 2 | 2 | 2 | 2 | 5 |
| 16-Aug | 2 | 3 | 2 | 3 | 1 | 2 | 1 | 2 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 2 | UO | UO | 1 | 1 | 5 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 |
| 18-Aug | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 3 | 3 | 3 | 1 | 1 | 5 |
| 19-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 4 | 3 | 4 |
| 20-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 2 | UO | 3 |
| 21-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 |
| 22-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 3 |
| 23-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 2 | 5 | 3 | 3 | 2 | 1 | 1 | 1 | 5 |
| 24-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 4 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | UO | 2 | 1 | 5 |
| 25-Aug | 1 | 1 | UO | UO | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 2 | 1 | 3 |
| 26-Aug | 1 | 1 | 2 | 1 | UO | UO | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 4 |
| 27-Aug | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 4 | 2 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 5 |
| 28-Aug | 3 | 3 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 8 | 6 | 6 | 7 | 6 | 6 | 5 | 5 | 4 | 4 | 8 |
| 29-Aug | 3 | 2 | 5 | 3 | 3 | 3 | 3 | 2 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 2 | 2 | 5 |
| 30-Aug | 2 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 2 | 4 |
| 31-Aug | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 4 |
| | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 8 | 7 | 7 | 7 | 6 | 6 | 7 | 9 | 4 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

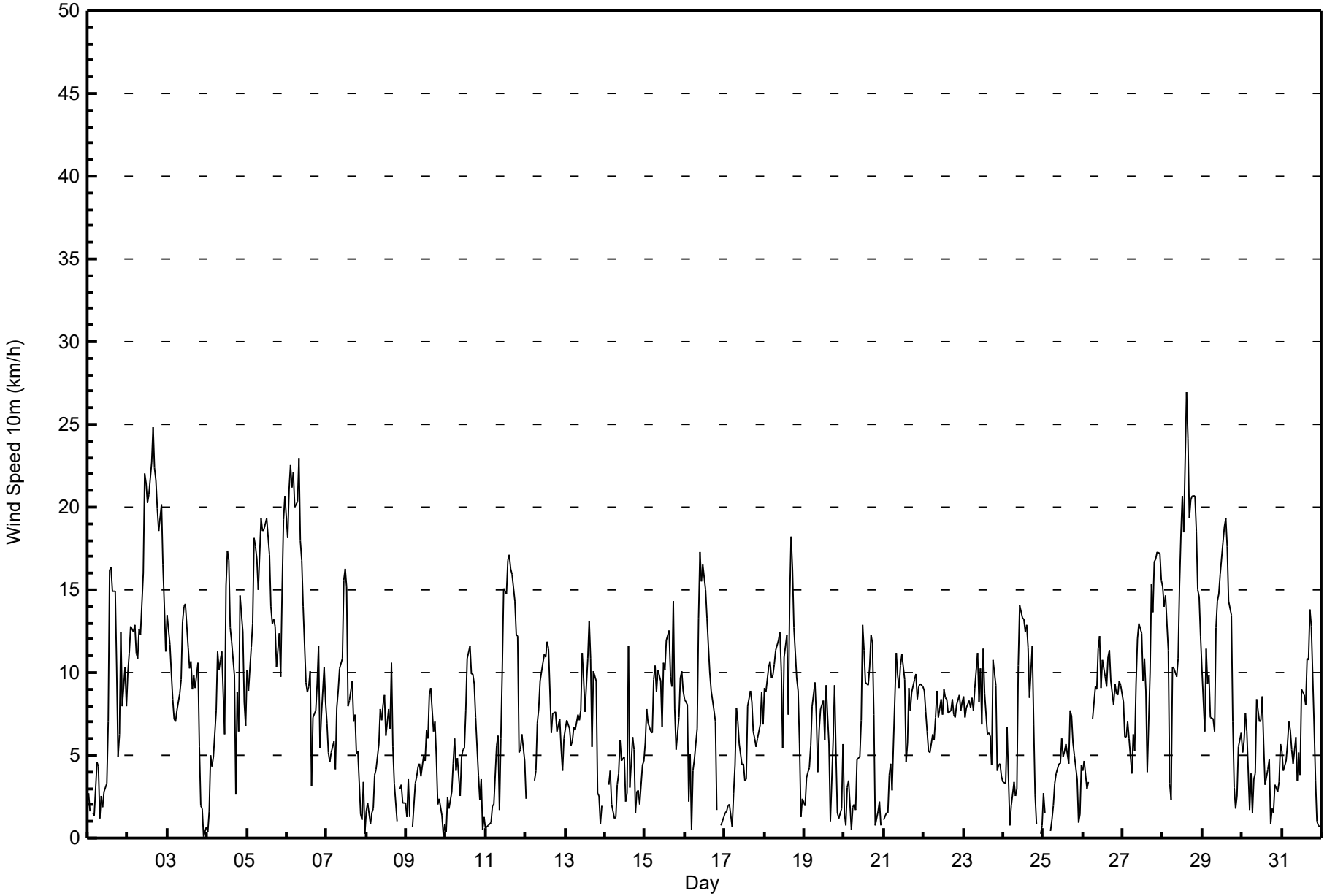
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Lower Camp - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 249 | 34.30 | 34.30 |
| 6 - 11 | 325 | 44.77 | 79.06 |
| 12 - 19 | 128 | 17.63 | 96.69 |
| 20 - 28 | 24 | 3.31 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 726

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Lower Camp - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 16 | 8 | 15 | 10 | 13 | 24 | 34 | 10 | 7 | 2 | 4 | 2 | 9 | 39 | 39 | 17 | 249 |
| 6 - 11 | 40 | 15 | 6 | 2 | 2 | 8 | 79 | 46 | 13 | 2 | 10 | 8 | 13 | 4 | 39 | 38 | 325 |
| 12 - 19 | 26 | 8 | 0 | 0 | 0 | 5 | 16 | 0 | 0 | 0 | 0 | 14 | 19 | 9 | 21 | 10 | 128 |
| 20 - 28 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 4 | 4 | 7 | 24 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 85 | 31 | 21 | 12 | 15 | 37 | 129 | 56 | 20 | 4 | 14 | 28 | 43 | 56 | 103 | 72 | 726 |

Total Number of Valid Hours: 726

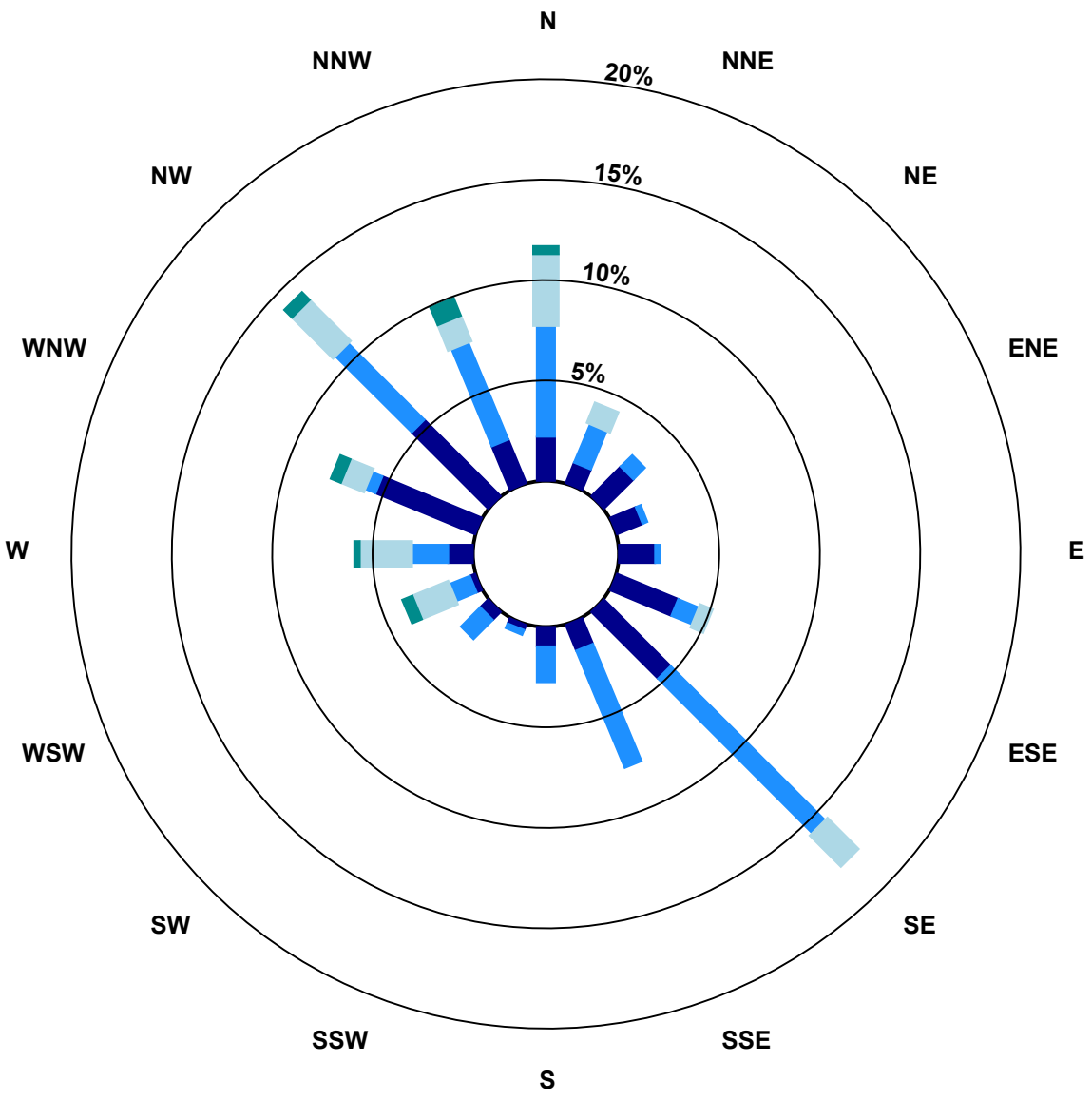
Total Number of Hours: 744

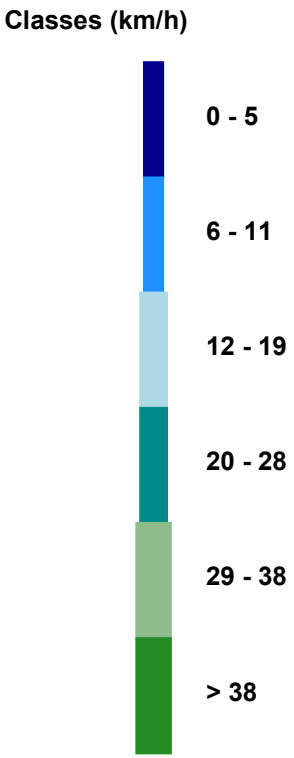
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Lower Camp**




**Total Number of Valid Hours: 726**

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Lower Camp - August 2026

Direction of Maximum Speed: 258 deg on Aug 28 15:00
Direction of Maximum Daily Speed Average: 343.0 deg on Aug 2

Direction of Minimum Speed: 72 deg on Aug 3 23:00

Direction of Minimum Daily Speed Average: 0.5 deg on Aug 14

Monthly Average Direction: 317.8 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 726 |
| Hours of Missing Data: | 18 |
| Percent Operational Time: | 97.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 303 | 268 | UO | 310 | 177 | 135 | 129 | 102 | 87 | 131 | 130 | 112 | 95 | 122 | 129 | 123 | 121 | 142 | 336 | 321 | 326 | 1 | 321 | 328 | 100.8 |
| 2-Aug | 324 | 331 | 340 | 352 | 9 | 343 | 5 | 0 | 350 | 354 | 344 | 1 | 349 | 338 | 341 | 345 | 352 | 341 | 340 | 338 | 335 | 323 | 314 | 314 | 343.0 |
| 3-Aug | 317 | 312 | 317 | 307 | 327 | 324 | 323 | 312 | 313 | 353 | 350 | 334 | 353 | 4 | 19 | 9 | 356 | 6 | 52 | 88 | 138 | 125 | 72 | 93 | 344.3 |
| 4-Aug | 295 | 155 | 134 | 146 | 153 | 138 | 137 | 137 | 137 | 138 | 179 | 259 | 264 | 259 | 262 | 253 | 353 | 46 | 296 | 338 | 304 | 314 | 320 | 340 | 254.5 |
| 5-Aug | 318 | 300 | 289 | 299 | 298 | 299 | 308 | 325 | 321 | 314 | 316 | 315 | 329 | 326 | 308 | 320 | 7 | 7 | 312 | 322 | 312 | 302 | 299 | 304 | 314.6 |
| 6-Aug | 303 | 298 | 298 | 302 | 304 | 309 | 303 | 305 | 308 | 323 | 327 | 336 | 346 | 358 | 357 | 310 | 276 | 334 | 311 | 315 | 319 | 340 | 312 | 319 | 312.9 |
| 7-Aug | 335 | 304 | 285 | 293 | 322 | 324 | 317 | 300 | 307 | 307 | 306 | 304 | 296 | 22 | 7 | 3 | 348 | 17 | 349 | 16 | 343 | 294 | 286 | 53 | 322.9 |
| 8-Aug | 287 | 287 | 280 | 294 | 297 | 295 | 317 | 2 | 359 | 17 | 350 | 357 | 2 | 347 | 346 | 328 | 350 | 325 | 286 | UO | 279 | 281 | 287 | 293 | 336.9 |
| 9-Aug | 306 | 277 | 107 | UO | 112 | 285 | 28 | 329 | 297 | 33 | 48 | 40 | 13 | 25 | 12 | 4 | 328 | 347 | 354 | 300 | 292 | 286 | 82 | 106 | 355.8 |
| 10-Aug | 358 | 257 | 146 | 132 | 154 | 130 | 126 | 118 | 105 | 4 | 316 | 333 | 358 | 359 | 358 | 333 | 358 | 4 | 348 | 310 | 319 | 274 | 321 | 318 | 356.4 |
| 11-Aug | 354 | 87 | 103 | 107 | 121 | 116 | 123 | 141 | 88 | 334 | 359 | 2 | 6 | 6 | 9 | 9 | 2 | 14 | 14 | 22 | 346 | 341 | 341 | 310 | 9.1 |
| 12-Aug | 287 | UO | UO | UO | UO | 328 | 316 | 323 | 324 | 324 | 328 | 348 | 345 | 349 | 7 | 11 | 356 | 355 | 321 | 320 | 316 | 299 | 307 | 323 | 335.2 |
| 13-Aug | 342 | 339 | 331 | 341 | 324 | 320 | 338 | 336 | 335 | 352 | 10 | 5 | 19 | 21 | 13 | 55 | 70 | 65 | 48 | 10 | 278 | 318 | 296 | UO | 4.6 |
| 14-Aug | UO | UO | 287 | 286 | 322 | 120 | 338 | 308 | 355 | 19 | 14 | 302 | 84 | 117 | 110 | 158 | 245 | 203 | 106 | 140 | 127 | 112 | 142 | 141 | 113.4 |
| 15-Aug | 146 | 146 | 146 | 141 | 142 | 136 | 136 | 139 | 141 | 140 | 138 | 261 | 271 | 275 | 266 | 238 | 231 | 269 | 233 | 209 | 220 | 230 | 255 | 264 | 208.8 |
| 16-Aug | 268 | 271 | 180 | 299 | 339 | 329 | 309 | 336 | 8 | 6 | 351 | 1 | 354 | 347 | 348 | 345 | 3 | 15 | 69 | 109 | UO | UO | 120 | 114 | 350.0 |
| 17-Aug | 126 | 119 | 130 | 177 | 164 | 149 | 141 | 137 | 135 | 125 | 304 | 1 | 34 | 93 | 132 | 135 | 142 | 155 | 166 | 177 | 174 | 154 | 148 | 148 | 142.3 |
| 18-Aug | 144 | 150 | 149 | 135 | 125 | 108 | 132 | 141 | 138 | 138 | 137 | 224 | 272 | 272 | 231 | 262 | 269 | 274 | 267 | 254 | 255 | 257 | 140 | 151 | 200.4 |
| 19-Aug | 179 | 134 | 133 | 139 | 148 | 141 | 140 | 147 | 180 | 305 | 344 | 356 | 25 | 6 | 1 | 340 | 36 | 331 | 2 | 359 | 317 | 107 | 336 | 329 | 22.1 |
| 20-Aug | 136 | 125 | 312 | 288 | 79 | 140 | 333 | 313 | 359 | 345 | 354 | 357 | 355 | 343 | 356 | 357 | 13 | 23 | 24 | 334 | 307 | 302 | 32 | UO | 357.5 |
| 21-Aug | 94 | 98 | 111 | 139 | 126 | 109 | 116 | 131 | 137 | 140 | 142 | 130 | 132 | 178 | 183 | 145 | 161 | 179 | 171 | 167 | 150 | 144 | 148 | 156 | 146.5 |
| 22-Aug | 150 | 142 | 119 | 125 | 159 | 150 | 131 | 136 | 139 | 175 | 141 | 166 | 136 | 144 | 157 | 161 | 153 | 151 | 148 | 149 | 160 | 181 | 163 | 141 | 149.5 |
| 23-Aug | 145 | 149 | 148 | 145 | 145 | 143 | 143 | 141 | 138 | 140 | 143 | 135 | 137 | 140 | 137 | 144 | 143 | 222 | 288 | 310 | 313 | 290 | 321 | 306 | 150.8 |
| 24-Aug | 324 | 302 | 311 | 311 | 286 | 308 | 317 | 21 | 0 | 317 | 338 | 341 | 353 | 354 | 348 | 17 | 3 | 23 | 23 | 299 | 63 | UO | 59 | 90 | 347.8 |
| 25-Aug | 312 | 54 | UO | UO | 44 | 45 | 71 | 37 | 330 | 320 | 345 | 35 | 45 | 41 | 37 | 37 | 2 | 41 | 27 | 305 | 321 | 22 | 289 | 286 | 9.2 |
| 26-Aug | 286 | 276 | 286 | 273 | UO | UO | 125 | 126 | 139 | 142 | 134 | 154 | 161 | 161 | 168 | 160 | 161 | 159 | 153 | 153 | 148 | 151 | 149 | 146 | 153.9 |
| 27-Aug | 145 | 154 | 143 | 109 | 118 | 135 | 122 | 129 | 130 | 132 | 137 | 136 | 180 | 140 | 176 | 153 | 134 | 117 | 129 | 138 | 140 | 142 | 138 | 136 | 137.5 |
| 28-Aug | 132 | 131 | 144 | 159 | 247 | 175 | 173 | 179 | 164 | 221 | 250 | 263 | 249 | 252 | 258 | 263 | 263 | 245 | 256 | 263 | 252 | 254 | 257 | 254 | 237.1 |
| 29-Aug | 239 | 208 | 242 | 227 | 228 | 215 | 209 | 180 | 250 | 251 | 255 | 260 | 259 | 264 | 266 | 254 | 258 | 251 | 234 | 221 | 62 | 75 | 153 | 154 | 243.3 |
| 30-Aug | 113 | 136 | 139 | 161 | 154 | 109 | 60 | 1 | 125 | 130 | 134 | 133 | 126 | 120 | 79 | 8 | 350 | 42 | 138 | 72 | 144 | 141 | 214 | 309 | 122.8 |
| 31-Aug | 295 | 315 | 315 | 322 | 321 | 306 | 311 | 345 | 307 | 323 | 26 | 42 | 270 | 275 | 274 | 275 | 261 | 258 | 267 | 280 | 298 | 3 | 91 | 62 | 291.6 |
| | 277.6 | 256.7 | 246.9 | 258.8 | 282.0 | 277.2 | 114.0 | 69.8 | 358.3 | 346.8 | 341.1 | 332.1 | 327.8 | 335.0 | 332.9 | 325.3 | 332.6 | 337.4 | 322.8 | 301.9 | 280.8 | 270.5 | 265.2 | 276.3 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Lower Camp - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Aug 20 20:00

Minimum Value: 10 deg on Aug 24 03:00

Percentiles: $P_1$ = 12 $P_{10}$ = 15 $Q_1$ = 19 Median = 25 $Q_3$ = 37 $P_{90}$ = 60 $P_{99}$ = 91

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 726 |
| Hours of Missing Data: | 18 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 97.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 48 | 81 | UO | 50 | 58 | 32 | 33 | 78 | 56 | 45 | 43 | 39 | 37 | 19 | 14 | 16 | 16 | 27 | 81 | 29 | 60 | 62 | 25 | 59 | 81 |
| 2-Aug | 36 | 23 | 19 | 22 | 21 | 23 | 23 | 22 | 21 | 22 | 21 | 21 | 22 | 18 | 20 | 21 | 22 | 19 | 19 | 19 | 18 | 14 | 13 | 15 | 36 |
| 3-Aug | 14 | 13 | 14 | 14 | 18 | 17 | 16 | 17 | 22 | 25 | 27 | 23 | 25 | 27 | 19 | 22 | 22 | 24 | 17 | 27 | 45 | 23 | 54 | 63 | 63 |
| 4-Aug | 91 | 71 | 29 | 45 | 40 | 35 | 18 | 20 | 16 | 13 | 56 | 18 | 16 | 19 | 20 | 23 | 63 | 74 | 19 | 29 | 13 | 13 | 18 | 17 | 91 |
| 5-Aug | 25 | 33 | 14 | 16 | 13 | 13 | 15 | 16 | 15 | 21 | 18 | 18 | 16 | 17 | 15 | 17 | 22 | 31 | 16 | 14 | 15 | 14 | 12 | 12 | 33 |
| 6-Aug | 12 | 12 | 12 | 12 | 12 | 12 | 13 | 12 | 14 | 16 | 16 | 23 | 28 | 25 | 24 | 49 | 33 | 49 | 24 | 16 | 24 | 25 | 26 | 23 | 49 |
| 7-Aug | 13 | 22 | 30 | 32 | 30 | 22 | 18 | 21 | 17 | 17 | 19 | 15 | 19 | 25 | 20 | 21 | 26 | 26 | 23 | 31 | 48 | 53 | 20 | 79 | 79 |
| 8-Aug | 75 | 56 | 67 | 80 | 56 | 22 | 25 | 27 | 24 | 27 | 24 | 25 | 31 | 25 | 35 | 21 | 22 | 33 | 81 | UO | 53 | 32 | 28 | 55 | 81 |
| 9-Aug | 61 | 50 | 81 | UO | 86 | 18 | 40 | 28 | 22 | 28 | 17 | 34 | 33 | 29 | 11 | 18 | 34 | 25 | 34 | 57 | 25 | 75 | 78 | 53 | 86 |
| 10-Aug | 76 | 56 | 54 | 71 | 31 | 35 | 43 | 21 | 57 | 24 | 19 | 37 | 28 | 25 | 26 | 22 | 23 | 25 | 19 | 35 | 43 | 20 | 38 | 61 | 76 |
| 11-Aug | 67 | 57 | 69 | 81 | 46 | 67 | 39 | 16 | 92 | 38 | 26 | 20 | 23 | 24 | 23 | 24 | 23 | 23 | 24 | 18 | 20 | 24 | 28 | 34 | 92 |
| 12-Aug | 53 | UO | UO | UO | UO | 24 | 23 | 17 | 14 | 16 | 16 | 25 | 22 | 22 | 33 | 44 | 28 | 25 | 23 | 15 | 19 | 24 | 23 | 20 | 53 |
| 13-Aug | 18 | 21 | 21 | 26 | 15 | 13 | 23 | 21 | 21 | 28 | 24 | 30 | 33 | 31 | 24 | 32 | 62 | 27 | 15 | 51 | 33 | 39 | 40 | UO | 62 |
| 14-Aug | UO | UO | 19 | 12 | 39 | 71 | 57 | 25 | 30 | 17 | 27 | 33 | 62 | 35 | 23 | 71 | 50 | 34 | 78 | 16 | 22 | 38 | 30 | 20 | 78 |
| 15-Aug | 25 | 17 | 21 | 22 | 24 | 19 | 16 | 17 | 14 | 14 | 48 | 26 | 30 | 23 | 24 | 36 | 40 | 17 | 27 | 19 | 26 | 23 | 13 | 13 | 48 |
| 16-Aug | 14 | 19 | 62 | 62 | 93 | 61 | 25 | 20 | 22 | 21 | 24 | 22 | 24 | 27 | 23 | 29 | 21 | 38 | 27 | 84 | UO | UO | 61 | 40 | 93 |
| 17-Aug | 45 | 65 | 36 | 47 | 97 | 64 | 47 | 16 | 16 | 17 | 72 | 42 | 19 | 44 | 20 | 13 | 24 | 23 | 25 | 24 | 30 | 22 | 19 | 34 | 97 |
| 18-Aug | 23 | 20 | 18 | 21 | 21 | 21 | 22 | 24 | 18 | 13 | 14 | 66 | 25 | 27 | 55 | 28 | 15 | 14 | 16 | 14 | 16 | 57 | 91 | 60 | 91 |
| 19-Aug | 51 | 27 | 21 | 28 | 22 | 25 | 28 | 41 | 56 | 49 | 36 | 29 | 24 | 20 | 32 | 66 | 54 | 23 | 19 | 22 | 92 | 71 | 86 | 50 | 92 |
| 20-Aug | 94 | 90 | 41 | 29 | 88 | 68 | 61 | 46 | 35 | 26 | 27 | 22 | 24 | 29 | 29 | 25 | 23 | 23 | 18 | 99 | 38 | 46 | 68 | UO | 99 |
| 21-Aug | 45 | 44 | 34 | 26 | 37 | 46 | 23 | 12 | 13 | 16 | 11 | 16 | 28 | 70 | 58 | 25 | 34 | 30 | 31 | 30 | 23 | 14 | 17 | 21 | 70 |
| 22-Aug | 24 | 39 | 21 | 27 | 25 | 23 | 23 | 21 | 18 | 36 | 22 | 39 | 25 | 33 | 35 | 32 | 30 | 25 | 21 | 20 | 23 | 31 | 26 | 28 | 39 |
| 23-Aug | 19 | 19 | 16 | 15 | 19 | 19 | 18 | 16 | 15 | 24 | 14 | 16 | 14 | 15 | 13 | 11 | 12 | 58 | 26 | 20 | 59 | 17 | 26 | 22 | 59 |
| 24-Aug | 27 | 16 | 10 | 36 | 80 | 70 | 18 | 46 | 41 | 23 | 24 | 26 | 26 | 25 | 21 | 20 | 22 | 18 | 22 | 54 | 37 | UO | 87 | 65 | 87 |
| 25-Aug | 41 | 22 | UO | UO | 31 | 44 | 35 | 44 | 34 | 25 | 35 | 14 | 12 | 16 | 15 | 14 | 14 | 26 | 44 | 32 | 39 | 95 | 71 | 17 | 95 |
| 26-Aug | 24 | 15 | 40 | 17 | UO | UO | 19 | 16 | 17 | 16 | 18 | 36 | 34 | 35 | 38 | 32 | 30 | 31 | 29 | 25 | 20 | 21 | 16 | 15 | 40 |
| 27-Aug | 20 | 25 | 22 | 25 | 22 | 31 | 20 | 28 | 16 | 15 | 17 | 24 | 40 | 17 | 37 | 51 | 25 | 16 | 19 | 17 | 17 | 14 | 14 | 15 | 51 |
| 28-Aug | 13 | 15 | 20 | 30 | 81 | 64 | 33 | 36 | 33 | 36 | 25 | 20 | 23 | 28 | 15 | 15 | 20 | 21 | 16 | 18 | 17 | 19 | 21 | 20 | 81 |
| 29-Aug | 23 | 40 | 27 | 28 | 28 | 35 | 38 | 37 | 28 | 22 | 21 | 24 | 18 | 20 | 18 | 19 | 21 | 21 | 28 | 52 | 64 | 60 | 56 | 34 | 64 |
| 30-Aug | 48 | 45 | 28 | 45 | 85 | 59 | 79 | 44 | 52 | 16 | 13 | 16 | 14 | 24 | 42 | 31 | 50 | 48 | 68 | 56 | 56 | 81 | 69 | 25 | 85 |
| 31-Aug | 16 | 19 | 31 | 25 | 19 | 19 | 25 | 33 | 41 | 58 | 34 | 48 | 33 | 34 | 35 | 26 | 24 | 17 | 13 | 38 | 38 | 56 | 83 | 83 | 83 |
| | 94 | 90 | 81 | 81 | 97 | 71 | 79 | 78 | 92 | 58 | 72 | 66 | 62 | 70 | 58 | 71 | 63 | 74 | 81 | 99 | 92 | 95 | 91 | 83 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

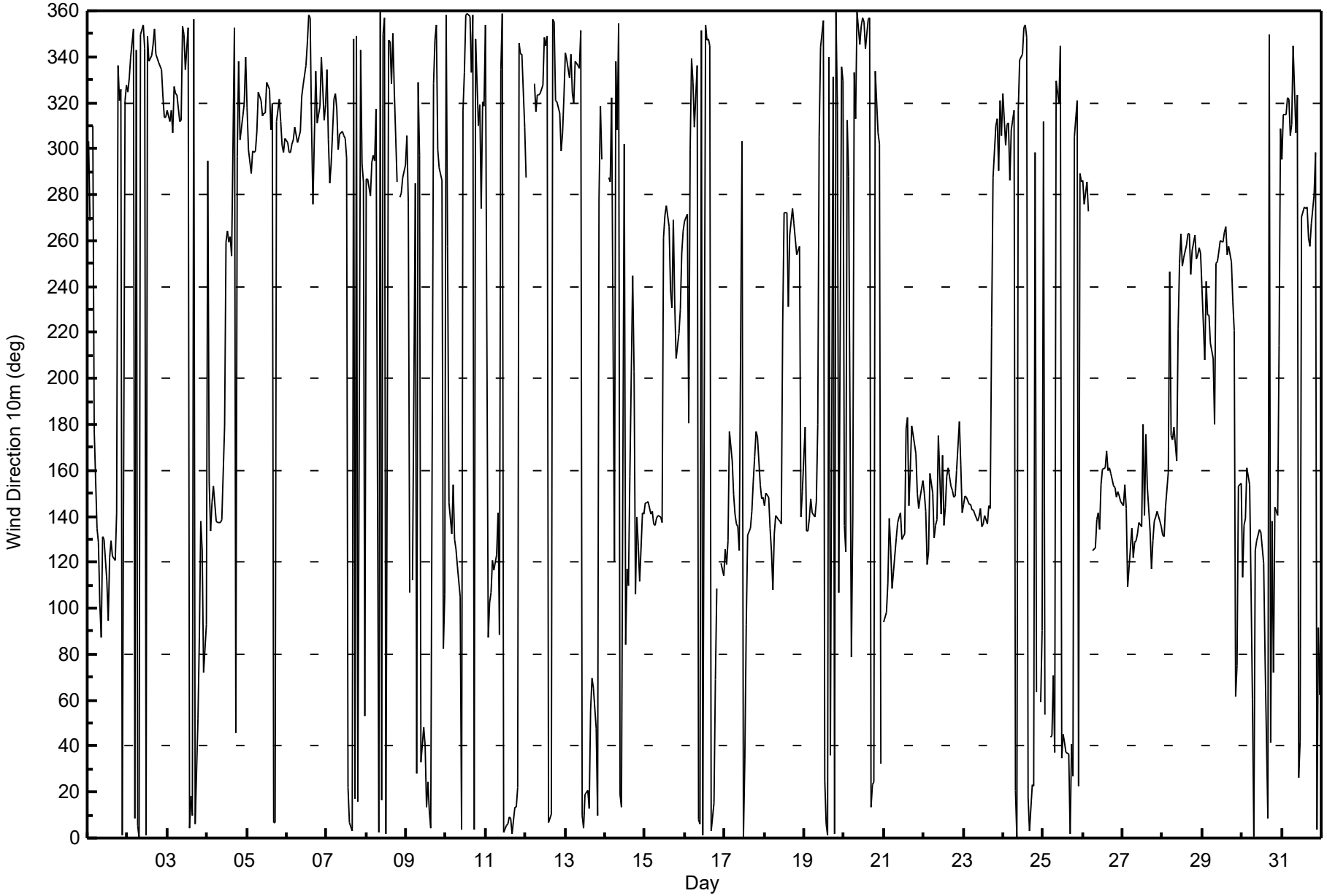
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Lower Camp - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS13
## FORT MCKAY SOUTH
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 701 | 35 | 43 | 98.92 | - | - | 51.7 | 0 | 5.8 | 0 |
| TRS(ppb) Average | 700 | 36 | 44 | 98.92 | 10.7 | 13 | 7.9 | 0 | 2.6 | 0 |
| THC(ppm) Average | 700 | 35 | 44 | 98.79 | - | - | 4.2 | - | 2.6 | - |
| NMHC(ppm) Average | 700 | 35 | 44 | 98.79 | - | - | 0.91 | - | 0.219 | - |
| CH4(ppm) Average | 700 | 35 | 44 | 98.79 | - | - | 3.3 | - | 2.4 | - |
| O3(ppb) Average | 703 | 35 | 41 | 99.19 | - | - | 46.3 | 0 | 22.4 | - |
| NO2(ppb) Average | 700 | 36 | 44 | 98.92 | - | - | 20.7 | 0 | 5.7 | - |
| NO(ppb) Average | 700 | 36 | 44 | 98.92 | - | - | 36.1 | - | 5.4 | - |
| NOX(ppb) Average | 700 | 36 | 44 | 98.92 | - | - | 55.6 | - | 10.8 | - |
| PM2.5(ug/m3) Average | 735 | 1 | 9 | 98.92 | - | - | 53.2 | 0 | 26 | 0 |
| ET(C) Average | 744 | 0 | 0 | 100 | - | - | 29.9 | - | 20.7 | - |
| RH(%) Average | 744 | 0 | 0 | 100 | - | - | 99.7 | - | 87.2 | - |
| WS(km/h) Average | 743 | 0 | 1 | 99.87 | - | - | 25 | - | 17 | - |
| WD(deg) Average | 743 | 0 | 1 | 99.87 | - | - | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2(ppb) Average | 701 | 0.63 | 2.8 | - | 0 | 0 | 0 | 0.1 | 0.2 | 0.7 | 51.7 |
| TRS(ppb) Average | 700 | 0.68 | 0.8 | - | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 1.1 | 7.9 |
| THC(ppm) Average | 700 | 2.2 | 0.2 | - | 1.8 | 1.9 | 2 | 2.1 | 2.3 | 2.5 | 4.2 |
| NMHC(ppm) Average | 700 | 0.087 | 0.081 | - | 0 | 0 | 0 | 0.1 | 0.1 | 0.2 | 0.91 |
| CH4(ppm) Average | 700 | 2.11 | 0.2 | - | 1.8 | 1.9 | 2 | 2.1 | 2.2 | 2.3 | 3.3 |
| O3(ppb) Average | 703 | 14.64 | 11.1 | - | 0.3 | 1 | 4.2 | 13.9 | 23.2 | 30.7 | 46.3 |
| NO2(ppb) Average | 700 | 3.24 | 3.1 | - | 0 | 0.3 | 1 | 2.3 | 4.6 | 7.5 | 20.7 |
| NO(ppb) Average | 700 | 1.83 | 4.3 | - | 0 | 0 | 0 | 0.2 | 1.3 | 5.5 | 36.1 |
| NOX(ppb) Average | 700 | 5.07 | 6.5 | - | 0 | 0.4 | 1.1 | 2.9 | 6.2 | 12.9 | 55.6 |
| PM2.5(ug/m3) Average | 735 | 10.61 | 8.5 | - | 0.5 | 2.9 | 4.5 | 7.4 | 15 | 22.8 | 53.2 |
| Temperature 2 m (C) Average | 744 | 16.44 | 5.5 | - | 4.1 | 9.5 | 11.9 | 16.2 | 20.7 | 24.1 | 29.9 |
| Relative Humidity (%) Average | 744 | 73.7 | 19.9 | - | 29.3 | 44.5 | 56.2 | 77.1 | 93 | 96.6 | 99.7 |
| Wind Speed 10 m (km/h) Average | 743 | 6.5 | 4 | - | 0 | 2 | 3 | 6 | 9 | 12 | 25 |
| Wind Direction 10 m (deg) Average | 743 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| ALL GASEOUS ANALYZERS | 06 Aug 2026 12:00 | 06 Aug 2026 13:00 | 2 | Maintenance - sample manifold cleaned |
| Wind Speed, Wind Direction | 25 Aug 2026 07:00 | 25 Aug 2026 07:00 | 1 | Unstable Operation - flatline in analyzer output signal |
| ALL GASEOUS ANALYZERS | 25 Aug 2026 16:00 | 25 Aug 2026 21:00 | 6 | Station power failure |
| THC/NMHC/CH4 | 25 Aug 2026 21:00 | 25 Aug 2026 22:00 | 1 | Station power failure |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Fort McKay South - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 51.7 ppb on Aug 30 13:00 Maximum Daily Average: 5.8 ppb on Aug 30

Minimum Value: 0.0 ppb on Aug 2 12:00 Minimum Daily Average: 0.0 ppb on Aug 12
Maximum Diurnal Average: 3.6 ppb at hour 13 Minimum Diurnal Average: 0.0 ppb at hour 6
Monthly Average: 0.63 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.7 $P_{99}$ = 13.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.6 | 0.9 | 0.9 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.3 | 0.9 |
| 2-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 3-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.1 | 0.3 | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 4-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 5-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | M | M | 0.2 | 0.1 | 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 8-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 9-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 | 0.9 | 0.2 | 0.4 | 0.5 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.9 |
| 10-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 11-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 14-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.1 | 0.1 | 1.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.1 |
| 15-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 16-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 17-Aug | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.8 | 10.6 | 1.8 | 2.5 | 0.7 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.8 | 10.6 |
| 18-Aug | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 1.7 | 1.1 | 1.1 | 0.5 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 1.7 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 20-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 21-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.4 | 2.3 | 0.5 | 0.2 | 0.3 | 0.5 | 4.0 | 1.0 | 4.0 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.6 | 4.0 |
| 22-Aug | 0.2 | 0.2 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 1.9 | 5.7 | 15.4 | 13.8 | 15.8 | 10.1 | 3.4 | 4.6 | 1.0 | 1.1 | 0.8 | 0.5 | 0.4 | 0.2 | 0.5 | 3.3 | 15.8 |
| 23-Aug | 0.3 | 0.3 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 2.1 | 2.7 | 1.6 | 0.8 | 1.9 | 9.2 | 2.6 | 2.4 | 1.7 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 1.2 | 9.2 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | PF | PF | PF | PF | PF | PF | 0.0 | 0.0 | 0.0 | -- | 0.4 |
| 26-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 1.7 | 1.9 | 6.6 | 7.1 | 19.2 | 10.1 | 7.9 | 9.0 | 2.6 | 1.1 | 0.7 | 0.7 | 0.5 | 0.3 | 0.3 | 0.2 | 3.1 | 19.2 |
| 27-Aug | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 7.3 | 1.9 | 1.4 | 13.3 | 1.8 | 5.0 | 4.3 | 1.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.4 | 1.7 | 13.3 |
| 28-Aug | 0.5 | 0.4 | Z | 1.3 | 0.5 | 0.2 | 0.7 | 1.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.3 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| 30-Aug | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.3 | 0.3 | 3.6 | 17.7 | 51.7 | 19.0 | 15.5 | 8.6 | 5.8 | 5.4 | 2.2 | 1.3 | 0.6 | 0.5 | 0.4 | 0.3 | 5.8 | 51.7 |
| 31-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.5 | 2.0 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 2.0 |
| | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.6 | 0.9 | 1.6 | 3.6 | 2.0 | 1.6 | 1.6 | 0.7 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.5 | 0.4 | 0.2 | 1.3 | 0.5 | 0.2 | 0.7 | 1.7 | 2.1 | 7.3 | 6.6 | 17.7 | 51.7 | 19.0 | 15.5 | 10.6 | 5.8 | 5.4 | 2.2 | 1.3 | 0.6 | 0.5 | 0.6 | 0.5 | Diurnal Maximum | |

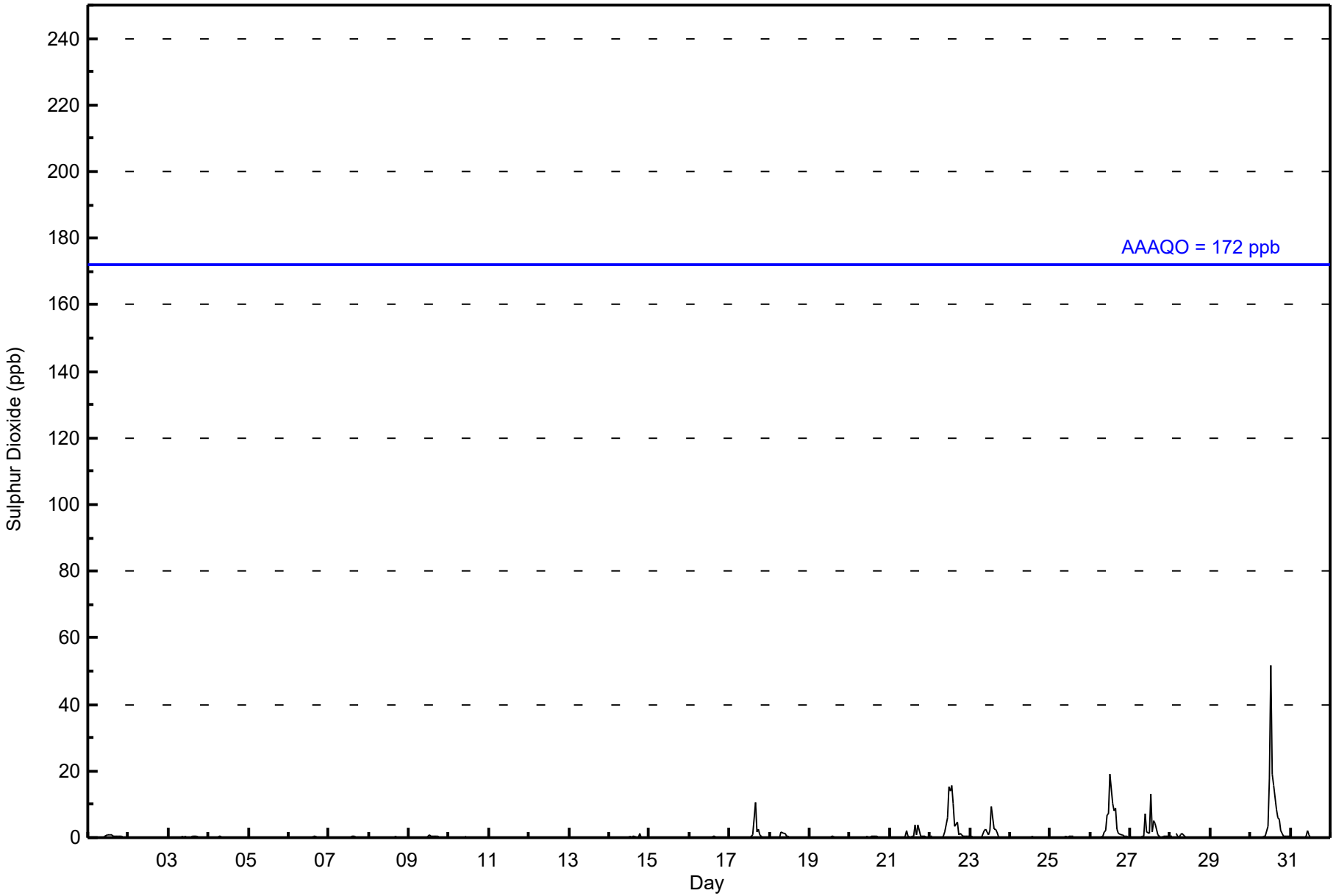
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay South - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 691 | 98.57 | 98.57 |
| 11 - 20 | 9 | 1.28 | 99.86 |
| 21 - 60 | 1 | 0.14 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay South - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 76 | 67 | 7 | 4 | 3 | 7 | 13 | 50 | 66 | 40 | 75 | 72 | 48 | 59 | 54 | 49 | 690 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 76 | 67 | 7 | 4 | 3 | 9 | 16 | 53 | 68 | 40 | 75 | 72 | 48 | 59 | 54 | 49 | 700 |

Total Number of Valid Hours: 700

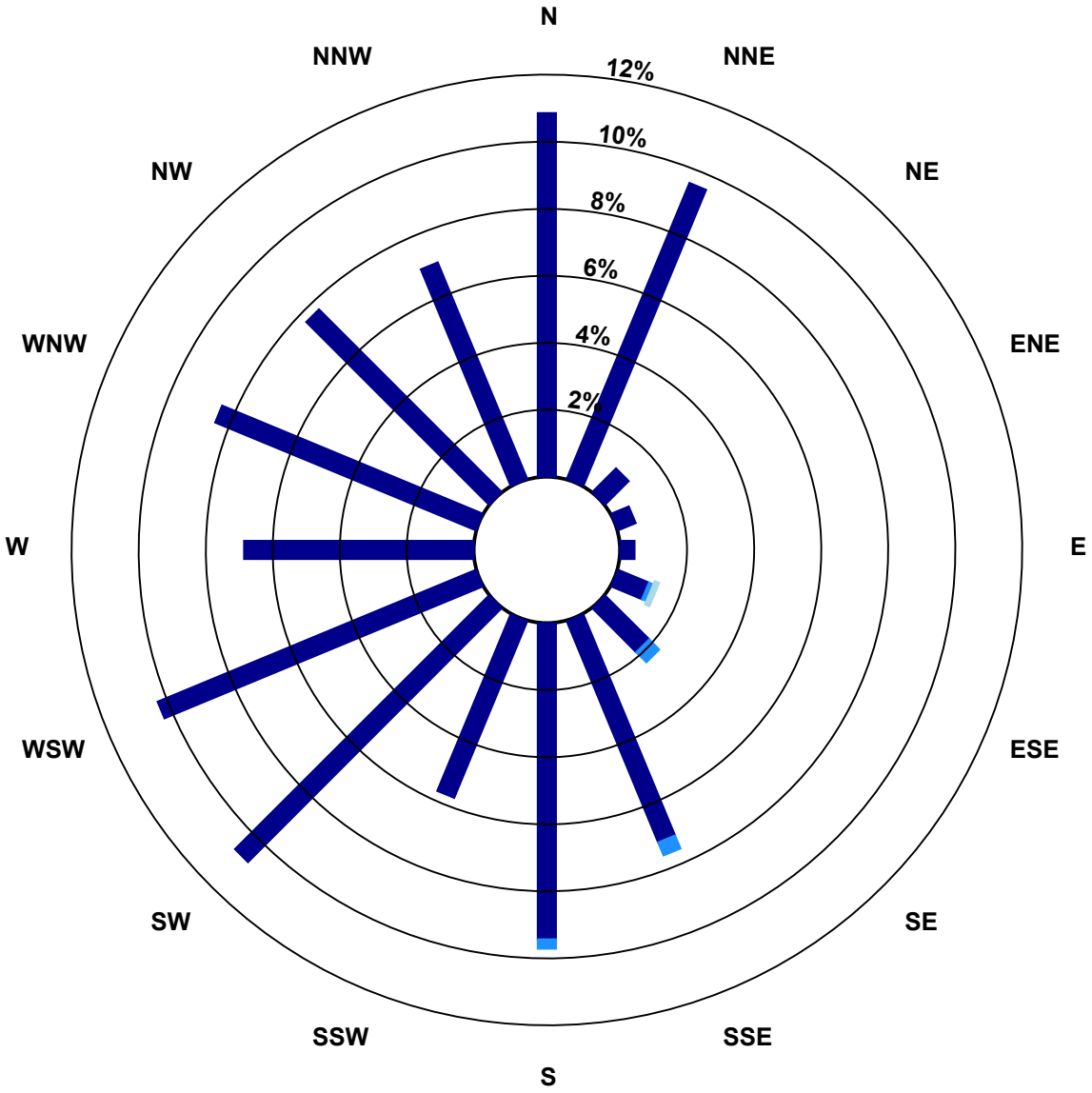
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Fort McKay South




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

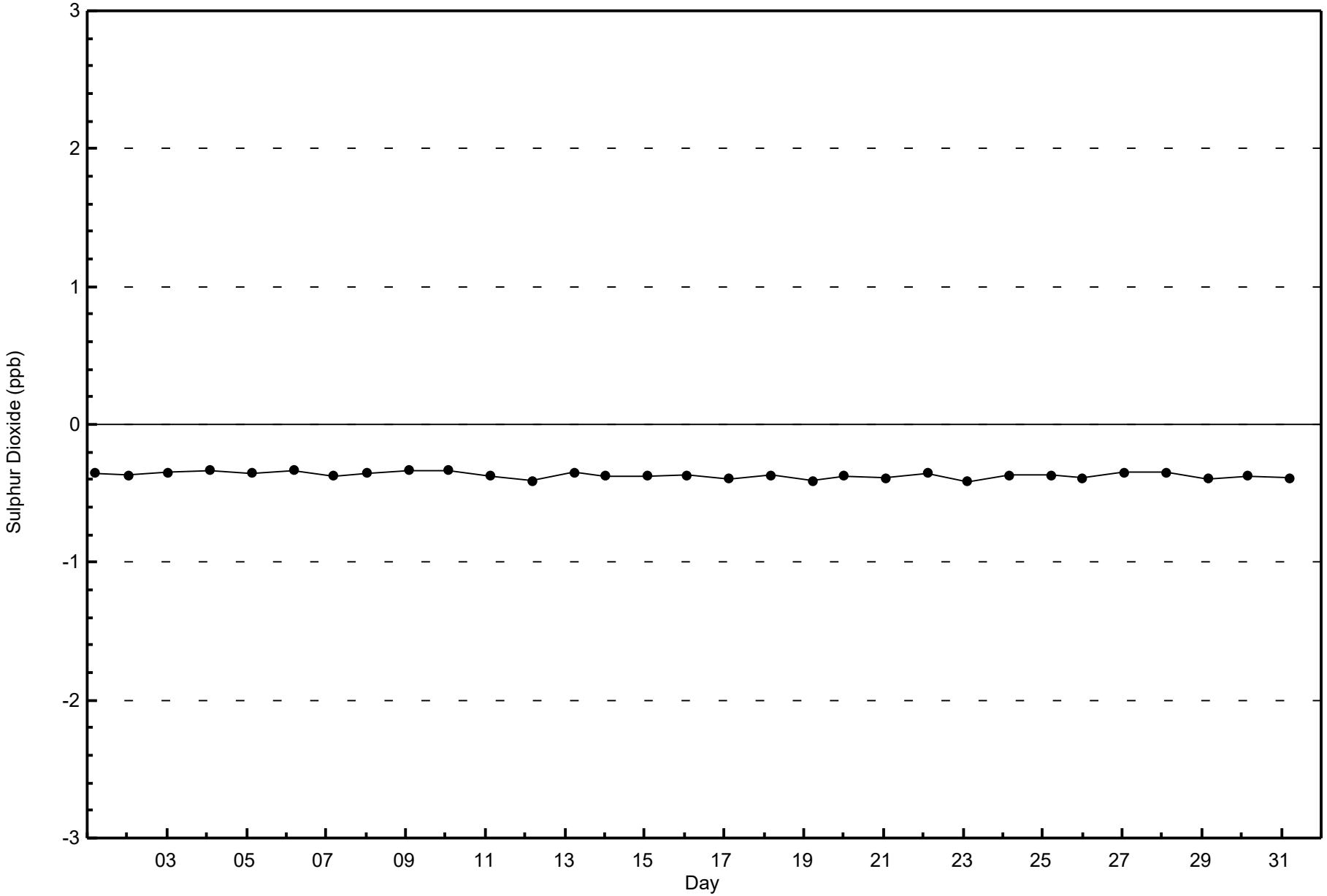
Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay South - August 2026**

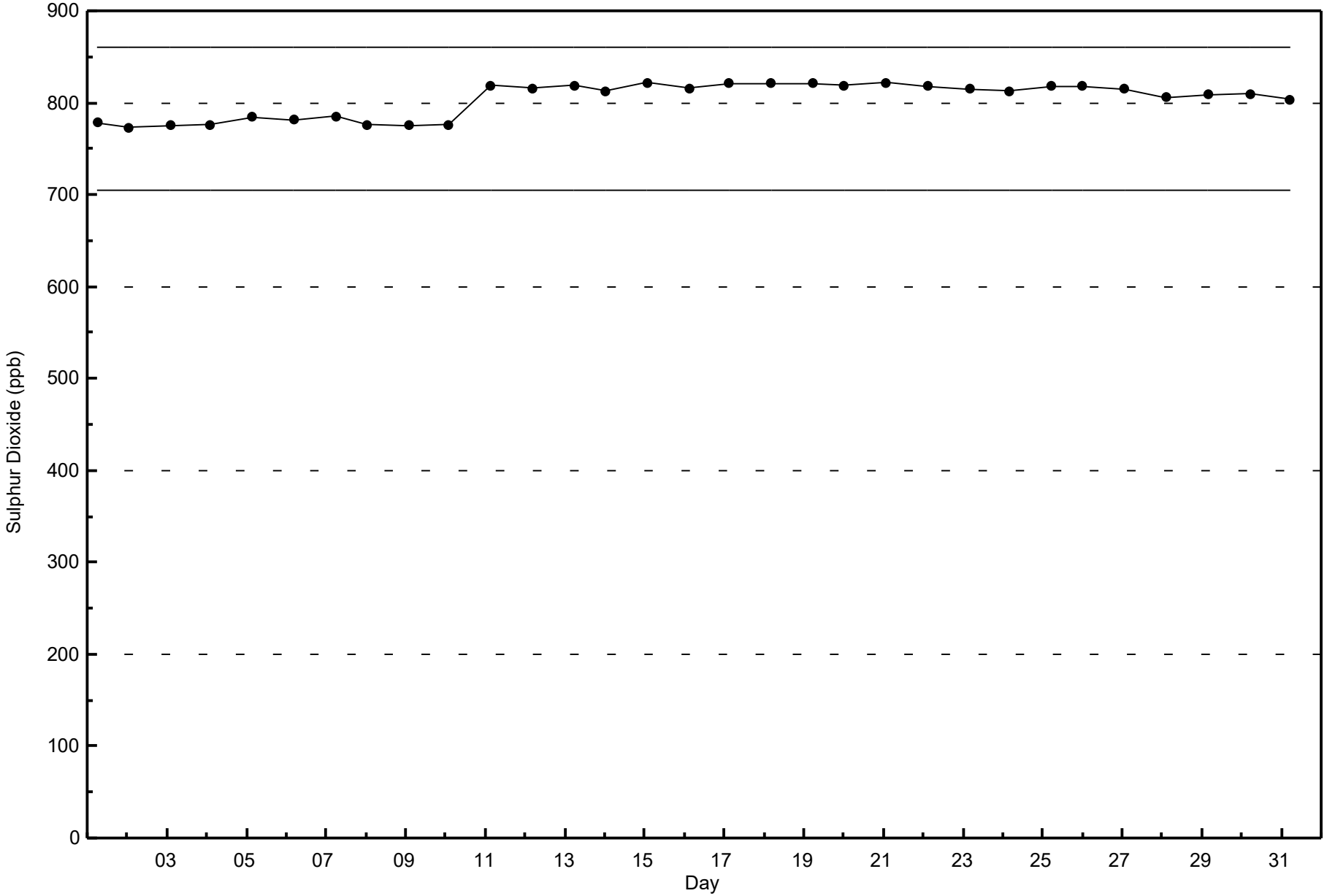


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort McKay South - August 2026

Number of Exceedences (AAAQG): 30-Min: 13

Maximum Value: 10.7 ppb on Aug 23 08:30 Maximum Daily Average: 2.6 ppb on Aug 27

Minimum Value: 0.2 ppb on Aug 13 17:30 Minimum Daily Average: 0.3 ppb on Aug 11

Maximum Diurnal Average: 1.1 ppb at hour 9 Minimum Diurnal Average: 0.5 ppb at hour 18

Monthly Average: 0.68 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.6$ $P_{90} = 1.1$ $P_{99} = 4.9$

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1400 |
| Periods of Invalid Data: | 88 |
| Periods of Calibration: | 72 |
| Percent Operational Time: | 98.9 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | Z | 2.1 | 0.6 | 0.6 | 0.4 | 0.3 | 0.8 | 0.8 | 0.8 | 1.8 | 2.5 | 2.0 | 1.0 | 1.2 | 1.2 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.9 | 0.6 | 0.6 | 1.0 | 2.5 |
| | SP | 1.1 | 0.5 | 0.5 | 0.4 | 0.3 | 1.0 | 0.7 | 1.0 | 2.4 | 2.4 | 1.4 | 1.5 | 1.0 | 1.1 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | | |
| 2-Aug | 0.5 | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 |
| | 0.5 | SP | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | DF | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 3-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 |
| | 0.4 | 0.4 | SP | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | | |
| 4-Aug | 0.5 | 0.9 | 0.7 | Z | 0.6 | 0.7 | 1.5 | 1.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 2.4 |
| | 0.8 | 0.9 | 0.6 | SP | 0.7 | 0.9 | 2.4 | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | | |
| 5-Aug | 0.5 | 0.5 | 0.5 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 |
| | 0.5 | 0.5 | 0.5 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 6-Aug | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | M | M | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | M | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | | |
| 7-Aug | Z | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 |
| | SP | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | | |
| 8-Aug | 0.4 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 |
| | 0.4 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | | |
| 9-Aug | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 |
| | 0.4 | 0.4 | SP | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | | |
| 10-Aug | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 1.5 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | 0.5 | 1.5 |
| | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 1.4 | 1.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | | |
| 11-Aug | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 |
| | 0.4 | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | | |
| 12-Aug | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 13-Aug | Z | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 |
| | SP | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 14-Aug | 0.3 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 3.7 | 1.1 | 0.6 | 0.3 | 0.3 | 0.4 | 0.5 | 3.7 |
| | 0.4 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.9 | 0.7 | 0.4 | 0.3 | 0.3 | 0.5 | | |
| 15-Aug | 0.5 | 0.4 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 1.7 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 1.7 |
| | 0.6 | 0.3 | SP | 0.3 | 0.4 | 0.4 | 1.0 | 0.9 | 0.4 | 0.7 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort McKay South - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.3 | 0.4 | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| | 0.3 | 0.4 | 0.3 | SP | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 17-Aug | 0.3 | 0.4 | 0.4 | 0.5 | Z | 0.4 | 0.6 | 1.8 | 0.8 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.7 | 0.6 | 0.7 | 0.3 | 0.4 | 2.1 | 3.2 | 1.7 | 1.1 | 0.8 | 4.8 |
| | 0.3 | 0.4 | 0.4 | 0.4 | SP | 0.4 | 1.1 | 1.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.5 | 0.6 | 0.3 | 0.3 | 0.9 | 4.8 | 2.6 | 1.1 | 0.9 | | |
| 18-Aug | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | Z | 1.1 | 4.5 | 1.5 | 3.5 | 0.7 | 0.8 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 6.5 |
| | 0.5 | 0.5 | 0.6 | 0.8 | 0.8 | SP | 0.6 | 6.5 | 3.3 | 1.3 | 1.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 19-Aug | Z | 0.3 | 0.3 | 0.5 | 0.7 | 1.1 | 1.1 | 1.6 | 0.7 | 0.4 | C | C | C | C | C | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 1.6 |
| | SP | 0.3 | 0.4 | 0.6 | 1.0 | 1.1 | 1.3 | 1.5 | 0.5 | 0.4 | C | C | C | C | C | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | | |
| 20-Aug | 0.5 | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 1.0 |
| | 0.4 | SP | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.8 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | | |
| 21-Aug | 0.4 | 0.5 | Z | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 1.7 | 1.8 | 2.3 | 0.7 | 0.3 | 0.3 | 0.3 | 0.6 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 2.6 |
| | 0.5 | 0.5 | SP | 0.5 | 0.4 | 0.5 | 0.6 | 1.5 | 1.8 | 0.9 | 2.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.3 | 0.6 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 1.7 | | |
| 22-Aug | 2.3 | 1.3 | 0.9 | Z | 0.8 | 0.7 | 0.6 | 1.1 | 1.9 | 1.8 | 1.5 | 1.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.3 | 1.9 | 0.7 | 1.2 | 1.0 | 2.3 |
| | 1.9 | 1.1 | 0.8 | SP | 0.7 | 0.6 | 0.7 | 1.7 | 2.0 | 1.9 | 0.8 | 0.7 | 1.1 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.8 | 1.3 | 1.1 | 1.2 | 1.0 | 0.9 | | |
| 23-Aug | 1.0 | 0.7 | 1.2 | 1.7 | Z | 0.9 | 0.8 | 0.8 | 10.7 | 2.0 | 7.6 | 5.9 | 0.8 | 1.7 | 2.8 | 1.4 | 1.2 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.8 | 10.7 |
| | 0.7 | 0.9 | 1.8 | 1.5 | SP | 0.9 | 0.8 | 1.1 | 3.1 | 10.2 | 1.9 | 1.6 | 2.2 | 1.3 | 1.8 | 1.3 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | | |
| 24-Aug | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.6 |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | SP | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | | |
| 25-Aug | Z | 0.7 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | PF | PF | PF | PF | PF | PF | 0.5 | 0.4 | 0.5 | -- | 1.1 |
| | SP | 0.7 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | PF | PF | PF | PF | PF | PF | 0.4 | 0.4 | 0.5 | | |
| 26-Aug | 0.5 | Z | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 0.8 | 0.7 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 1.0 |
| | 0.5 | SP | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.9 | 1.0 | 0.6 | 1.0 | 0.4 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | | |
| 27-Aug | 5.5 | 4.1 | Z | 3.5 | 5.6 | 3.4 | 6.5 | 5.4 | 1.6 | 2.0 | 2.0 | 0.6 | 2.0 | 0.6 | 0.7 | 4.9 | 1.3 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 4.9 | 2.6 | 9.4 |
| | 8.0 | 6.4 | SP | 3.9 | 4.5 | 4.4 | 9.4 | 2.8 | 1.6 | 3.1 | 0.7 | 1.3 | 1.9 | 0.6 | 1.7 | 1.0 | 2.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 2.3 | 3.9 | | |
| 28-Aug | 3.3 | 3.4 | 3.4 | Z | 1.6 | 0.5 | 1.1 | 0.7 | 3.0 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 1.2 | 5.1 |
| | 4.1 | 3.3 | 2.7 | SP | 0.5 | 0.5 | 1.5 | 2.2 | 5.1 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | | |
| 29-Aug | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 3.0 | 2.2 | 0.6 | 3.0 |
| | 0.4 | 0.5 | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 1.1 | 2.5 | 2.6 | | |
| 30-Aug | 2.4 | 2.0 | 1.1 | 1.0 | 0.7 | Z | 0.5 | 1.2 | 1.5 | 1.7 | 1.8 | 0.9 | 0.9 | 1.0 | 0.8 | 0.9 | 0.7 | 0.6 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 1.0 | 2.7 |
| | 2.1 | 1.5 | 1.0 | 0.9 | 0.6 | SP | 1.3 | 1.1 | 2.7 | 0.9 | 1.2 | 1.0 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | | |
| 31-Aug | Z | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 |
| | SP | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | | |
| | 1.0 | 0.9 | 0.6 | 0.6 | 0.7 | 0.6 | 0.9 | 1.0 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.7 | Diurnal Average | |
| | 8.0 | 6.4 | 3.4 | 3.9 | 5.6 | 4.4 | 9.4 | 6.5 | 10.7 | 10.2 | 7.6 | 5.9 | 2.2 | 1.7 | 2.8 | 4.9 | 2.0 | 0.9 | 3.7 | 1.3 | 4.8 | 3.2 | 3.0 | 4.9 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance DF - DAS Failure PF - Power Failure SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort McKay South - August 2026

Maximum Value: 7.9 ppb on Aug 27 07:00

Maximum Daily Average: 2.6 ppb on Aug 27

Minimum Value: 0.2 ppb on Aug 15 18:00

Minimum Daily Average: 0.3 ppb on Aug 11

Maximum Diurnal Average: 1.1 ppb at hour 9

Minimum Diurnal Average: 0.5 ppb at hour 18

Monthly Average: 0.68 ppb

Percentiles: $P_1$ = 0.3 $P_{10}$ = 0.3 $Q_1$ = 0.4 Median = 0.5 $Q_3$ = 0.6 $P_{90}$ = 1.1 $P_{99}$ = 4.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 1.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.9 | 0.7 | 0.9 | 2.1 | 2.4 | 1.7 | 1.3 | 1.1 | 1.2 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 1.0 | 2.4 |
| 2-Aug | 0.5 | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 |
| 3-Aug | 0.4 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 |
| 4-Aug | 0.6 | 0.9 | 0.7 | Z | 0.6 | 0.8 | 2.0 | 1.1 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 2.0 |
| 5-Aug | 0.5 | 0.5 | 0.5 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 |
| 6-Aug | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | M | M | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 |
| 7-Aug | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 |
| 8-Aug | 0.4 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| 9-Aug | 0.4 | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 |
| 10-Aug | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 1.1 | 1.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 1.5 |
| 11-Aug | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 |
| 12-Aug | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 |
| 13-Aug | Z | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 |
| 14-Aug | 0.3 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 2.8 | 0.9 | 0.5 | 0.3 | 0.3 | 0.4 | 0.5 | 2.8 |
| 15-Aug | 0.6 | 0.4 | Z | 0.3 | 0.3 | 0.4 | 0.7 | 1.3 | 0.4 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 1.3 |
| 16-Aug | 0.3 | 0.4 | 0.3 | Z | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| 17-Aug | 0.3 | 0.4 | 0.4 | 0.5 | Z | 0.4 | 0.9 | 1.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.6 | 0.5 | 0.3 | 0.6 | 3.4 | 2.9 | 1.4 | 1.0 | 0.8 | 3.4 |
| 18-Aug | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | Z | 0.9 | 5.5 | 2.4 | 2.4 | 1.1 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 5.5 |
| 19-Aug | Z | 0.3 | 0.4 | 0.5 | 0.9 | 1.1 | 1.2 | 1.6 | 0.6 | 0.4 | C | C | C | C | C | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 1.6 |
| 20-Aug | 0.4 | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 1.0 |
| 21-Aug | 0.5 | 0.5 | Z | 0.5 | 0.4 | 0.4 | 0.5 | 1.2 | 1.8 | 1.3 | 2.5 | 0.6 | 0.4 | 0.3 | 0.4 | 0.7 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1 | 0.7 | 2.5 |
| 22-Aug | 2.1 | 1.2 | 0.9 | Z | 0.7 | 0.7 | 0.7 | 1.4 | 2.0 | 1.8 | 1.1 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 1.1 | 1.2 | 1.5 | 0.8 | 1.0 | 1.0 | 2.1 |
| 23-Aug | 0.9 | 0.8 | 1.5 | 1.6 | Z | 0.9 | 0.8 | 0.9 | 6.9 | 6.1 | 4.7 | 3.8 | 1.5 | 1.5 | 2.3 | 1.3 | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 1.8 | 6.9 |
| 24-Aug | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 |
| 25-Aug | Z | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.1 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | PF | PF | PF | PF | PF | PF | 0.4 | 0.4 | 0.5 | -- | 1.1 |
| 26-Aug | 0.5 | Z | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 0.8 | 1.0 | 0.7 | 0.9 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 |
| 27-Aug | 6.7 | 5.3 | Z | 3.7 | 5.0 | 3.9 | 7.9 | 4.1 | 1.6 | 2.5 | 1.4 | 1.0 | 2.0 | 0.6 | 1.2 | 3.0 | 1.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5 | 4.4 | 2.6 | 7.9 |
| 28-Aug | 3.7 | 3.4 | 3.1 | Z | 1.0 | 0.5 | 1.3 | 1.4 | 4.1 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 1.2 | 4.1 |
| 29-Aug | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 2.7 | 2.4 | 0.6 | 2.7 |
| 30-Aug | 2.3 | 1.8 | 1.1 | 0.9 | 0.6 | Z | 0.9 | 1.1 | 2.1 | 1.3 | 1.5 | 0.9 | 0.9 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 1.0 | 2.3 |
| 31-Aug | Z | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | 1.0 | 0.9 | 0.6 | 0.6 | 0.7 | 0.6 | 0.9 | 1.0 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.7 | Diurnal Average | |
| | 6.7 | 5.3 | 3.1 | 3.7 | 5.0 | 3.9 | 7.9 | 5.5 | 6.9 | 6.1 | 4.7 | 3.8 | 2.0 | 1.5 | 2.3 | 3.0 | 1.7 | 0.9 | 2.8 | 1.1 | 3.4 | 2.9 | 2.7 | 4.4 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance PF - Power Failure

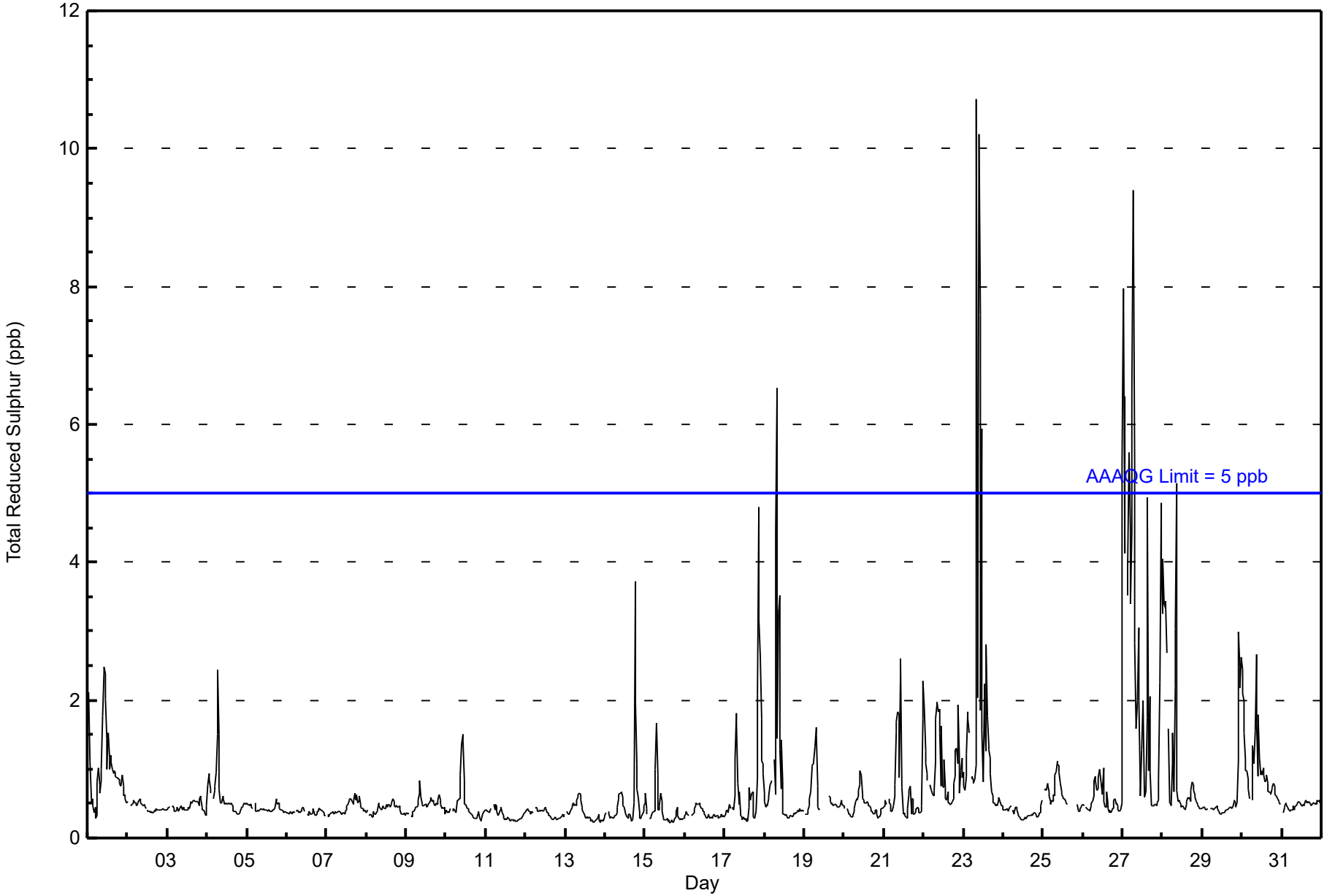
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay South - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 677 | 96.71 | 96.71 |
| 3 - 4 | 15 | 2.14 | 98.86 |
| 5 - 7 | 7 | 1.00 | 99.86 |
| 8 - 11 | 1 | 0.14 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay South - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 77 | 67 | 6 | 4 | 3 | 9 | 16 | 47 | 59 | 40 | 77 | 68 | 45 | 58 | 56 | 44 | 676 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 15 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 7 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 77 | 67 | 6 | 4 | 3 | 9 | 16 | 52 | 70 | 42 | 78 | 69 | 47 | 59 | 56 | 44 | 699 |

Total Number of Valid Hours: 699

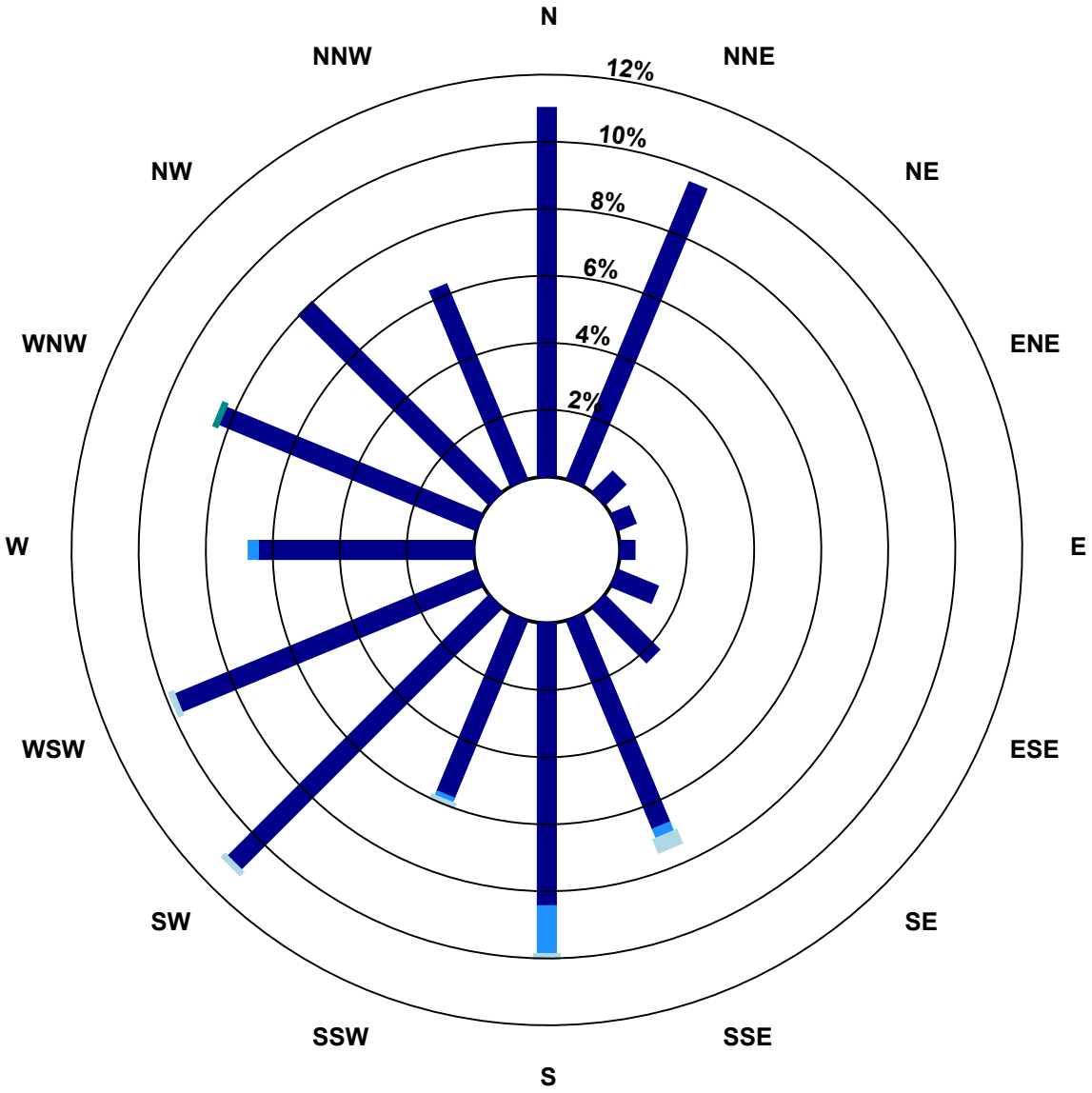
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Reduced Sulphur (TRS) - ppb

Fort McKay South




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

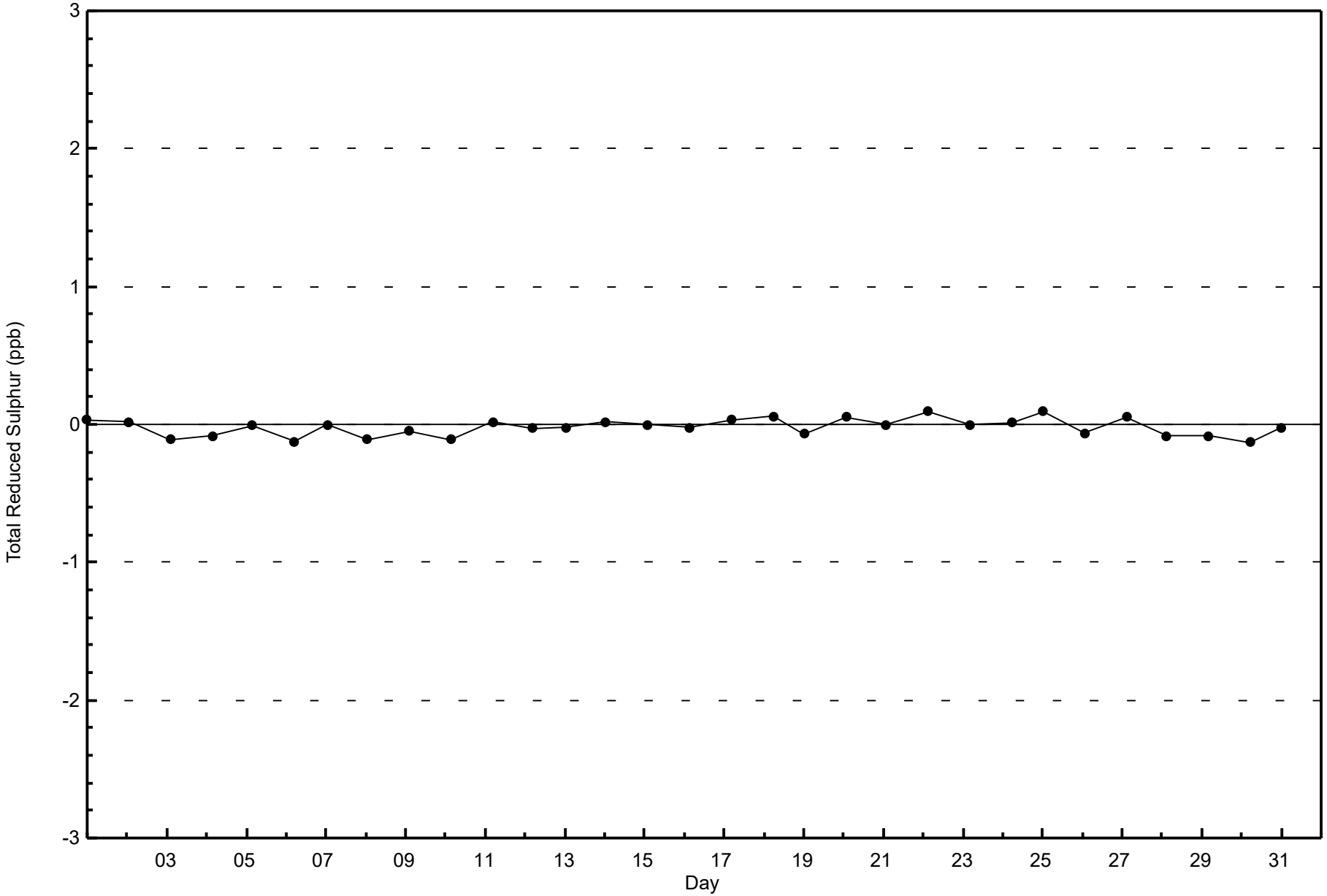
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay South - August 2026**

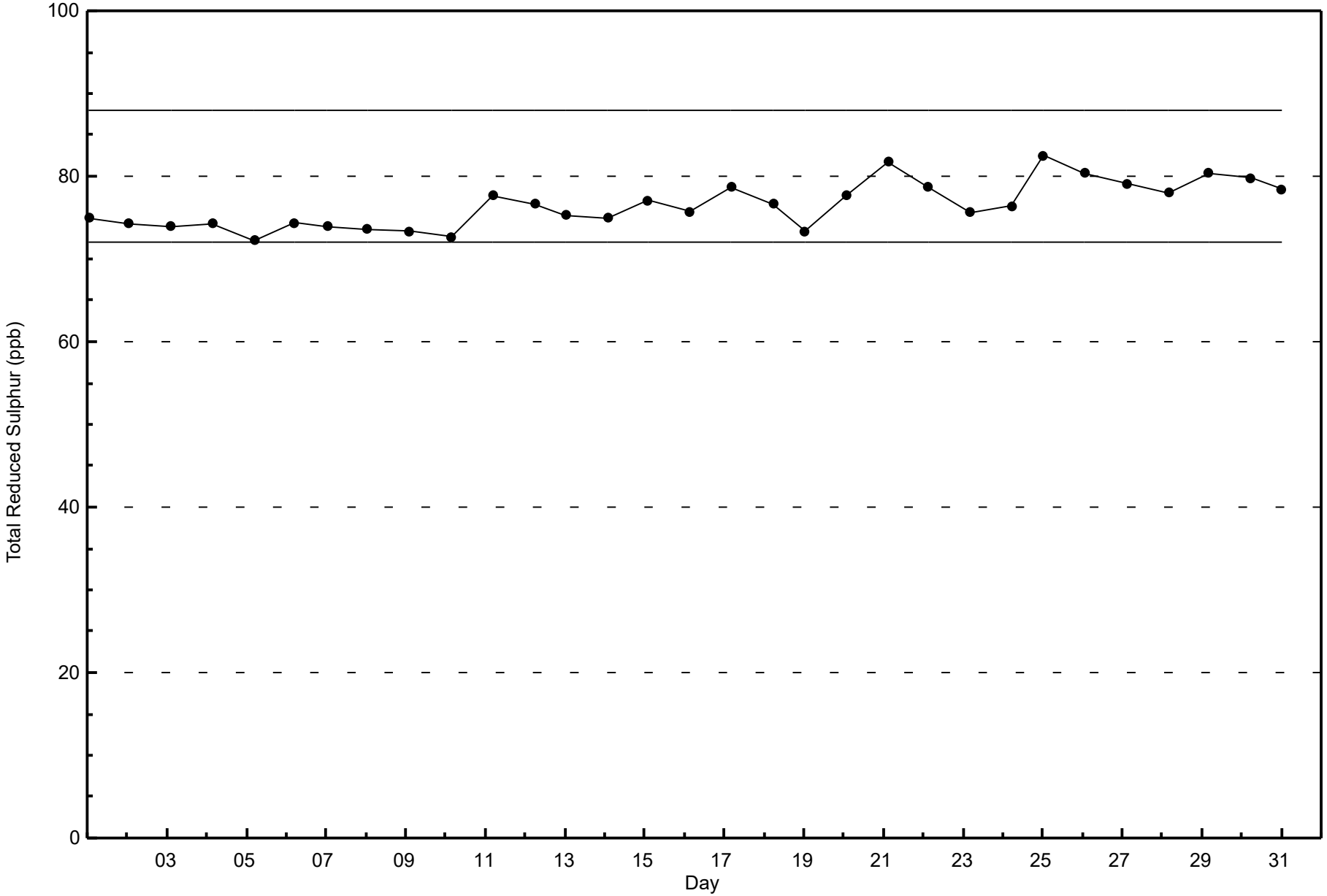


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort McKay South - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Hydrocarbons (THC) - ppm

## Fort McKay South - August 2026

Maximum Value: 4.2 ppm on Aug 23 09:00

Maximum Daily Average: 2.6 ppm on Aug 23

Minimum Value: 1.8 ppm on Aug 6 22:00

Minimum Daily Average: 1.9 ppm on Aug 6

Maximum Diurnal Average: 2.4 ppm at hour 9

Minimum Diurnal Average: 2.1 ppm at hour 14

Monthly Average: 2.20 ppm

Percentiles: $P_1$ = 1.8 $P_{10}$ = 1.9 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 3.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.9 | 2.9 | 2.7 | 2.7 | 2.5 | Z | 2.7 | 2.7 | 2.9 | 2.9 | 2.7 | 2.6 | 2.6 | 2.6 | 2.6 | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.6 | 2.9 |
| 2-Aug | Z | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.1 |
| 3-Aug | 1.9 | Z | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 2.1 |
| 4-Aug | 2.2 | 2.7 | Z | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 2.1 | 2.7 |
| 5-Aug | 1.8 | 1.8 | 1.9 | Z | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.1 | 2.2 | 2.1 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.2 |
| 6-Aug | 1.9 | 1.9 | 1.9 | 1.9 | Z | 1.9 | 1.8 | 1.8 | 1.9 | 1.9 | 2.0 | M | M | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.9 | 2.0 |
| 7-Aug | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 | Z | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 1.9 | 2.0 | 2.4 | 2.2 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.4 |
| 8-Aug | Z | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 9-Aug | 2.3 | Z | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.7 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.7 |
| 10-Aug | 2.1 | 2.2 | Z | 2.3 | 2.4 | 2.3 | 2.3 | 2.4 | 2.5 | 2.7 | 3.0 | C | C | C | C | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 3.0 |
| 11-Aug | 2.2 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.5 |
| 12-Aug | 2.1 | 2.2 | 2.2 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 |
| 13-Aug | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.4 |
| 14-Aug | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.7 | 2.6 | 2.5 | 2.4 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.7 |
| 15-Aug | 2.5 | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.3 | 2.3 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 16-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 17-Aug | 2.3 | 2.5 | 2.4 | Z | 2.1 | 2.2 | 2.4 | 2.7 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.7 |
| 18-Aug | 2.3 | 2.3 | 2.3 | 2.4 | Z | 2.5 | 2.3 | 2.6 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 | 2.3 | 2.1 | 2.1 | 2.2 | 2.6 |
| 19-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | Z | 2.8 | 2.8 | 2.4 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.0 | 2.2 | 2.8 |
| 20-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.4 | 2.6 | 2.9 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.9 |
| 21-Aug | 2.2 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.5 | 2.4 | 2.6 | 2.1 | 2.0 | 2.0 | 2.0 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | 2.2 | 2.1 | 2.4 | 2.2 | 2.6 |
| 22-Aug | 2.4 | 2.3 | Z | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.4 | 2.5 | 2.4 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.6 | 2.7 | 2.5 | 2.4 | 2.7 |
| 23-Aug | 2.4 | 2.4 | 2.6 | Z | 2.6 | 2.5 | 2.6 | 2.6 | 4.2 | 3.0 | 2.7 | 2.8 | 2.6 | 2.8 | 2.7 | 2.7 | 2.7 | 2.4 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.6 | 4.2 |
| 24-Aug | 2.1 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.3 |
| 25-Aug | 2.3 | 2.4 | 2.4 | 2.2 | 2.2 | Z | 2.2 | 2.5 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | PF | PF | PF | PF | PF | PF | PF | 2.2 | 2.2 | -- | 2.8 |
| 26-Aug | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.5 |
| 27-Aug | 2.5 | Z | 3.1 | 3.4 | 3.2 | 3.1 | 3.3 | 2.9 | 2.4 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.5 | 3.4 |
| 28-Aug | 2.3 | 2.3 | Z | 2.4 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.4 |
| 29-Aug | 2.1 | 2.1 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.7 | 2.1 | 2.7 |
| 30-Aug | 2.6 | 2.6 | 2.4 | 2.5 | Z | 2.4 | 2.5 | 2.6 | 2.9 | 2.6 | 2.5 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.9 |
| 31-Aug | 2.3 | 2.3 | 2.4 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 |
| | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | Diurnal Average | |
| | 2.9 | 2.9 | 3.1 | 3.4 | 3.2 | 3.1 | 3.3 | 2.9 | 4.2 | 3.0 | 3.0 | 2.8 | 2.6 | 2.8 | 2.7 | 2.7 | 2.7 | 2.4 | 2.4 | 2.4 | 2.6 | 2.6 | 2.7 | 2.7 | Diurnal Maximum | |

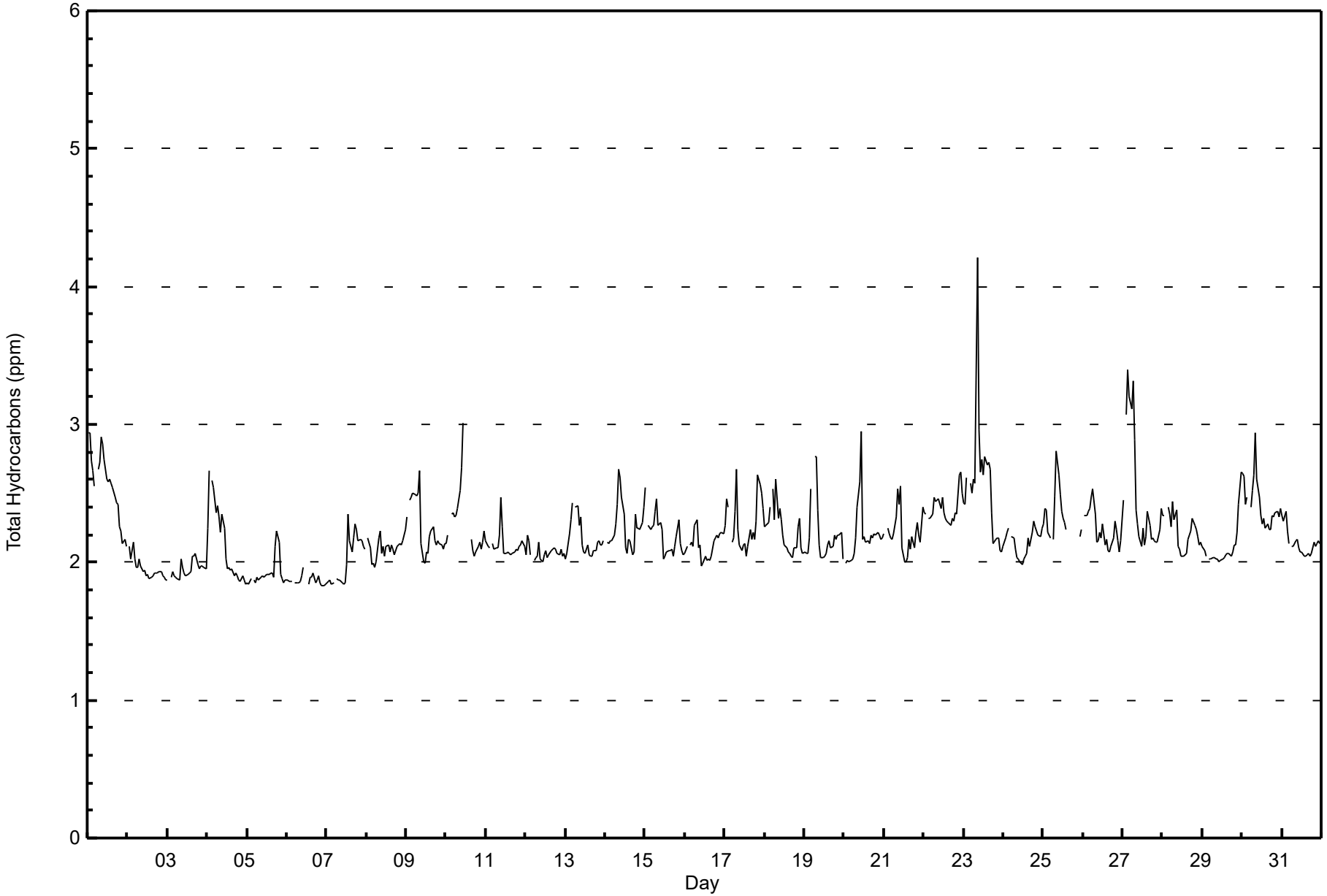
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay South - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 177 | 25.29 | 25.29 |
| 2.1 - 3.0 | 517 | 73.86 | 99.14 |
| 3.1 - 10.0 | 6 | 0.86 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay South - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 27 | 9 | 2 | 2 | 0 | 2 | 0 | 1 | 5 | 4 | 16 | 13 | 12 | 30 | 25 | 29 | 177 |
| 2.1 - 3.0 | 49 | 58 | 5 | 2 | 3 | 7 | 16 | 51 | 63 | 36 | 59 | 58 | 33 | 27 | 29 | 20 | 516 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 6 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 76 | 67 | 7 | 4 | 3 | 9 | 16 | 53 | 68 | 40 | 75 | 72 | 48 | 58 | 54 | 49 | 699 |

Total Number of Valid Hours: 699

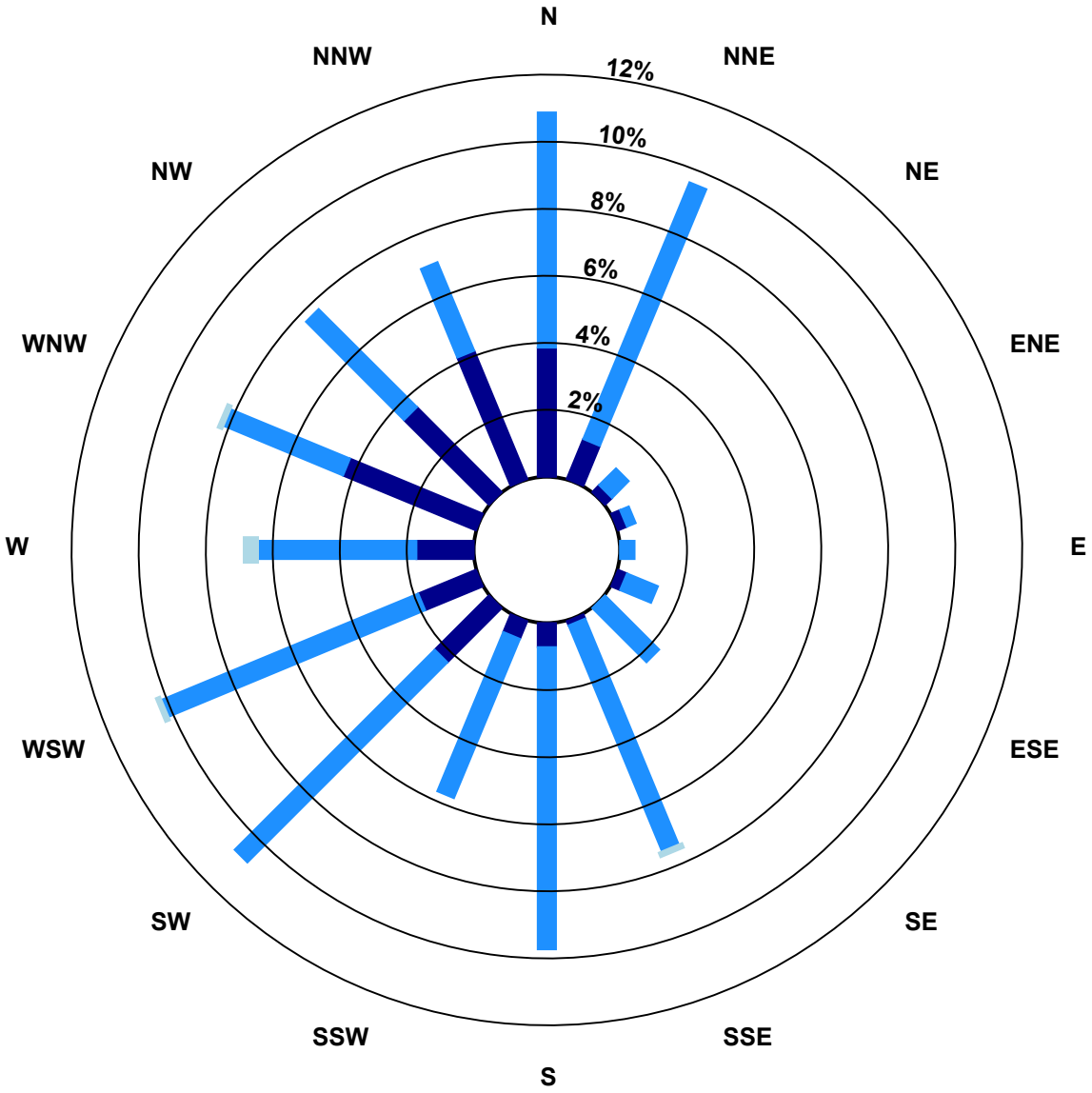
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Fort McKay South




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

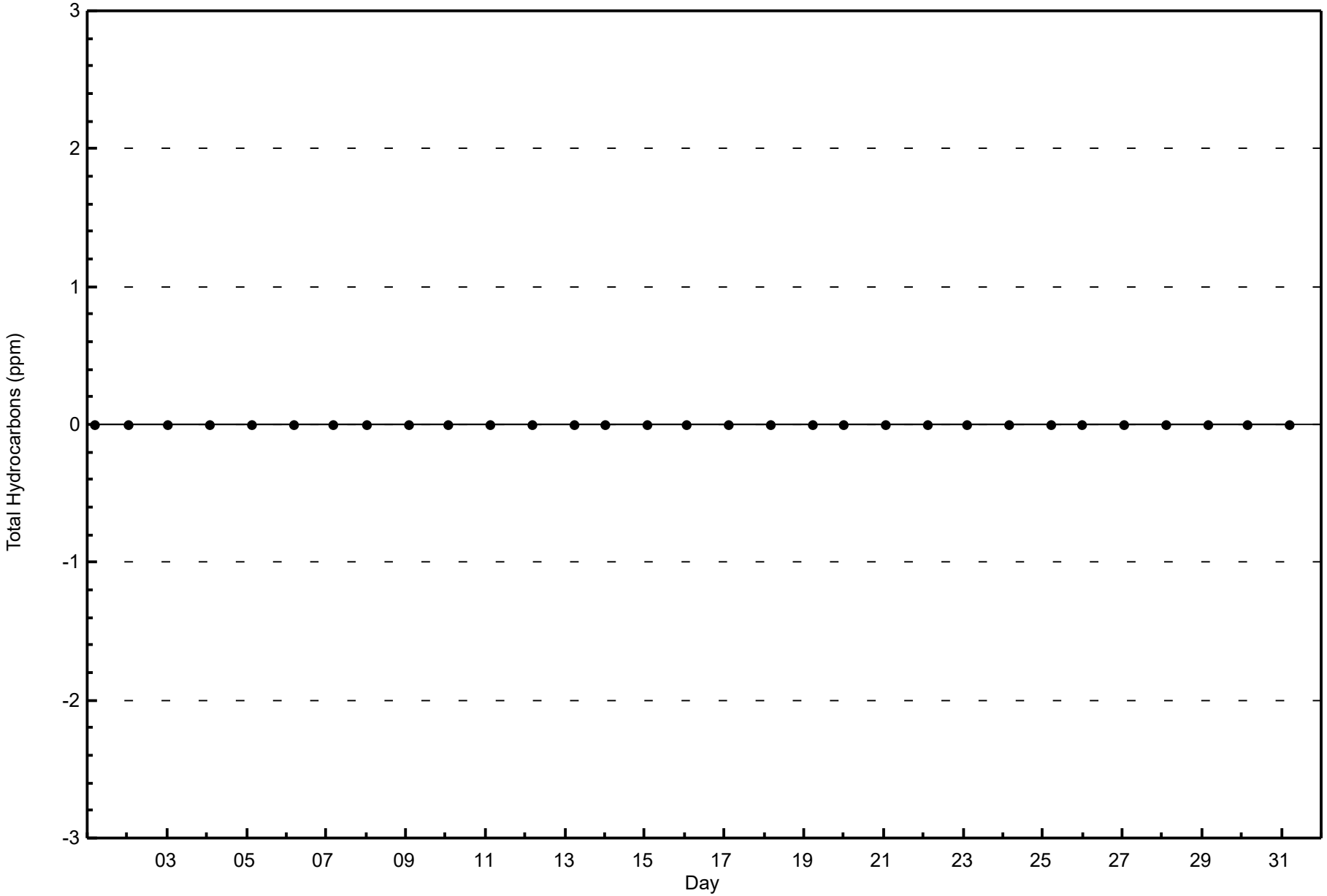
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay South - August 2026**

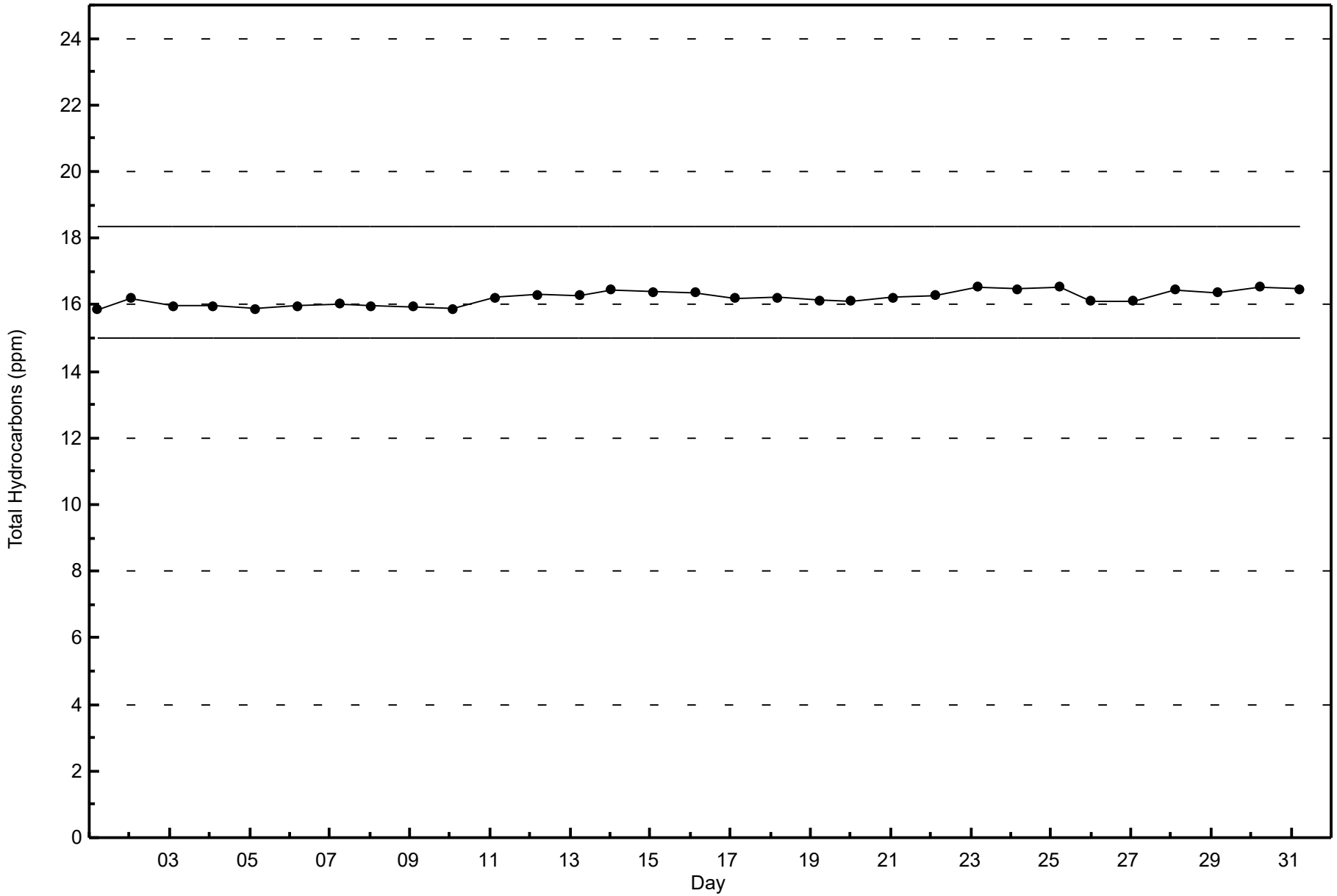


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Fort McKay South - August 2026**



Maximum Value: 0.910 ppm on Aug 23 09:00

Maximum Daily Average: 0.219 ppm on Aug 1

Minimum Value: 0.000 ppm on Aug 3 06:00

Minimum Daily Average: 0.012 ppm on Aug 6

Maximum Diurnal Average: 0.124 ppm at hour 9

Minimum Diurnal Average: 0.063 ppm at hour 12

Monthly Average: 0.087 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.1 $P_{90}$ = 0.2 $P_{99}$ = 0.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.253 | 0.258 | 0.195 | 0.175 | 0.130 | Z | 0.181 | 0.194 | 0.219 | 0.257 | 0.251 | 0.204 | 0.193 | 0.267 | 0.314 | 0.341 | 0.315 | 0.277 | 0.257 | 0.194 | 0.157 | 0.150 | 0.149 | 0.111 | 0.219 | 0.341 |
| 2-Aug | Z | 0.078 | 0.047 | 0.085 | 0.050 | 0.026 | 0.029 | 0.049 | 0.037 | 0.017 | 0.014 | 0.005 | 0.003 | 0.005 | 0.006 | 0.002 | 0.005 | 0.004 | 0.001 | 0.004 | 0.005 | 0.022 | 0.028 | 0.006 | 0.023 | 0.085 |
| 3-Aug | 0.007 | Z | 0.027 | 0.038 | 0.004 | 0.000 | 0.000 | 0.000 | 0.057 | 0.013 | 0.005 | 0.002 | 0.003 | 0.001 | 0.005 | 0.090 | 0.102 | 0.116 | 0.059 | 0.039 | 0.064 | 0.029 | 0.013 | 0.003 | 0.029 | 0.116 |
| 4-Aug | 0.077 | 0.145 | Z | 0.127 | 0.118 | 0.109 | 0.186 | 0.109 | 0.076 | 0.102 | 0.097 | 0.068 | 0.054 | 0.059 | 0.034 | 0.049 | 0.037 | 0.070 | 0.055 | 0.044 | 0.035 | 0.051 | 0.053 | 0.016 | 0.077 | 0.186 |
| 5-Aug | 0.008 | 0.002 | 0.007 | Z | 0.009 | 0.007 | 0.010 | 0.025 | 0.013 | 0.007 | 0.004 | 0.000 | 0.001 | 0.000 | 0.003 | 0.003 | 0.000 | 0.068 | 0.092 | 0.069 | 0.012 | 0.003 | 0.000 | 0.000 | 0.015 | 0.092 |
| 6-Aug | 0.001 | 0.000 | 0.000 | 0.000 | Z | 0.001 | 0.000 | 0.000 | 0.001 | 0.014 | 0.039 | M | M | 0.003 | 0.027 | 0.026 | 0.034 | 0.013 | 0.024 | 0.057 | 0.010 | 0.000 | 0.002 | 0.001 | 0.012 | 0.057 |
| 7-Aug | 0.001 | 0.007 | 0.001 | 0.001 | 0.000 | Z | 0.001 | 0.000 | 0.000 | 0.006 | 0.007 | 0.006 | 0.069 | 0.334 | 0.174 | 0.106 | 0.109 | 0.150 | 0.126 | 0.107 | 0.107 | 0.100 | 0.101 | 0.107 | 0.070 | 0.334 |
| 8-Aug | Z | 0.105 | 0.080 | 0.025 | 0.007 | 0.006 | 0.027 | 0.120 | 0.090 | 0.054 | 0.136 | 0.108 | 0.149 | 0.146 | 0.099 | 0.110 | 0.093 | 0.094 | 0.176 | 0.169 | 0.148 | 0.131 | 0.127 | 0.156 | 0.102 | 0.176 |
| 9-Aug | 0.183 | Z | 0.178 | 0.178 | 0.166 | 0.150 | 0.134 | 0.139 | 0.185 | 0.083 | 0.040 | 0.042 | 0.087 | 0.084 | 0.177 | 0.225 | 0.230 | 0.153 | 0.152 | 0.165 | 0.142 | 0.116 | 0.089 | 0.066 | 0.138 | 0.230 |
| 10-Aug | 0.070 | 0.085 | Z | 0.111 | 0.113 | 0.111 | 0.111 | 0.130 | 0.162 | 0.317 | 0.490 | C | C | C | C | 0.083 | 0.044 | 0.029 | 0.041 | 0.079 | 0.073 | 0.046 | 0.051 | 0.082 | 0.117 | 0.490 |
| 11-Aug | 0.049 | 0.023 | 0.010 | Z | 0.006 | 0.005 | 0.000 | 0.026 | 0.081 | 0.141 | 0.104 | 0.051 | 0.039 | 0.044 | 0.037 | 0.037 | 0.026 | 0.035 | 0.046 | 0.041 | 0.065 | 0.080 | 0.072 | 0.065 | 0.047 | 0.141 |
| 12-Aug | 0.022 | 0.067 | 0.079 | 0.017 | Z | 0.002 | 0.002 | 0.001 | 0.045 | 0.010 | 0.001 | 0.016 | 0.034 | 0.011 | 0.021 | 0.044 | 0.054 | 0.066 | 0.050 | 0.033 | 0.027 | 0.039 | 0.013 | 0.008 | 0.029 | 0.079 |
| 13-Aug | 0.001 | 0.014 | 0.065 | 0.097 | 0.129 | Z | 0.108 | 0.133 | 0.121 | 0.146 | 0.050 | 0.017 | 0.013 | 0.062 | 0.032 | 0.010 | 0.011 | 0.021 | 0.021 | 0.060 | 0.064 | 0.056 | 0.048 | 0.043 | 0.058 | 0.146 |
| 14-Aug | Z | 0.051 | 0.053 | 0.039 | 0.034 | 0.030 | 0.065 | 0.102 | 0.187 | 0.203 | 0.175 | 0.140 | 0.059 | 0.038 | 0.070 | 0.075 | 0.027 | 0.037 | 0.134 | 0.118 | 0.099 | 0.077 | 0.070 | 0.085 | 0.085 | 0.203 |
| 15-Aug | 0.106 | Z | 0.018 | 0.009 | 0.007 | 0.026 | 0.054 | 0.107 | 0.054 | 0.060 | 0.059 | 0.006 | 0.004 | 0.008 | 0.010 | 0.020 | 0.036 | 0.024 | 0.057 | 0.084 | 0.078 | 0.029 | 0.023 | 0.006 | 0.039 | 0.107 |
| 16-Aug | 0.001 | 0.003 | Z | 0.002 | 0.008 | 0.011 | 0.062 | 0.075 | 0.062 | 0.074 | 0.003 | 0.007 | 0.026 | 0.014 | 0.016 | 0.013 | 0.043 | 0.078 | 0.084 | 0.093 | 0.079 | 0.074 | 0.069 | 0.047 | 0.041 | 0.093 |
| 17-Aug | 0.054 | 0.091 | 0.089 | Z | 0.012 | 0.011 | 0.073 | 0.117 | 0.048 | 0.028 | 0.019 | 0.021 | 0.034 | 0.011 | 0.043 | 0.117 | 0.080 | 0.105 | 0.078 | 0.168 | 0.362 | 0.271 | 0.195 | 0.140 | 0.094 | 0.362 |
| 18-Aug | 0.104 | 0.104 | 0.119 | 0.150 | Z | 0.196 | 0.120 | 0.306 | 0.114 | 0.115 | 0.078 | 0.072 | 0.056 | 0.047 | 0.037 | 0.039 | 0.032 | 0.024 | 0.058 | 0.052 | 0.091 | 0.098 | 0.037 | 0.019 | 0.090 | 0.306 |
| 19-Aug | 0.023 | 0.013 | 0.011 | 0.036 | 0.106 | Z | 0.126 | 0.135 | 0.058 | 0.038 | 0.037 | 0.039 | 0.051 | 0.046 | 0.070 | 0.098 | 0.068 | 0.087 | 0.138 | 0.138 | 0.146 | 0.139 | 0.127 | 0.038 | 0.077 | 0.146 |
| 20-Aug | Z | 0.018 | 0.010 | 0.004 | 0.004 | 0.002 | 0.009 | 0.074 | 0.157 | 0.193 | 0.480 | 0.102 | 0.146 | 0.109 | 0.113 | 0.104 | 0.123 | 0.115 | 0.135 | 0.143 | 0.124 | 0.097 | 0.078 | 0.062 | 0.104 | 0.480 |
| 21-Aug | 0.062 | Z | 0.065 | 0.040 | 0.032 | 0.016 | 0.017 | 0.072 | 0.165 | 0.141 | 0.251 | 0.054 | 0.015 | 0.010 | 0.022 | 0.098 | 0.060 | 0.102 | 0.060 | 0.083 | 0.105 | 0.086 | 0.065 | 0.118 | 0.076 | 0.251 |
| 22-Aug | 0.130 | 0.112 | Z | 0.099 | 0.099 | 0.095 | 0.102 | 0.121 | 0.148 | 0.177 | 0.195 | 0.220 | 0.144 | 0.126 | 0.122 | 0.112 | 0.105 | 0.130 | 0.129 | 0.165 | 0.157 | 0.182 | 0.144 | 0.187 | 0.139 | 0.220 |
| 23-Aug | 0.152 | 0.158 | 0.256 | Z | 0.228 | 0.168 | 0.217 | 0.184 | 0.910 | 0.375 | 0.140 | 0.153 | 0.166 | 0.291 | 0.190 | 0.246 | 0.244 | 0.149 | 0.100 | 0.107 | 0.120 | 0.119 | 0.083 | 0.069 | 0.210 | 0.910 |
| 24-Aug | 0.079 | 0.093 | 0.094 | 0.092 | Z | 0.088 | 0.076 | 0.062 | 0.048 | 0.030 | 0.015 | 0.015 | 0.034 | 0.029 | 0.058 | 0.140 | 0.083 | 0.173 | 0.238 | 0.231 | 0.163 | 0.115 | 0.097 | 0.086 | 0.093 | 0.238 |
| 25-Aug | 0.091 | 0.109 | 0.101 | 0.074 | 0.054 | Z | 0.018 | 0.100 | 0.208 | 0.188 | 0.142 | 0.137 | 0.146 | 0.135 | 0.115 | PF | PF | PF | PF | PF | PF | PF | 0.096 | 0.111 | -- | 0.208 |
| 26-Aug | Z | 0.139 | 0.141 | 0.137 | 0.135 | 0.139 | 0.135 | 0.174 | 0.087 | 0.084 | 0.110 | 0.094 | 0.202 | 0.103 | 0.126 | 0.084 | 0.074 | 0.097 | 0.109 | 0.152 | 0.128 | 0.096 | 0.078 | 0.095 | 0.118 | 0.202 |
| 27-Aug | 0.210 | Z | 0.321 | 0.351 | 0.358 | 0.352 | 0.452 | 0.286 | 0.149 | 0.142 | 0.108 | 0.082 | 0.148 | 0.082 | 0.111 | 0.151 | 0.133 | 0.093 | 0.089 | 0.075 | 0.063 | 0.067 | 0.115 | 0.178 | 0.179 | 0.452 |
| 28-Aug | 0.159 | 0.153 | Z | 0.147 | 0.082 | 0.061 | 0.098 | 0.108 | 0.120 | 0.046 | 0.041 | 0.021 | 0.015 | 0.005 | 0.020 | 0.062 | 0.087 | 0.104 | 0.143 | 0.114 | 0.095 | 0.075 | 0.060 | 0.056 | 0.081 | 0.159 |
| 29-Aug | 0.045 | 0.032 | 0.009 | Z | 0.006 | 0.005 | 0.006 | 0.004 | 0.002 | 0.006 | 0.008 | 0.003 | 0.009 | 0.013 | 0.018 | 0.017 | 0.019 | 0.010 | 0.036 | 0.079 | 0.077 | 0.086 | 0.110 | 0.148 | 0.032 | 0.148 |
| 30-Aug | 0.154 | 0.146 | 0.130 | 0.147 | Z | 0.083 | 0.121 | 0.134 | 0.179 | 0.118 | 0.167 | 0.136 | 0.134 | 0.163 | 0.136 | 0.119 | 0.105 | 0.115 | 0.192 | 0.192 | 0.169 | 0.145 | 0.144 | 0.167 | 0.143 | 0.192 |
| 31-Aug | 0.143 | 0.116 | 0.124 | 0.070 | 0.026 | Z | 0.010 | 0.013 | 0.060 | 0.077 | 0.047 | 0.020 | 0.022 | 0.014 | 0.010 | 0.007 | 0.002 | 0.000 | 0.005 | 0.050 | 0.039 | 0.031 | 0.028 | 0.027 | 0.041 | 0.143 |
| | 0.084 | 0.081 | 0.086 | 0.087 | 0.074 | 0.068 | 0.082 | 0.100 | 0.124 | 0.105 | 0.107 | 0.063 | 0.071 | 0.075 | 0.074 | 0.088 | 0.079 | 0.085 | 0.096 | 0.103 | 0.100 | 0.087 | 0.076 | 0.074 | Diurnal Average | |
| | 0.253 | 0.258 | 0.321 | 0.351 | 0.358 | 0.352 | 0.452 | 0.306 | 0.910 | 0.375 | 0.490 | 0.220 | 0.202 | 0.334 | 0.314 | 0.341 | 0.315 | 0.277 | 0.257 | 0.231 | 0.362 | 0.271 | 0.195 | 0.187 | Diurnal Maximum | |

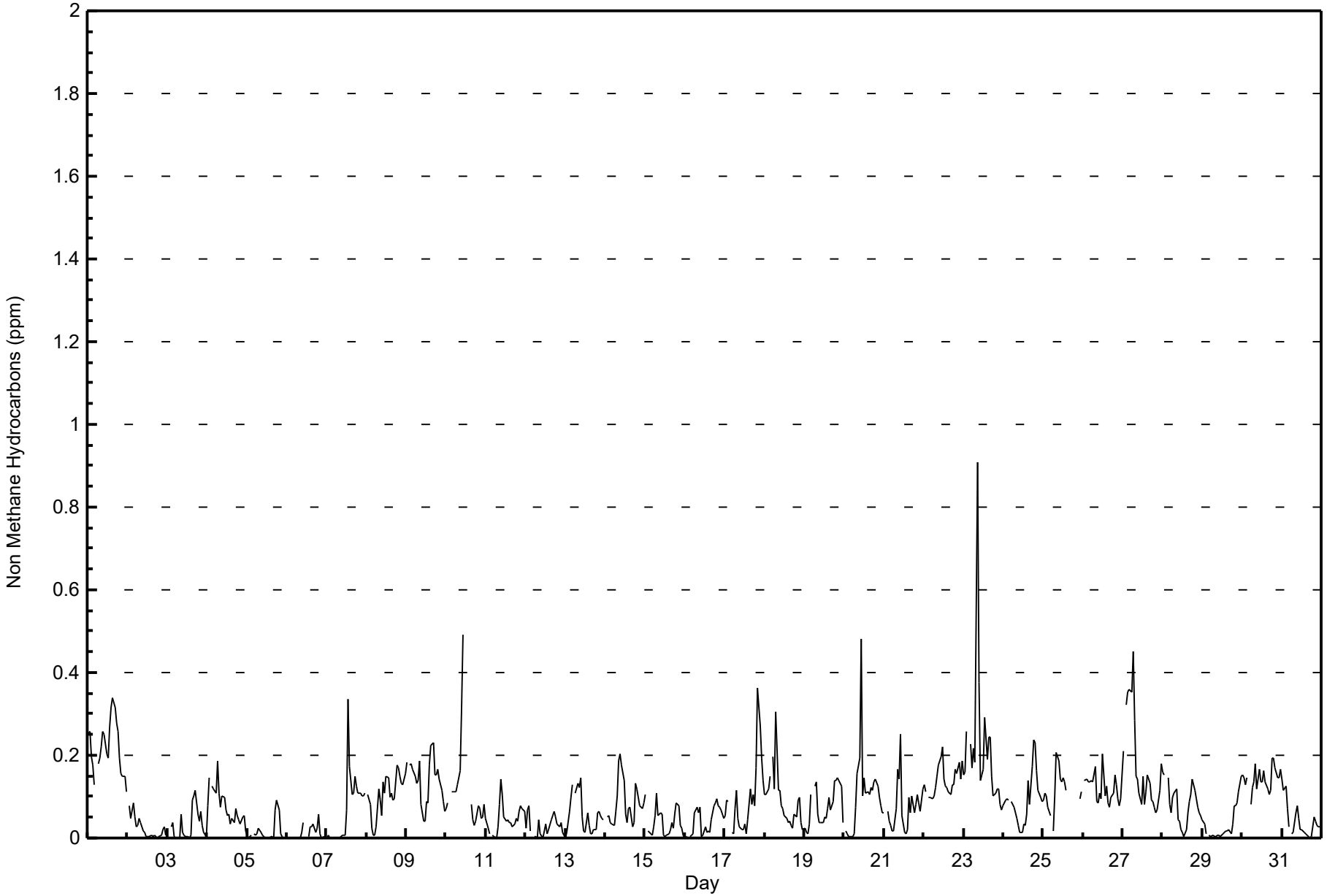
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay South - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay South - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 72 | 10.29 | 10.29 |
| 0.006 - 0.05 | 214 | 30.57 | 40.86 |
| 0.06 - 0.1 | 309 | 44.14 | 85.00 |
| > 0.1 | 105 | 15.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay South - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 4 | 7 | 4 | 18 | 10 | 12 | 72 |
| 0.006 - 0.05 | 29 | 20 | 2 | 2 | 1 | 4 | 0 | 3 | 10 | 10 | 33 | 19 | 23 | 16 | 21 | 20 | 213 |
| 0.06 - 0.1 | 24 | 28 | 5 | 2 | 2 | 4 | 11 | 35 | 40 | 14 | 34 | 39 | 16 | 21 | 21 | 13 | 309 |
| > 0.1 | 14 | 17 | 0 | 0 | 0 | 1 | 5 | 14 | 18 | 11 | 4 | 7 | 5 | 3 | 2 | 4 | 105 |
| **Totals** | 76 | 67 | 7 | 4 | 3 | 9 | 16 | 53 | 68 | 40 | 75 | 72 | 48 | 58 | 54 | 49 | 699 |

Total Number of Valid Hours: 699

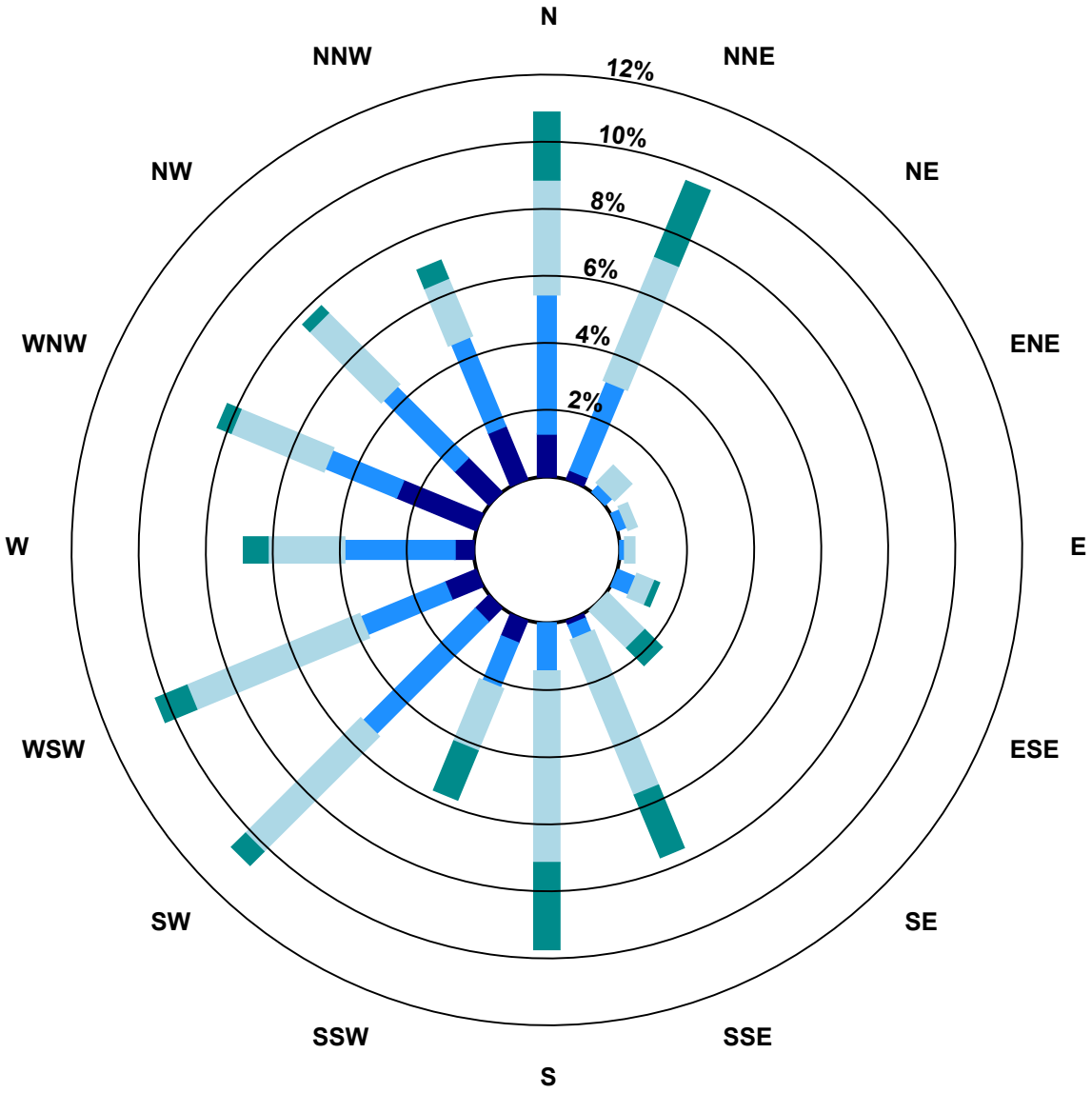
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

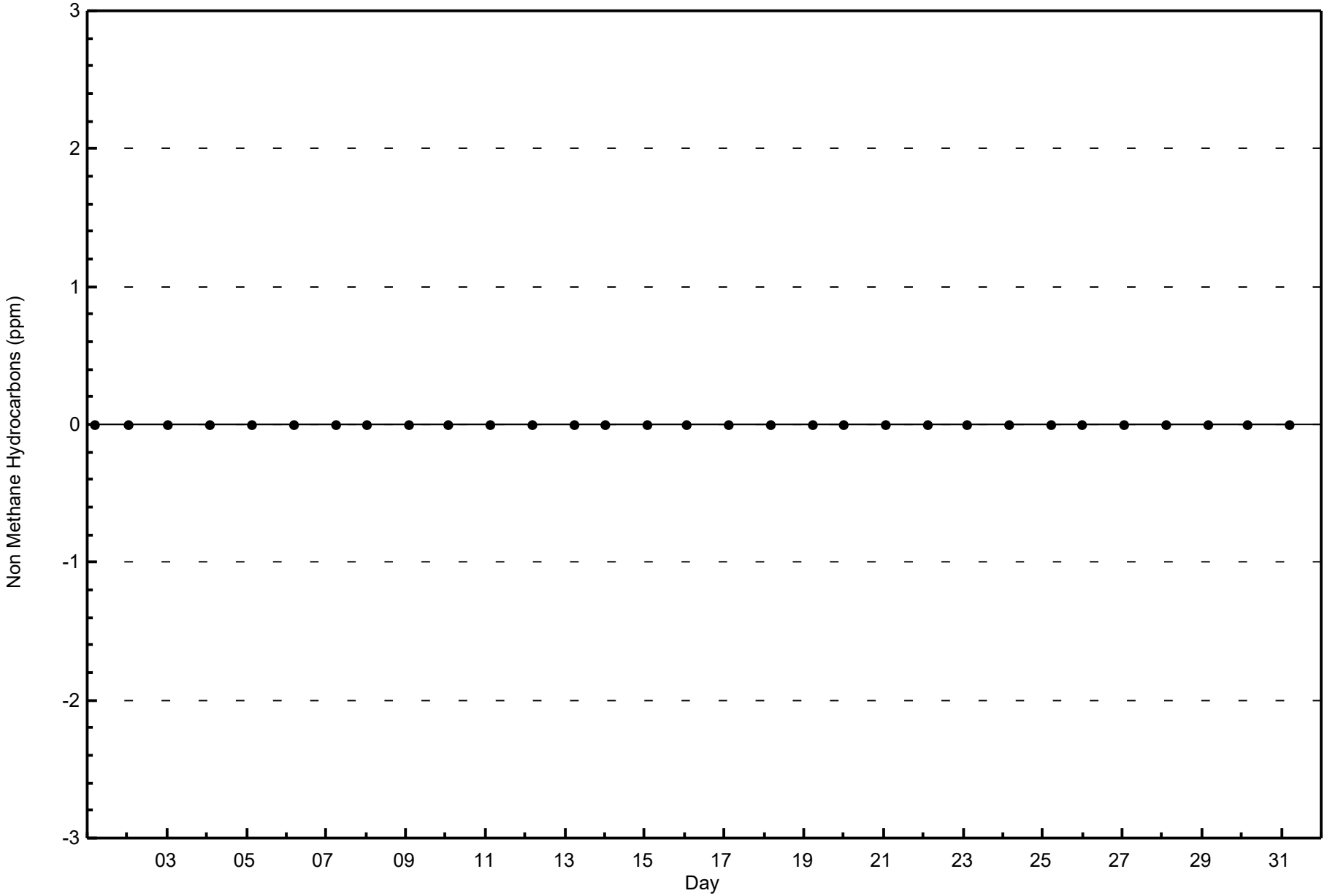
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay South - August 2026**

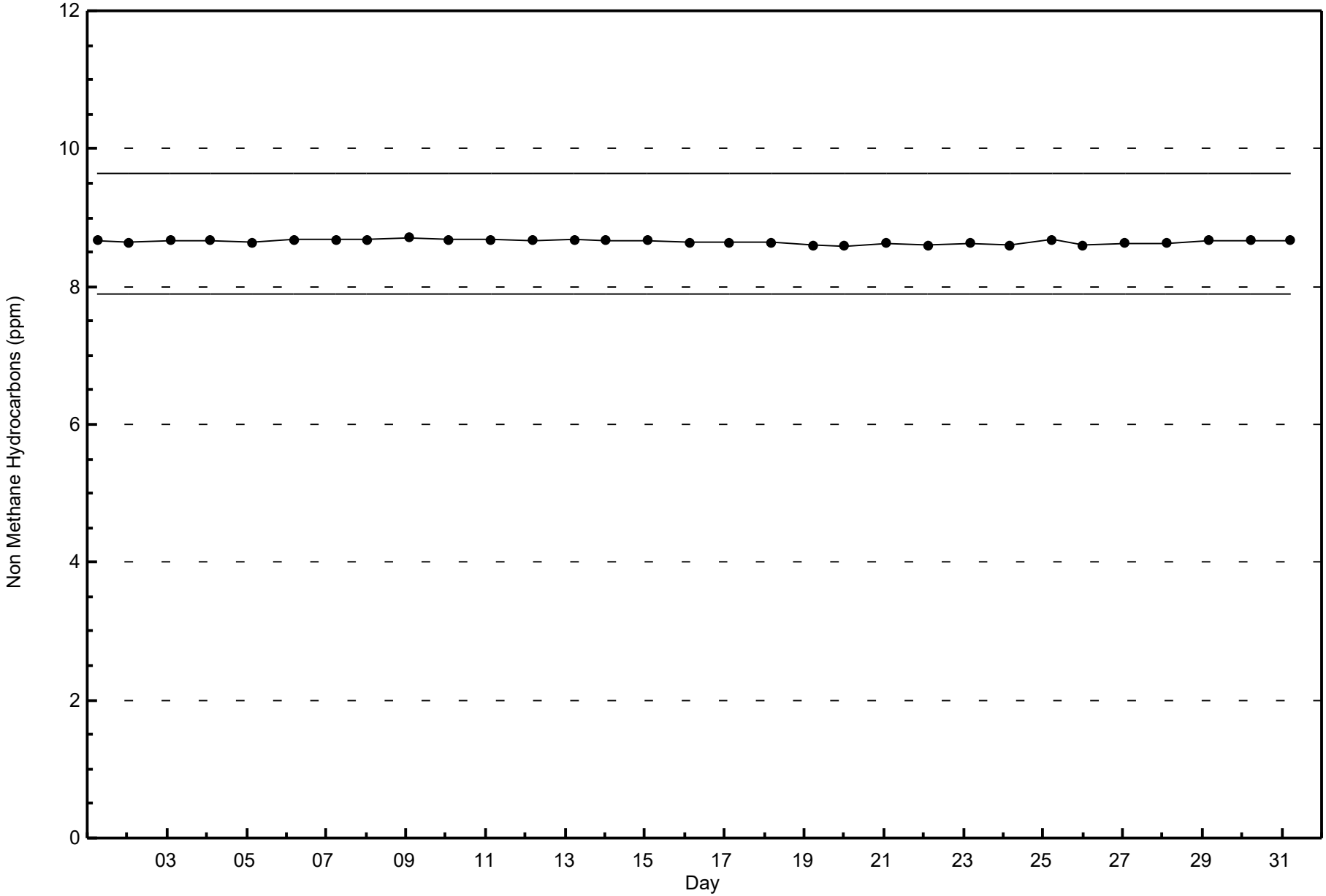


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Fort McKay South - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.3 ppm on Aug 23 09:00
Maximum Daily Average: 2.4 ppm on Aug 23

Minimum Value: 1.8 ppm on Aug 4 23:00
Minimum Daily Average: 1.9 ppm on Aug 6
Maximum Diurnal Average: 2.2 ppm at hour 9
Minimum Diurnal Average: 2.0 ppm at hour 14
Monthly Average: 2.11 ppm
Percentiles: $P_1$ = 1.8 $P_{10}$ = 1.9 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.3 $P_{99}$ = 2.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.7 | 2.7 | 2.5 | 2.5 | 2.4 | Z | 2.5 | 2.5 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.3 | 2.7 |
| 2-Aug | Z | 2.0 | 2.0 | 2.1 | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.1 |
| 3-Aug | 1.9 | Z | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 |
| 4-Aug | 2.2 | 2.5 | Z | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.3 | 2.2 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 2.0 | 2.5 |
| 5-Aug | 1.8 | 1.8 | 1.9 | Z | 1.9 | 1.8 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.1 | 2.1 | 2.1 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.1 |
| 6-Aug | 1.9 | 1.9 | 1.9 | 1.9 | Z | 1.9 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | M | M | 1.8 | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.9 | 1.9 |
| 7-Aug | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 | Z | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 1.9 | 2.1 |
| 8-Aug | Z | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 |
| 9-Aug | 2.1 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.5 |
| 10-Aug | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | C | C | C | C | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.5 |
| 11-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 12-Aug | 2.0 | 2.1 | 2.1 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 |
| 13-Aug | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | Z | 2.3 | 2.3 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 14-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.5 | 2.4 | 2.3 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.5 |
| 15-Aug | 2.4 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.2 | 2.4 |
| 16-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 17-Aug | 2.2 | 2.4 | 2.3 | Z | 2.1 | 2.2 | 2.3 | 2.6 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.6 |
| 18-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.3 |
| 19-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | Z | 2.6 | 2.6 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.6 |
| 20-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.4 | 2.5 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.5 |
| 21-Aug | 2.1 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.3 | 2.1 | 2.4 |
| 22-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 | 2.5 | 2.3 | 2.3 | 2.5 |
| 23-Aug | 2.3 | 2.3 | 2.4 | Z | 2.3 | 2.3 | 2.4 | 2.4 | 3.3 | 2.6 | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.2 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.4 | 3.3 |
| 24-Aug | 2.0 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 25-Aug | 2.2 | 2.3 | 2.3 | 2.1 | 2.1 | Z | 2.2 | 2.4 | 2.6 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | PF | PF | PF | PF | PF | PF | PF | 2.1 | 2.1 | -- | 2.6 |
| 26-Aug | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.4 |
| 27-Aug | 2.2 | Z | 2.7 | 3.0 | 2.8 | 2.8 | 2.9 | 2.6 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 3.0 |
| 28-Aug | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 29-Aug | 2.1 | 2.1 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.5 | 2.1 | 2.5 |
| 30-Aug | 2.5 | 2.5 | 2.3 | 2.3 | Z | 2.3 | 2.4 | 2.5 | 2.8 | 2.5 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.8 |
| 31-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Diurnal Average | |
| | 2.7 | 2.7 | 2.7 | 3.0 | 2.8 | 2.8 | 2.9 | 2.6 | 3.3 | 2.6 | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.3 | 2.5 | 2.5 | 2.5 | Diurnal Maximum | |

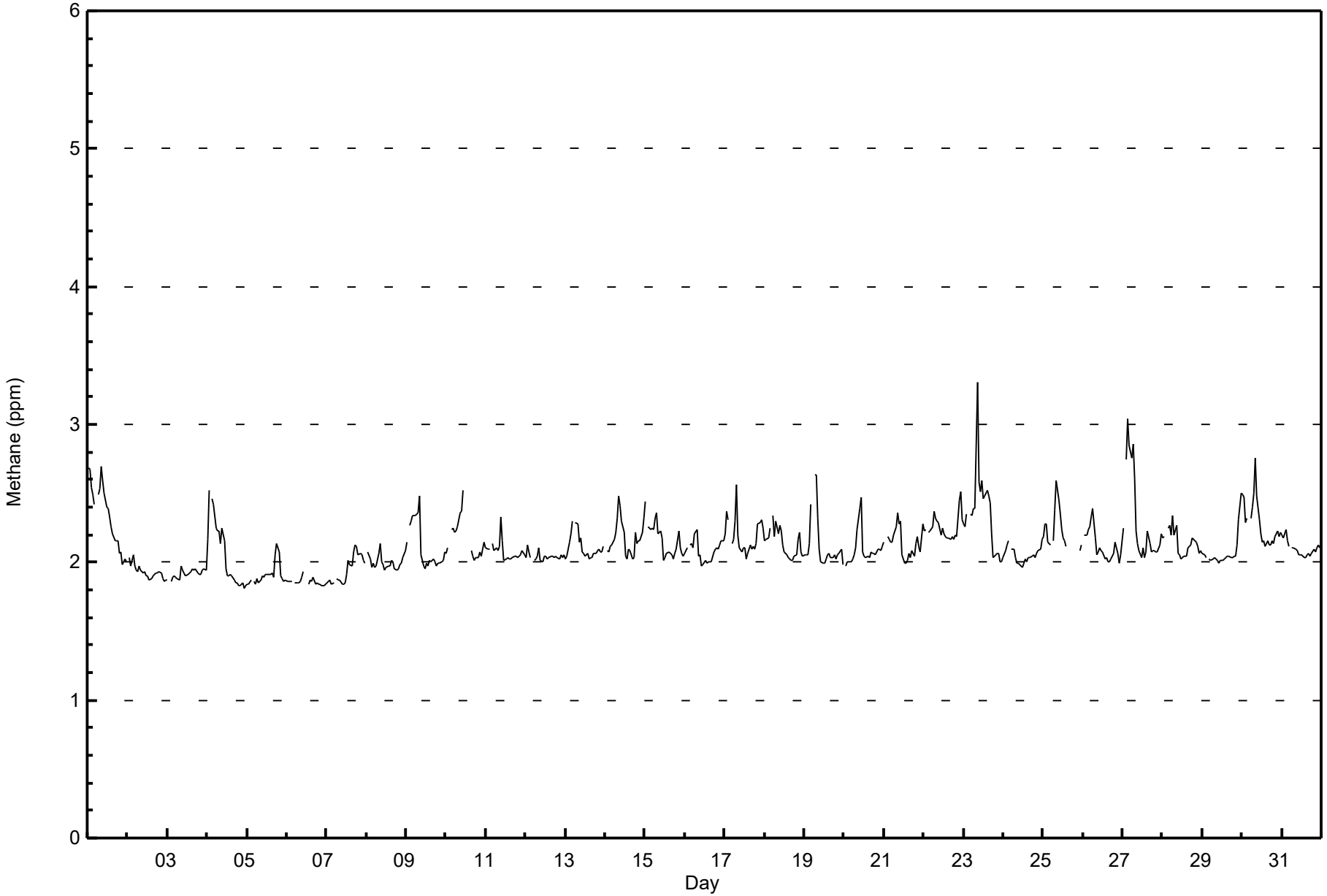
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Fort McKay South - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 286 | 40.86 | 40.86 |
| 2.1 - 3.0 | 413 | 59.00 | 99.86 |
| 3.1 - 10.0 | 1 | 0.14 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Fort McKay South - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 49 | 37 | 3 | 2 | 0 | 2 | 0 | 8 | 10 | 6 | 24 | 22 | 21 | 35 | 30 | 37 | 286 |
| 2.1 - 3.0 | 27 | 30 | 4 | 2 | 3 | 7 | 16 | 44 | 58 | 34 | 51 | 50 | 27 | 23 | 24 | 12 | 412 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 76 | 67 | 7 | 4 | 3 | 9 | 16 | 53 | 68 | 40 | 75 | 72 | 48 | 58 | 54 | 49 | 699 |

Total Number of Valid Hours: 699

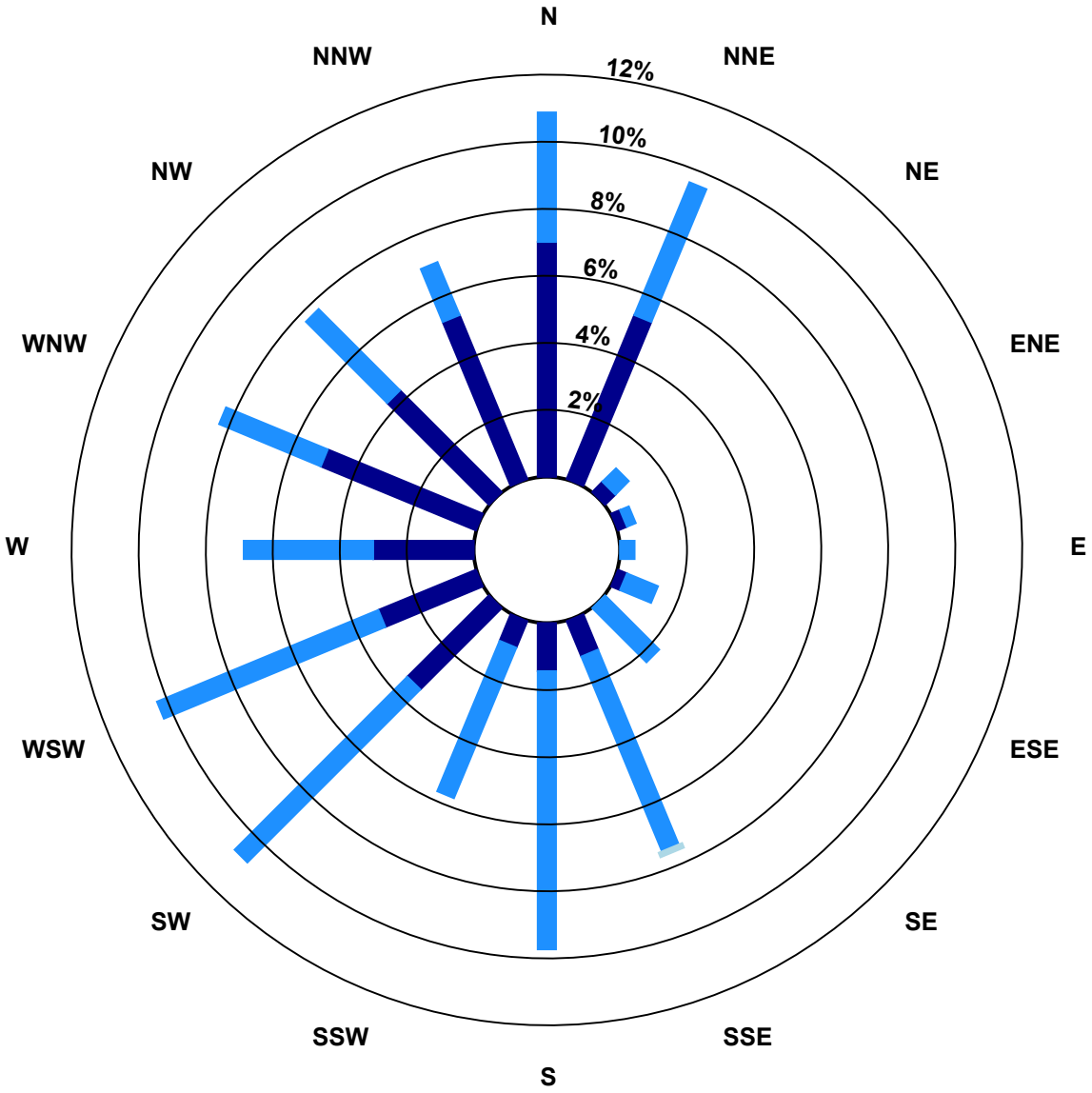
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Fort McKay South




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

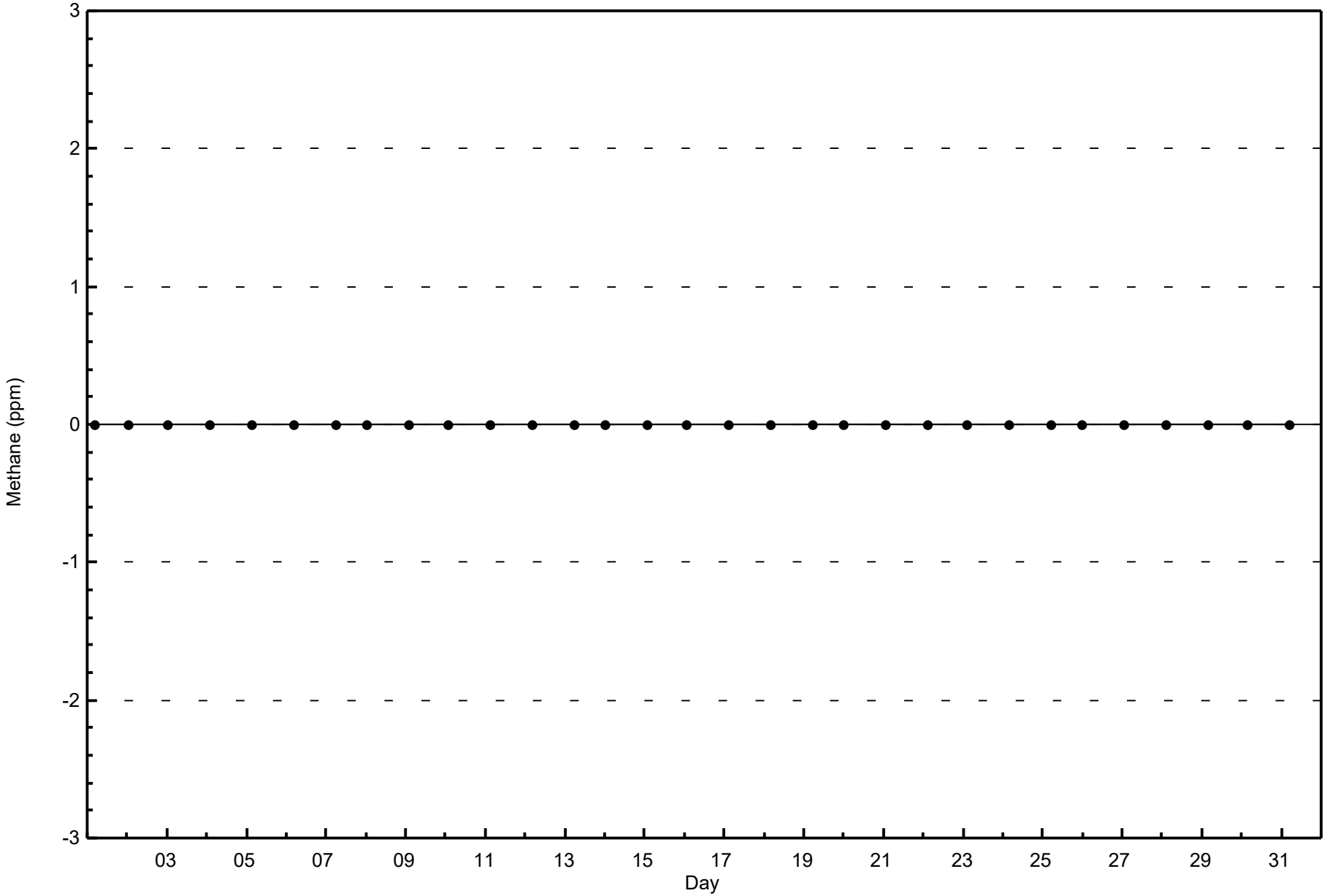
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Fort McKay South - August 2026**

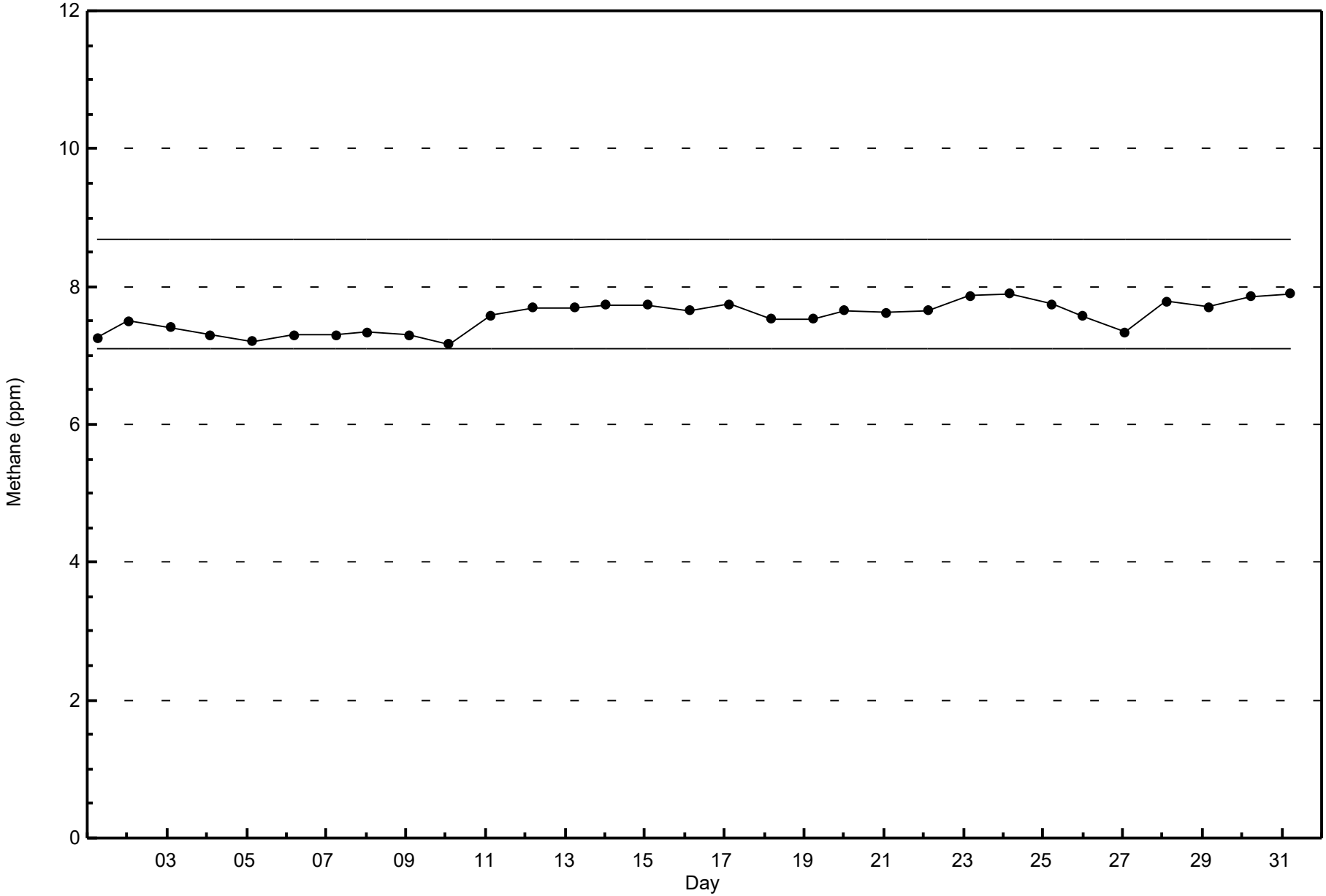


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Fort McKay South - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.3 ppb on Aug 25 15:00
Maximum Daily Average: 22.4 ppb on Aug 27

Minimum Value: 0.3 ppb on Aug 4 02:00
Minimum Daily Average: 9.0 ppb on Aug 8
Maximum Diurnal Average: 28.8 ppb at hour 15
Minimum Diurnal Average: 4.5 ppb at hour 6
Monthly Average: 14.63 ppb
Percentiles: $P_1$ = 0.4 $P_{10}$ = 1.0 $Q_1$ = 4.2 Median = 13.9 $Q_3$ = 23.2 $P_{90}$ = 30.7 $P_{99}$ = 39.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 703 |
| Hours of Missing Data: | 41 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.6 | Z | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 | 0.8 | 2.0 | 3.1 | 7.3 | 10.3 | 15.2 | 18.2 | 23.0 | 20.0 | 17.5 | 12.1 | 10.3 | 16.5 | 26.9 | 30.0 | 30.6 | 10.8 | 30.6 |
| 2-Aug | 19.7 | 20.6 | Z | 17.1 | 18.4 | 17.4 | 16.8 | 14.9 | 14.0 | 16.2 | 15.6 | 17.8 | 19.8 | 20.1 | 23.1 | 25.2 | 25.4 | 26.1 | 24.4 | 21.0 | 19.6 | 21.6 | 20.3 | 20.1 | 19.8 | 26.1 |
| 3-Aug | 18.9 | 18.9 | 18.1 | Z | 17.2 | 15.6 | 15.1 | 15.2 | 14.7 | 18.1 | 21.8 | 24.0 | 25.6 | 26.1 | 26.3 | 24.8 | 23.0 | 22.1 | 20.6 | 14.6 | 4.8 | 2.5 | 1.3 | 1.2 | 17.0 | 26.3 |
| 4-Aug | 0.7 | 0.3 | 0.3 | 0.3 | Z | 1.0 | 5.9 | 11.3 | 13.5 | 11.0 | 15.6 | 23.3 | 27.2 | 29.0 | 29.3 | 27.8 | 25.9 | 15.3 | 17.4 | 17.2 | 15.6 | 18.1 | 17.9 | 16.2 | 14.8 | 29.3 |
| 5-Aug | 17.0 | 16.0 | 14.0 | 13.1 | 12.6 | Z | 13.9 | 15.0 | 19.3 | 22.9 | 26.0 | 29.3 | 27.6 | 26.2 | 24.3 | 24.5 | 24.7 | 17.6 | 13.3 | 12.2 | 15.2 | 16.1 | 17.1 | 17.7 | 18.9 | 29.3 |
| 6-Aug | Z | 16.2 | 15.0 | 12.9 | 12.1 | 11.1 | 9.4 | 8.9 | 9.0 | 10.1 | C | C | C | C | 21.3 | 19.6 | 21.3 | 20.8 | 17.9 | 15.0 | 14.7 | 19.9 | 16.1 | 14.6 | 15.0 | 21.3 |
| 7-Aug | 6.0 | Z | 9.1 | 10.6 | 8.7 | 3.8 | 3.8 | 7.8 | 9.8 | 11.2 | 17.0 | 19.6 | 19.4 | 13.1 | 15.8 | 18.0 | 17.4 | 6.3 | 6.6 | 8.3 | 2.4 | 1.0 | 0.9 | 3.7 | 9.6 | 19.6 |
| 8-Aug | 1.5 | 0.9 | Z | 9.2 | 5.5 | 5.9 | 6.8 | 8.3 | 10.9 | 13.4 | 14.1 | 17.9 | 16.9 | 18.3 | 17.0 | 9.9 | 14.9 | 18.2 | 11.4 | 3.8 | 0.9 | 0.7 | 0.5 | 0.4 | 9.0 | 18.3 |
| 9-Aug | 0.5 | 0.5 | 0.4 | Z | 0.5 | 0.6 | 1.1 | 2.4 | 4.7 | 16.9 | 22.4 | 26.4 | 25.8 | 31.8 | 31.1 | 32.6 | 32.5 | 30.9 | 18.4 | 7.1 | 3.6 | 2.0 | 1.6 | 1.3 | 12.8 | 32.6 |
| 10-Aug | 0.7 | 0.5 | 0.4 | 0.4 | Z | 0.9 | 1.0 | 2.1 | 2.9 | 5.7 | 7.5 | 21.6 | 30.0 | 31.8 | 31.6 | 34.3 | 34.5 | 33.4 | 29.0 | 10.4 | 3.5 | 3.4 | 3.1 | 5.0 | 12.8 | 34.5 |
| 11-Aug | 7.3 | 4.1 | 3.2 | 1.6 | 2.6 | Z | 6.8 | 8.8 | 13.8 | 15.7 | 23.4 | 30.8 | 31.2 | 30.6 | 31.6 | 31.6 | 32.6 | 31.3 | 26.8 | 23.9 | 20.2 | 15.3 | 3.6 | 3.8 | 17.4 | 32.6 |
| 12-Aug | Z | 4.3 | 12.5 | 13.4 | 12.7 | 11.7 | 10.1 | 7.4 | 7.3 | 12.0 | 15.4 | 16.4 | 19.9 | 25.6 | 24.8 | 22.0 | 20.6 | 19.8 | 18.4 | 13.9 | 8.8 | 5.3 | 7.2 | 3.7 | 13.6 | 25.6 |
| 13-Aug | 7.7 | Z | 1.3 | 0.4 | 0.3 | 0.8 | 1.4 | 3.7 | 8.7 | 8.8 | 16.1 | 20.0 | 23.5 | 21.4 | 23.0 | 24.2 | 25.8 | 23.9 | 19.2 | 7.1 | 2.6 | 1.7 | 1.3 | 2.8 | 10.7 | 25.8 |
| 14-Aug | 6.6 | 7.4 | Z | 4.5 | 4.9 | 2.2 | 1.9 | 2.6 | 3.9 | 5.6 | 13.0 | 19.1 | 29.4 | 31.8 | 33.5 | 31.7 | 33.3 | 29.8 | 30.6 | 13.2 | 4.7 | 2.4 | 0.8 | 0.5 | 13.6 | 33.5 |
| 15-Aug | 0.4 | 0.6 | 0.5 | Z | 0.5 | 0.5 | 1.2 | 6.7 | 11.1 | 12.9 | 19.7 | 27.6 | 28.2 | 29.6 | 30.1 | 28.0 | 26.0 | 28.0 | 20.7 | 10.2 | 7.9 | 13.9 | 15.6 | 16.2 | 14.6 | 30.1 |
| 16-Aug | 17.8 | 17.1 | 17.9 | 12.1 | Z | 7.0 | 4.4 | 10.9 | 24.9 | 29.1 | 36.4 | 36.3 | 31.3 | 31.0 | 31.5 | 32.0 | 28.5 | 19.5 | 16.9 | 4.5 | 3.1 | 1.7 | 1.2 | 0.9 | 18.1 | 36.4 |
| 17-Aug | 0.4 | 0.3 | 0.4 | 1.3 | 4.6 | Z | 1.3 | 1.6 | 9.5 | 14.2 | 15.6 | 13.2 | 15.8 | 29.2 | 33.5 | 34.7 | 36.0 | 33.6 | 24.1 | 7.7 | 4.5 | 3.8 | 4.2 | 4.8 | 12.8 | 36.0 |
| 18-Aug | Z | 1.8 | 1.0 | 0.6 | 0.5 | 1.7 | 7.7 | 12.8 | 15.3 | 18.1 | 20.3 | 22.7 | 27.8 | 31.5 | 32.4 | 32.4 | 31.3 | 30.8 | 26.4 | 22.2 | 4.7 | 1.6 | 16.9 | 17.1 | 16.4 | 32.4 |
| 19-Aug | 13.8 | Z | 3.7 | 0.8 | 0.5 | 0.5 | 0.7 | 1.4 | 4.6 | 12.8 | 17.6 | 19.5 | 20.2 | 25.4 | 26.5 | 17.2 | 20.2 | 24.1 | 18.4 | 8.6 | 2.4 | 1.5 | 4.5 | 19.0 | 11.5 | 26.5 |
| 20-Aug | 7.0 | 5.7 | Z | 0.7 | 0.5 | 0.7 | 1.8 | 4.5 | 4.1 | 7.9 | 10.5 | 22.9 | 26.5 | 27.9 | 28.1 | 29.5 | 27.0 | 25.2 | 18.8 | 5.7 | 2.4 | 1.4 | 1.3 | 1.3 | 11.4 | 29.5 |
| 21-Aug | 0.5 | 0.4 | 0.3 | Z | 0.5 | 0.4 | 1.0 | 2.7 | 5.8 | 16.2 | 25.9 | 29.4 | 29.8 | 30.1 | 29.4 | 30.0 | 29.6 | 27.0 | 27.7 | 23.0 | 12.1 | 12.6 | 9.0 | 6.0 | 15.2 | 30.1 |
| 22-Aug | 9.0 | 9.2 | 4.8 | 2.4 | Z | 1.7 | 3.3 | 5.7 | 9.1 | 15.6 | 21.0 | 22.1 | 26.4 | 29.4 | 34.8 | 39.0 | 39.6 | 38.7 | 33.6 | 10.6 | 6.5 | 13.8 | 13.7 | 13.9 | 17.6 | 39.6 |
| 23-Aug | 8.0 | 7.9 | 3.0 | 4.9 | 5.2 | Z | 4.6 | 3.9 | 9.4 | 11.0 | 13.2 | 15.5 | 22.7 | 24.0 | 20.0 | 22.6 | 21.1 | 16.8 | 17.2 | 14.7 | 7.3 | 4.5 | 6.9 | 8.9 | 11.9 | 24.0 |
| 24-Aug | Z | 1.8 | 1.4 | 1.1 | 4.2 | 1.9 | 2.0 | 10.2 | 17.3 | 23.3 | 28.1 | 29.4 | 30.7 | 31.8 | 31.6 | 31.3 | 28.9 | 27.1 | 18.8 | 6.5 | 3.9 | 3.3 | 2.4 | 0.6 | 14.7 | 31.8 |
| 25-Aug | 0.5 | Z | 1.4 | 1.2 | 3.2 | 2.0 | 2.8 | 4.2 | 5.1 | 9.6 | 14.5 | 22.4 | 30.9 | 39.2 | 46.3 | PF | PF | PF | PF | PF | PF | 1.7 | 0.8 | 0.5 | -- | 46.3 |
| 26-Aug | 0.5 | 0.4 | Z | 0.6 | 0.4 | 0.5 | 1.1 | 6.3 | 14.5 | 20.8 | 28.3 | 33.9 | 34.0 | 38.0 | 38.8 | 38.4 | 39.5 | 39.2 | 35.6 | 14.4 | 9.8 | 11.1 | 16.6 | 5.9 | 18.6 | 39.5 |
| 27-Aug | 10.9 | 9.2 | 5.3 | 2.1 | Z | 1.0 | 2.3 | 6.0 | 13.5 | 24.0 | 31.0 | 35.5 | 33.1 | 36.6 | 36.9 | 29.5 | 27.1 | 28.9 | 28.3 | 30.2 | 31.9 | 33.3 | 30.6 | 27.5 | 22.4 | 36.9 |
| 28-Aug | 14.0 | 8.2 | 10.0 | 22.0 | Z | 21.5 | 19.7 | 20.9 | 26.1 | 26.2 | 30.1 | 38.5 | 36.2 | 37.0 | 34.1 | 27.8 | 24.7 | 19.7 | 9.3 | 7.2 | 6.4 | 8.2 | 9.8 | 9.8 | 20.3 | 38.5 |
| 29-Aug | 9.5 | 8.7 | 12.2 | 12.7 | 12.1 | Z | 11.3 | 11.5 | 11.7 | 14.3 | 18.0 | 18.3 | 18.2 | 19.4 | 21.0 | 21.9 | 23.1 | 24.1 | 21.1 | 8.0 | 4.6 | 2.7 | 3.0 | 1.8 | 13.4 | 24.1 |
| 30-Aug | Z | 1.2 | 1.3 | 0.9 | 1.0 | 0.8 | 1.2 | 1.7 | 4.9 | 13.4 | 20.6 | 24.2 | 24.4 | 38.4 | 41.9 | 43.8 | 42.1 | 36.7 | 14.7 | 9.0 | 4.4 | 4.0 | 6.2 | 1.6 | 14.7 | 43.8 |
| 31-Aug | 1.7 | Z | 0.9 | 3.5 | 4.9 | 5.2 | 3.2 | 6.2 | 12.5 | 15.3 | 22.1 | 25.2 | 24.8 | 23.2 | 23.4 | 23.3 | 24.7 | 24.0 | 21.0 | 7.4 | 4.4 | 2.7 | 1.6 | 0.7 | 12.2 | 25.2 |
| | 7.0 | 6.5 | 5.3 | 5.6 | 5.4 | 4.5 | 5.3 | 7.3 | 10.7 | 14.7 | 19.5 | 23.7 | 25.6 | 28.1 | 28.8 | 27.7 | 27.4 | 25.2 | 20.6 | 12.2 | 8.3 | 8.3 | 8.6 | 8.3 | Diurnal Average | |
| | 19.7 | 20.6 | 18.1 | 22.0 | 18.4 | 21.5 | 19.7 | 20.9 | 26.1 | 29.1 | 36.4 | 38.5 | 36.2 | 39.2 | 46.3 | 43.8 | 42.1 | 39.2 | 35.6 | 30.2 | 31.9 | 33.3 | 30.6 | 30.6 | Diurnal Maximum | |

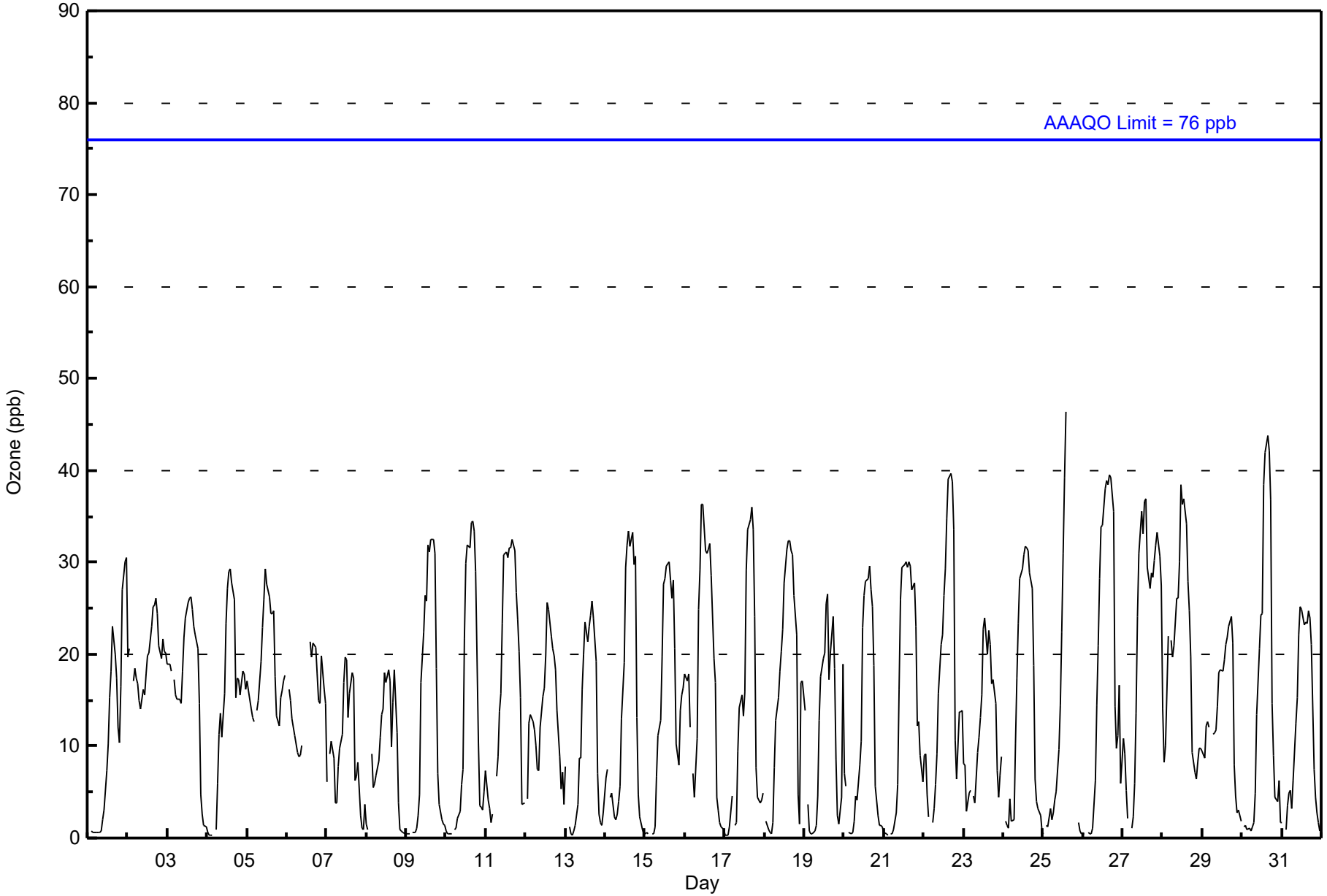
Z - zerospan C - Calibration PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Fort McKay South - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 485 | 68.99 | 68.99 |
| 21 - 50 | 218 | 31.01 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 703

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Fort McKay South - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 47 | 26 | 5 | 2 | 1 | 2 | 3 | 24 | 49 | 36 | 52 | 60 | 45 | 55 | 46 | 31 | 484 |
| 21 - 50 | 31 | 41 | 2 | 2 | 2 | 7 | 13 | 29 | 20 | 4 | 24 | 10 | 4 | 3 | 11 | 15 | 218 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 78 | 67 | 7 | 4 | 3 | 9 | 16 | 53 | 69 | 40 | 76 | 70 | 49 | 58 | 57 | 46 | 702 |

Total Number of Valid Hours: 702

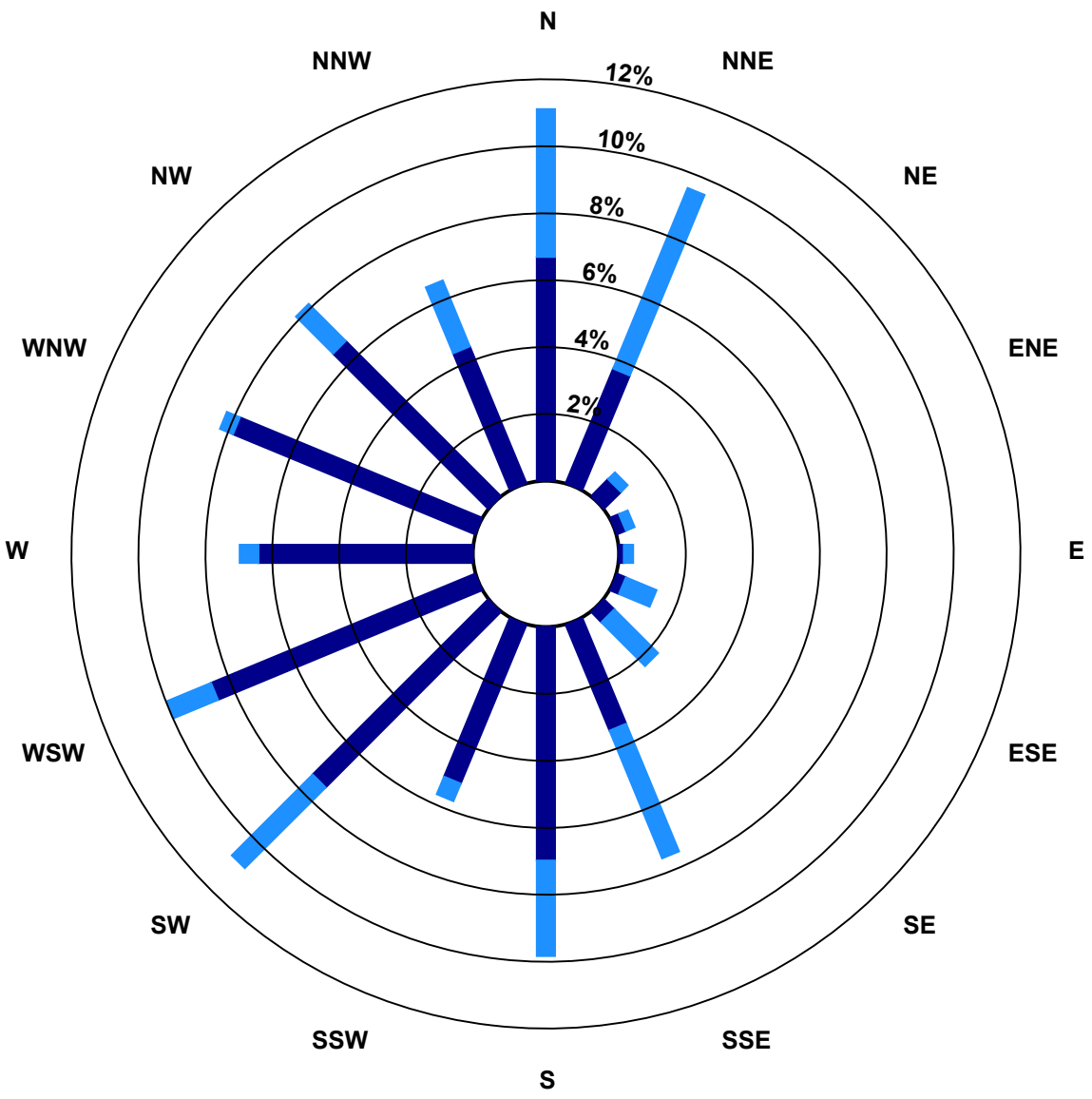
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ozone ($O_3$) - ppb

Fort McKay South




Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

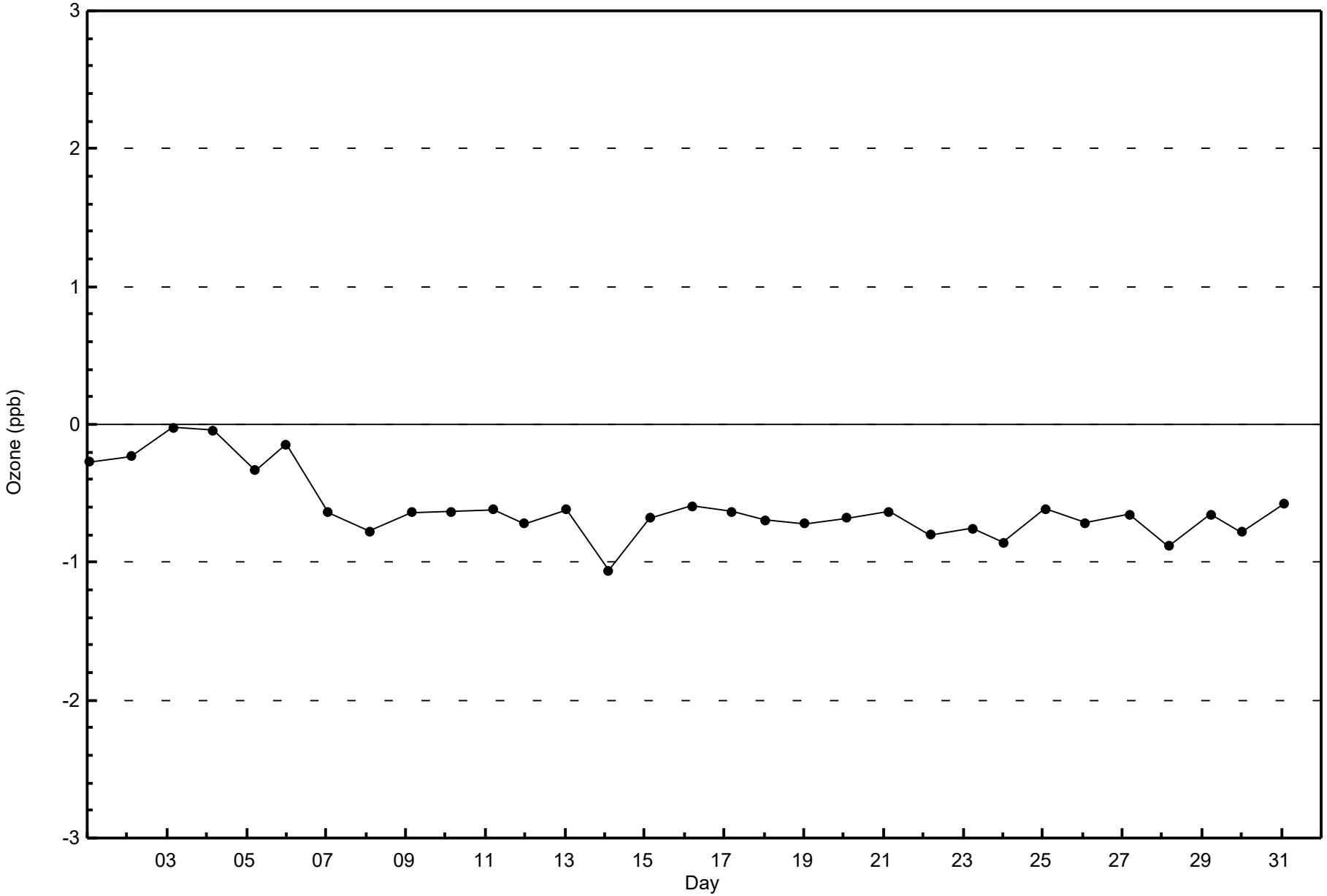
Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Fort McKay South - August 2026**

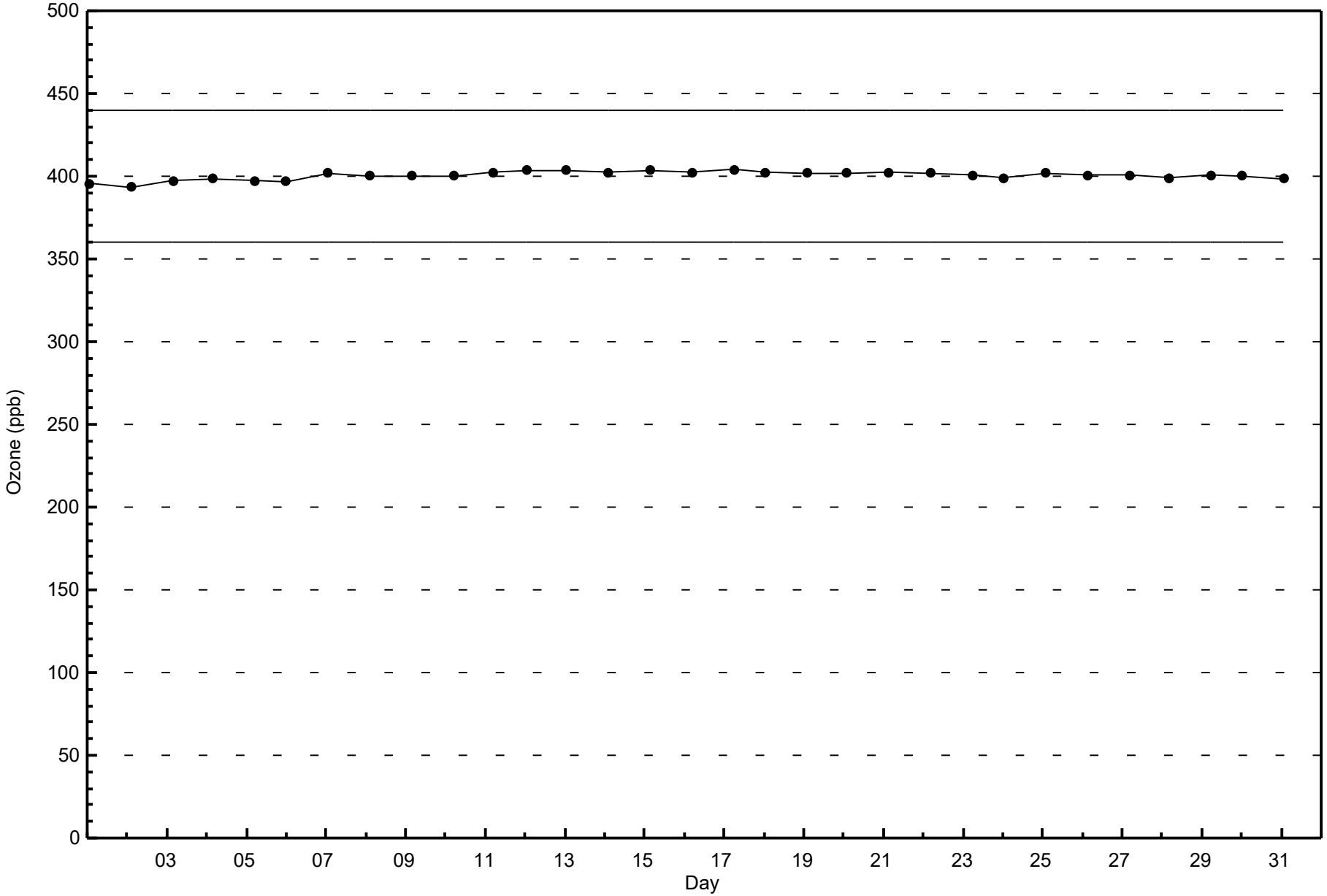


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Fort McKay South - August 2026

Maximum Value: 36.1 ppb on Aug 10 11:00

Maximum Daily Average: 5.4 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 1 21:00

Minimum Daily Average: 0.0 ppb on Aug 5

Maximum Diurnal Average: 7.0 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 1.83 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.2 $Q_3$ = 1.3 $P_{90}$ = 5.5 $P_{99}$ = 20.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.3 | 0.3 | 0.5 | Z | 5.2 | 5.3 | 18.7 | 16.8 | 13.5 | 11.9 | 14.4 | 7.8 | 11.2 | 5.9 | 5.5 | 2.3 | 2.1 | 0.9 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 5.4 | 18.7 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 3-Aug | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 3.9 | 1.2 | 0.9 | 0.2 | 0.2 | 0.1 | 0.4 | 1.6 | 1.9 | 1.4 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 3.9 |
| 4-Aug | Z | 2.3 | 8.0 | 13.4 | 11.9 | 11.5 | 4.7 | 2.9 | 4.5 | 8.7 | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 3.2 | 13.4 |
| 5-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 6-Aug | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 1.4 | M | M | 0.3 | 0.6 | 0.3 | 0.7 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.4 |
| 7-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 1.3 | 3.5 | 1.9 | 0.6 | 1.6 | 4.9 | 2.0 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.8 | 4.9 |
| 8-Aug | 0.1 | 0.2 | 0.2 | 0.1 | Z | 0.1 | 0.2 | 3.5 | 4.1 | 2.2 | 4.3 | 1.0 | 1.4 | 1.5 | 0.7 | 0.9 | 0.6 | 0.8 | 0.8 | 0.3 | 0.1 | 0.1 | 0.2 | 1.4 | 1.1 | 4.3 |
| 9-Aug | 3.4 | 5.0 | 7.7 | 11.1 | 10.8 | Z | 4.6 | 6.5 | 20.5 | 4.2 | 1.3 | 0.5 | 0.8 | 0.3 | 1.3 | 1.9 | 1.8 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 3.6 | 20.5 |
| 10-Aug | Z | 0.3 | 0.5 | 1.6 | 2.1 | 2.2 | 3.0 | 5.5 | 8.9 | 14.0 | 36.1 | 9.0 | 1.2 | 0.7 | 0.3 | 0.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 3.8 | 36.1 |
| 11-Aug | 0.1 | Z | 0.3 | 0.4 | 0.2 | 0.3 | 0.2 | 0.3 | 1.7 | 9.1 | 4.4 | 0.9 | 0.6 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.9 | 9.1 |
| 12-Aug | 0.1 | 0.2 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 0.6 | 0.5 | 1.2 | 0.9 | 0.4 | 0.5 | 0.7 | 0.5 | 0.8 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 1.2 |
| 13-Aug | 0.2 | 0.2 | 1.6 | Z | 13.1 | 13.1 | 12.0 | 13.0 | 8.8 | 11.5 | 2.3 | 1.1 | 0.9 | 1.8 | 1.1 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 3.6 | 13.1 |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.4 | 3.0 | 10.8 | 19.9 | C | C | C | C | C | 1.0 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 | 1.1 | 2.1 | 19.9 |
| 15-Aug | 4.1 | 1.7 | 0.3 | 0.3 | 3.9 | Z | 9.2 | 7.9 | 7.5 | 7.2 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 2.0 | 9.2 |
| 16-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.5 | 2.6 | 0.4 | 0.8 | 0.3 | 0.2 | 0.9 | 0.4 | 0.2 | 0.1 | 0.0 | 1.2 | 1.3 | 0.5 | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 | 2.6 |
| 17-Aug | 2.0 | Z | 13.9 | 6.1 | 0.6 | 2.1 | 14.7 | 34.2 | 8.4 | 3.3 | 0.1 | 0.2 | 1.0 | 0.3 | 0.2 | 1.4 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 3.9 | 34.2 |
| 18-Aug | 0.1 | 0.2 | Z | 1.1 | 4.5 | 5.6 | 3.1 | 3.9 | 2.5 | 1.7 | 0.6 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 3.2 | 0.1 | 0.0 | 1.2 | 5.6 |
| 19-Aug | 0.0 | 0.1 | 0.1 | Z | 17.7 | 16.6 | 17.2 | 15.4 | 5.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 3.2 | 17.7 |
| 20-Aug | 0.0 | 0.1 | 0.1 | 0.2 | Z | 0.5 | 1.6 | 3.3 | 11.0 | 12.5 | 31.6 | 2.4 | 1.9 | 1.4 | 1.1 | 0.6 | 1.2 | 0.9 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 3.1 | 31.6 |
| 21-Aug | 0.2 | 3.1 | 4.3 | 3.8 | 4.9 | Z | 12.1 | 20.7 | 16.8 | 6.2 | 3.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 3.3 | 20.7 |
| 22-Aug | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 1.3 | 6.9 | 10.2 | 4.5 | 2.1 | 3.7 | 2.2 | 2.7 | 1.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 10.2 |
| 23-Aug | 0.1 | Z | 1.8 | 0.3 | 0.2 | 0.4 | 1.8 | 6.3 | 4.3 | 2.8 | 0.9 | 1.4 | 0.9 | 0.9 | 0.8 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 6.3 |
| 24-Aug | 0.1 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.8 | 0.4 | 0.5 | 0.2 | 0.0 | 0.0 | 0.1 | 0.2 | 1.5 | 0.3 | 1.5 |
| 25-Aug | 1.2 | 1.2 | 0.7 | Z | 0.2 | 0.3 | 0.9 | 10.0 | 25.0 | 15.7 | 9.6 | 4.5 | 2.4 | 1.3 | 0.5 | PF | PF | PF | PF | PF | PF | 0.0 | 0.2 | 0.4 | -- | 25.0 |
| 26-Aug | 0.7 | 1.4 | 1.5 | 1.2 | Z | 4.1 | 6.4 | 8.3 | 4.2 | 2.5 | 2.0 | 1.4 | 2.1 | 0.6 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.6 | 8.3 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | Z | 7.8 | 6.9 | 4.1 | 1.6 | 0.3 | 1.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 | 7.8 |
| 28-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.5 | 0.4 | 0.4 | 0.6 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 29-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 1.1 | 0.6 | 0.3 | 0.3 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 1.1 |
| 30-Aug | 0.3 | 0.4 | Z | 0.4 | 0.3 | 0.4 | 1.4 | 26.5 | 20.8 | 10.3 | 3.3 | 4.5 | 7.6 | 1.7 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 3.4 | 26.5 |
| 31-Aug | 1.4 | 1.3 | 2.2 | Z | 0.1 | 0.3 | 2.0 | 2.3 | 1.4 | 2.2 | 1.2 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.3 |
| | 0.6 | 0.7 | 1.7 | 1.7 | 3.0 | 2.4 | 4.0 | 7.0 | 6.9 | 4.6 | 4.4 | 1.5 | 1.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Diurnal Average | |
| | 4.1 | 5.0 | 13.9 | 13.4 | 17.7 | 16.6 | 18.7 | 34.2 | 25.0 | 15.7 | 36.1 | 9.0 | 11.2 | 5.9 | 5.5 | 2.3 | 2.1 | 4.9 | 2.0 | 0.5 | 1.0 | 3.2 | 0.4 | 1.5 | Diurnal Maximum | |

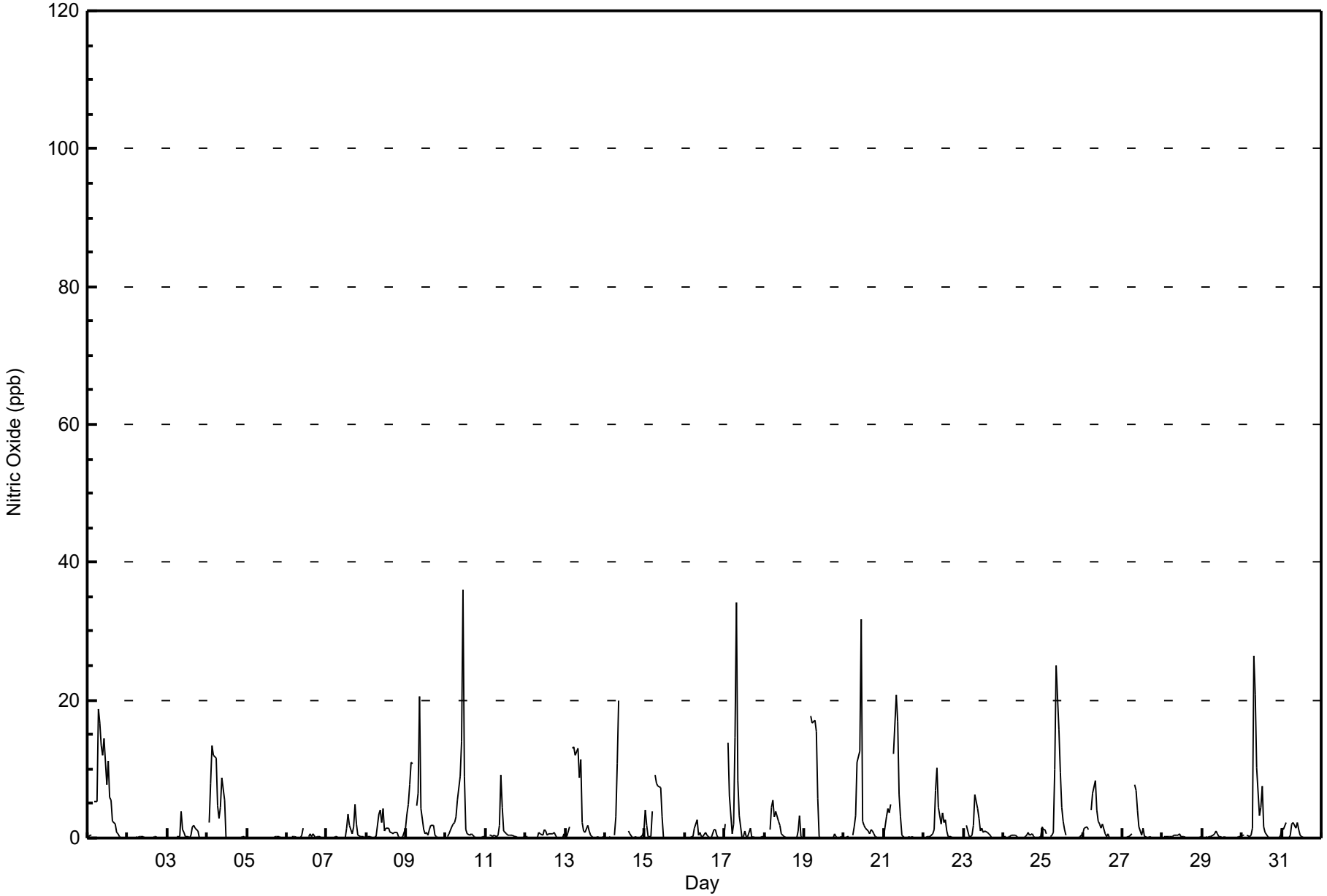
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Fort McKay South - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 693 | 99.00 | 99.00 |
| 21 - 40 | 7 | 1.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 75 | 62 | 7 | 4 | 3 | 9 | 16 | 49 | 68 | 42 | 76 | 72 | 49 | 56 | 56 | 48 | 692 |
| 21 - 40 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 75 | 65 | 7 | 4 | 3 | 9 | 16 | 52 | 69 | 42 | 76 | 72 | 49 | 56 | 56 | 48 | 699 |

Total Number of Valid Hours: 699

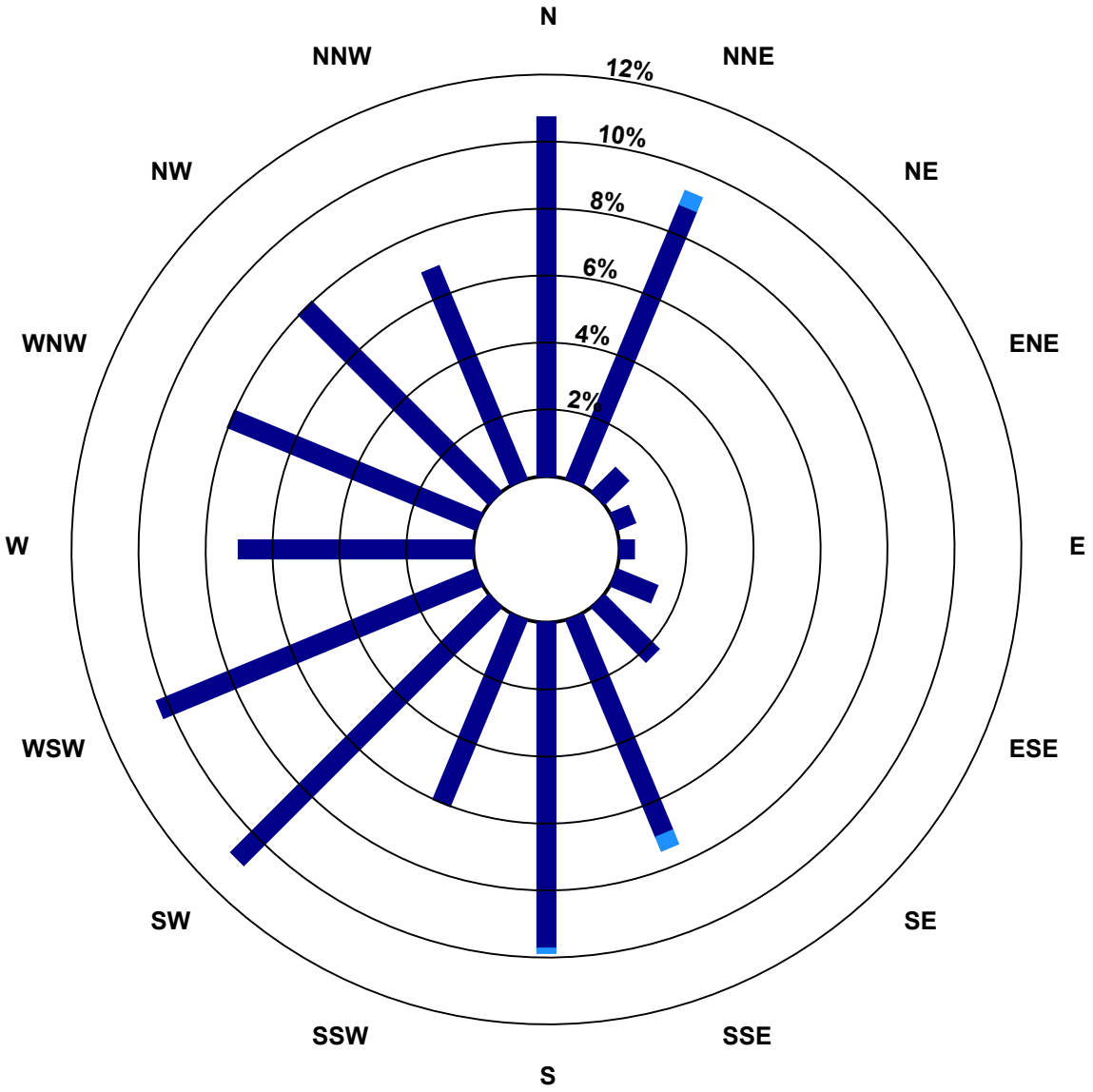
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Fort McKay South




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

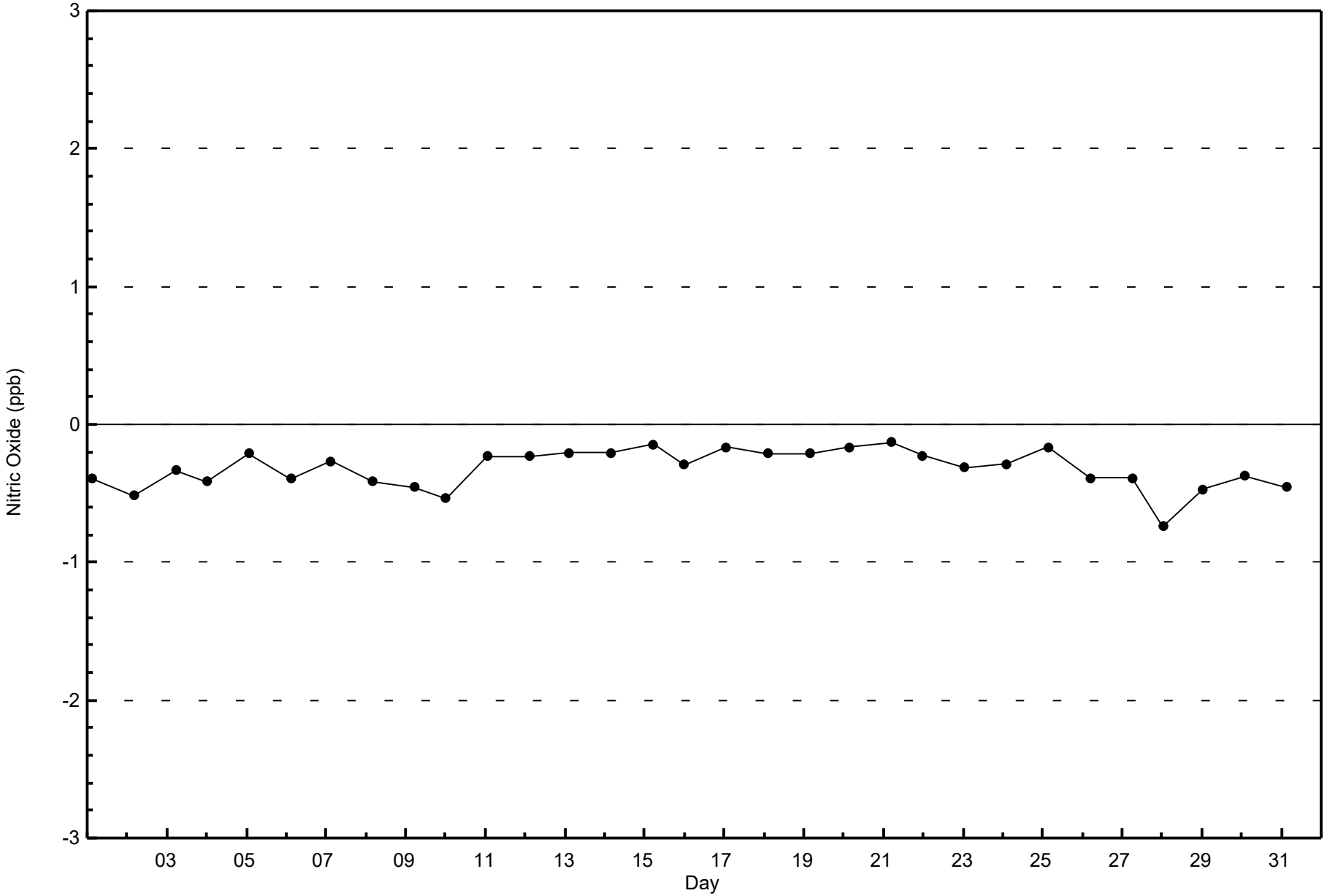
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Fort McKay South - August 2026**

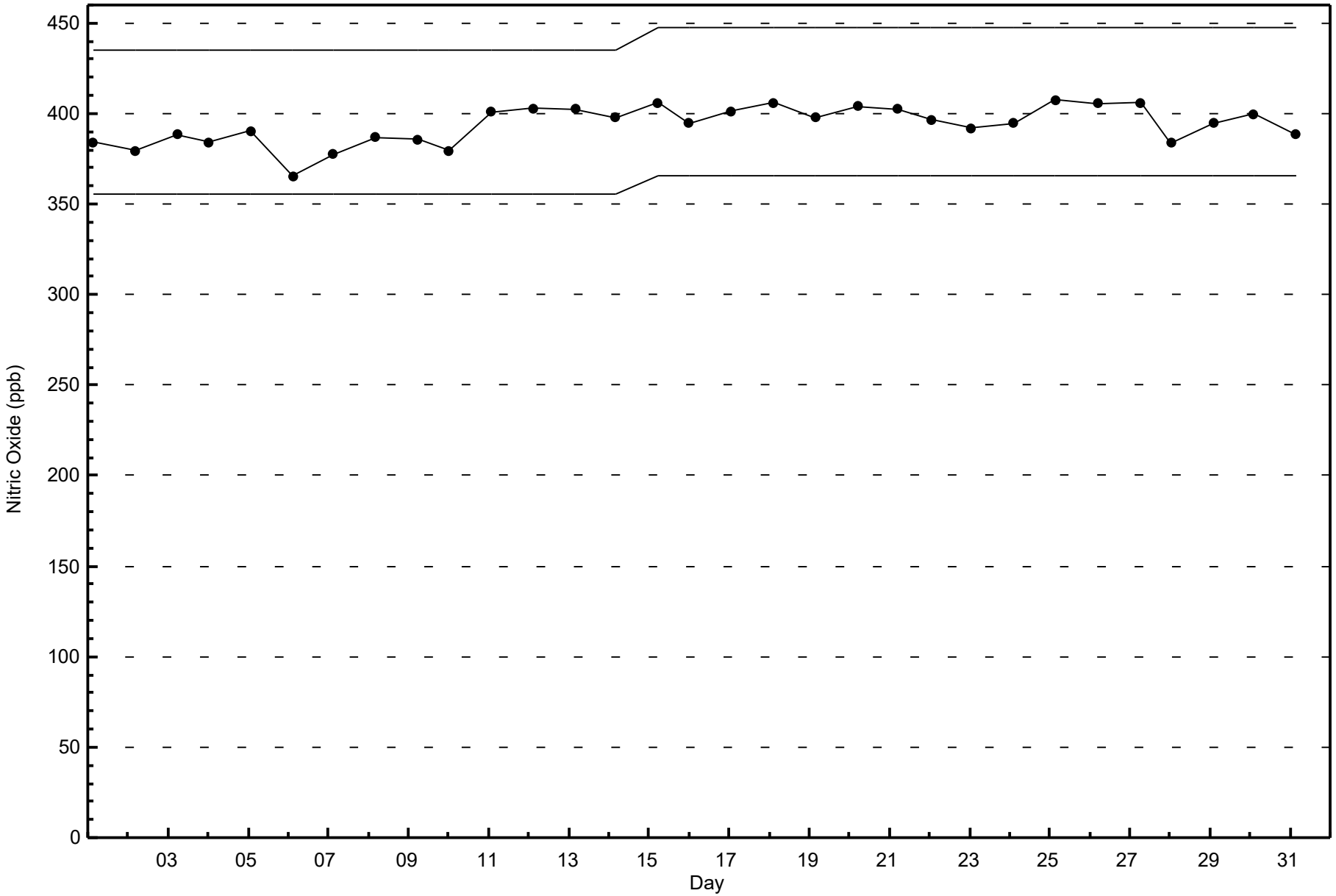


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Fort McKay South - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 20.7 ppb on Aug 18 22:00
Maximum Daily Average: 5.7 ppb on Aug 30

Minimum Value: 0.0 ppb on Aug 5 11:00
Minimum Daily Average: 0.5 ppb on Aug 6
Maximum Diurnal Average: 5.4 ppb at hour 9
Minimum Diurnal Average: 2.3 ppb at hour 6
Monthly Average: 3.24 ppb
Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.3 $Q_1$ = 1.0 Median = 2.3 $Q_3$ = 4.6 $P_{90}$ = 7.5 $P_{99}$ = 13.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.6 | 0.6 | 0.4 | Z | 1.1 | 0.4 | 3.4 | 2.0 | 3.2 | 6.4 | 8.3 | 6.9 | 10.8 | 11.2 | 11.8 | 8.7 | 8.3 | 7.3 | 8.6 | 7.4 | 4.6 | 3.3 | 4.7 | 3.9 | 5.4 | 11.8 |
| 2-Aug | 3.0 | 1.9 | 0.7 | 4.6 | Z | 0.7 | 0.5 | 2.3 | 1.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.8 | 0.8 | 0.3 | 1.6 | 2.7 | 0.6 | 0.8 | 0.6 | 1.1 | 4.6 |
| 3-Aug | 1.4 | 0.5 | 0.8 | 0.5 | 0.1 | Z | 0.3 | 0.3 | 4.6 | 2.6 | 2.1 | 0.8 | 0.6 | 0.6 | 1.5 | 4.0 | 4.8 | 4.8 | 4.9 | 2.3 | 1.3 | 0.9 | 1.5 | 1.1 | 1.8 | 4.9 |
| 4-Aug | Z | 2.6 | 2.6 | 2.8 | 2.6 | 4.9 | 5.4 | 3.8 | 6.0 | 9.1 | 6.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.4 | 0.9 | 0.3 | 0.2 | 0.4 | 1.4 | 0.4 | 0.4 | 2.3 | 9.1 |
| 5-Aug | 0.4 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 5.3 | 6.5 | 6.7 | 1.6 | 0.1 | 0.1 | 0.1 | 1.0 | 6.7 |
| 6-Aug | 0.2 | 0.1 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 2.0 | M | M | 0.7 | 1.5 | 0.6 | 1.5 | 0.1 | 0.5 | 1.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 2.0 |
| 7-Aug | 0.2 | 0.1 | 0.1 | Z | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 3.1 | 8.2 | 5.4 | 2.7 | 4.6 | 12.4 | 8.5 | 7.0 | 3.6 | 1.7 | 1.4 | 3.1 | 2.8 | 12.4 |
| 8-Aug | 1.9 | 0.9 | 0.7 | 0.5 | Z | 0.4 | 0.2 | 2.4 | 3.1 | 2.8 | 4.7 | 1.9 | 3.1 | 3.3 | 3.1 | 2.3 | 1.9 | 2.7 | 4.0 | 1.8 | 0.8 | 0.7 | 1.4 | 2.4 | 2.0 | 4.7 |
| 9-Aug | 2.2 | 1.4 | 1.6 | 1.7 | 2.6 | Z | 2.3 | 3.5 | 11.0 | 4.5 | 2.5 | 2.4 | 3.2 | 2.5 | 5.7 | 8.2 | 9.2 | 6.1 | 4.0 | 2.5 | 1.6 | 1.0 | 1.2 | 1.3 | 3.6 | 11.0 |
| 10-Aug | Z | 1.5 | 1.9 | 2.3 | 1.4 | 1.3 | 1.4 | 3.7 | 4.9 | 8.2 | 19.5 | 10.8 | 3.7 | 3.0 | 2.6 | 3.0 | 2.2 | 1.8 | 2.0 | 1.3 | 1.0 | 1.2 | 3.2 | 4.5 | 3.8 | 19.5 |
| 11-Aug | 2.9 | Z | 7.7 | 5.7 | 2.3 | 3.1 | 0.8 | 0.7 | 2.5 | 11.1 | 7.0 | 2.8 | 2.2 | 2.0 | 2.1 | 2.2 | 2.1 | 2.6 | 3.4 | 3.1 | 4.1 | 4.4 | 3.0 | 4.8 | 3.6 | 11.1 |
| 12-Aug | 1.4 | 4.4 | Z | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 1.7 | 1.3 | 0.9 | 2.7 | 1.9 | 1.0 | 1.4 | 2.1 | 1.7 | 3.0 | 2.5 | 1.8 | 1.4 | 4.0 | 4.1 | 8.1 | 2.0 | 8.1 |
| 13-Aug | 5.3 | 6.1 | 9.4 | Z | 13.4 | 9.0 | 5.0 | 8.3 | 7.4 | 9.9 | 3.4 | 2.0 | 1.9 | 3.5 | 2.4 | 1.3 | 1.4 | 1.3 | 1.7 | 2.1 | 1.5 | 1.0 | 0.5 | 2.3 | 4.4 | 13.4 |
| 14-Aug | 2.9 | 1.3 | 1.0 | 0.8 | Z | 2.3 | 4.4 | 8.0 | 13.2 | C | C | C | C | C | 3.8 | 3.2 | 0.7 | 1.7 | 4.2 | 2.3 | 1.4 | 1.5 | 4.0 | 4.4 | 3.4 | 13.2 |
| 15-Aug | 3.5 | 2.3 | 1.4 | 0.9 | 0.9 | Z | 2.6 | 6.0 | 7.0 | 7.0 | 4.4 | 0.5 | 0.5 | 0.6 | 0.9 | 0.2 | 0.1 | 0.2 | 1.6 | 2.6 | 7.9 | 5.3 | 4.2 | 4.4 | 2.8 | 7.9 |
| 16-Aug | Z | 2.5 | 1.3 | 0.5 | 0.4 | 1.4 | 6.6 | 7.9 | 3.9 | 4.3 | 1.0 | 1.0 | 2.4 | 1.8 | 1.6 | 1.6 | 0.9 | 7.5 | 7.2 | 3.1 | 2.1 | 1.4 | 1.0 | 0.7 | 2.7 | 7.9 |
| 17-Aug | 1.6 | Z | 2.5 | 2.6 | 1.8 | 2.8 | 3.7 | 7.1 | 5.4 | 3.6 | 0.4 | 1.0 | 2.3 | 1.6 | 1.6 | 5.9 | 1.6 | 2.9 | 2.2 | 1.1 | 1.1 | 2.7 | 4.8 | 4.2 | 2.8 | 7.1 |
| 18-Aug | 7.9 | 4.7 | Z | 5.5 | 7.5 | 7.5 | 5.6 | 6.5 | 4.3 | 3.2 | 1.9 | 1.8 | 1.4 | 1.1 | 0.8 | 0.5 | 0.9 | 0.3 | 1.7 | 2.4 | 11.3 | 20.7 | 5.3 | 1.2 | 4.5 | 20.7 |
| 19-Aug | 1.4 | 6.7 | 5.7 | Z | 8.4 | 4.9 | 4.6 | 6.9 | 5.3 | 0.5 | 0.3 | 0.1 | 0.2 | 1.1 | 1.4 | 1.3 | 0.7 | 1.8 | 6.7 | 5.1 | 3.5 | 2.8 | 3.9 | 0.8 | 3.2 | 8.4 |
| 20-Aug | 0.4 | 4.9 | 1.6 | 1.6 | Z | 0.9 | 1.5 | 2.8 | 5.3 | 8.6 | 19.7 | 4.8 | 4.6 | 4.4 | 4.2 | 3.3 | 5.0 | 5.1 | 5.3 | 3.1 | 1.9 | 1.4 | 1.4 | 1.3 | 4.0 | 19.7 |
| 21-Aug | 1.1 | 3.6 | 2.7 | 3.7 | 2.4 | Z | 2.6 | 6.9 | 8.8 | 6.7 | 7.8 | 2.0 | 1.1 | 0.7 | 0.5 | 2.0 | 1.3 | 2.7 | 1.9 | 3.0 | 9.0 | 9.0 | 6.7 | 7.5 | 4.1 | 9.0 |
| 22-Aug | Z | 4.9 | 3.7 | 2.5 | 2.1 | 2.3 | 2.1 | 8.1 | 12.2 | 9.2 | 6.2 | 8.7 | 6.3 | 7.5 | 5.2 | 3.1 | 3.3 | 2.3 | 3.7 | 2.7 | 4.6 | 5.4 | 4.1 | 3.3 | 4.9 | 12.2 |
| 23-Aug | 7.9 | Z | 10.0 | 5.8 | 3.5 | 4.5 | 4.1 | 7.3 | 8.5 | 6.7 | 3.8 | 3.4 | 4.1 | 5.4 | 5.8 | 5.2 | 5.3 | 2.7 | 0.4 | 1.7 | 1.7 | 1.0 | 0.5 | 0.3 | 4.3 | 10.0 |
| 24-Aug | 0.3 | 0.3 | Z | 1.5 | 2.7 | 1.3 | 0.4 | 0.8 | 0.3 | 0.1 | 0.2 | 0.1 | 0.6 | 1.1 | 2.0 | 3.9 | 2.4 | 3.8 | 3.8 | 2.8 | 2.4 | 2.1 | 3.1 | 5.7 | 1.8 | 5.7 |
| 25-Aug | 4.4 | 3.9 | 4.0 | Z | 4.1 | 1.5 | 1.1 | 6.5 | 13.1 | 12.8 | 10.6 | 8.3 | 7.5 | 7.0 | 5.3 | PF | PF | PF | PF | PF | PF | 2.8 | 3.1 | 3.4 | -- | 13.1 |
| 26-Aug | 2.7 | 2.5 | 1.9 | 1.6 | Z | 1.3 | 2.3 | 7.2 | 6.3 | 5.5 | 6.5 | 5.7 | 6.7 | 4.2 | 3.5 | 4.0 | 2.0 | 1.5 | 2.2 | 2.1 | 13.6 | 15.6 | 8.8 | 7.0 | 5.0 | 15.6 |
| 27-Aug | 7.1 | 4.7 | 2.5 | 2.5 | 5.8 | 2.7 | Z | 10.1 | 11.7 | 10.0 | 5.9 | 3.1 | 7.3 | 2.5 | 4.3 | 4.9 | 6.0 | 2.4 | 0.8 | 0.6 | 0.7 | 1.1 | 4.1 | 3.8 | 4.5 | 11.7 |
| 28-Aug | Z | 6.6 | 5.4 | 4.8 | 3.2 | 0.9 | 4.1 | 5.0 | 2.3 | 1.4 | 2.0 | 0.9 | 0.9 | 1.2 | 1.2 | 1.2 | 1.5 | 1.4 | 0.9 | 0.8 | 2.0 | 1.1 | 1.0 | 1.8 | 2.2 | 6.6 |
| 29-Aug | 2.2 | Z | 1.5 | 1.7 | 3.3 | 3.4 | 2.4 | 1.2 | 2.4 | 1.1 | 0.7 | 0.7 | 0.5 | 0.8 | 0.6 | 0.8 | 0.7 | 0.9 | 2.0 | 1.3 | 2.0 | 3.6 | 4.5 | 7.3 | 2.0 | 7.3 |
| 30-Aug | 5.0 | 4.5 | Z | 3.6 | 2.8 | 1.3 | 1.4 | 7.9 | 10.5 | 7.4 | 6.2 | 9.6 | 15.3 | 7.7 | 5.7 | 3.9 | 3.0 | 3.2 | 2.6 | 2.8 | 3.0 | 4.1 | 7.0 | 12.4 | 5.7 | 15.3 |
| 31-Aug | 14.0 | 12.7 | 9.9 | Z | 1.5 | 1.1 | 3.5 | 2.8 | 2.0 | 3.0 | 2.6 | 1.9 | 1.4 | 1.0 | 0.4 | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.5 | 2.6 | 14.0 |
| | 3.2 | 3.3 | 3.1 | 2.4 | 2.9 | 2.3 | 2.4 | 4.4 | 5.4 | 4.9 | 4.6 | 2.9 | 3.2 | 2.9 | 2.8 | 2.7 | 2.5 | 3.0 | 3.1 | 2.6 | 3.1 | 3.3 | 2.9 | 3.3 | Diurnal Average | |
| | 14.0 | 12.7 | 10.0 | 5.8 | 13.4 | 9.0 | 6.6 | 10.1 | 13.2 | 12.8 | 19.7 | 10.8 | 15.3 | 11.2 | 11.8 | 8.7 | 9.2 | 12.4 | 8.6 | 7.4 | 13.6 | 20.7 | 8.8 | 12.4 | Diurnal Maximum | |

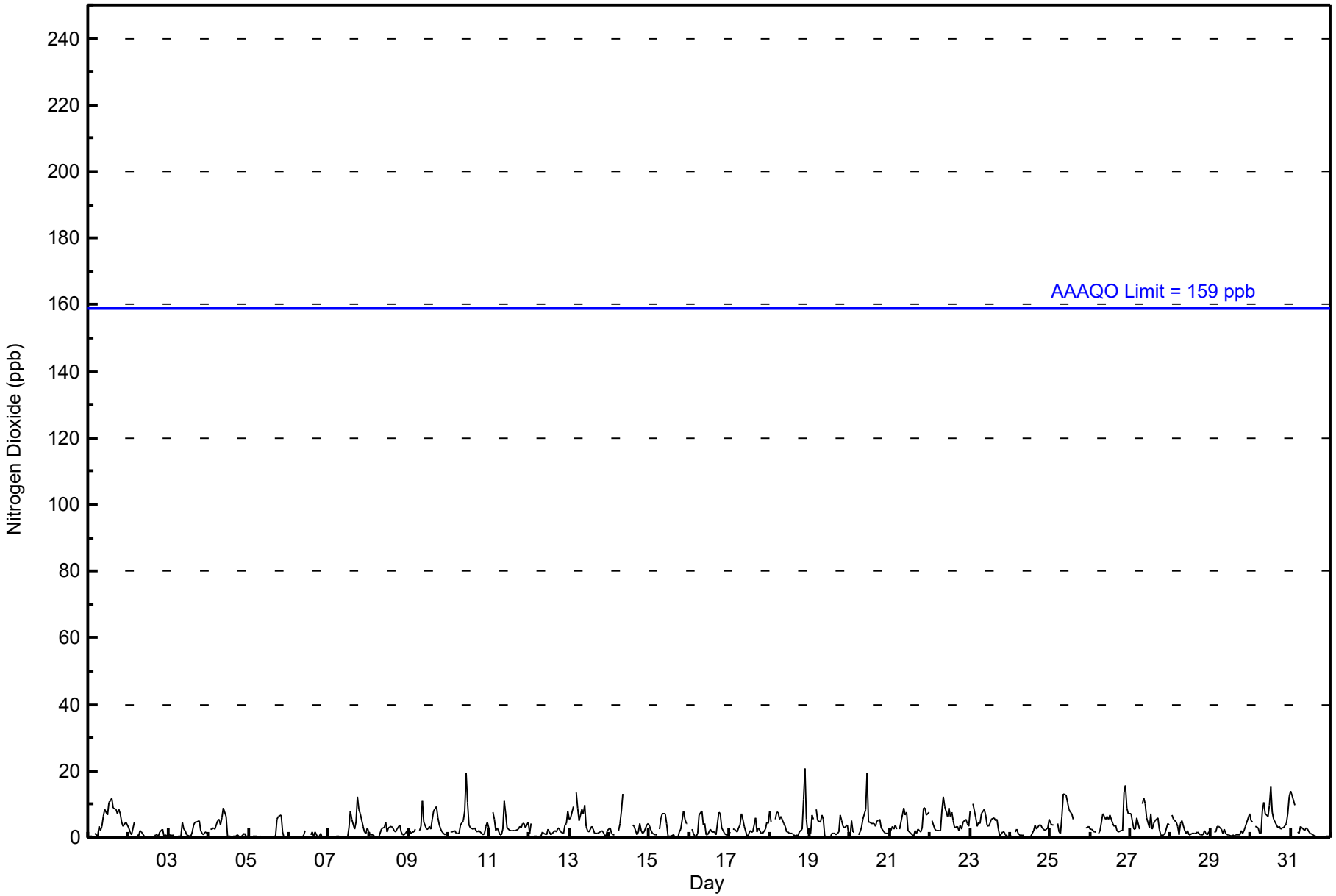
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay South - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Fort McKay South - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 699 | 99.86 | 99.86 |
| 21 - 40 | 1 | 0.14 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay South - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 75 | 65 | 7 | 4 | 3 | 9 | 16 | 52 | 69 | 42 | 76 | 71 | 49 | 56 | 56 | 48 | 698 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 75 | 65 | 7 | 4 | 3 | 9 | 16 | 52 | 69 | 42 | 76 | 72 | 49 | 56 | 56 | 48 | 699 |

Total Number of Valid Hours: 699

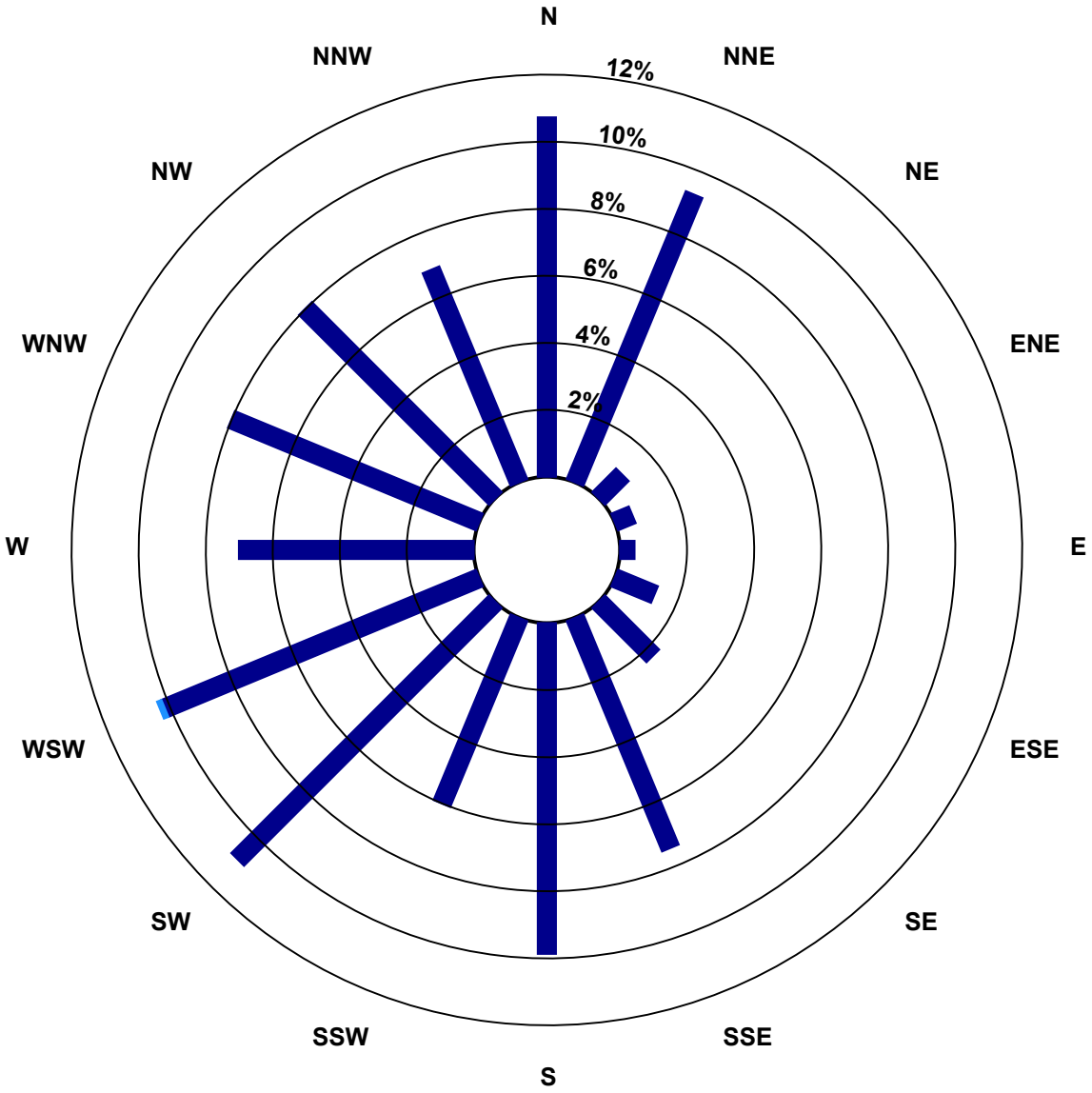
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Fort McKay South




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

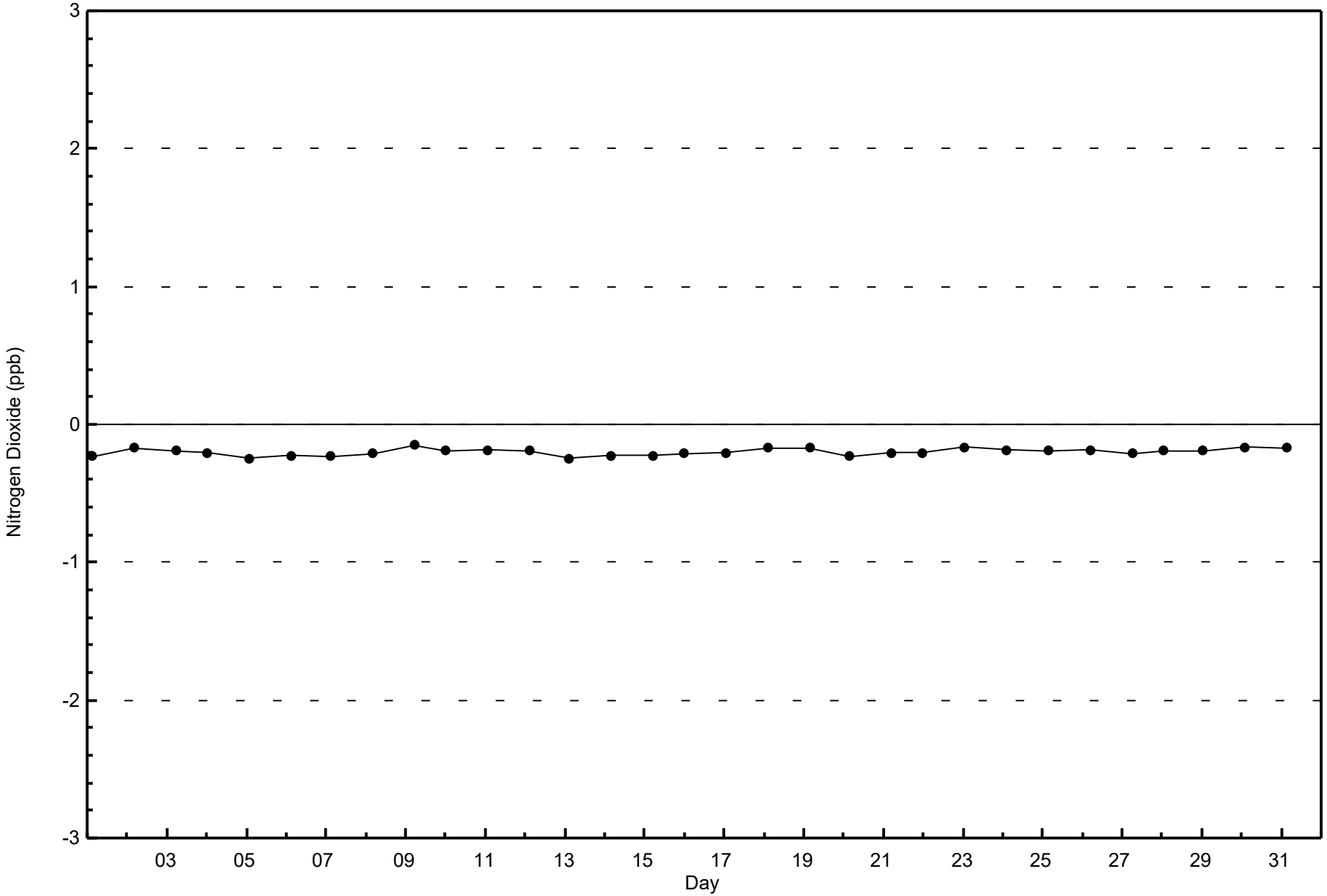
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay South - August 2026**

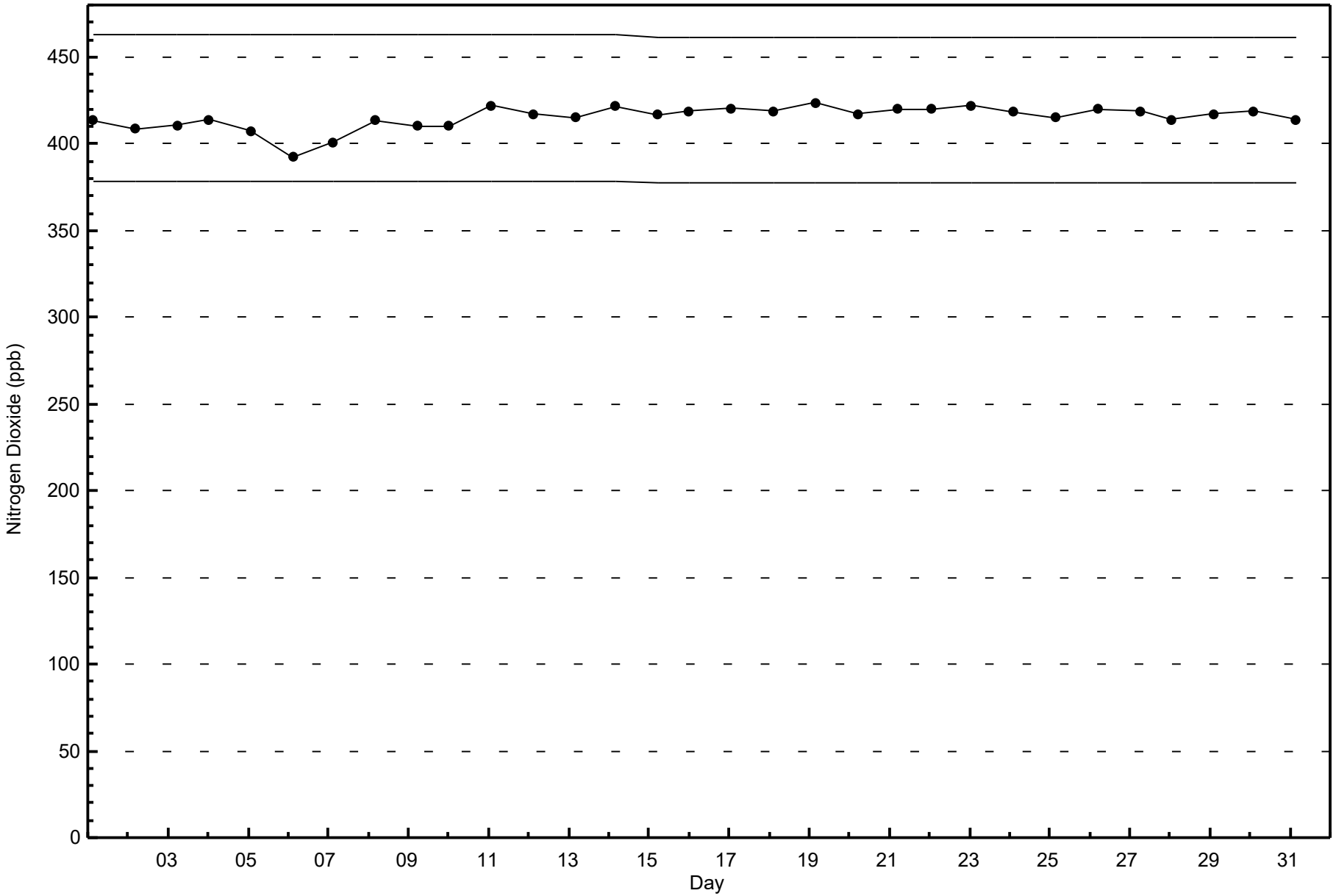


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Fort McKay South - August 2026

Maximum Value: 55.6 ppb on Aug 10 11:00

Maximum Daily Average: 10.8 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 5 12:00

Minimum Daily Average: 0.8 ppb on Aug 6

Maximum Diurnal Average: 12.3 ppb at hour 9

Minimum Diurnal Average: 2.6 ppb at hour 20

Monthly Average: 5.07 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.4 $Q_1$ = 1.1 Median = 2.9 $Q_3$ = 6.2 $P_{90}$ = 12.9 $P_{99}$ = 31.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.9 | 0.9 | 0.9 | Z | 6.3 | 5.7 | 22.1 | 18.8 | 16.7 | 18.3 | 22.7 | 14.7 | 22.0 | 17.1 | 17.3 | 11.0 | 10.4 | 8.2 | 9.1 | 7.6 | 4.6 | 3.3 | 4.7 | 3.9 | 10.8 | 22.7 |
| 2-Aug | 3.0 | 1.9 | 0.7 | 4.7 | Z | 0.8 | 0.6 | 2.5 | 1.8 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 | 1.0 | 1.0 | 0.3 | 1.6 | 2.7 | 0.6 | 0.8 | 0.6 | 1.2 | 4.7 |
| 3-Aug | 1.4 | 0.6 | 0.9 | 0.6 | 0.2 | Z | 0.4 | 0.5 | 8.5 | 3.8 | 3.0 | 1.0 | 0.8 | 0.7 | 1.9 | 5.6 | 6.7 | 6.2 | 5.9 | 2.4 | 1.3 | 0.9 | 1.5 | 1.2 | 2.4 | 8.5 |
| 4-Aug | Z | 4.9 | 10.6 | 16.2 | 14.5 | 16.4 | 10.1 | 6.7 | 10.5 | 17.8 | 11.7 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.4 | 0.9 | 0.3 | 0.3 | 0.5 | 1.5 | 0.5 | 0.5 | 5.5 | 17.8 |
| 5-Aug | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 5.5 | 6.8 | 6.8 | 1.6 | 0.1 | 0.1 | 0.1 | 1.1 | 6.8 |
| 6-Aug | 0.2 | 0.2 | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 1.3 | 3.4 | M | M | 1.0 | 2.1 | 0.9 | 2.2 | 0.2 | 0.7 | 1.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.8 | 3.4 |
| 7-Aug | 0.3 | 0.2 | 0.2 | Z | 0.7 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 4.4 | 11.7 | 7.3 | 3.3 | 6.2 | 17.3 | 10.5 | 7.5 | 3.9 | 1.9 | 1.5 | 3.2 | 3.6 | 17.3 |
| 8-Aug | 2.0 | 1.1 | 0.9 | 0.6 | Z | 0.5 | 0.4 | 5.9 | 7.2 | 5.0 | 9.0 | 2.9 | 4.5 | 4.8 | 3.8 | 3.2 | 2.5 | 3.5 | 4.8 | 2.1 | 0.9 | 0.8 | 1.6 | 3.8 | 3.1 | 9.0 |
| 9-Aug | 5.6 | 6.4 | 9.3 | 12.8 | 13.4 | Z | 6.9 | 10.0 | 31.5 | 8.7 | 3.8 | 2.9 | 4.0 | 2.8 | 7.0 | 10.1 | 11.0 | 6.6 | 4.2 | 2.5 | 1.6 | 1.0 | 1.2 | 1.4 | 7.2 | 31.5 |
| 10-Aug | Z | 1.8 | 2.4 | 3.9 | 3.5 | 3.5 | 4.4 | 9.2 | 13.8 | 22.2 | 55.6 | 19.8 | 4.9 | 3.7 | 2.9 | 3.5 | 2.5 | 1.9 | 2.0 | 1.3 | 1.0 | 1.2 | 3.3 | 4.6 | 7.5 | 55.6 |
| 11-Aug | 3.0 | Z | 8.0 | 6.1 | 2.5 | 3.4 | 1.0 | 1.0 | 4.2 | 20.2 | 11.4 | 3.7 | 2.8 | 2.4 | 2.5 | 2.7 | 2.4 | 2.9 | 3.6 | 3.1 | 4.1 | 4.4 | 3.1 | 4.9 | 4.5 | 20.2 |
| 12-Aug | 1.5 | 4.6 | Z | 0.6 | 0.3 | 0.2 | 0.3 | 0.4 | 2.5 | 1.9 | 1.4 | 3.9 | 2.8 | 1.4 | 1.9 | 2.8 | 2.2 | 3.8 | 3.0 | 1.8 | 1.4 | 4.0 | 4.1 | 8.6 | 2.4 | 8.6 |
| 13-Aug | 5.5 | 6.3 | 11.0 | Z | 26.5 | 22.1 | 17.0 | 21.3 | 16.2 | 21.4 | 5.7 | 3.1 | 2.8 | 5.3 | 3.5 | 1.6 | 1.6 | 1.4 | 1.7 | 2.2 | 1.5 | 1.0 | 0.6 | 2.4 | 7.9 | 26.5 |
| 14-Aug | 3.0 | 1.4 | 1.1 | 0.9 | Z | 2.7 | 7.4 | 18.8 | 33.1 | C | C | C | C | C | 4.8 | 3.8 | 0.7 | 1.7 | 4.4 | 2.3 | 1.4 | 1.5 | 4.4 | 5.5 | 5.5 | 33.1 |
| 15-Aug | 7.6 | 4.0 | 1.7 | 1.2 | 4.8 | Z | 11.8 | 13.9 | 14.5 | 14.2 | 7.4 | 0.5 | 0.5 | 0.6 | 0.9 | 0.2 | 0.1 | 0.2 | 1.6 | 2.6 | 8.0 | 5.3 | 4.2 | 4.4 | 4.8 | 14.5 |
| 16-Aug | Z | 2.6 | 1.4 | 0.6 | 0.5 | 1.6 | 8.1 | 10.5 | 4.3 | 5.1 | 1.3 | 1.2 | 3.3 | 2.2 | 1.8 | 1.7 | 0.9 | 8.7 | 8.5 | 3.6 | 2.1 | 1.4 | 1.1 | 0.8 | 3.2 | 10.5 |
| 17-Aug | 3.6 | Z | 16.4 | 8.7 | 2.4 | 4.9 | 18.4 | 41.3 | 13.8 | 6.9 | 0.5 | 1.2 | 3.3 | 1.9 | 1.8 | 7.3 | 1.6 | 3.1 | 2.3 | 1.1 | 1.1 | 2.7 | 4.9 | 4.3 | 6.7 | 41.3 |
| 18-Aug | 8.0 | 4.9 | Z | 6.6 | 12.0 | 13.1 | 8.7 | 10.4 | 6.8 | 4.9 | 2.5 | 2.3 | 1.6 | 1.2 | 0.8 | 0.5 | 0.9 | 0.3 | 1.7 | 2.4 | 12.3 | 23.9 | 5.4 | 1.2 | 5.8 | 23.9 |
| 19-Aug | 1.4 | 6.8 | 5.8 | Z | 26.1 | 21.5 | 21.8 | 22.3 | 11.0 | 0.7 | 0.3 | 0.1 | 0.2 | 1.2 | 1.4 | 1.3 | 0.7 | 1.8 | 7.3 | 5.3 | 3.5 | 2.8 | 4.0 | 0.8 | 6.4 | 26.1 |
| 20-Aug | 0.4 | 5.0 | 1.7 | 1.8 | Z | 1.4 | 3.1 | 6.1 | 16.3 | 21.1 | 51.3 | 7.2 | 6.5 | 5.8 | 5.3 | 3.9 | 6.2 | 6.0 | 5.8 | 3.2 | 1.9 | 1.4 | 1.4 | 1.4 | 7.1 | 51.3 |
| 21-Aug | 1.3 | 6.7 | 7.0 | 7.5 | 7.3 | Z | 14.7 | 27.6 | 25.6 | 12.9 | 10.8 | 2.4 | 1.1 | 0.7 | 0.5 | 2.1 | 1.3 | 2.9 | 1.9 | 3.0 | 9.0 | 9.0 | 6.8 | 7.6 | 7.4 | 27.6 |
| 22-Aug | Z | 5.0 | 3.8 | 2.7 | 2.3 | 2.8 | 3.4 | 15.0 | 22.4 | 13.7 | 8.3 | 12.4 | 8.5 | 10.2 | 6.2 | 3.3 | 3.5 | 2.3 | 3.7 | 2.7 | 4.6 | 5.4 | 4.1 | 3.3 | 6.5 | 22.4 |
| 23-Aug | 8.0 | Z | 11.8 | 6.1 | 3.7 | 4.9 | 5.9 | 13.6 | 12.8 | 9.5 | 4.7 | 4.8 | 5.0 | 6.3 | 6.6 | 5.7 | 5.7 | 2.7 | 0.4 | 1.7 | 1.7 | 1.0 | 0.5 | 0.3 | 5.4 | 13.6 |
| 24-Aug | 0.4 | 0.5 | Z | 1.8 | 3.0 | 1.6 | 0.7 | 1.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.7 | 1.2 | 2.4 | 4.7 | 2.8 | 4.3 | 4.0 | 2.8 | 2.4 | 2.2 | 3.3 | 7.2 | 2.1 | 7.2 |
| 25-Aug | 5.6 | 5.1 | 4.7 | Z | 4.3 | 1.8 | 2.0 | 16.5 | 38.1 | 28.5 | 20.2 | 12.8 | 9.9 | 8.3 | 5.8 | PF | PF | PF | PF | PF | PF | 2.8 | 3.3 | 3.8 | -- | 38.1 |
| 26-Aug | 3.4 | 3.9 | 3.4 | 2.8 | Z | 5.4 | 8.7 | 15.5 | 10.5 | 8.0 | 8.5 | 7.1 | 8.8 | 4.8 | 3.7 | 4.5 | 2.0 | 1.5 | 2.2 | 2.1 | 13.6 | 15.6 | 8.8 | 7.1 | 6.6 | 15.6 |
| 27-Aug | 7.2 | 4.8 | 2.6 | 2.6 | 6.1 | 3.3 | Z | 17.9 | 18.6 | 14.1 | 7.5 | 3.4 | 8.8 | 2.7 | 4.5 | 5.0 | 6.1 | 2.4 | 0.8 | 0.6 | 0.7 | 1.1 | 4.1 | 3.9 | 5.6 | 18.6 |
| 28-Aug | Z | 6.8 | 5.6 | 5.0 | 3.4 | 1.0 | 4.4 | 5.5 | 2.7 | 1.8 | 2.6 | 1.0 | 1.1 | 1.3 | 1.2 | 1.3 | 1.6 | 1.4 | 0.9 | 0.8 | 2.1 | 1.2 | 1.1 | 1.9 | 2.4 | 6.8 |
| 29-Aug | 2.3 | Z | 1.6 | 1.8 | 3.4 | 3.6 | 2.8 | 1.7 | 3.5 | 1.7 | 1.0 | 1.0 | 0.6 | 1.0 | 0.6 | 0.8 | 0.7 | 0.9 | 2.0 | 1.3 | 2.0 | 3.7 | 4.7 | 7.6 | 2.2 | 7.6 |
| 30-Aug | 5.3 | 4.9 | Z | 4.0 | 3.1 | 1.7 | 2.8 | 34.4 | 31.3 | 17.7 | 9.5 | 14.1 | 22.9 | 9.4 | 6.5 | 4.0 | 3.0 | 3.2 | 2.6 | 2.8 | 3.0 | 4.1 | 7.0 | 12.9 | 9.1 | 34.4 |
| 31-Aug | 15.4 | 14.0 | 12.1 | Z | 1.6 | 1.4 | 5.5 | 5.1 | 3.4 | 5.2 | 3.8 | 2.3 | 1.6 | 1.0 | 0.4 | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.5 | 3.3 | 15.4 |
| | 3.7 | 4.1 | 4.9 | 4.0 | 5.9 | 4.7 | 6.5 | 11.4 | 12.3 | 9.6 | 8.9 | 4.4 | 4.6 | 3.7 | 3.4 | 3.2 | 2.9 | 3.4 | 3.4 | 2.6 | 3.2 | 3.4 | 3.0 | 3.6 | Diurnal Average | |
| | 15.4 | 14.0 | 16.4 | 16.2 | 26.5 | 22.1 | 22.1 | 41.3 | 38.1 | 28.5 | 55.6 | 19.8 | 22.9 | 17.1 | 17.3 | 11.0 | 11.0 | 17.3 | 10.5 | 7.6 | 13.6 | 23.9 | 8.8 | 12.9 | Diurnal Maximum | |

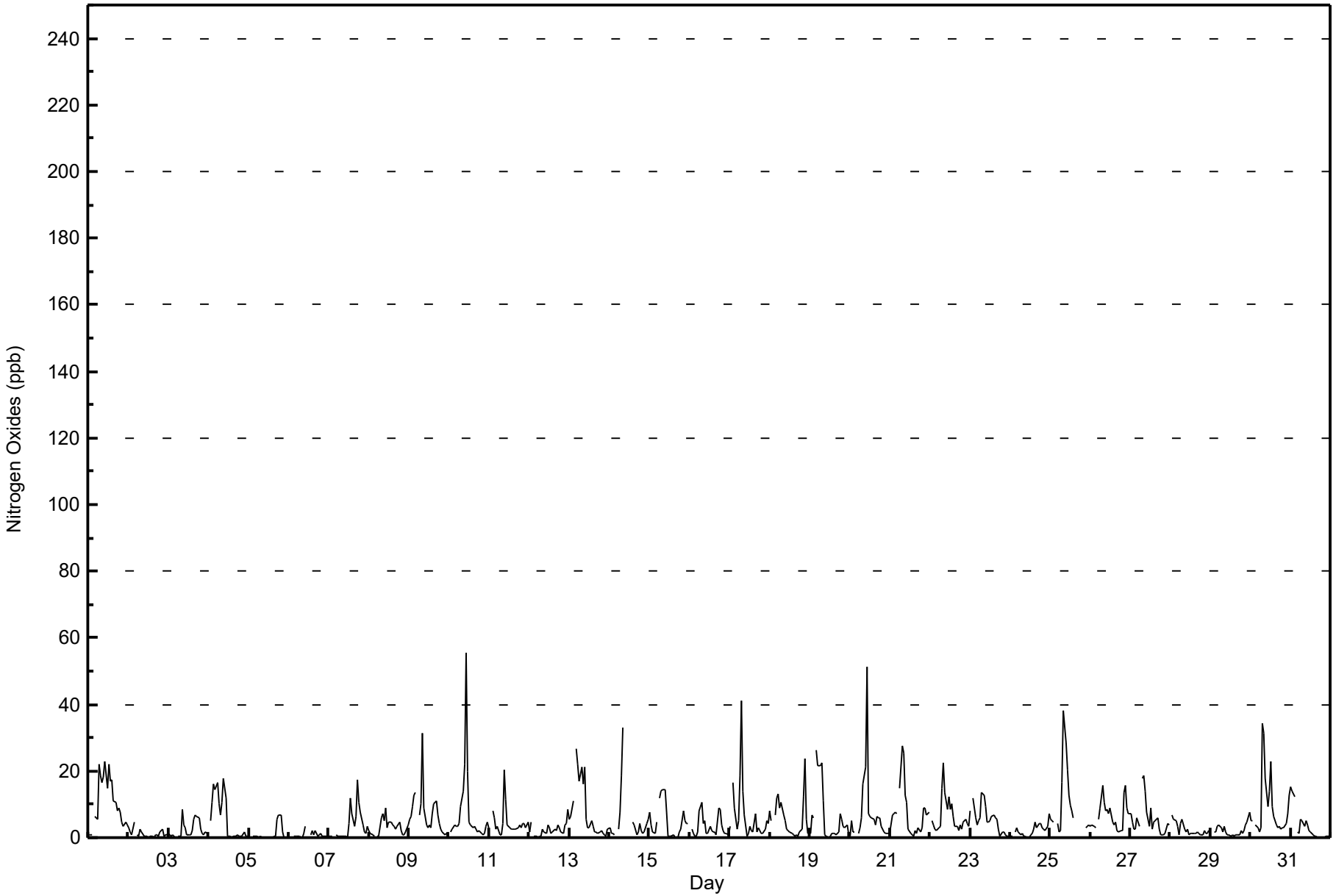
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay South - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Fort McKay South - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 673 | 96.14 | 96.14 |
| 21 - 40 | 24 | 3.43 | 99.57 |
| 11 - 80 | 3 | 0.43 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay South - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 70 | 58 | 7 | 4 | 3 | 8 | 16 | 46 | 67 | 40 | 76 | 70 | 49 | 56 | 55 | 47 | 672 |
| 21 - 40 | 5 | 5 | 0 | 0 | 0 | 1 | 0 | 5 | 2 | 2 | 0 | 2 | 0 | 0 | 1 | 1 | 24 |
| 11 - 80 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 75 | 65 | 7 | 4 | 3 | 9 | 16 | 52 | 69 | 42 | 76 | 72 | 49 | 56 | 56 | 48 | 699 |

Total Number of Valid Hours: 699

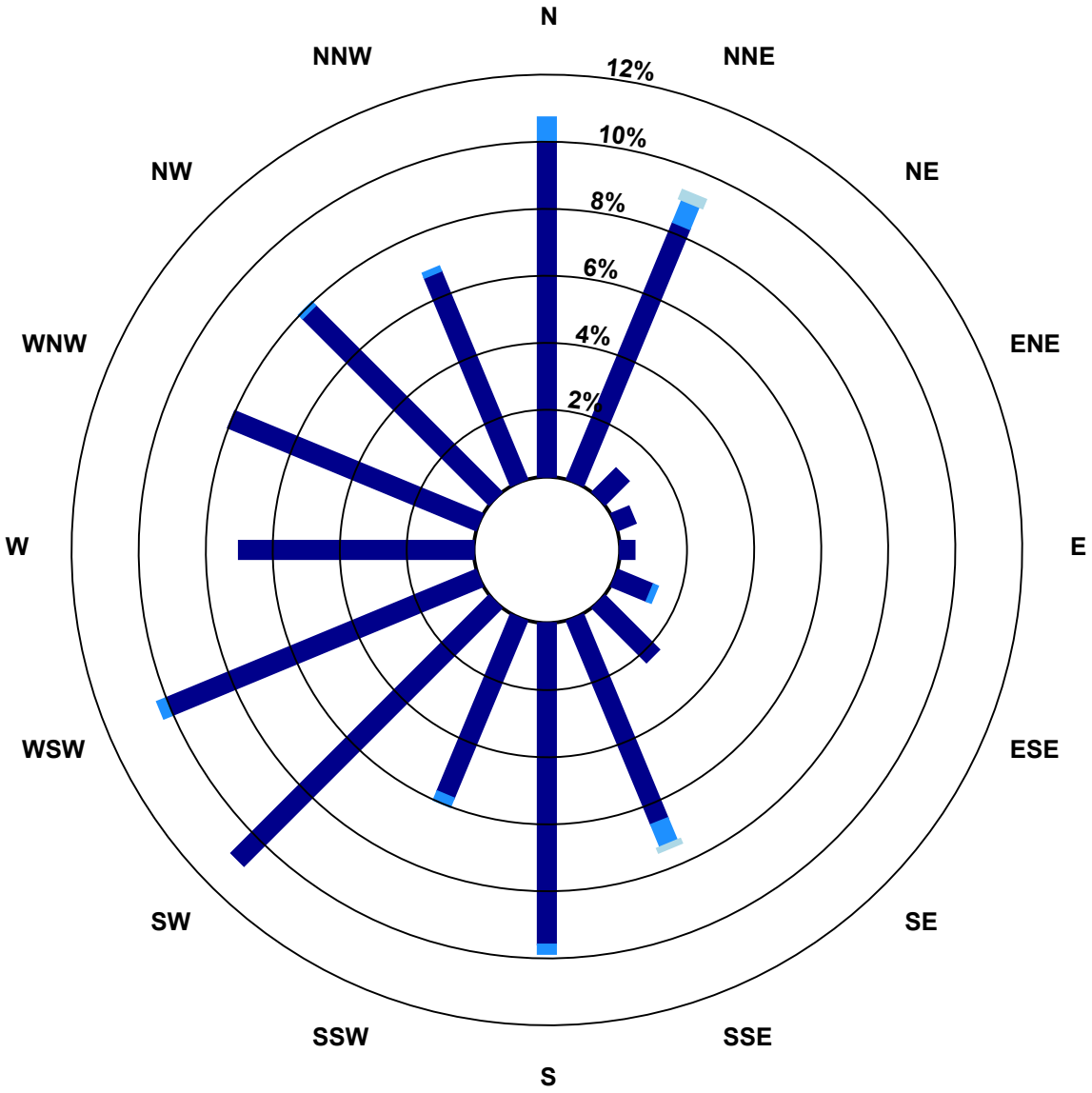
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Fort McKay South




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

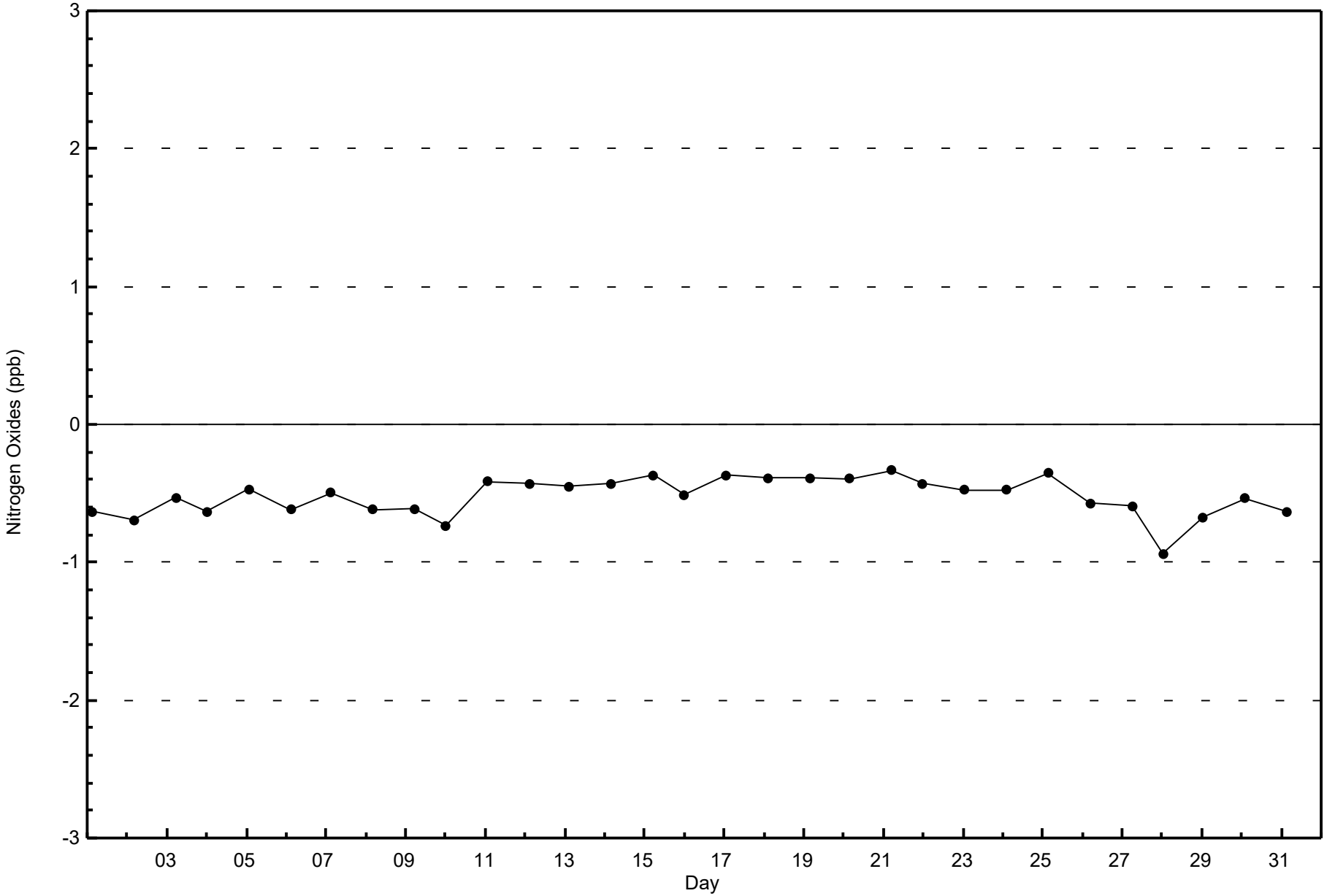
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay South - August 2026**

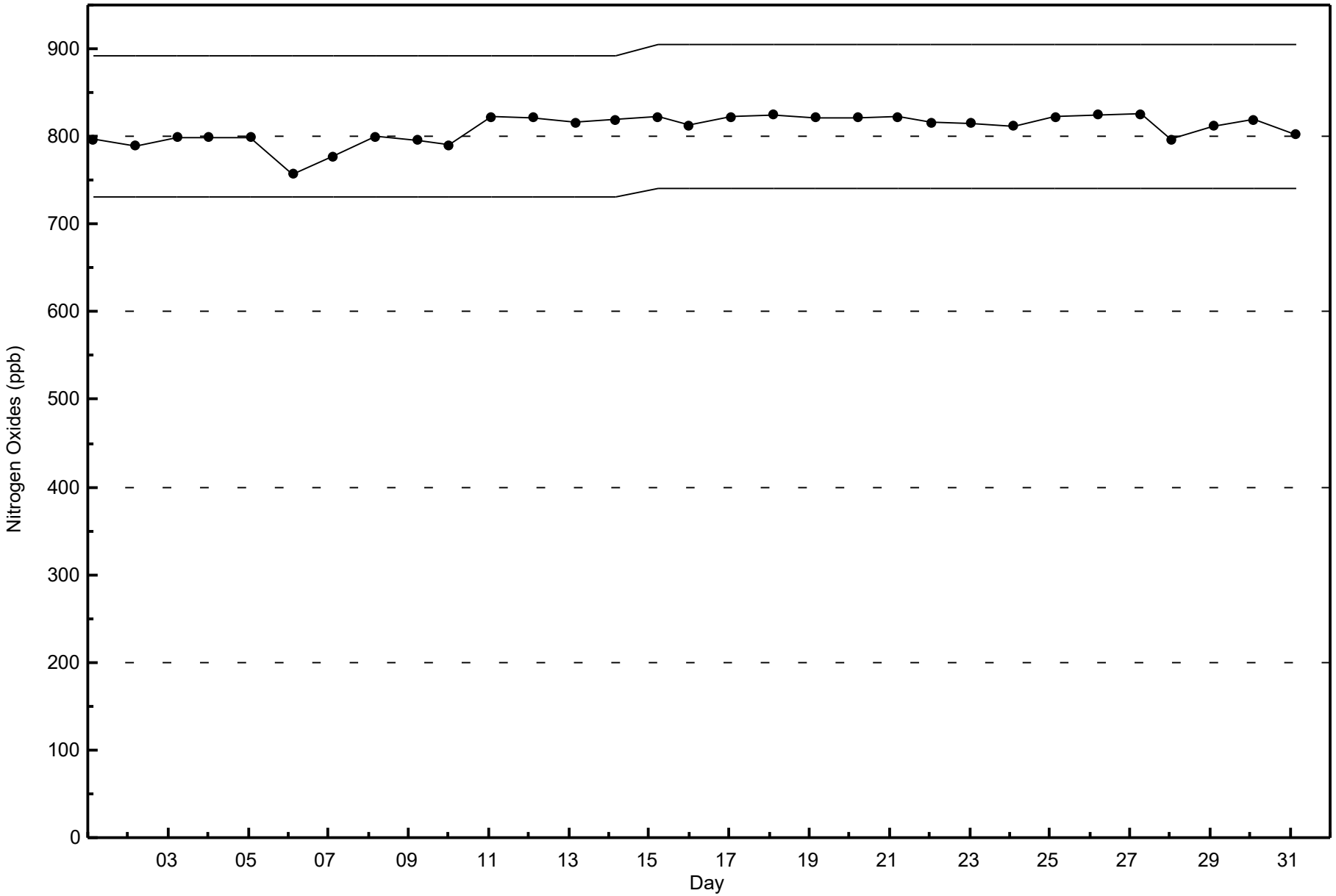


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Fort McKay South - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 53.2 $\mu g/m^3$ on Aug 16 17:00

Maximum Daily Average: 26.0 $\mu g/m^3$ on Aug 25

Minimum Value: 0.5 $\mu g/m^3$ on Aug 6 10:00

Minimum Daily Average: 1.5 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 12.1 $\mu g/m^3$ at hour 11

Minimum Diurnal Average: 8.6 $\mu g/m^3$ at hour 7

Monthly Average: 10.61 $\mu g/m^3$

Percentiles: $P_1$ = 0.8 $P_{10}$ = 2.9 $Q_1$ = 4.5 Median = 7.4 $Q_3$ = 15.0 $P_{90}$ = 22.8 $P_{99}$ = 38.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 735 |
| Hours of Missing Data: | 9 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 6.8 | 6.8 | 6.2 | 6.2 | 6.1 | 5.6 | 6.3 | 6.1 | 6.9 | 9.5 | 14.1 | 17.6 | 22.9 | 25.5 | 25.4 | 25.2 | 24.9 | 24.6 | 24.7 | 22.7 | 20.3 | 18.3 | 18.6 | 10.0 | 15.1 | 25.5 |
| 2-Aug | 10.0 | 13.4 | 15.6 | 16.4 | 14.8 | 12.0 | 11.3 | 9.7 | 7.2 | 6.6 | 6.1 | 4.4 | 3.5 | 3.6 | 3.7 | 3.4 | 3.5 | 3.4 | 3.0 | 3.2 | 3.0 | 2.1 | 2.2 | 2.3 | 6.9 | 16.4 |
| 3-Aug | 2.6 | 2.6 | 2.5 | 2.5 | 2.5 | 2.2 | 2.0 | 2.2 | 2.5 | 2.9 | 4.9 | 4.5 | 3.4 | 3.0 | 3.7 | 5.6 | 7.7 | 7.9 | 7.2 | 6.2 | 5.6 | 5.5 | 6.4 | 6.1 | 4.3 | 7.9 |
| 4-Aug | 5.6 | 7.2 | 7.9 | 8.1 | 6.8 | 6.2 | 6.7 | 8.1 | 15.2 | 21.0 | 18.9 | 10.0 | 7.1 | 6.4 | 5.5 | 6.9 | 9.2 | 7.7 | 6.8 | 5.9 | 6.7 | 8.0 | 9.0 | 10.8 | 8.8 | 21.0 |
| 5-Aug | 12.9 | 15.2 | 15.2 | 15.1 | 13.9 | 13.6 | 11.3 | 9.0 | 6.8 | 5.8 | 5.1 | 3.8 | 3.7 | 3.9 | 3.9 | 3.4 | 2.7 | 3.5 | 3.5 | 2.9 | 2.8 | 2.7 | 2.1 | 1.5 | 6.8 | 15.2 |
| 6-Aug | 1.3 | 1.1 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.9 | M | M | 2.0 | 2.4 | 2.3 | 2.3 | 1.9 | 2.3 | 2.8 | 2.3 | 1.9 | 2.3 | 2.3 | 1.5 | 2.8 |
| 7-Aug | 2.9 | 3.0 | 2.7 | 2.5 | 2.6 | 2.8 | 2.9 | 2.7 | 2.9 | 3.4 | 4.4 | 5.2 | 7.4 | 7.1 | 7.5 | 7.9 | 8.4 | 8.4 | 7.8 | 3.8 | 3.4 | 4.2 | 4.6 | 4.9 | 4.7 | 8.4 |
| 8-Aug | 4.7 | 4.6 | 4.7 | 4.1 | 4.2 | 3.9 | 3.8 | 3.0 | 2.6 | 2.4 | 3.2 | 2.9 | 3.4 | 3.8 | 3.7 | 3.4 | 2.9 | 3.3 | 5.0 | 5.4 | 5.8 | 5.4 | 6.0 | 7.1 | 4.1 | 7.1 |
| 9-Aug | 7.2 | 6.9 | 6.7 | 7.0 | 6.1 | 5.1 | 4.6 | 4.7 | 5.7 | 3.7 | 3.3 | 4.3 | 7.0 | 4.5 | 6.3 | 8.0 | 9.4 | 7.7 | 7.2 | 7.1 | 6.6 | 6.5 | 6.2 | 6.2 | 6.2 | 9.4 |
| 10-Aug | 6.0 | 6.4 | 6.2 | 6.0 | 5.4 | 5.3 | 5.1 | 5.5 | 5.9 | 7.5 | 13.0 | 9.1 | 6.6 | 7.0 | 5.9 | 6.9 | 5.4 | 4.7 | 5.0 | 5.6 | 5.7 | 5.9 | 6.4 | 6.8 | 6.4 | 13.0 |
| 11-Aug | 6.0 | 5.8 | 5.4 | 5.1 | 4.9 | 4.8 | 4.6 | 4.6 | 5.0 | 7.2 | 8.3 | 7.8 | 7.7 | 7.8 | 7.8 | 7.3 | 6.1 | 5.7 | 6.4 | 5.5 | 5.0 | 5.3 | 5.7 | 5.5 | 6.1 | 8.3 |
| 12-Aug | 4.5 | 4.8 | 3.3 | 3.0 | 2.7 | 2.6 | 2.4 | 2.4 | 2.2 | 1.4 | 1.2 | 1.3 | 1.6 | 1.6 | 1.7 | 1.8 | 2.3 | 2.6 | 2.7 | 2.9 | 3.4 | 3.2 | 3.0 | 2.9 | 2.6 | 4.8 |
| 13-Aug | 2.8 | 2.9 | 3.2 | 3.2 | 3.3 | 3.4 | 3.5 | 3.3 | 3.5 | 3.6 | 3.3 | 3.3 | 3.3 | 4.4 | 4.0 | 3.0 | 3.4 | 3.4 | 3.8 | 5.2 | 5.5 | 5.2 | 5.1 | 5.1 | 3.8 | 5.5 |
| 14-Aug | 4.7 | 4.5 | 4.6 | 4.6 | 4.5 | 4.6 | 4.6 | 5.0 | 6.1 | 7.1 | 7.4 | 7.5 | 5.4 | 5.3 | 7.1 | 7.1 | 4.2 | 4.5 | 10.2 | 8.4 | 7.9 | 8.5 | 9.6 | 10.0 | 6.4 | 10.2 |
| 15-Aug | 9.4 | 8.7 | 7.8 | 7.2 | 6.9 | 6.6 | 6.4 | 8.7 | 6.1 | 8.5 | 9.5 | 4.3 | 4.7 | 5.1 | 5.6 | 4.4 | 4.1 | 3.4 | 5.2 | 6.1 | 9.5 | 7.2 | 5.9 | 4.5 | 6.5 | 9.5 |
| 16-Aug | 4.6 | 4.8 | 4.1 | 3.9 | 4.1 | 4.2 | 4.9 | 8.9 | 17.9 | 19.7 | 19.7 | 19.9 | 15.8 | 17.8 | 27.6 | 38.4 | 53.2 | 42.4 | 33.3 | 29.9 | 29.3 | 29.1 | 28.4 | 28.3 | 20.4 | 53.2 |
| 17-Aug | 29.4 | 34.6 | 34.3 | 34.4 | 25.8 | 24.4 | 20.2 | 23.9 | 20.6 | 21.6 | 19.5 | 19.4 | 21.0 | 20.4 | 22.6 | 31.2 | 22.1 | 21.7 | 20.7 | 17.6 | 18.1 | 21.4 | 21.7 | 17.4 | 23.5 | 34.6 |
| 18-Aug | 15.7 | 15.3 | 15.0 | 15.1 | 15.3 | 15.6 | 14.2 | 14.8 | 13.8 | 13.7 | 13.6 | 10.8 | 8.2 | 7.6 | 6.4 | 5.5 | 4.3 | 4.6 | 7.7 | 6.7 | 12.2 | 12.9 | 7.0 | 5.2 | 10.9 | 15.7 |
| 19-Aug | 5.5 | 6.4 | 6.3 | 6.9 | 9.8 | 9.5 | 8.9 | 11.7 | 7.3 | 5.4 | 4.5 | 3.2 | 3.1 | C | 3.9 | 6.8 | 9.9 | 32.2 | 39.1 | 37.8 | 42.8 | 44.9 | 50.6 | 25.4 | 16.6 | 50.6 |
| 20-Aug | 21.5 | 19.3 | 18.2 | 16.8 | 15.9 | 16.1 | 15.3 | 15.3 | 15.7 | 15.8 | 22.4 | 17.6 | 17.5 | 19.9 | 21.5 | 17.6 | 16.1 | 11.7 | 11.2 | 9.1 | 9.7 | 9.2 | 9.4 | 9.3 | 15.5 | 22.4 |
| 21-Aug | 9.4 | 10.2 | 8.9 | 7.8 | 7.8 | 7.1 | 7.9 | 11.3 | 17.3 | 18.5 | 22.8 | 11.8 | 9.0 | 8.7 | 8.7 | 11.3 | 11.5 | 13.9 | 13.3 | 12.5 | 14.7 | 13.9 | 12.0 | 13.2 | 11.8 | 22.8 |
| 22-Aug | 13.7 | 12.5 | 12.4 | 12.7 | 12.4 | 12.8 | 12.5 | 14.0 | 14.9 | 16.8 | 18.7 | 22.8 | 18.4 | 20.3 | 16.1 | 13.3 | 14.8 | 14.9 | 16.6 | 16.7 | 20.8 | 22.9 | 21.1 | 16.8 | 16.2 | 22.9 |
| 23-Aug | 15.1 | 14.3 | 14.3 | 14.4 | 13.9 | 14.8 | 14.7 | 18.7 | 24.5 | 23.3 | 23.8 | 24.1 | 24.2 | 28.0 | 24.2 | 26.7 | 28.2 | 26.8 | 12.4 | 9.9 | 9.3 | 9.3 | 8.0 | 6.5 | 17.9 | 28.2 |
| 24-Aug | 5.8 | 4.8 | 4.4 | 4.6 | 4.1 | 3.9 | 3.6 | 3.2 | 2.7 | 2.3 | 1.8 | 1.9 | 2.3 | 3.0 | 3.8 | 6.2 | 4.3 | 7.5 | 8.8 | 8.0 | 8.8 | 9.8 | 11.8 | 18.8 | 5.7 | 18.8 |
| 25-Aug | 16.5 | 13.6 | 13.7 | 16.9 | 16.4 | 13.8 | 14.2 | 24.5 | 34.5 | 33.6 | 32.8 | 36.1 | 37.6 | 39.0 | 39.8 | PF | PF | PF | PF | PF | PF | 28.9 | 28.3 | 27.9 | 26.0 | 39.8 |
| 26-Aug | 27.2 | 27.3 | 27.6 | 26.9 | 26.2 | 26.4 | 24.2 | 26.8 | 21.5 | 21.1 | 21.8 | 16.9 | 14.5 | 9.8 | 8.6 | 8.8 | 7.1 | 7.5 | 8.7 | 7.9 | 16.3 | 10.9 | 6.7 | 7.8 | 17.0 | 27.6 |
| 27-Aug | 8.9 | 8.1 | 8.1 | 8.8 | 11.2 | 10.8 | 10.7 | 13.5 | 20.1 | 20.7 | 19.8 | 19.3 | 28.2 | 21.3 | 22.2 | 26.9 | 20.1 | 16.4 | 15.6 | 16.9 | 17.8 | 18.7 | 22.2 | 24.8 | 17.1 | 28.2 |
| 28-Aug | 22.1 | 23.9 | 23.3 | 25.1 | 18.1 | 13.4 | 15.0 | 20.0 | 15.0 | 17.3 | 15.1 | 9.1 | 6.3 | 7.1 | 5.7 | 8.5 | 17.4 | 26.1 | 35.6 | 18.7 | 12.4 | 6.7 | 3.6 | 2.8 | 15.3 | 35.6 |
| 29-Aug | 2.8 | 2.9 | 2.7 | 3.0 | 3.7 | 4.6 | 6.9 | 7.8 | 7.6 | 8.1 | 8.5 | 7.5 | 7.1 | 7.7 | 7.0 | 6.7 | 7.4 | 7.7 | 11.1 | 9.5 | 11.2 | 14.1 | 13.9 | 14.2 | 7.7 | 14.2 |
| 30-Aug | 11.6 | 10.4 | 11.0 | 10.9 | 10.4 | 9.4 | 10.2 | 13.2 | 21.0 | 22.5 | 21.1 | 31.1 | 32.1 | 23.7 | 18.8 | 15.0 | 13.7 | 14.3 | 13.4 | 14.1 | 16.0 | 16.9 | 10.7 | 7.8 | 15.8 | 32.1 |
| 31-Aug | 6.6 | 5.1 | 5.2 | 6.1 | 5.2 | 4.7 | 5.4 | 5.3 | 4.9 | 5.4 | 5.1 | 6.0 | 7.3 | 5.3 | 3.8 | 3.3 | 2.6 | 2.9 | 2.6 | 3.0 | 3.4 | 4.1 | 4.3 | 4.6 | 4.7 | 7.3 |
| | 9.8 | 9.9 | 9.7 | 9.9 | 9.2 | 8.7 | 8.6 | 10.0 | 10.9 | 11.5 | 12.1 | 11.4 | 11.3 | 11.0 | 10.8 | 10.8 | 11.0 | 11.4 | 11.7 | 10.4 | 11.2 | 11.7 | 11.4 | 10.2 | Diurnal Average | |
| | 29.4 | 34.6 | 34.3 | 34.4 | 26.2 | 26.4 | 24.2 | 26.8 | 34.5 | 33.6 | 32.8 | 36.1 | 37.6 | 39.0 | 39.8 | 38.4 | 53.2 | 42.4 | 39.1 | 37.8 | 42.8 | 44.9 | 50.6 | 28.3 | Diurnal Maximum | |

C - Calibration M - Maintenance PF - Power Failure

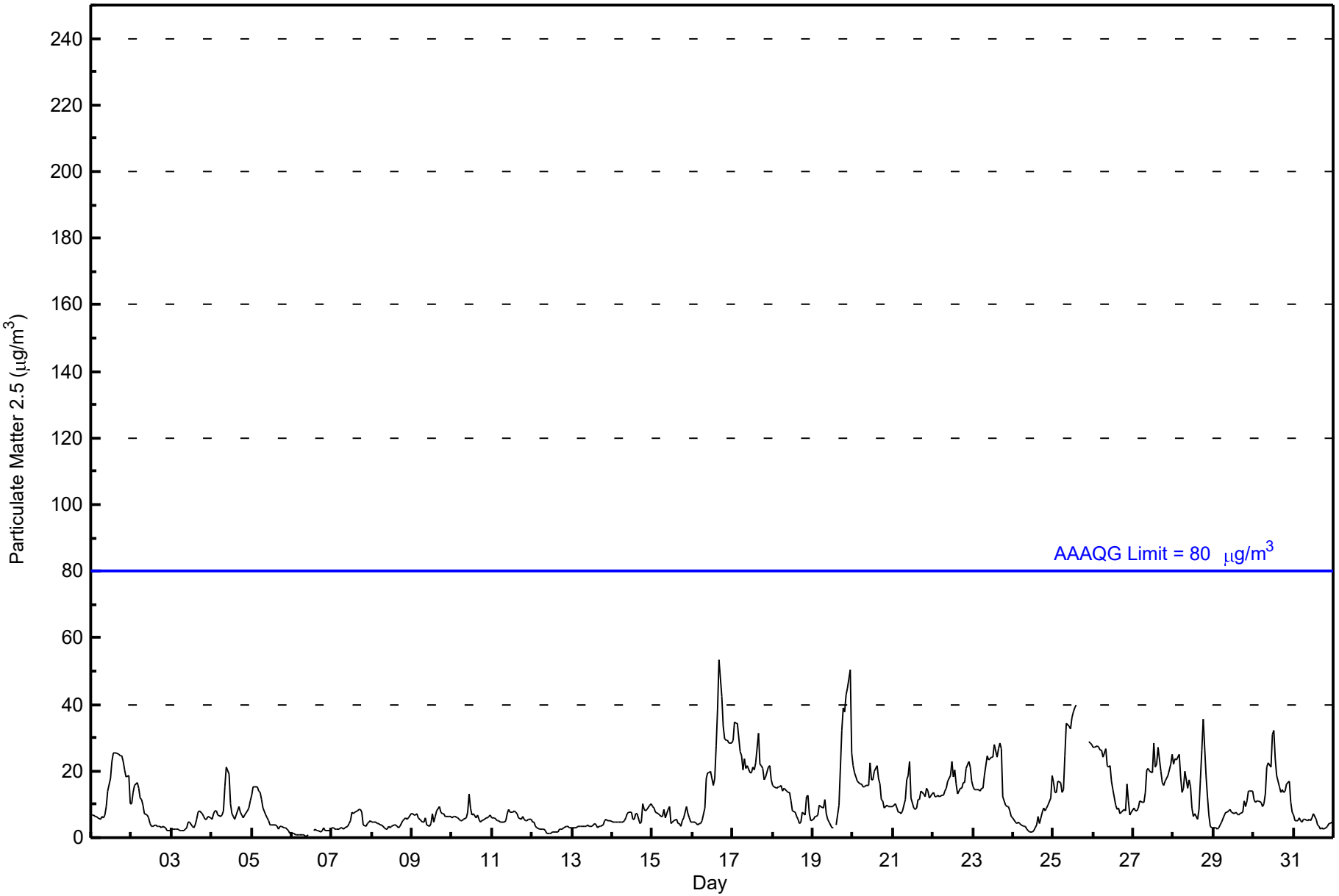
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort McKay South - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort McKay South - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 252 | 34.29 | 34.29 |
| 6 - 15 | 313 | 42.59 | 76.87 |
| 16 - 25 | 121 | 16.46 | 93.33 |
| 26 - 80 | 49 | 6.67 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 735

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort McKay South - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 32 | 24 | 4 | 1 | 0 | 1 | 1 | 3 | 3 | 6 | 21 | 18 | 27 | 38 | 36 | 37 | 252 |
| 6 - 15 | 24 | 30 | 1 | 1 | 0 | 3 | 3 | 19 | 43 | 31 | 53 | 42 | 15 | 20 | 20 | 7 | 312 |
| 16 - 25 | 17 | 10 | 1 | 0 | 1 | 3 | 9 | 29 | 24 | 5 | 4 | 8 | 3 | 1 | 2 | 4 | 121 |
| 26 - 80 | 5 | 4 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 4 | 8 | 7 | 3 | 0 | 1 | 49 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 78 | 68 | 7 | 4 | 3 | 9 | 16 | 53 | 72 | 45 | 82 | 76 | 52 | 62 | 58 | 49 | 734 |

Total Number of Valid Hours: 734

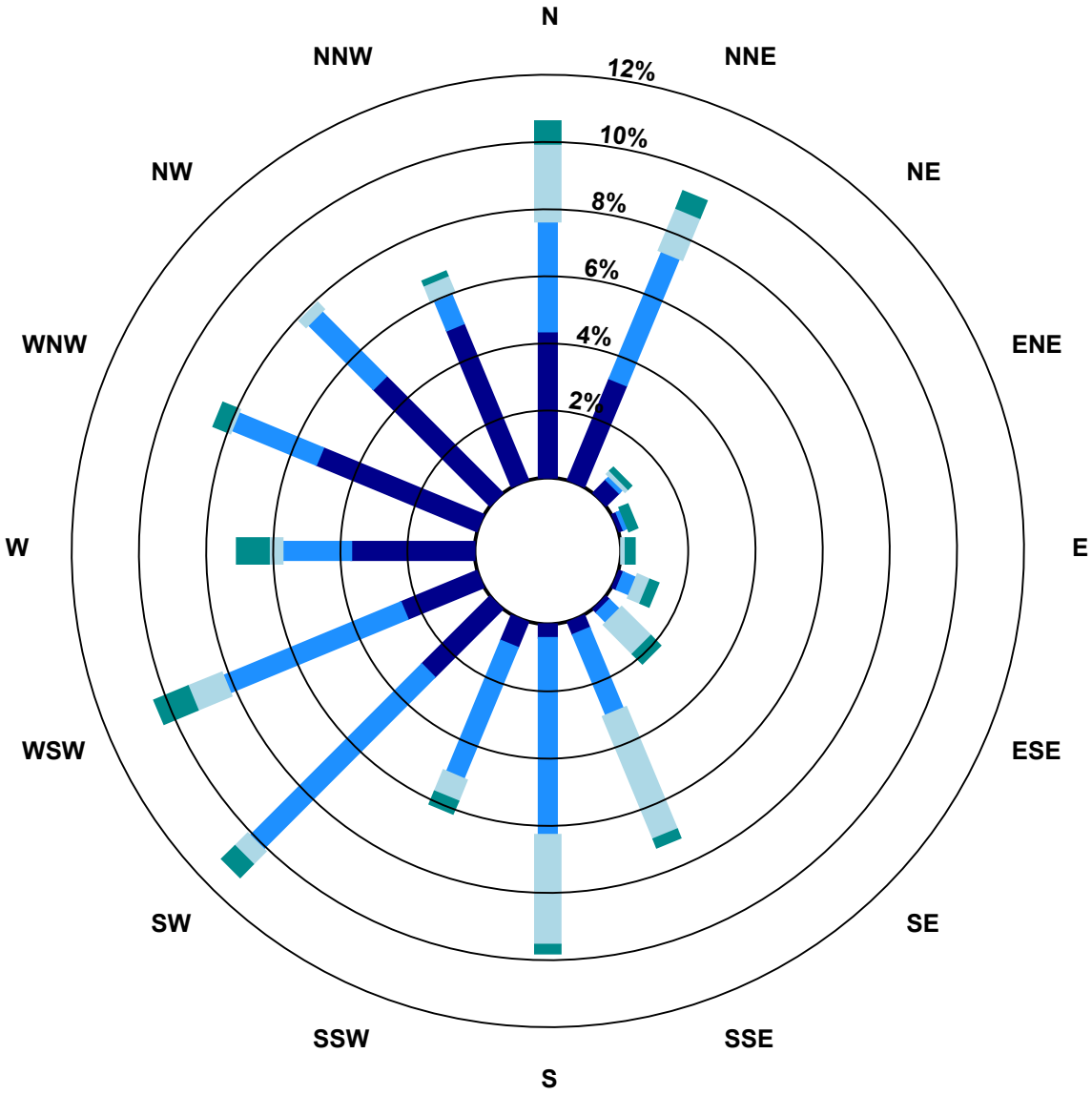
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Fort McKay South




Classes ($\mu g/m^3$)

0 - 5

6 - 15

16 - 25

26 - 80

> 81.0

Total Number of Valid Hours: 734

Maximum Value: 29.9 C on Aug 26 16:00
Maximum Daily Average: 20.7 C on Aug 27

Minimum Value: 4.1 C on Aug 17 06:00
Minimum Daily Average: 13.2 C on Aug 17
Maximum Diurnal Average: 22.7 C at hour 15
Minimum Diurnal Average: 10.5 C at hour 6
Monthly Average: 16.44 C
Percentiles: $P_1$ = 5.4 $P_{10}$ = 9.5 $Q_1$ = 11.9 Median = 16.2 $Q_3$ = 20.7 $P_{90}$ = 24.1 $P_{99}$ = 28.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

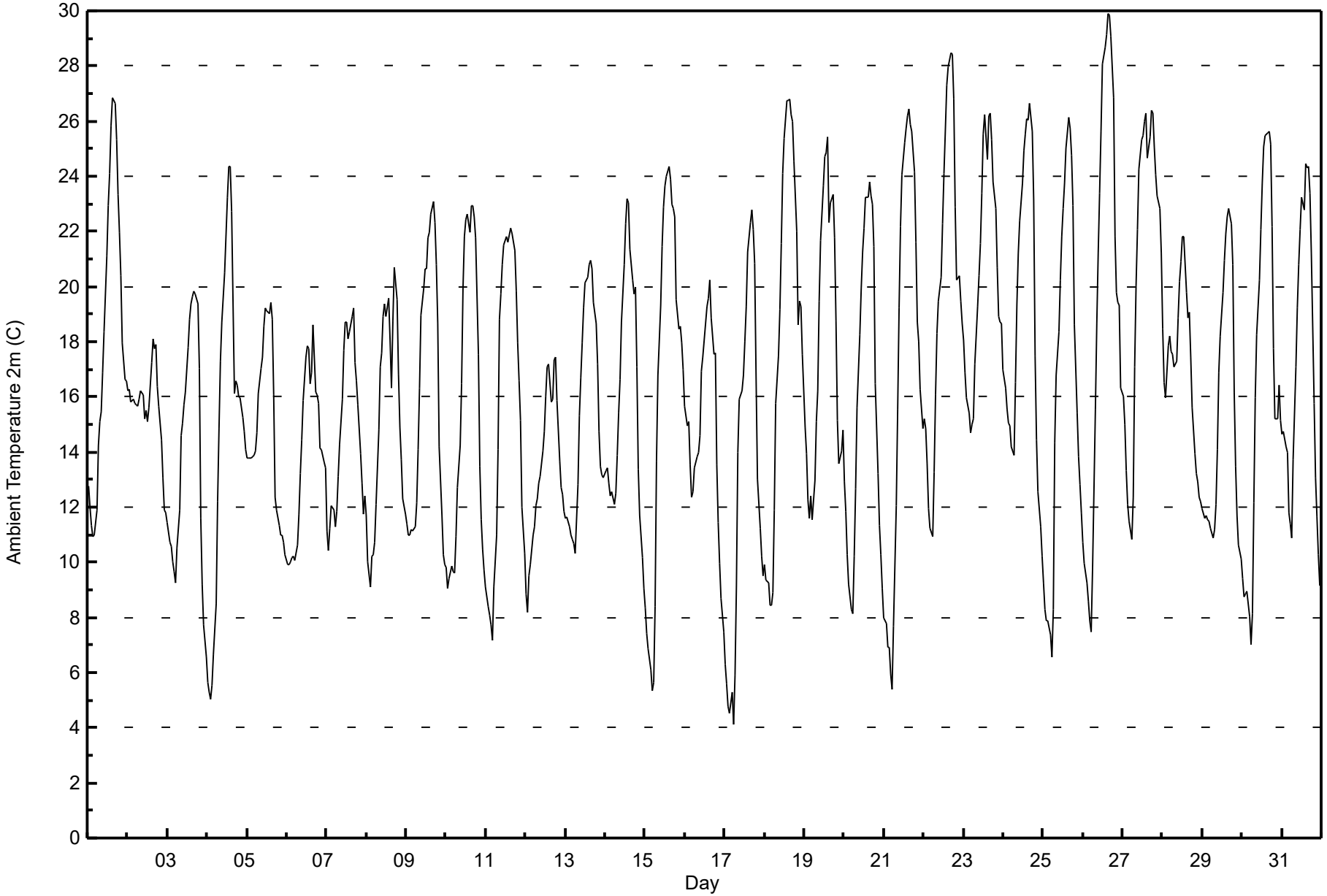
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 12.8 | 12.0 | 11.4 | 10.9 | 11.0 | 11.9 | 14.3 | 15.1 | 15.5 | 16.9 | 18.4 | 21.1 | 23.0 | 24.1 | 25.8 | 26.8 | 26.6 | 25.3 | 23.3 | 21.9 | 20.4 | 17.9 | 16.6 | 16.6 | 18.3 | 26.8 |
| 2-Aug | 16.2 | 16.3 | 15.8 | 15.9 | 15.8 | 15.7 | 15.7 | 15.9 | 16.2 | 16.1 | 15.2 | 15.5 | 15.1 | 15.6 | 17.2 | 18.1 | 17.7 | 17.9 | 16.4 | 15.7 | 14.4 | 13.0 | 11.9 | 11.8 | 15.6 | 18.1 |
| 3-Aug | 11.5 | 10.8 | 10.6 | 10.0 | 9.6 | 9.3 | 10.5 | 11.9 | 14.6 | 15.0 | 15.7 | 16.2 | 17.8 | 18.8 | 19.4 | 19.6 | 19.8 | 19.7 | 19.4 | 17.0 | 11.6 | 9.2 | 7.7 | 6.5 | 13.8 | 19.8 |
| 4-Aug | 5.6 | 5.3 | 5.0 | 5.5 | 6.7 | 8.5 | 12.2 | 14.8 | 17.3 | 18.7 | 20.5 | 21.9 | 23.2 | 24.4 | 24.3 | 22.7 | 16.1 | 16.6 | 16.4 | 16.0 | 16.0 | 15.2 | 14.7 | 14.1 | 15.1 | 24.4 |
| 5-Aug | 13.8 | 13.8 | 13.8 | 13.8 | 13.9 | 14.0 | 14.7 | 16.1 | 17.0 | 17.4 | 18.6 | 19.2 | 19.1 | 19.0 | 19.4 | 18.8 | 16.1 | 12.4 | 11.9 | 11.3 | 11.0 | 11.0 | 10.7 | 10.3 | 14.9 | 19.4 |
| 6-Aug | 9.9 | 9.9 | 10.0 | 10.2 | 10.2 | 10.0 | 10.6 | 11.8 | 13.2 | 14.4 | 15.9 | 17.4 | 17.9 | 17.7 | 16.5 | 16.9 | 18.6 | 16.2 | 16.1 | 15.7 | 14.1 | 14.1 | 13.6 | 13.4 | 13.9 | 18.6 |
| 7-Aug | 11.2 | 10.4 | 11.2 | 12.1 | 11.9 | 11.3 | 11.9 | 13.1 | 14.3 | 15.9 | 17.7 | 18.7 | 18.7 | 18.1 | 18.4 | 18.9 | 19.2 | 17.2 | 16.6 | 15.7 | 13.9 | 12.8 | 11.7 | 12.4 | 14.7 | 19.2 |
| 8-Aug | 11.7 | 10.0 | 9.1 | 10.2 | 10.3 | 10.7 | 12.1 | 14.8 | 17.1 | 17.6 | 18.9 | 19.4 | 18.9 | 19.6 | 18.0 | 16.3 | 18.8 | 20.7 | 19.5 | 16.9 | 14.9 | 13.7 | 12.3 | 11.7 | 15.1 | 20.7 |
| 9-Aug | 11.4 | 11.0 | 11.0 | 11.2 | 11.1 | 11.3 | 12.2 | 14.1 | 16.3 | 18.9 | 19.9 | 20.7 | 20.6 | 21.8 | 22.0 | 22.6 | 23.1 | 22.3 | 20.8 | 18.6 | 14.2 | 11.7 | 10.3 | 9.9 | 16.1 | 23.1 |
| 10-Aug | 9.8 | 9.1 | 9.4 | 9.8 | 9.7 | 9.6 | 10.9 | 12.7 | 14.3 | 16.5 | 20.0 | 21.8 | 22.4 | 22.6 | 21.9 | 22.9 | 22.9 | 22.5 | 21.8 | 17.5 | 13.5 | 11.6 | 10.5 | 9.7 | 15.6 | 22.9 |
| 11-Aug | 9.1 | 8.4 | 8.1 | 7.7 | 7.2 | 9.1 | 11.0 | 14.1 | 18.8 | 19.7 | 20.8 | 21.5 | 21.8 | 21.6 | 21.9 | 22.1 | 21.9 | 21.3 | 19.8 | 17.9 | 16.6 | 15.1 | 12.0 | 10.3 | 15.7 | 22.1 |
| 12-Aug | 8.9 | 8.2 | 9.5 | 9.9 | 11.0 | 11.3 | 12.1 | 12.3 | 12.9 | 13.1 | 14.0 | 14.7 | 16.0 | 17.1 | 17.2 | 15.8 | 15.9 | 17.4 | 17.4 | 15.8 | 13.7 | 12.7 | 12.4 | 11.8 | 13.4 | 17.4 |
| 13-Aug | 11.6 | 11.7 | 11.3 | 11.0 | 10.8 | 10.7 | 10.3 | 12.8 | 15.3 | 16.7 | 17.9 | 19.2 | 20.1 | 20.4 | 20.8 | 21.0 | 20.7 | 19.4 | 18.7 | 17.2 | 14.7 | 13.5 | 13.2 | 13.1 | 15.5 | 21.0 |
| 14-Aug | 13.3 | 13.4 | 12.9 | 12.4 | 12.5 | 12.1 | 12.5 | 13.9 | 15.4 | 16.6 | 18.7 | 20.8 | 22.3 | 23.2 | 23.0 | 21.4 | 20.2 | 19.7 | 20.0 | 17.1 | 13.4 | 11.7 | 10.2 | 9.0 | 16.1 | 23.2 |
| 15-Aug | 8.3 | 7.4 | 6.9 | 6.1 | 5.3 | 5.6 | 8.4 | 13.7 | 16.8 | 19.3 | 21.4 | 22.9 | 23.6 | 24.0 | 24.4 | 23.9 | 23.0 | 22.8 | 22.5 | 19.5 | 18.5 | 18.6 | 17.9 | 17.0 | 16.6 | 24.4 |
| 16-Aug | 15.7 | 14.9 | 15.1 | 13.5 | 12.4 | 12.5 | 13.4 | 13.8 | 14.0 | 14.6 | 16.9 | 17.4 | 18.7 | 19.3 | 19.6 | 20.2 | 18.9 | 17.5 | 17.6 | 13.5 | 11.4 | 10.0 | 8.7 | 7.5 | 14.9 | 20.2 |
| 17-Aug | 6.3 | 5.6 | 4.8 | 4.5 | 5.3 | 4.1 | 5.9 | 9.2 | 14.0 | 15.9 | 16.2 | 16.8 | 18.0 | 19.3 | 21.2 | 22.3 | 22.8 | 22.1 | 20.8 | 16.8 | 13.0 | 11.2 | 10.2 | 9.5 | 13.2 | 22.8 |
| 18-Aug | 9.9 | 9.4 | 9.3 | 8.5 | 8.5 | 8.9 | 11.9 | 15.7 | 17.5 | 19.2 | 21.6 | 24.1 | 25.4 | 26.7 | 26.8 | 26.8 | 26.2 | 26.0 | 24.6 | 22.0 | 18.6 | 19.5 | 19.3 | 17.6 | 18.5 | 26.8 |
| 19-Aug | 14.9 | 14.0 | 12.2 | 11.6 | 12.4 | 11.6 | 12.9 | 15.1 | 16.2 | 19.5 | 21.7 | 23.6 | 24.7 | 24.9 | 25.4 | 22.3 | 23.0 | 23.3 | 21.8 | 18.8 | 15.1 | 13.6 | 14.0 | 14.8 | 17.8 | 25.4 |
| 20-Aug | 12.9 | 11.9 | 10.3 | 9.2 | 8.3 | 8.1 | 10.2 | 12.6 | 15.6 | 18.3 | 19.9 | 21.3 | 22.1 | 23.2 | 23.2 | 23.8 | 23.3 | 23.0 | 21.4 | 16.5 | 13.2 | 11.3 | 10.2 | 9.1 | 15.8 | 23.8 |
| 21-Aug | 8.0 | 7.8 | 6.9 | 6.9 | 5.9 | 5.4 | 7.7 | 12.1 | 15.6 | 19.2 | 22.2 | 24.0 | 25.2 | 25.7 | 26.2 | 26.5 | 25.9 | 25.6 | 24.2 | 21.6 | 18.7 | 18.0 | 16.3 | 14.9 | 17.1 | 26.5 |
| 22-Aug | 15.2 | 14.8 | 13.6 | 12.0 | 11.2 | 10.9 | 13.3 | 16.1 | 18.3 | 19.5 | 20.3 | 22.3 | 24.1 | 25.7 | 27.3 | 28.0 | 28.5 | 28.4 | 26.8 | 22.9 | 20.2 | 20.4 | 19.5 | 18.7 | 19.9 | 28.5 |
| 23-Aug | 18.0 | 16.9 | 16.0 | 15.4 | 14.7 | 15.0 | 15.2 | 17.2 | 19.3 | 20.4 | 21.5 | 23.4 | 25.5 | 26.2 | 24.6 | 26.2 | 26.3 | 25.3 | 23.8 | 22.8 | 20.7 | 18.9 | 18.7 | 18.6 | 20.4 | 26.3 |
| 24-Aug | 17.0 | 16.3 | 15.5 | 15.1 | 15.0 | 14.2 | 13.9 | 16.5 | 19.3 | 21.2 | 22.4 | 23.8 | 24.9 | 25.5 | 26.1 | 26.0 | 26.6 | 25.6 | 23.1 | 17.5 | 14.4 | 12.6 | 11.3 | 10.2 | 18.9 | 26.6 |
| 25-Aug | 9.2 | 8.3 | 7.9 | 7.9 | 7.4 | 6.5 | 8.3 | 14.3 | 16.8 | 18.4 | 20.3 | 21.8 | 22.8 | 23.7 | 25.0 | 26.1 | 25.7 | 24.7 | 22.9 | 18.6 | 15.4 | 13.8 | 12.8 | 11.8 | 16.3 | 26.1 |
| 26-Aug | 10.7 | 10.0 | 9.3 | 8.6 | 7.9 | 7.5 | 9.8 | 15.6 | 18.7 | 21.2 | 23.4 | 25.6 | 28.1 | 28.7 | 29.1 | 29.9 | 29.9 | 29.1 | 26.9 | 21.8 | 19.8 | 19.4 | 19.3 | 16.3 | 19.4 | 29.9 |
| 27-Aug | 16.0 | 15.0 | 13.3 | 12.1 | 11.5 | 10.9 | 12.4 | 17.1 | 20.0 | 22.1 | 24.3 | 25.3 | 25.5 | 26.0 | 26.3 | 24.6 | 25.4 | 26.4 | 26.3 | 25.1 | 24.1 | 23.3 | 22.8 | 21.2 | 20.7 | 26.4 |
| 28-Aug | 18.4 | 16.6 | 16.0 | 17.9 | 18.2 | 17.6 | 17.6 | 17.1 | 17.3 | 18.9 | 20.2 | 20.9 | 21.8 | 21.8 | 19.8 | 18.9 | 19.1 | 17.4 | 15.6 | 13.9 | 13.2 | 12.9 | 12.4 | 12.2 | 17.3 | 21.8 |
| 29-Aug | 12.0 | 11.6 | 11.7 | 11.6 | 11.5 | 11.3 | 10.9 | 11.2 | 12.1 | 14.1 | 16.9 | 18.2 | 19.8 | 21.0 | 21.9 | 22.5 | 22.8 | 22.3 | 20.8 | 16.2 | 13.5 | 11.7 | 10.6 | 10.1 | 15.3 | 22.8 |
| 30-Aug | 9.4 | 8.8 | 8.8 | 8.9 | 8.0 | 7.0 | 8.1 | 12.1 | 16.0 | 18.2 | 20.2 | 22.1 | 23.7 | 25.1 | 25.5 | 25.6 | 25.6 | 25.2 | 22.2 | 17.7 | 15.2 | 15.2 | 16.4 | 15.1 | 16.7 | 25.6 |
| 31-Aug | 14.7 | 14.8 | 14.2 | 14.0 | 11.8 | 11.4 | 10.9 | 13.7 | 17.1 | 19.2 | 20.8 | 22.1 | 23.2 | 22.8 | 24.5 | 24.3 | 24.4 | 23.4 | 21.2 | 15.7 | 13.1 | 11.7 | 10.3 | 9.2 | 17.0 | 24.5 |
| | 12.0 | 11.4 | 11.0 | 10.8 | 10.5 | 10.5 | 11.7 | 14.1 | 16.2 | 17.8 | 19.4 | 20.8 | 21.7 | 22.4 | 22.7 | 22.6 | 22.4 | 21.8 | 20.7 | 17.9 | 15.5 | 14.4 | 13.5 | 12.7 | Diurnal Average | |
| | 18.4 | 16.9 | 16.0 | 17.9 | 18.2 | 17.6 | 17.6 | 17.2 | 20.0 | 22.1 | 24.3 | 25.6 | 28.1 | 28.7 | 29.1 | 29.9 | 29.9 | 29.1 | 26.9 | 25.1 | 24.1 | 23.3 | 22.8 | 21.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Fort McKay South - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 90 | 12.10 | 12.10 |
| 10 - 20 | 452 | 60.75 | 72.85 |
| > 20 | 202 | 27.15 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 99.7 % on Aug 17 07:00

Maximum Daily Average: 87.2 % on Aug 1

Minimum Value: 29.3 % on Aug 24 14:00

Minimum Daily Average: 64.4 % on Aug 29

Maximum Diurnal Average: 93.5 % at hour 6

Minimum Diurnal Average: 49.2 % at hour 15

Monthly Average: 73.70 %

Percentiles: $P_1$ = 33.4 $P_{10}$ = 44.5 $Q_1$ = 56.2 Median = 77.1 $Q_3$ = 93.0 $P_{90}$ = 96.6 $P_{99}$ = 99.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

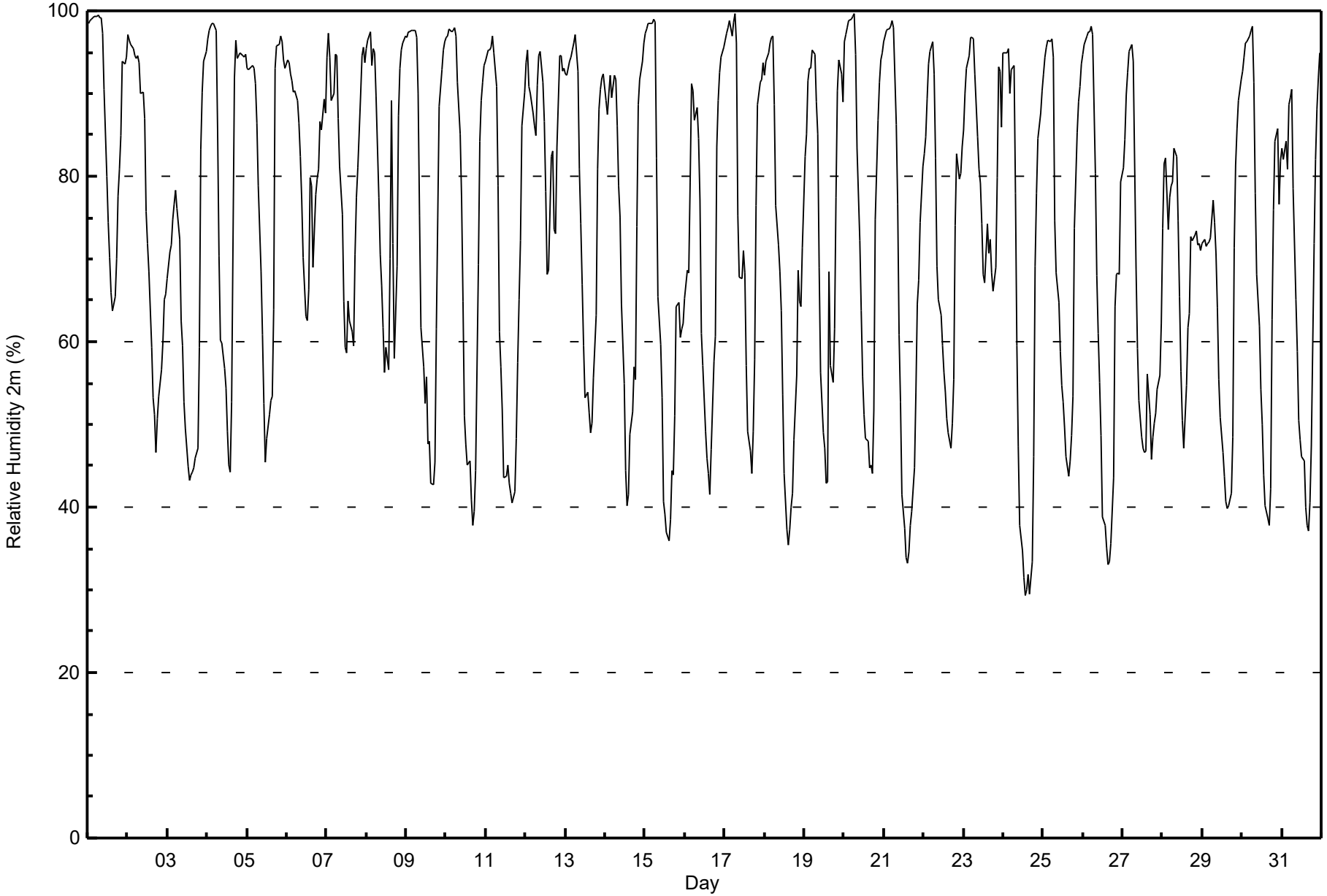
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 98.4 | 98.7 | 98.9 | 99.1 | 99.3 | 99.4 | 99.5 | 99.1 | 99.2 | 97.2 | 90.4 | 80.0 | 74.5 | 70.1 | 65.9 | 63.7 | 65.4 | 70.0 | 77.6 | 80.9 | 84.9 | 93.9 | 93.5 | 94.4 | 87.2 | 99.5 |
| 2-Aug | 97.2 | 96.5 | 95.9 | 95.4 | 94.5 | 94.2 | 94.6 | 93.7 | 90.0 | 90.1 | 87.0 | 75.8 | 71.9 | 68.4 | 59.4 | 53.2 | 51.1 | 46.5 | 50.7 | 53.4 | 56.6 | 60.0 | 65.1 | 65.8 | 75.3 | 97.2 |
| 3-Aug | 67.7 | 70.8 | 71.7 | 74.8 | 76.6 | 78.3 | 76.1 | 72.5 | 62.5 | 59.4 | 52.7 | 49.5 | 45.0 | 43.2 | 43.9 | 44.3 | 44.8 | 45.9 | 47.1 | 59.3 | 83.3 | 90.2 | 93.9 | 95.1 | 64.5 | 95.1 |
| 4-Aug | 96.6 | 97.6 | 98.1 | 98.5 | 98.5 | 97.6 | 85.7 | 70.3 | 60.2 | 59.9 | 56.8 | 54.4 | 49.1 | 45.0 | 44.2 | 52.6 | 91.9 | 96.5 | 94.2 | 94.5 | 94.9 | 94.7 | 94.5 | 94.7 | 80.0 | 98.5 |
| 5-Aug | 93.0 | 92.9 | 93.3 | 93.5 | 93.0 | 91.2 | 86.4 | 78.8 | 68.5 | 60.9 | 52.5 | 45.3 | 48.3 | 51.1 | 52.9 | 53.4 | 63.8 | 93.0 | 95.8 | 95.9 | 97.0 | 96.4 | 94.0 | 93.1 | 78.5 | 97.0 |
| 6-Aug | 94.0 | 93.7 | 92.4 | 91.5 | 90.2 | 90.3 | 89.1 | 86.5 | 82.5 | 77.1 | 70.2 | 63.0 | 62.6 | 66.2 | 79.9 | 78.9 | 69.0 | 77.9 | 79.7 | 80.8 | 86.6 | 85.6 | 89.3 | 87.7 | 81.9 | 94.0 |
| 7-Aug | 94.5 | 97.3 | 94.4 | 89.2 | 90.0 | 94.7 | 94.5 | 86.9 | 81.3 | 75.4 | 64.9 | 59.4 | 58.7 | 64.9 | 62.6 | 61.1 | 59.4 | 70.5 | 77.4 | 81.0 | 89.9 | 94.6 | 95.7 | 93.7 | 80.5 | 97.3 |
| 8-Aug | 95.5 | 96.4 | 97.4 | 93.3 | 95.4 | 94.9 | 89.6 | 77.5 | 70.5 | 66.7 | 61.7 | 56.3 | 59.2 | 56.6 | 70.1 | 89.2 | 71.8 | 57.9 | 69.1 | 87.2 | 93.1 | 95.2 | 96.0 | 97.0 | 80.7 | 97.4 |
| 9-Aug | 96.8 | 97.4 | 97.5 | 97.6 | 97.6 | 97.7 | 96.9 | 90.1 | 75.3 | 61.6 | 57.0 | 52.6 | 55.8 | 47.6 | 47.9 | 42.9 | 42.7 | 45.4 | 61.5 | 75.1 | 88.5 | 92.9 | 95.3 | 96.3 | 75.4 | 97.7 |
| 10-Aug | 96.8 | 96.9 | 97.8 | 97.5 | 97.6 | 98.0 | 96.9 | 91.4 | 85.1 | 77.2 | 64.8 | 51.0 | 47.6 | 45.1 | 45.7 | 40.8 | 37.8 | 39.6 | 44.5 | 69.3 | 84.3 | 89.1 | 91.3 | 93.5 | 74.1 | 98.0 |
| 11-Aug | 93.9 | 95.3 | 95.2 | 95.7 | 97.0 | 94.9 | 90.9 | 78.9 | 61.1 | 56.9 | 51.7 | 43.6 | 43.7 | 45.0 | 42.9 | 41.7 | 40.5 | 41.8 | 48.3 | 57.5 | 65.0 | 72.2 | 86.1 | 90.2 | 67.9 | 97.0 |
| 12-Aug | 93.7 | 95.3 | 90.8 | 90.1 | 87.7 | 86.1 | 85.0 | 91.1 | 94.5 | 95.1 | 91.4 | 86.7 | 78.2 | 68.1 | 68.6 | 82.4 | 83.0 | 73.6 | 73.0 | 83.6 | 94.6 | 94.6 | 92.7 | 93.0 | 86.4 | 95.3 |
| 13-Aug | 92.3 | 92.3 | 93.9 | 94.3 | 95.2 | 96.1 | 97.1 | 92.7 | 80.9 | 74.3 | 67.0 | 59.6 | 53.3 | 53.8 | 51.4 | 49.0 | 50.1 | 55.6 | 63.2 | 80.9 | 88.1 | 90.6 | 91.9 | 92.3 | 77.3 | 97.1 |
| 14-Aug | 89.2 | 87.5 | 90.0 | 92.2 | 89.6 | 92.3 | 91.7 | 86.2 | 78.9 | 75.1 | 64.6 | 55.0 | 44.4 | 40.2 | 41.5 | 48.7 | 51.5 | 56.9 | 55.5 | 73.9 | 88.6 | 91.7 | 93.9 | 96.2 | 74.0 | 96.2 |
| 15-Aug | 97.2 | 97.8 | 98.4 | 98.5 | 98.5 | 99.1 | 98.6 | 82.2 | 65.4 | 59.7 | 53.3 | 40.8 | 39.2 | 37.0 | 36.0 | 38.5 | 44.4 | 43.9 | 50.9 | 64.2 | 64.8 | 60.6 | 61.5 | 62.2 | 66.4 | 99.1 |
| 16-Aug | 65.3 | 68.7 | 68.3 | 79.4 | 91.2 | 90.3 | 86.7 | 88.3 | 84.5 | 77.1 | 61.0 | 57.1 | 49.2 | 45.9 | 44.1 | 41.6 | 46.9 | 57.7 | 60.7 | 83.6 | 89.2 | 92.5 | 94.4 | 95.7 | 71.6 | 95.7 |
| 17-Aug | 96.5 | 97.2 | 98.0 | 98.8 | 97.0 | 98.6 | 99.7 | 96.1 | 75.2 | 67.9 | 67.7 | 71.0 | 68.3 | 57.1 | 49.2 | 46.8 | 44.1 | 49.1 | 57.8 | 76.5 | 88.7 | 91.4 | 91.7 | 93.8 | 78.3 | 99.7 |
| 18-Aug | 92.1 | 93.9 | 94.8 | 96.1 | 96.7 | 97.0 | 88.7 | 76.4 | 71.8 | 68.4 | 63.8 | 53.5 | 44.0 | 37.2 | 35.4 | 37.3 | 40.1 | 41.8 | 48.2 | 55.9 | 68.7 | 64.9 | 64.2 | 71.4 | 66.8 | 97.0 |
| 19-Aug | 82.4 | 85.1 | 91.5 | 93.0 | 93.0 | 95.2 | 94.8 | 88.9 | 85.0 | 69.0 | 56.2 | 49.0 | 47.2 | 42.8 | 43.0 | 68.5 | 57.1 | 55.0 | 61.6 | 77.4 | 90.3 | 94.2 | 92.4 | 88.9 | 75.1 | 95.2 |
| 20-Aug | 96.3 | 97.1 | 97.9 | 98.9 | 98.9 | 99.3 | 99.7 | 94.7 | 83.4 | 72.3 | 63.7 | 55.8 | 51.2 | 48.2 | 48.0 | 44.8 | 45.1 | 44.0 | 51.7 | 74.8 | 86.7 | 91.4 | 94.0 | 94.9 | 76.4 | 99.7 |
| 21-Aug | 96.4 | 97.7 | 97.8 | 97.9 | 98.1 | 98.8 | 98.0 | 86.3 | 76.6 | 60.8 | 52.8 | 41.5 | 37.5 | 34.0 | 33.2 | 34.7 | 37.8 | 39.5 | 44.7 | 53.9 | 64.6 | 67.4 | 74.4 | 81.1 | 66.9 | 98.8 |
| 22-Aug | 82.7 | 84.8 | 89.3 | 93.6 | 95.1 | 96.3 | 92.4 | 82.2 | 69.2 | 65.2 | 63.2 | 59.4 | 56.2 | 53.9 | 50.7 | 48.9 | 47.1 | 50.2 | 55.4 | 74.1 | 82.8 | 79.7 | 80.4 | 83.6 | 72.3 | 96.3 |
| 23-Aug | 85.6 | 90.0 | 93.0 | 94.6 | 96.7 | 96.7 | 96.6 | 92.3 | 84.8 | 80.9 | 79.2 | 74.3 | 68.1 | 67.2 | 74.3 | 70.7 | 72.4 | 68.3 | 66.1 | 69.0 | 79.9 | 93.3 | 92.7 | 86.0 | 82.2 | 96.7 |
| 24-Aug | 94.9 | 94.9 | 94.8 | 95.5 | 90.1 | 92.9 | 93.4 | 77.9 | 59.4 | 47.3 | 37.8 | 34.7 | 31.5 | 29.3 | 30.0 | 31.9 | 29.5 | 33.4 | 46.1 | 69.2 | 78.0 | 84.6 | 87.6 | 90.3 | 64.8 | 95.5 |
| 25-Aug | 92.3 | 94.5 | 95.5 | 96.4 | 96.2 | 96.6 | 94.3 | 74.5 | 68.3 | 64.8 | 58.8 | 54.8 | 52.7 | 49.7 | 46.0 | 43.7 | 45.5 | 48.6 | 53.4 | 73.7 | 85.3 | 88.9 | 90.8 | 93.5 | 73.3 | 96.6 |
| 26-Aug | 94.7 | 95.9 | 97.0 | 97.5 | 97.5 | 98.1 | 97.1 | 80.4 | 67.9 | 61.1 | 55.1 | 48.6 | 38.8 | 37.8 | 35.2 | 33.0 | 33.5 | 35.6 | 43.6 | 64.2 | 68.1 | 68.4 | 68.2 | 79.3 | 66.5 | 98.1 |
| 27-Aug | 81.0 | 84.5 | 89.9 | 92.6 | 95.2 | 95.9 | 94.0 | 81.4 | 68.9 | 59.2 | 52.9 | 48.6 | 47.2 | 46.7 | 46.8 | 56.2 | 51.2 | 45.8 | 48.5 | 50.2 | 51.4 | 54.2 | 56.0 | 62.2 | 65.0 | 95.9 |
| 28-Aug | 73.7 | 81.5 | 82.1 | 73.6 | 77.5 | 78.8 | 79.4 | 83.4 | 82.4 | 74.6 | 65.5 | 56.4 | 50.6 | 47.1 | 54.8 | 61.7 | 63.5 | 72.7 | 72.2 | 72.9 | 73.4 | 71.8 | 71.8 | 70.9 | 70.5 | 83.4 |
| 29-Aug | 71.8 | 72.4 | 71.5 | 71.9 | 72.0 | 72.5 | 77.1 | 74.5 | 70.6 | 64.1 | 55.3 | 50.8 | 46.6 | 43.7 | 40.6 | 39.8 | 40.2 | 41.6 | 48.4 | 71.3 | 81.4 | 85.7 | 89.2 | 91.7 | 64.4 | 91.7 |
| 30-Aug | 92.7 | 94.5 | 96.1 | 96.2 | 97.0 | 97.6 | 98.1 | 91.4 | 77.9 | 68.1 | 61.9 | 54.2 | 50.0 | 43.9 | 40.1 | 38.7 | 37.9 | 42.2 | 62.7 | 76.0 | 84.2 | 85.7 | 76.6 | 81.8 | 72.7 | 98.1 |
| 31-Aug | 83.3 | 82.0 | 84.3 | 80.8 | 88.7 | 89.4 | 90.6 | 78.5 | 65.1 | 58.8 | 50.6 | 48.2 | 46.2 | 45.6 | 40.0 | 37.8 | 37.1 | 40.4 | 47.5 | 71.9 | 82.0 | 88.1 | 91.8 | 94.9 | 67.7 | 94.9 |
| | 89.6 | 91.0 | 91.9 | 92.2 | 93.0 | 93.5 | 92.0 | 84.7 | 75.7 | 69.2 | 62.3 | 55.8 | 52.1 | 49.4 | 49.2 | 50.9 | 51.5 | 54.2 | 59.9 | 72.7 | 81.1 | 84.0 | 85.5 | 87.3 | Diurnal Average | |
| | 98.4 | 98.7 | 98.9 | 99.1 | 99.3 | 99.4 | 99.7 | 99.1 | 99.2 | 97.2 | 91.4 | 86.7 | 78.2 | 70.1 | 79.9 | 89.2 | 91.9 | 96.5 | 95.8 | 95.9 | 97.0 | 96.4 | 96.0 | 97.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Fort McKay South - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Fort McKay South - August 2026

Maximum Speed: 25 km/h on Aug 2 15:00

Maximum Daily Speed Average: 16.4 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 20 02:00

Minimum Daily Speed Average: 1.2 km/h on Aug 9

Maximum Diurnal Speed Average: 2.9 km/h at hour 12

Minimum Diurnal Speed Average: 0.6 km/h at hour 9

Monthly Average Velocity: 1.6 km/h 294.7 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 3 Median = 6 $Q_3$ = 9 $P_{90}$ = 12 $P_{99}$ = 20

Hours in Service: 744

Hours of Data: 743

Hours of Missing Data: 1

Percent Operational Time: 99.9

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | WSW3 | SSW2 | SW2 | SSW2 | SSW2 | SW2 | SSW4 | SSW2 | N2 | ESE2 | N1 | NNE5 | N11 | N11 | N11 | N11 | NNW11 | N11 | N10 | NNW10 | N14 | NNW10 | N10 | N8 | N5.0 | N14 |
| 2-Aug | NW4 | NNW15 | N14 | N15 | N12 | NNW9 | N10 | N13 | N13 | N19 | N23 | N24 | N20 | N21 | N25 | N24 | NNW20 | NNW22 | N18 | NNW20 | NNW17 | NNW14 | NNW12 | NNW12 | N16.4 | N25 |
| 3-Aug | NW10 | NW10 | NW11 | NW9 | WNW7 | WNW7 | NW5 | NW5 | NNW11 | NNW12 | NNW13 | NNW12 | NNW10 | N9 | NNE8 | NNE10 | NNE9 | NNE8 | NE6 | ENE2 | WSW3 | SW3 | WSW2 | WSW1 | NNW6.2 | NNW13 |
| 4-Aug | WSW3 | SW3 | SSW2 | SW3 | SSW2 | SSW4 | SSE8 | SSE8 | SSW6 | S7 | WSW9 | SW11 | WSW12 | SW12 | SW9 | WSW8 | NW4 | NW2 | WNW6 | W6 | WNW7 | NW7 | NW5 | WNW6 | WSW4.6 | SW12 |
| 5-Aug | WNW6 | W6 | W6 | W7 | W7 | WNW9 | NW7 | NW6 | NW11 | NW13 | NNW14 | NW15 | NW13 | NW10 | NW7 | NNW9 | N11 | N7 | NW6 | NW7 | WNW6 | W7 | WNW8 | WNW9 | NW7.8 | NW15 |
| 6-Aug | WNW8 | WNW8 | WNW9 | WNW9 | WNW9 | WNW7 | WNW7 | NW8 | NW8 | NNW10 | NNW9 | NNW10 | N9 | NNE7 | NNE5 | W1 | W4 | WNW7 | NNW5 | WNW4 | WNW5 | WNW8 | W7 | WNW7 | NW6.2 | NNW10 |
| 7-Aug | NNW3 | S0 | NW4 | WNW6 | WNW3 | S2 | SSE1 | WNW5 | WNW8 | WNW9 | WNW11 | WNW9 | N8 | NNE6 | NNE3 | NNW3 | NNE7 | NNE6 | NNE5 | N5 | WSW3 | WNW1 | W2 | W4 | NW3.3 | WNW11 |
| 8-Aug | SSW1 | WSW1 | W4 | W5 | N0 | WSW2 | NNW3 | N7 | NNE7 | NNE8 | NNE7 | N9 | N9 | NNE6 | NNW5 | W4 | WSW2 | NNW5 | NNW4 | WNW2 | WSW1 | W2 | WNW3 | SW2 | NNW2.7 | N9 |
| 9-Aug | WSW2 | WSW2 | SW3 | WNW1 | SE0 | SSW1 | SW1 | NE1 | NNE1 | SE4 | ESE4 | ENE2 | NNW2 | NNE5 | NNE8 | NNE6 | NNE7 | NNE6 | NNW3 | NW2 | W2 | WSW2 | SW2 | WNW1 | N1.2 | NNE8 |
| 10-Aug | SW2 | SW2 | SW2 | SSW2 | WSW3 | W2 | NW1 | WSW1 | NNE2 | NNE4 | NNE7 | N8 | N11 | NNE12 | N9 | NNE9 | NNE11 | N11 | N7 | NW3 | NW3 | WSW2 | W2 | W1 | N3.5 | NNE12 |
| 11-Aug | WNW1 | SSW1 | N1 | SSW2 | SSE1 | SSW2 | SSW2 | NNW0 | NE3 | NNE10 | NNE11 | N14 | NNE15 | NNE14 | NNE16 | NNE15 | NNE14 | N12 | N13 | NNE12 | N8 | N5 | WNW3 | NW3 | N6.5 | NNE16 |
| 12-Aug | WSW3 | NW3 | NW5 | NW6 | NW4 | WNW6 | NW4 | NW3 | N6 | NNW8 | N10 | N9 | N11 | N13 | N15 | N11 | N10 | N9 | NE4 | N2 | NW3 | NW6 | NNW7 | NNW7 | NNW6.1 | N15 |
| 13-Aug | NNW8 | NNW6 | NNW5 | NNW6 | NNW6 | NW4 | NW3 | N5 | NNE8 | NNE7 | NNE9 | NNE10 | NNE10 | NNE12 | NNE12 | NNE11 | NE10 | NNE9 | NNE5 | NW3 | WNW2 | W2 | W2 | WNW3 | N5.8 | NNE12 |
| 14-Aug | W2 | W3 | WNW1 | W3 | W2 | WNW3 | WNW2 | NW3 | N4 | N3 | NNE7 | N7 | NNE4 | NNE5 | NNE8 | NW12 | W5 | S5 | S6 | WSW3 | S4 | SW2 | WSW3 | WSW3 | NW1.9 | NW12 |
| 15-Aug | WSW3 | SW3 | SW3 | SW2 | WSW3 | SW3 | S4 | SSE5 | SSW5 | S8 | S8 | WSW10 | SW10 | SW12 | SW12 | W5 | W5 | SW5 | SW3 | WSW5 | SW6 | WSW6 | SW6 | SW6 | SW5.3 | SW12 |
| 16-Aug | WSW8 | WSW8 | W5 | WSW1 | W2 | WNW5 | NW4 | N11 | N15 | N15 | N14 | N10 | NNE12 | NNE10 | N10 | N5 | NNW6 | NNE9 | ENE3 | W2 | WSW3 | SW3 | SSW2 | WSW2 | N4.5 | N15 |
| 17-Aug | W1 | WSW3 | W2 | SSW3 | SSW5 | SSW4 | S4 | SSE4 | SSE3 | WSW3 | WSW3 | E2 | ESE4 | ESE6 | ESE8 | SE8 | S9 | SSE8 | S5 | SW4 | S3 | S4 | S3 | SSW4 | S3.2 | S9 |
| 18-Aug | S3 | SSW3 | S3 | SSW3 | S4 | S4 | S6 | SSE8 | S10 | SSE10 | S12 | SW8 | SW8 | SW10 | SSW11 | WSW10 | SW11 | WSW10 | SW7 | SW6 | SW5 | WSW6 | W8 | W4 | SW6.1 | S12 |
| 19-Aug | W3 | SW2 | S3 | SW4 | S4 | WSW2 | SSW1 | SSE2 | WSW3 | NW5 | NW7 | NNW5 | NE7 | N7 | NNE7 | WNW4 | N11 | N10 | N8 | N4 | WSW3 | SW3 | WNW5 | WNW4 | NNW2.3 | N11 |
| 20-Aug | WSW1 | N0 | W2 | SW2 | W1 | WSW2 | SSW3 | WNW2 | N3 | N5 | NNE12 | NNE13 | NNE10 | NNE8 | NNE11 | NNE10 | NNE11 | NNE9 | N5 | WSW3 | W1 | WSW2 | WSW3 | SW2 | N3.5 | NNE13 |
| 21-Aug | SW2 | SSW1 | SW3 | WSW2 | SSW2 | SW3 | S2 | SSE5 | SSE6 | SSE7 | SE5 | S9 | S10 | S10 | S11 | S12 | SSE11 | S11 | SSE11 | S9 | S8 | S8 | S6 | SSE5 | S6.3 | S12 |
| 22-Aug | SSE8 | S6 | WNW2 | WSW2 | SW3 | S1 | SSW1 | SSW2 | SSE5 | SSE7 | SSE9 | SSE10 | SSE10 | SE9 | SE9 | SE10 | SSE12 | SSE8 | SSE7 | SSW3 | SSW4 | S8 | S3 | S6 | SSE5.5 | SSE12 |
| 23-Aug | SSW6 | S6 | S7 | S5 | SSW5 | S6 | S5 | S6 | SSE6 | S10 | S7 | S7 | SSE9 | SE9 | SSE7 | SE2 | S4 | W5 | NW9 | NW7 | NW3 | WSW3 | WNW4 | WNW4 | SSW3.7 | SSE10 |
| 24-Aug | WSW2 | WNW3 | W3 | NW3 | WNW5 | WNW2 | SW2 | WNW5 | W4 | NW5 | NW11 | NNW11 | NNW11 | N12 | N12 | N9 | NNE10 | NNE8 | N5 | W2 | WSW3 | WSW1 | NW1 | WSW3 | NNW4.3 | N12 |
| 25-Aug | WSW2 | SW3 | WSW2 | NW1 | NNW1 | SW1 | UO | NE3 | NNE5 | NNE5 | NNE4 | NE4 | ENE6 | E6 | E6 | NE6 | NE9 | NNE8 | NE6 | NNW4 | NW4 | WNW3 | W2 | WNW1 | NNE2.5 | NE9 |
| 26-Aug | W1 | W1 | WSW2 | WSW2 | WSW1 | SW2 | S3 | SSE4 | SSE9 | SSE8 | SE9 | SSE12 | S17 | SSE15 | S14 | S17 | SSE14 | SSE13 | SSE9 | S4 | S6 | S8 | S8 | SSW5 | S7.2 | S17 |
| 27-Aug | SSW6 | SW5 | W1 | W2 | WSW1 | W2 | WNW1 | SSW0 | SE5 | SSE8 | SSE7 | SSE10 | S13 | SSE11 | S10 | SSE5 | SE5 | SSE14 | SSE11 | SE7 | SSE9 | SSE11 | SSE12 | S7 | SSE6.1 | SSE14 |
| 28-Aug | S4 | S2 | S3 | S13 | SW7 | WNW2 | S13 | S12 | S13 | SSW15 | SW14 | SW14 | SW19 | SW20 | SW17 | SW16 | SW16 | SW14 | WSW13 | WSW10 | SW11 | SW12 | SW11 | SW11 | SW10.9 | SW20 |
| 29-Aug | SW11 | SW11 | SW11 | SW11 | SW12 | SSW12 | S10 | SSW14 | SSW13 | SW13 | SW11 | WSW13 | SW14 | SW14 | SW13 | SW13 | SW11 | SSW11 | SSW6 | WSW4 | S4 | S4 | S4 | S4 | SW9.8 | SSW14 |
| 30-Aug | SW1 | SSW3 | SW2 | WSW1 | SW2 | WSW3 | WNW1 | S3 | SSE6 | S7 | SE7 | ESE6 | ESE5 | SSE3 | SE4 | ESE6 | ESE4 | SE3 | WSW2 | WSW3 | W1 | NW4 | NNW6 | NW5 | SSE1.5 | S7 |
| 31-Aug | NNW5 | NNW4 | W4 | W6 | NNW0 | WSW2 | NW1 | W2 | SW1 | WSW3 | SSE1 | WSW3 | NW3 | WSW5 | NW5 | WSW7 | SW6 | WSW8 | WNW6 | NW4 | W2 | SW2 | SW2 | SW1 | W2.8 | WSW8 |
| | WSW2.5 | W2.4 | W2.6 | W2.7 | WSW2.2 | WSW2.4 | SW1.6 | WSW0.8 | NW0.6 | NW1.1 | NNW2.4 | NNW2.9 | NNW2.2 | N1.8 | N2.2 | NNW2.0 | N2.1 | N1.8 | NNW1.8 | WNW2.5 | W2.3 | WSW2.6 | W2.7 | W2.6 | Diurnal Average | |
| | SW11 | NNW15 | N14 | N15 | N12 | SSW12 | S13 | SSW14 | N15 | N19 | N23 | N24 | N20 | N21 | N25 | N24 | NNW20 | NNW22 | N18 | NNW20 | NNW17 | NNW14 | NNW12 | NNW12 | Diurnal Maximum | |

UO - Unstable Operation

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 7 km/h on Aug 2 11:00

Minimum Value: 0 km/h on Aug 16 23:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 1$ Median = 2 $Q_3 = 3$ $P_{90} = 4$ $P_{99} = 6$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 6 | 4 | 3 | 6 | 6 |
| 2-Aug | 2 | 4 | 3 | 4 | 4 | 2 | 3 | 3 | 3 | 6 | 7 | 7 | 5 | 6 | 7 | 6 | 6 | 7 | 5 | 6 | 6 | 4 | 3 | 3 | 7 |
| 3-Aug | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 6 | 6 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 6 |
| 5-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 2 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 5 |
| 6-Aug | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 1 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 4 |
| 7-Aug | 1 | 1 | 1 | 3 | 3 | 1 | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 1 | 4 |
| 8-Aug | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 9-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 3 |
| 11-Aug | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 2 | 1 | 1 | 1 | 4 |
| 12-Aug | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 3 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 1 | 2 | 2 | 2 | 4 |
| 13-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 4 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 16-Aug | 1 | 2 | 3 | 2 | 2 | 2 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 0 | 0 | 1 | 4 |
| 17-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 18-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 3 | 2 | 1 | 1 | 2 | 2 | 4 | 5 |
| 19-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 4 | 4 | 4 |
| 20-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 3 |
| 21-Aug | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 4 |
| 22-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 3 |
| 23-Aug | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 1 | 2 | 1 | 2 | 3 |
| 24-Aug | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | UO | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 3 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 2 | 1 | 5 |
| 27-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 7 | 3 | 2 | 2 | 2 | 3 | 2 | 7 |
| 28-Aug | 1 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 7 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 7 |
| 29-Aug | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 30-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 3 |
| 31-Aug | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

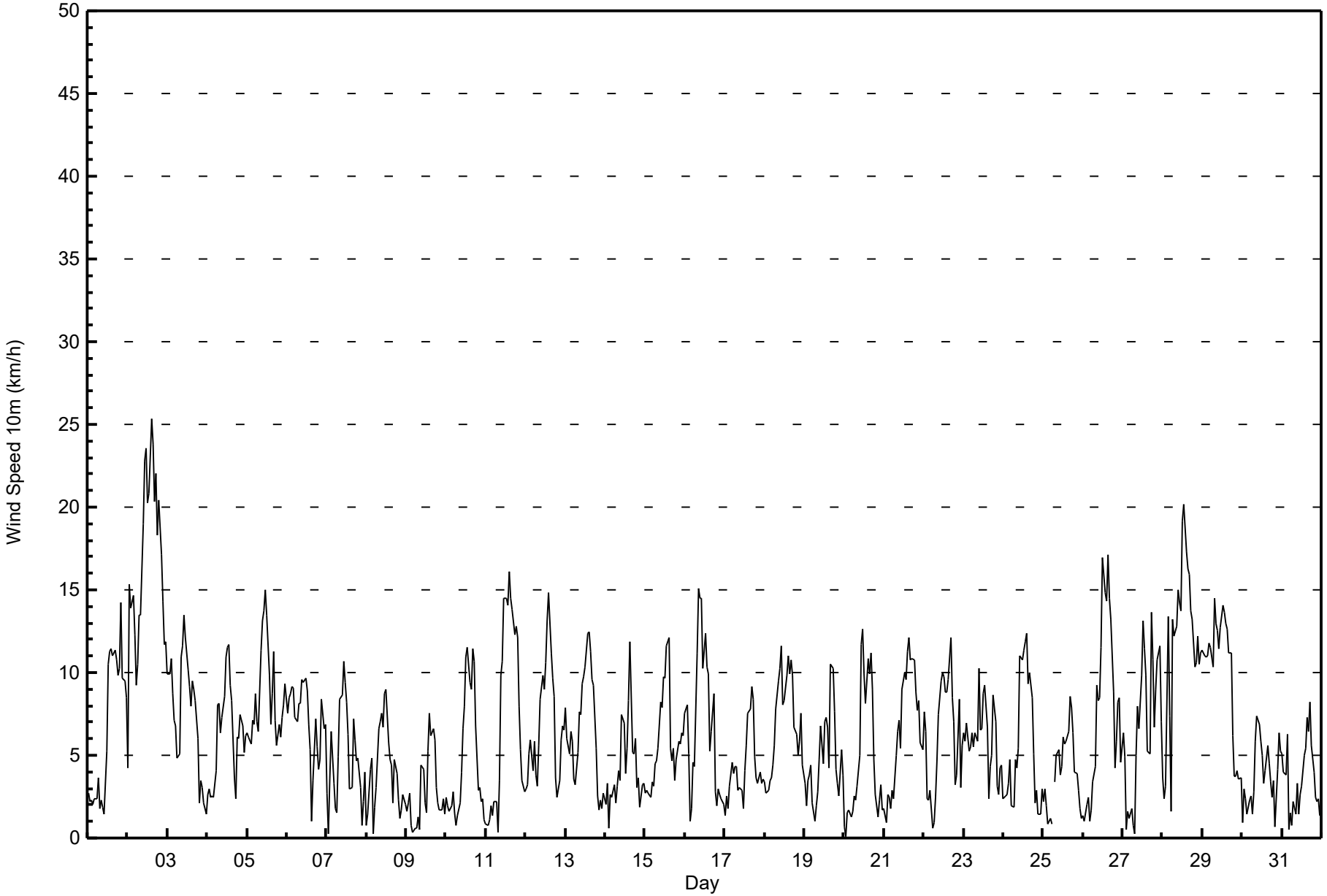
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Fort McKay South - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 366 | 49.26 | 49.26 |
| 6 - 11 | 284 | 38.22 | 87.48 |
| 12 - 19 | 83 | 11.17 | 98.65 |
| 20 - 28 | 10 | 1.35 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Fort McKay South - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 17 | 14 | 5 | 3 | 1 | 5 | 8 | 14 | 31 | 35 | 42 | 60 | 44 | 34 | 35 | 18 | 366 |
| 6 - 11 | 39 | 44 | 5 | 1 | 2 | 4 | 8 | 32 | 31 | 6 | 22 | 13 | 8 | 28 | 20 | 21 | 284 |
| 12 - 19 | 18 | 11 | 0 | 0 | 0 | 0 | 0 | 7 | 10 | 4 | 17 | 3 | 0 | 0 | 4 | 9 | 83 |
| 20 - 28 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 10 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 80 | 69 | 10 | 4 | 3 | 9 | 16 | 53 | 72 | 45 | 82 | 76 | 52 | 62 | 59 | 51 | 743 |

Total Number of Valid Hours: 743

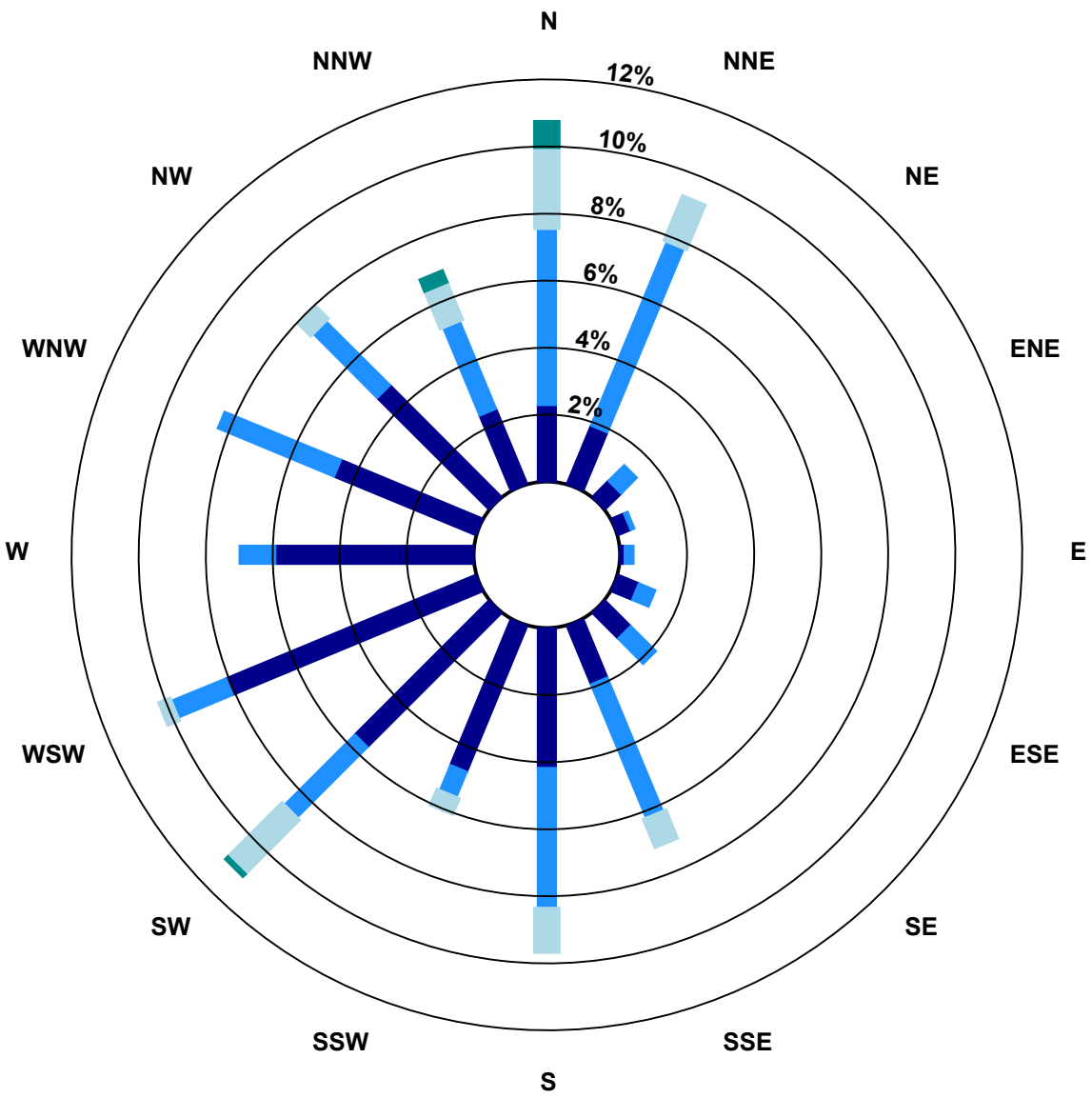
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Fort McKay South




Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 743

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Fort McKay South - August 2026

Direction of Maximum Speed: 354 deg on Aug 2 15:00
Direction of Maximum Daily Speed Average: 349.3 deg on Aug 2

Direction of Minimum Speed: 6 deg on Aug 20 02:00
Direction of Minimum Daily Speed Average: 1.2 deg on Aug 9

Monthly Average Direction: 294.7 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 244 | 209 | 230 | 205 | 192 | 224 | 200 | 206 | 9 | 123 | 8 | 13 | 3 | 5 | 1 | 1 | 348 | 352 | 351 | 337 | 355 | 343 | 356 | 3 | 351.0 |
| 2-Aug | 310 | 341 | 350 | 354 | 355 | 346 | 355 | 1 | 357 | 355 | 355 | 358 | 356 | 351 | 354 | 357 | 345 | 348 | 355 | 346 | 338 | 329 | 327 | 328 | 349.3 |
| 3-Aug | 322 | 318 | 319 | 310 | 302 | 298 | 311 | 308 | 348 | 342 | 339 | 334 | 348 | 0 | 32 | 25 | 20 | 23 | 41 | 71 | 246 | 233 | 243 | 238 | 339.2 |
| 4-Aug | 247 | 216 | 203 | 226 | 204 | 203 | 156 | 162 | 204 | 189 | 238 | 236 | 240 | 231 | 231 | 250 | 318 | 314 | 284 | 268 | 300 | 307 | 305 | 282 | 239.6 |
| 5-Aug | 286 | 263 | 265 | 270 | 277 | 296 | 309 | 322 | 324 | 319 | 328 | 324 | 326 | 321 | 304 | 344 | 3 | 350 | 319 | 323 | 286 | 273 | 292 | 299 | 312.1 |
| 6-Aug | 288 | 282 | 292 | 300 | 291 | 286 | 282 | 306 | 311 | 336 | 331 | 342 | 2 | 21 | 19 | 261 | 276 | 282 | 334 | 289 | 286 | 292 | 279 | 301 | 308.5 |
| 7-Aug | 341 | 189 | 308 | 287 | 302 | 172 | 154 | 287 | 285 | 290 | 300 | 296 | 9 | 19 | 32 | 338 | 17 | 22 | 20 | 9 | 257 | 286 | 274 | 271 | 321.0 |
| 8-Aug | 197 | 257 | 270 | 274 | 350 | 252 | 347 | 4 | 30 | 21 | 32 | 5 | 2 | 26 | 348 | 262 | 257 | 332 | 337 | 289 | 242 | 261 | 286 | 233 | 342.4 |
| 9-Aug | 252 | 255 | 236 | 300 | 137 | 213 | 225 | 38 | 18 | 130 | 109 | 72 | 348 | 33 | 22 | 23 | 15 | 12 | 327 | 310 | 276 | 237 | 231 | 285 | 9.2 |
| 10-Aug | 227 | 225 | 219 | 192 | 244 | 263 | 307 | 243 | 14 | 18 | 12 | 5 | 9 | 12 | 4 | 19 | 13 | 9 | 7 | 312 | 306 | 255 | 271 | 276 | 357.1 |
| 11-Aug | 287 | 202 | 6 | 193 | 155 | 200 | 212 | 345 | 36 | 20 | 20 | 4 | 14 | 16 | 16 | 12 | 16 | 11 | 9 | 14 | 3 | 354 | 291 | 309 | 10.4 |
| 12-Aug | 248 | 305 | 309 | 316 | 316 | 294 | 326 | 320 | 354 | 343 | 351 | 353 | 7 | 10 | 5 | 7 | 0 | 356 | 46 | 11 | 304 | 325 | 338 | 336 | 346.6 |
| 13-Aug | 344 | 345 | 328 | 337 | 339 | 323 | 319 | 360 | 13 | 15 | 22 | 15 | 13 | 18 | 27 | 31 | 34 | 25 | 17 | 313 | 287 | 278 | 274 | 286 | 5.2 |
| 14-Aug | 272 | 280 | 286 | 281 | 268 | 299 | 282 | 325 | 358 | 9 | 18 | 11 | 21 | 27 | 15 | 312 | 278 | 186 | 189 | 251 | 183 | 219 | 242 | 248 | 314.6 |
| 15-Aug | 245 | 236 | 227 | 232 | 237 | 215 | 186 | 166 | 200 | 178 | 186 | 238 | 218 | 219 | 219 | 274 | 267 | 225 | 221 | 237 | 233 | 241 | 229 | 234 | 221.4 |
| 16-Aug | 242 | 245 | 278 | 253 | 267 | 297 | 306 | 1 | 5 | 9 | 7 | 6 | 25 | 22 | 4 | 357 | 330 | 29 | 61 | 263 | 241 | 222 | 205 | 250 | 350.0 |
| 17-Aug | 263 | 251 | 263 | 208 | 195 | 193 | 169 | 158 | 148 | 244 | 251 | 88 | 108 | 123 | 118 | 132 | 175 | 162 | 178 | 223 | 186 | 188 | 189 | 193 | 171.8 |
| 18-Aug | 189 | 210 | 191 | 210 | 184 | 190 | 185 | 158 | 176 | 166 | 185 | 216 | 233 | 232 | 209 | 246 | 236 | 238 | 221 | 235 | 234 | 240 | 267 | 274 | 214.3 |
| 19-Aug | 275 | 215 | 175 | 214 | 172 | 248 | 206 | 163 | 240 | 316 | 320 | 348 | 36 | 6 | 24 | 282 | 358 | 8 | 9 | 357 | 250 | 214 | 299 | 293 | 332.0 |
| 20-Aug | 251 | 6 | 270 | 228 | 272 | 237 | 199 | 295 | 11 | 1 | 12 | 17 | 14 | 28 | 26 | 21 | 17 | 14 | 3 | 251 | 263 | 258 | 240 | 233 | 5.5 |
| 21-Aug | 233 | 212 | 224 | 249 | 204 | 221 | 169 | 152 | 156 | 168 | 126 | 189 | 185 | 189 | 176 | 170 | 160 | 169 | 167 | 180 | 176 | 171 | 179 | 166 | 174.9 |
| 22-Aug | 165 | 170 | 289 | 249 | 230 | 183 | 194 | 197 | 151 | 158 | 154 | 159 | 162 | 139 | 138 | 142 | 161 | 158 | 162 | 202 | 199 | 179 | 176 | 172 | 164.1 |
| 23-Aug | 199 | 189 | 190 | 190 | 193 | 191 | 188 | 179 | 168 | 169 | 177 | 182 | 162 | 145 | 148 | 142 | 178 | 273 | 324 | 312 | 317 | 247 | 303 | 300 | 192.3 |
| 24-Aug | 237 | 285 | 281 | 310 | 292 | 287 | 226 | 294 | 270 | 306 | 314 | 327 | 339 | 352 | 7 | 10 | 14 | 16 | 355 | 265 | 241 | 249 | 312 | 248 | 329.8 |
| 25-Aug | 251 | 231 | 241 | 312 | 339 | 226 | UO | 35 | 24 | 14 | 31 | 49 | 70 | 94 | 94 | 45 | 39 | 32 | 35 | 336 | 323 | 302 | 273 | 287 | 29.9 |
| 26-Aug | 270 | 262 | 255 | 245 | 241 | 222 | 188 | 147 | 157 | 147 | 138 | 147 | 176 | 168 | 171 | 169 | 167 | 164 | 164 | 189 | 190 | 179 | 181 | 207 | 170.4 |
| 27-Aug | 212 | 218 | 275 | 279 | 238 | 261 | 284 | 200 | 139 | 157 | 154 | 161 | 178 | 156 | 171 | 153 | 138 | 147 | 150 | 143 | 153 | 157 | 164 | 169 | 163.2 |
| 28-Aug | 188 | 183 | 180 | 175 | 227 | 289 | 170 | 179 | 183 | 209 | 223 | 224 | 216 | 216 | 229 | 234 | 216 | 221 | 255 | 240 | 231 | 234 | 232 | 224 | 216.2 |
| 29-Aug | 223 | 215 | 226 | 225 | 214 | 213 | 191 | 197 | 212 | 235 | 234 | 238 | 228 | 225 | 228 | 217 | 217 | 210 | 212 | 239 | 170 | 187 | 182 | 178 | 217.3 |
| 30-Aug | 218 | 213 | 225 | 250 | 218 | 251 | 287 | 169 | 149 | 169 | 140 | 108 | 117 | 154 | 124 | 121 | 112 | 133 | 247 | 241 | 270 | 325 | 337 | 314 | 162.6 |
| 31-Aug | 335 | 343 | 261 | 281 | 338 | 249 | 319 | 263 | 215 | 241 | 152 | 246 | 305 | 249 | 313 | 239 | 231 | 241 | 294 | 308 | 275 | 220 | 222 | 230 | 267.0 |
| | 255.8 | 259.1 | 269.8 | 265.4 | 257.9 | 256.5 | 222.8 | 242.3 | 312.4 | 314.3 | 340.2 | 331.6 | 345.4 | 1.7 | 7.3 | 343.7 | 352.0 | 351.9 | 336.3 | 296.7 | 269.2 | 252.8 | 263.7 | 268.0 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Fort McKay South - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 111 deg on Aug 11 08:00

Minimum Value: 8 deg on Aug 21 21:00

Percentiles: $P_1$ = 11 $P_{10}$ = 16 $Q_1$ = 21 Median = 27 $Q_3$ = 40 $P_{90}$ = 67 $P_{99}$ = 95

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 29 | 22 | 26 | 23 | 24 | 37 | 19 | 62 | 70 | 68 | 75 | 29 | 19 | 19 | 19 | 20 | 20 | 19 | 17 | 19 | 25 | 53 | 21 | 60 | 75 |
| 2-Aug | 66 | 18 | 19 | 18 | 18 | 17 | 18 | 19 | 19 | 20 | 21 | 21 | 21 | 21 | 21 | 23 | 21 | 23 | 19 | 20 | 20 | 19 | 20 | 19 | 66 |
| 3-Aug | 21 | 20 | 18 | 18 | 23 | 24 | 30 | 30 | 28 | 22 | 23 | 24 | 40 | 42 | 34 | 27 | 26 | 23 | 26 | 68 | 11 | 13 | 58 | 61 | 68 |
| 4-Aug | 20 | 18 | 26 | 40 | 40 | 40 | 17 | 28 | 33 | 26 | 35 | 30 | 35 | 29 | 27 | 41 | 88 | 61 | 21 | 24 | 34 | 21 | 19 | 20 | 88 |
| 5-Aug | 20 | 24 | 26 | 25 | 24 | 22 | 27 | 33 | 28 | 28 | 30 | 27 | 26 | 28 | 26 | 25 | 18 | 27 | 21 | 22 | 24 | 27 | 23 | 20 | 33 |
| 6-Aug | 23 | 25 | 25 | 21 | 24 | 25 | 28 | 25 | 25 | 23 | 25 | 28 | 32 | 32 | 47 | 82 | 84 | 24 | 35 | 26 | 29 | 20 | 22 | 23 | 84 |
| 7-Aug | 35 | 99 | 48 | 41 | 78 | 42 | 77 | 37 | 30 | 31 | 31 | 36 | 28 | 23 | 49 | 41 | 36 | 18 | 30 | 47 | 19 | 41 | 41 | 44 | 99 |
| 8-Aug | 76 | 72 | 26 | 34 | 95 | 61 | 53 | 25 | 32 | 24 | 41 | 26 | 24 | 43 | 76 | 22 | 71 | 46 | 30 | 24 | 35 | 41 | 19 | 50 | 95 |
| 9-Aug | 31 | 28 | 26 | 72 | 81 | 86 | 89 | 80 | 93 | 41 | 60 | 90 | 83 | 49 | 25 | 26 | 34 | 18 | 18 | 26 | 18 | 42 | 35 | 66 | 93 |
| 10-Aug | 29 | 30 | 63 | 58 | 45 | 80 | 53 | 58 | 72 | 30 | 40 | 35 | 24 | 24 | 25 | 23 | 24 | 18 | 19 | 26 | 15 | 23 | 40 | 70 | 80 |
| 11-Aug | 82 | 89 | 94 | 61 | 77 | 78 | 49 | 111 | 53 | 25 | 24 | 25 | 22 | 23 | 20 | 23 | 22 | 20 | 19 | 18 | 14 | 20 | 16 | 35 | 111 |
| 12-Aug | 37 | 44 | 29 | 26 | 44 | 26 | 38 | 24 | 30 | 18 | 19 | 21 | 22 | 23 | 21 | 26 | 21 | 24 | 76 | 96 | 22 | 16 | 15 | 17 | 96 |
| 13-Aug | 17 | 17 | 15 | 13 | 12 | 20 | 20 | 24 | 22 | 25 | 26 | 28 | 24 | 25 | 27 | 26 | 31 | 23 | 24 | 19 | 17 | 17 | 38 | 29 | 38 |
| 14-Aug | 50 | 31 | 75 | 26 | 22 | 17 | 46 | 22 | 23 | 39 | 26 | 26 | 69 | 51 | 37 | 36 | 49 | 17 | 22 | 24 | 35 | 71 | 17 | 14 | 75 |
| 15-Aug | 21 | 34 | 28 | 17 | 14 | 22 | 16 | 36 | 37 | 25 | 38 | 36 | 35 | 33 | 28 | 34 | 62 | 27 | 23 | 9 | 12 | 15 | 15 | 13 | 62 |
| 16-Aug | 13 | 15 | 64 | 89 | 89 | 24 | 29 | 19 | 21 | 21 | 24 | 29 | 26 | 30 | 26 | 59 | 25 | 27 | 60 | 22 | 23 | 16 | 23 | 35 | 89 |
| 17-Aug | 22 | 19 | 40 | 38 | 41 | 28 | 17 | 20 | 66 | 85 | 70 | 67 | 27 | 30 | 32 | 29 | 24 | 18 | 20 | 18 | 25 | 12 | 21 | 16 | 85 |
| 18-Aug | 17 | 17 | 64 | 20 | 18 | 14 | 22 | 19 | 23 | 25 | 22 | 41 | 37 | 40 | 29 | 31 | 32 | 26 | 26 | 15 | 10 | 23 | 24 | 82 | 82 |
| 19-Aug | 43 | 74 | 38 | 28 | 18 | 71 | 93 | 66 | 74 | 43 | 31 | 56 | 39 | 41 | 26 | 56 | 21 | 18 | 15 | 20 | 27 | 60 | 42 | 80 | 93 |
| 20-Aug | 94 | 103 | 57 | 69 | 61 | 45 | 71 | 54 | 45 | 47 | 22 | 21 | 24 | 35 | 24 | 24 | 21 | 19 | 45 | 8 | 16 | 43 | 11 | 38 | 103 |
| 21-Aug | 47 | 63 | 28 | 40 | 37 | 26 | 70 | 19 | 23 | 29 | 44 | 31 | 36 | 35 | 28 | 22 | 21 | 16 | 12 | 12 | 8 | 9 | 15 | 15 | 70 |
| 22-Aug | 15 | 46 | 45 | 33 | 29 | 91 | 81 | 54 | 23 | 16 | 18 | 22 | 29 | 30 | 33 | 27 | 17 | 16 | 13 | 19 | 13 | 13 | 80 | 27 | 91 |
| 23-Aug | 14 | 14 | 12 | 14 | 13 | 13 | 15 | 13 | 26 | 15 | 54 | 41 | 36 | 27 | 29 | 48 | 37 | 24 | 27 | 35 | 31 | 53 | 24 | 63 | 63 |
| 24-Aug | 37 | 41 | 21 | 34 | 23 | 53 | 49 | 25 | 29 | 33 | 25 | 27 | 35 | 31 | 24 | 25 | 24 | 20 | 28 | 43 | 13 | 52 | 56 | 19 | 56 |
| 25-Aug | 31 | 17 | 34 | 64 | 28 | 27 | UO | 15 | 31 | 44 | 55 | 60 | 44 | 44 | 37 | 31 | 23 | 22 | 22 | 19 | 15 | 16 | 38 | 38 | 64 |
| 26-Aug | 22 | 11 | 15 | 9 | 40 | 58 | 16 | 60 | 17 | 22 | 27 | 20 | 20 | 20 | 20 | 17 | 18 | 15 | 11 | 20 | 8 | 9 | 17 | 21 | 60 |
| 27-Aug | 14 | 19 | 88 | 46 | 60 | 34 | 74 | 90 | 29 | 27 | 32 | 29 | 21 | 21 | 25 | 61 | 69 | 33 | 19 | 22 | 17 | 14 | 13 | 17 | 90 |
| 28-Aug | 22 | 61 | 48 | 13 | 51 | 103 | 16 | 20 | 18 | 25 | 27 | 30 | 25 | 24 | 25 | 28 | 26 | 33 | 33 | 28 | 25 | 28 | 31 | 27 | 103 |
| 29-Aug | 26 | 24 | 28 | 28 | 26 | 26 | 16 | 19 | 25 | 32 | 33 | 30 | 32 | 29 | 30 | 27 | 27 | 22 | 23 | 22 | 12 | 29 | 17 | 19 | 33 |
| 30-Aug | 67 | 31 | 34 | 68 | 61 | 39 | 81 | 69 | 24 | 28 | 31 | 63 | 65 | 71 | 62 | 48 | 38 | 51 | 16 | 14 | 91 | 22 | 15 | 18 | 91 |
| 31-Aug | 23 | 38 | 25 | 24 | 96 | 75 | 85 | 63 | 83 | 87 | 97 | 87 | 87 | 49 | 52 | 40 | 43 | 29 | 26 | 16 | 34 | 32 | 30 | 52 | 97 |
| | 94 | 103 | 94 | 89 | 96 | 103 | 93 | 111 | 93 | 87 | 97 | 90 | 87 | 71 | 76 | 82 | 88 | 61 | 76 | 96 | 91 | 71 | 80 | 82 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

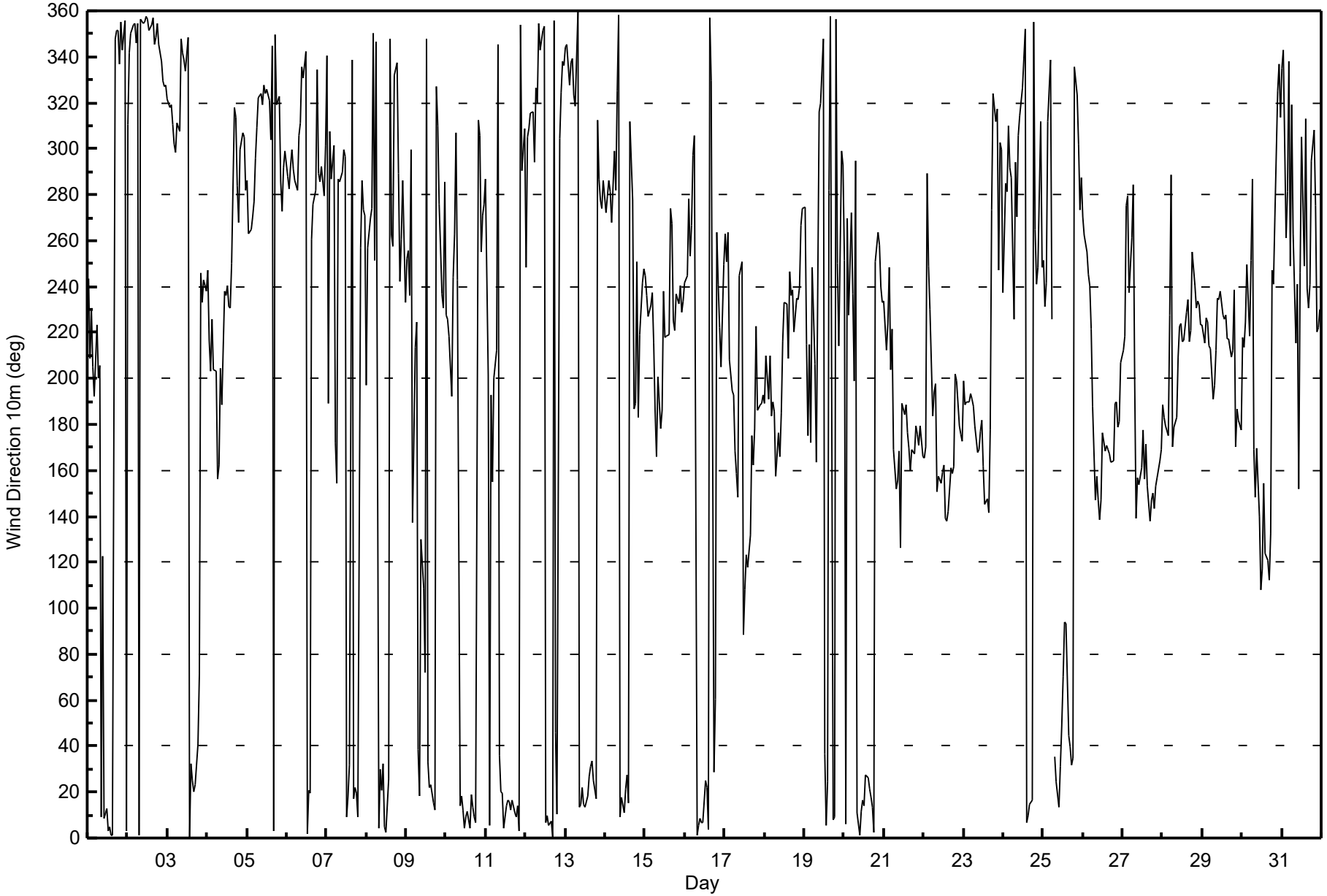
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Fort McKay South - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS14
## ANZAC
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
AUGUST 2026

MONTHLY SUMMARY for
AMD SECTION III.B.1(c)

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 708 | 35 | 36 | 99.87 | - | - | 6.4 | 0 | 0.9 | 0 |
| TRS(ppb) Average | 659 | 35 | 85 | 93.28 | 1.8 | 0 | 1.4 | - | 0.7 | - |
| THC(ppm) Average | 708 | 35 | 36 | 99.87 | - | - | 2.4 | - | 2.2 | - |
| NMHC(ppm) Average | 708 | 35 | 36 | 99.87 | - | - | 0.01 | - | 0 | - |
| CH4(ppm) Average | 708 | 35 | 36 | 99.87 | - | - | 2.4 | - | 2.2 | - |
| NO2(ppb) Average | 708 | 36 | 36 | 100 | - | - | 8.4 | 0 | 2.5 | - |
| NO(ppb) Average | 708 | 36 | 36 | 100 | - | - | 6.9 | - | 0.7 | - |
| NOX(ppb) Average | 708 | 36 | 36 | 100 | - | - | 14.2 | - | 3 | - |
| O3(ppb) Average | 707 | 36 | 37 | 99.87 | - | - | 43.7 | 0 | 28.1 | - |
| PM2.5(ug/m3) Average | 739 | 5 | 5 | 100 | - | - | 77.2 | 0 | 26.8 | 0 |
| AT 2m(C) Average | 744 | 0 | 0 | 100 | - | - | 28.1 | - | 20.7 | - |
| RH(%) Average | 744 | 0 | 0 | 100 | - | - | 99.5 | - | 91.2 | - |
| WS(km/h) Average | 744 | 0 | 0 | 100 | - | - | 32 | - | 20 | - |
| WD(deg) Average | 744 | 0 | 0 | 100 | - | - | - | - | - | - |
| Leaf Wetness (% of range) Average | 744 | 0 | 0 | 100 | - | - | 61 | - | 16.8 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2(ppb) Average | 708 | 0.28 | 0.5 | - | 0 | 0 | 0 | 0.1 | 0.3 | 0.7 | 6.4 |
| TRS(ppb) Average | 659 | 0.45 | 0.2 | - | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 1.4 |
| THC(ppm) Average | 708 | 2.1 | 0.1 | - | 2 | 2 | 2 | 2.1 | 2.1 | 2.2 | 2.4 |
| NMHC (ppm) Average | 708 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.01 |
| CH4(ppm) Average | 708 | 2.1 | 0.1 | - | 2 | 2 | 2 | 2.1 | 2.1 | 2.2 | 2.4 |
| NO2(ppb) Average | 708 | 1.36 | 1.2 | - | 0.1 | 0.4 | 0.6 | 1 | 1.7 | 2.7 | 8.4 |
| NO(ppb) Average | 708 | 0.24 | 0.5 | - | 0 | 0 | 0.1 | 0.1 | 0.2 | 0.5 | 6.9 |
| NOX(ppb) Average | 708 | 1.6 | 1.5 | - | 0.1 | 0.5 | 0.7 | 1.1 | 1.9 | 3.2 | 14.2 |
| O3(ppb) Average | 707 | 19.44 | 9.1 | - | 1.7 | 6.7 | 12.3 | 19.7 | 26.1 | 32.1 | 43.7 |
| PM2.5(ug/m3) Average | 739 | 9.5 | 8.9 | - | 0.9 | 2.6 | 4.1 | 6.4 | 12 | 19.6 | 77.2 |
| Temperature 2 m (C) Average | 744 | 15.75 | 5.1 | - | 4.1 | 9.1 | 12 | 15.4 | 19.7 | 22.6 | 28.1 |
| Relative Humidity (%) Average | 744 | 75.62 | 18.3 | - | 34.8 | 49.2 | 59.2 | 78.9 | 93.6 | 97.3 | 99.5 |
| Wind Speed 20 m (km/h) Average | 744 | 10.8 | 5 | - | 1 | 5 | 7 | 10 | 14 | 17 | 32 |
| Wind Direction 20 m (deg) Average | 744 | 265 | - | - | - | - | - | - | - | - | - |
| Leaf Wetness (% of range) Average | 744 | 7.89 | 13.7 | - | 0 | 0 | 0 | 0 | 10.9 | 30.9 | 61 |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| O3, SO2, THC/NMHC/CH4, TRS | 25 Aug 2026 09:00 | 25 Aug 2026 09:00 | 1 | Maintenance - sample manifold cleaned |
| TRS | 23 Aug 2026 02:00 | 25 Aug 2026 02:00 | 49 | Unstable Operation - inconsistent response |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Anzac - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.4 ppb on Aug 31 12:00 Maximum Daily Average: 0.9 ppb on Aug 31

Minimum Value: 0.0 ppb on Aug 1 23:00 Minimum Daily Average: 0.0 ppb on Aug 13
Maximum Diurnal Average: 0.6 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 21
Monthly Average: 0.28 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 0.7 $P_{99}$ = 2.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.3 | Z | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 0.4 | 1.0 | 0.5 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 1.0 |
| 2-Aug | 0.0 | 0.0 | Z | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.5 | 0.1 | 1.3 |
| 3-Aug | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.5 | 1.1 | 1.7 | 1.7 | 2.4 | 2.1 | 2.0 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.6 | 2.4 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 0.4 |
| 5-Aug | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.6 | 0.0 | 0.1 | 0.7 |
| 6-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.3 | 0.3 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 |
| 7-Aug | 0.2 | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 1.0 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 1.1 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 1.1 |
| 8-Aug | 0.4 | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 1.2 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.4 | 1.0 | 0.6 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 1.2 |
| 9-Aug | 0.2 | 0.3 | 0.2 | Z | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 10-Aug | 0.1 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.6 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 1.1 | 0.4 | 0.3 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 1.1 |
| 11-Aug | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | Z | 0.5 | 0.7 | 2.1 | 1.1 | 1.1 | 1.4 | 0.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.1 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.4 | 0.3 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 13-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 15-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.1 | 0.3 |
| 16-Aug | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.9 | 1.7 | 1.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 1.7 |
| 17-Aug | 0.2 | 0.1 | 0.0 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 18-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 |
| 19-Aug | 0.0 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 |
| 20-Aug | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | C | C | C | C | 0.5 | 1.2 | 0.5 | 1.3 | 1.3 | 1.5 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.5 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.3 | 0.7 | 0.7 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.7 |
| 22-Aug | 0.3 | 0.3 | 0.4 | 0.5 | Z | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 1.4 | 1.2 | 0.7 | 0.6 | 0.7 | 0.8 | 0.5 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.5 | 1.4 |
| 23-Aug | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.7 | 0.8 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.8 |
| 24-Aug | Z | 0.2 | 0.6 | 0.5 | 0.2 | 0.3 | 0.5 | 0.7 | 1.0 | 2.0 | 1.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 1.2 | 0.8 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 2.0 |
| 25-Aug | 0.2 | Z | 0.1 | 0.1 | 0.0 | 0.3 | 0.4 | 0.7 | M | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.4 | 0.6 | 0.9 | 1.0 | 0.9 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 1.0 |
| 26-Aug | 0.2 | 0.0 | Z | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.3 | 0.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.6 | 0.3 | 0.6 |
| 27-Aug | 0.6 | 0.6 | 0.7 | Z | 0.5 | 0.4 | 0.7 | 1.0 | 0.9 | 1.0 | 0.8 | 0.4 | 0.6 | 0.4 | 0.8 | 0.1 | 0.2 | 0.4 | 0.8 | 0.1 | 0.2 | 2.5 | 1.3 | 2.0 | 0.7 | 2.5 |
| 28-Aug | 1.1 | 0.8 | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 1.1 |
| 29-Aug | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | Z | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 |
| 30-Aug | Z | 0.3 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.3 | 0.7 | 3.9 | 2.4 | 1.0 | 0.4 | 0.3 | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.7 | 3.9 |
| 31-Aug | 0.3 | Z | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 1.1 | 2.5 | 6.4 | 6.4 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.9 | 6.4 |
| | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 1.1 | 2.1 | 2.5 | 6.4 | 6.4 | 2.4 | 1.2 | 1.2 | 0.8 | 1.3 | 1.7 | 1.5 | 1.1 | 0.6 | 2.5 | 1.3 | 2.0 | Diurnal Maximum | |

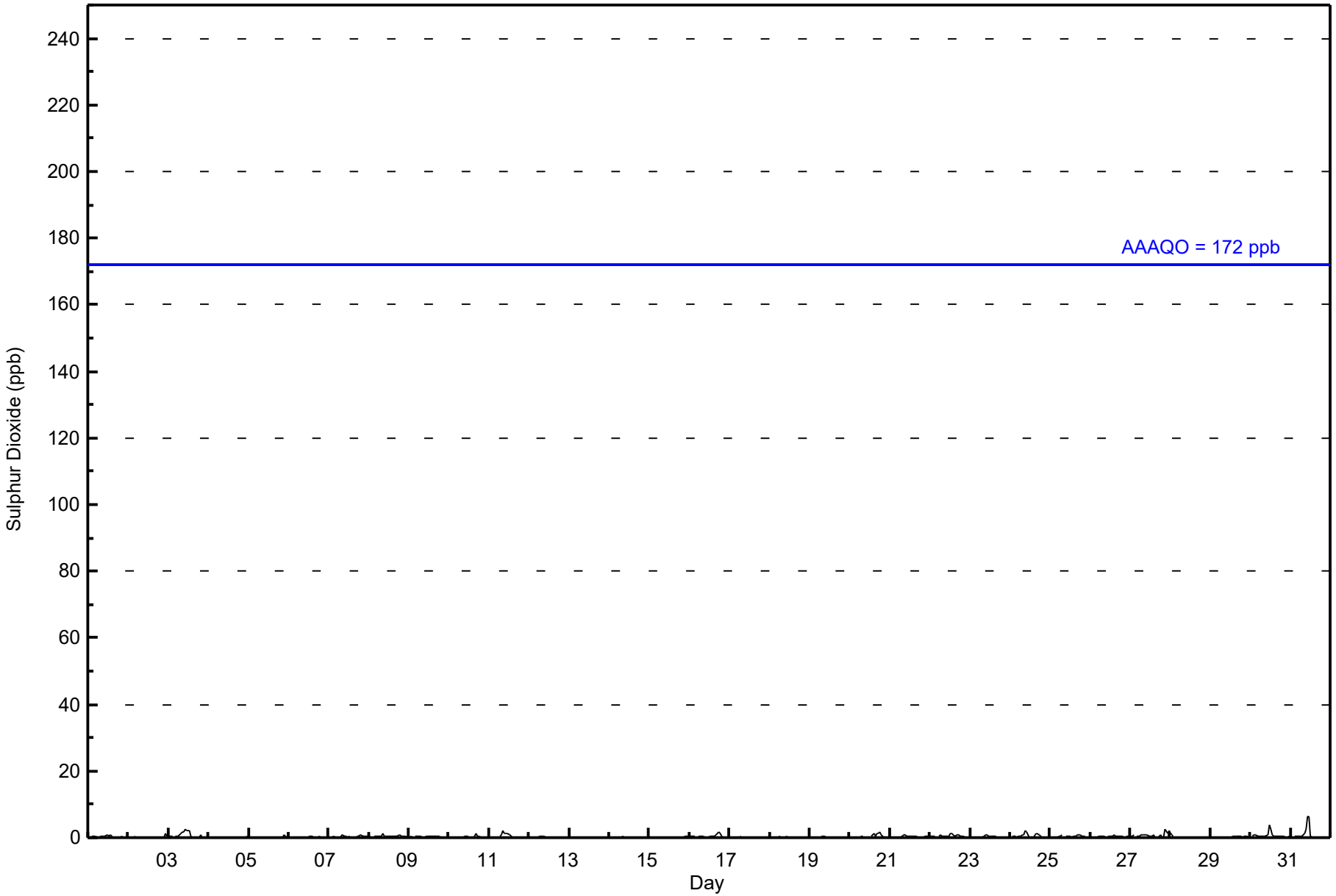
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Anzac - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Anzac - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 708 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Anzac - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 34 | 7 | 7 | 4 | 8 | 14 | 36 | 66 | 37 | 27 | 26 | 38 | 65 | 142 | 113 | 84 | 708 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 14 | 36 | 66 | 37 | 27 | 26 | 38 | 65 | 142 | 113 | 84 | 708 |

Total Number of Valid Hours: 708

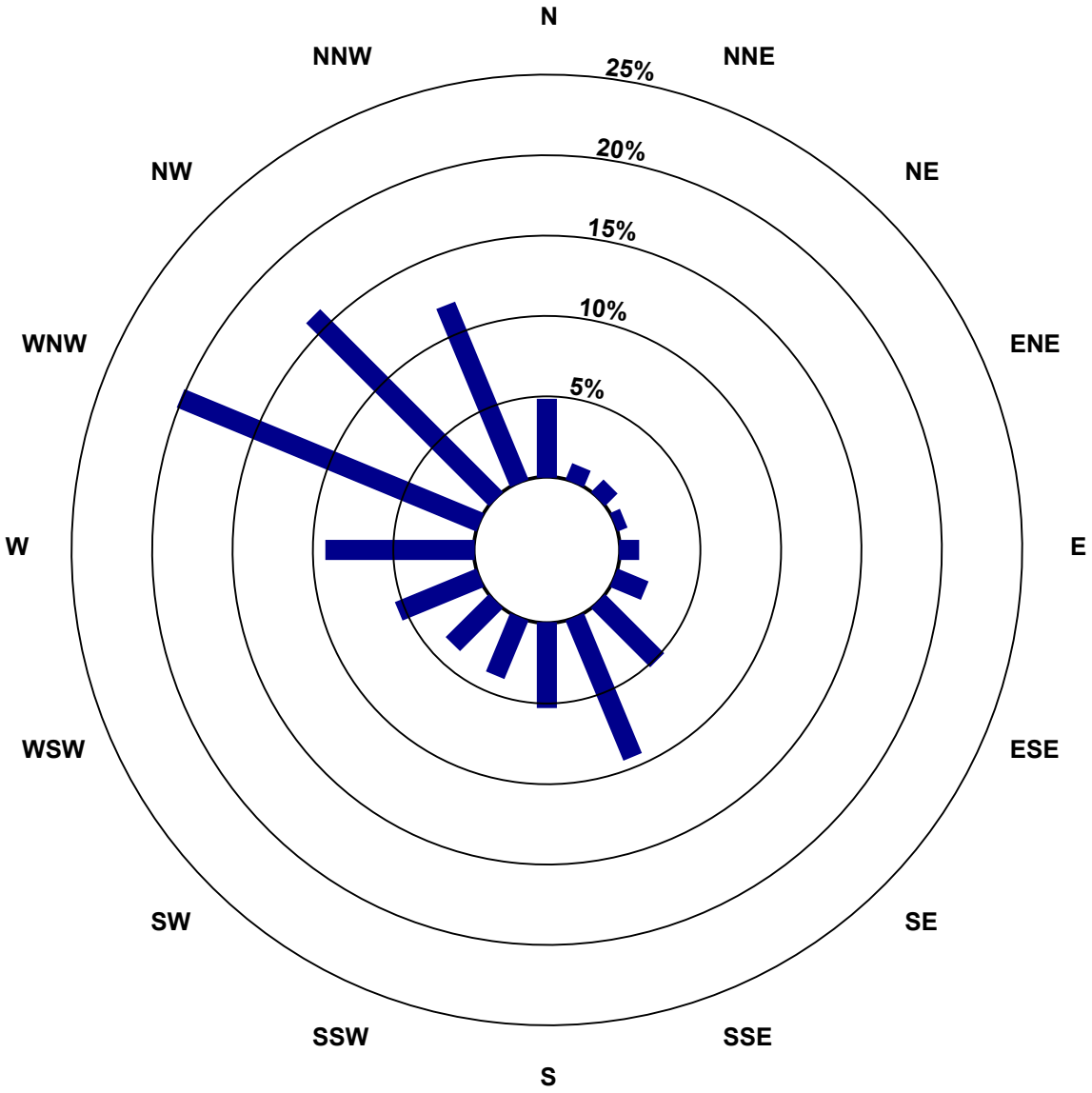
Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Sulphur Dioxide ($SO_2$) - ppb

## Anzac




Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

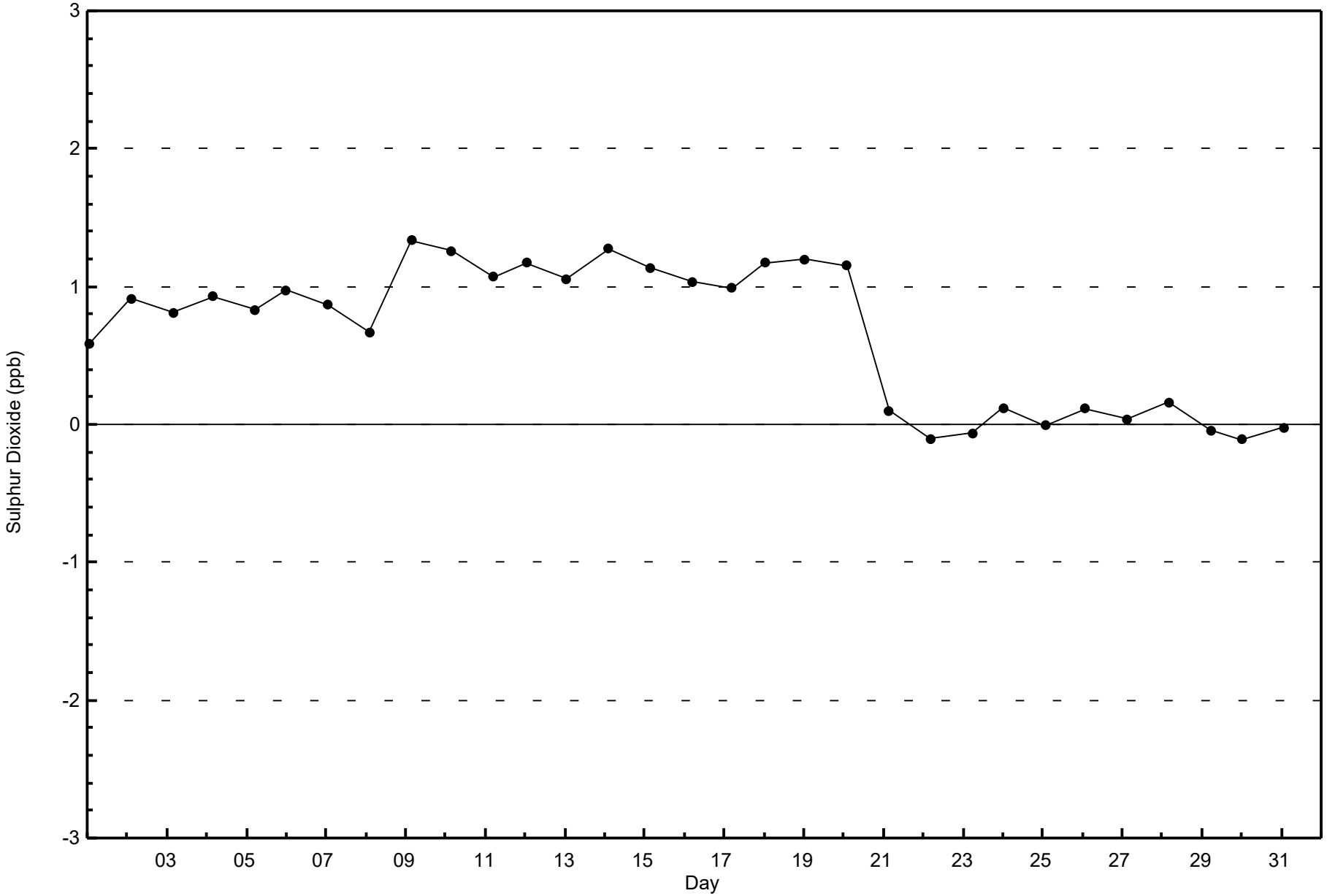
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Anzac - August 2026**

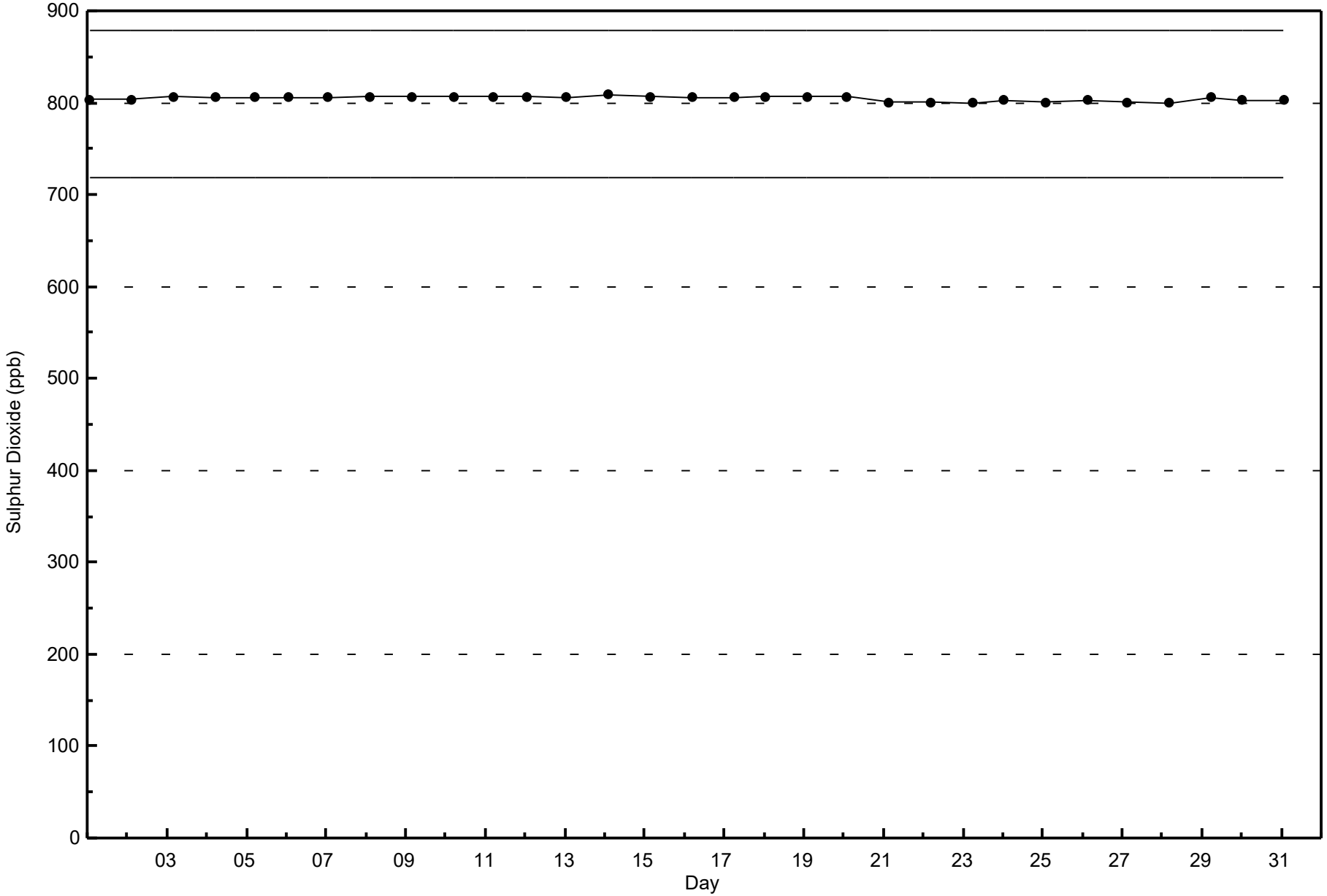


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Anzac - August 2026**



Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 1.8 ppb on Aug 5 14:30 Maximum Daily Average: 0.7 ppb on Aug 27

Minimum Value: 0.2 ppb on Aug 15 06:00 Minimum Daily Average: 0.3 ppb on Aug 15

Maximum Diurnal Average: 0.5 ppb at hour 9 Minimum Diurnal Average: 0.4 ppb at hour 1

Monthly Average: 0.45 ppb Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.3 $Q_1$ = 0.4 Median = 0.4 $Q_3$ = 0.5 $P_{90}$ = 0.6 $P_{99}$ = 1.1

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1320 |
| Periods of Invalid Data: | 168 |
| Periods of Calibration: | 69 |
| Percent Operational Time: | 93.4 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.8 | 0.4 | 0.5 | 0.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.8 |
| | 0.4 | 0.3 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | | |
| 2-Aug | 0.5 | 0.5 | 0.7 | Z | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 0.8 | 0.7 | 0.8 | 0.4 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.2 |
| | 0.5 | 0.5 | 1.2 | SP | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 1.0 | 0.8 | 1.2 | 0.4 | 0.4 | 0.8 | 1.0 | 0.7 | 0.6 | 0.4 | | |
| 3-Aug | 0.4 | 0.4 | 0.4 | 0.3 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 |
| | 0.4 | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | | |
| 4-Aug | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 |
| | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | | |
| 5-Aug | Z | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 1.8 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 0.5 | 0.3 | 0.5 | 1.8 |
| | SP | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1 | 0.7 | 0.4 | 0.4 | | |
| 6-Aug | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 |
| | 0.4 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 7-Aug | 0.3 | 0.4 | Z | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.8 | 0.5 | 0.5 | 0.4 | 0.4 | 0.8 |
| | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | | |
| 8-Aug | 0.3 | 0.3 | 0.3 | Z | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 |
| | 0.4 | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | | |
| 9-Aug | 0.3 | 0.3 | 0.4 | 0.4 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| | 0.3 | 0.4 | 0.4 | 0.4 | SP | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 10-Aug | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | | |
| 11-Aug | Z | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.9 | 0.9 | 0.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.9 |
| | SP | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 12-Aug | 0.3 | Z | 0.3 | 0.5 | 0.9 | 0.9 | 0.6 | 0.6 | 0.9 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.4 | 0.4 | 0.5 | 1.0 |
| | 0.3 | SP | 0.4 | 0.6 | 1.0 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.3 | 0.3 | | |
| 13-Aug | 0.3 | 0.3 | Z | 0.7 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 0.8 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 1.1 |
| | 0.3 | 0.3 | SP | 0.8 | 0.8 | 0.9 | 1.1 | 1.0 | 0.8 | 0.7 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | | |
| 14-Aug | 0.2 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.6 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.9 |
| | 0.2 | 0.2 | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.5 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 15-Aug | 0.3 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 |
| | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Anzac - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 |
| | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | SP | 0.3 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | | |
| 17-Aug | Z | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| | SP | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 18-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | C | C | C | C | C | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 |
| | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | C | C | C | C | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 19-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 |
| | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | | |
| 20-Aug | 0.4 | 0.5 | 0.6 | Z | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 1.1 | 0.8 | 0.6 | 0.5 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 1.1 |
| | 0.4 | 0.6 | 0.5 | SP | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.1 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | | |
| 21-Aug | 0.4 | 0.3 | 0.4 | 0.3 | Z | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 |
| | 0.4 | 0.4 | 0.4 | 0.3 | SP | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | | |
| 22-Aug | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | Z | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 1.0 |
| | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | SP | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | | |
| 23-Aug | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | SP | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 24-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | | |
| 25-Aug | UO | UO | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | M | 1.3 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 1.6 |
| | UO | UO | SP | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 1.6 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | | |
| 26-Aug | 0.4 | 0.7 | 0.5 | Z | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.9 |
| | 0.7 | 0.9 | 0.4 | SP | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | | |
| 27-Aug | 0.5 | 0.5 | 0.5 | 0.6 | Z | 0.5 | 1.0 | 0.7 | 1.1 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.5 | 1.1 | 1.2 | 1.2 | 0.7 | 1.6 |
| | 0.5 | 0.5 | 1.0 | 0.4 | SP | 0.8 | 0.7 | 0.9 | 1.1 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.7 | 0.5 | 0.5 | 0.7 | 1.3 | 0.5 | 0.7 | 1.5 | 1.6 | 0.7 | | |
| 28-Aug | 0.6 | 0.8 | 0.6 | 0.6 | 0.6 | Z | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 1.4 |
| | 0.8 | 1.4 | 0.5 | 0.6 | 0.6 | SP | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 | 0.5 | | |
| 29-Aug | Z | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 |
| | SP | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 30-Aug | 0.3 | Z | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.7 |
| | 0.3 | SP | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.7 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 31-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | Diurnal Average | |
| | 0.8 | 1.4 | 1.2 | 0.8 | 1.0 | 0.9 | 1.1 | 1.0 | 1.6 | 1.3 | 0.9 | 0.6 | 1.0 | 1.1 | 1.8 | 0.8 | 1.2 | 0.8 | 1.3 | 1.0 | 1.1 | 1.5 | 1.6 | 1.2 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Reduced Sulphur (TRS) - ppb

## Anzac - August 2026

Maximum Value: 1.4 ppb on Aug 27 23:00

Maximum Daily Average: 0.7 ppb on Aug 27

Minimum Value: 0.2 ppb on Aug 15 06:00

Minimum Daily Average: 0.3 ppb on Aug 15

Maximum Diurnal Average: 0.5 ppb at hour 9

Minimum Diurnal Average: 0.4 ppb at hour 1

Monthly Average: 0.45 ppb

Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.3 $Q_1$ = 0.4 Median = 0.4 $Q_3$ = 0.5 $P_{90}$ = 0.6 $P_{99}$ = 1.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 659 |
| Hours of Missing Data: | 85 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 93.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.4 | 0.3 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.7 |
| 2-Aug | 0.5 | 0.5 | 0.9 | Z | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 0.8 | 1.0 | 0.6 | 0.4 | 0.9 | 0.9 | 0.7 | 0.6 | 0.4 | 0.6 | 1.0 |
| 3-Aug | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 |
| 4-Aug | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 5-Aug | Z | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 1.1 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 0.4 | 0.4 | 0.5 | 1.1 |
| 6-Aug | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 |
| 7-Aug | 0.3 | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 |
| 8-Aug | 0.4 | 0.3 | 0.3 | Z | 0.2 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 |
| 9-Aug | 0.3 | 0.4 | 0.4 | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| 10-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 |
| 11-Aug | Z | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.9 |
| 12-Aug | 0.3 | Z | 0.4 | 0.5 | 1.0 | 0.8 | 0.5 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.4 | 0.3 | 0.5 | 1.0 |
| 13-Aug | 0.3 | 0.3 | Z | 0.8 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 1.0 |
| 14-Aug | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.6 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.8 |
| 15-Aug | 0.3 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 |
| 16-Aug | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | Z | 0.3 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 |
| 17-Aug | Z | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| 18-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | C | C | C | C | C | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 |
| 19-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 |
| 20-Aug | 0.4 | 0.6 | 0.6 | Z | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 1.0 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 1.0 |
| 21-Aug | 0.4 | 0.4 | 0.4 | 0.3 | Z | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 |
| 22-Aug | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | Z | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 |
| 23-Aug | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 24-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | -- |
| 25-Aug | UO | UO | Z | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | M | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 1.1 |
| 26-Aug | 0.6 | 0.8 | 0.4 | Z | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.8 |
| 27-Aug | 0.5 | 0.5 | 0.7 | 0.5 | Z | 0.7 | 0.9 | 0.8 | 1.1 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.9 | 0.5 | 0.6 | 1.3 | 1.4 | 0.9 | 0.7 | 1.4 |
| 28-Aug | 0.7 | 1.1 | 0.6 | 0.6 | 0.6 | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 1.1 |
| 29-Aug | Z | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 |
| 30-Aug | 0.3 | Z | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.6 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 |
| 31-Aug | 0.4 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | Diurnal Average | |
| | 0.7 | 1.1 | 0.9 | 0.8 | 1.0 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 0.8 | 0.6 | 0.8 | 0.8 | 1.1 | 0.8 | 1.0 | 0.6 | 0.9 | 0.9 | 0.9 | 1.3 | 1.4 | 0.9 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

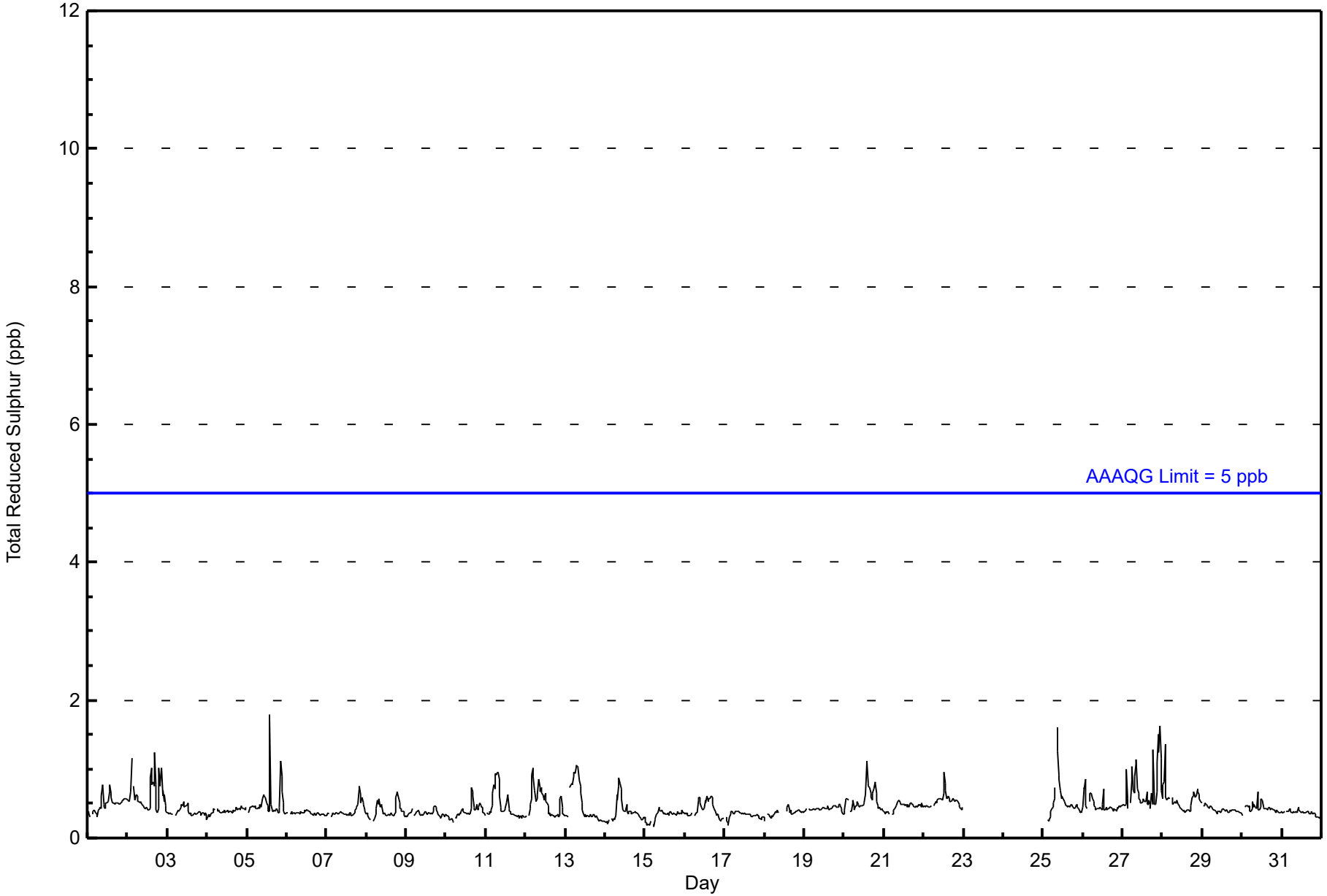
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Anzac - August 2026**



# Total Reduced Sulphur (TRS) - ppb

## Anzac - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 659 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 659

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Anzac - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 32 | 7 | 7 | 4 | 7 | 15 | 35 | 62 | 34 | 24 | 26 | 34 | 61 | 125 | 108 | 78 | 659 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 32 | 7 | 7 | 4 | 7 | 15 | 35 | 62 | 34 | 24 | 26 | 34 | 61 | 125 | 108 | 78 | 659 |

Total Number of Valid Hours: 659

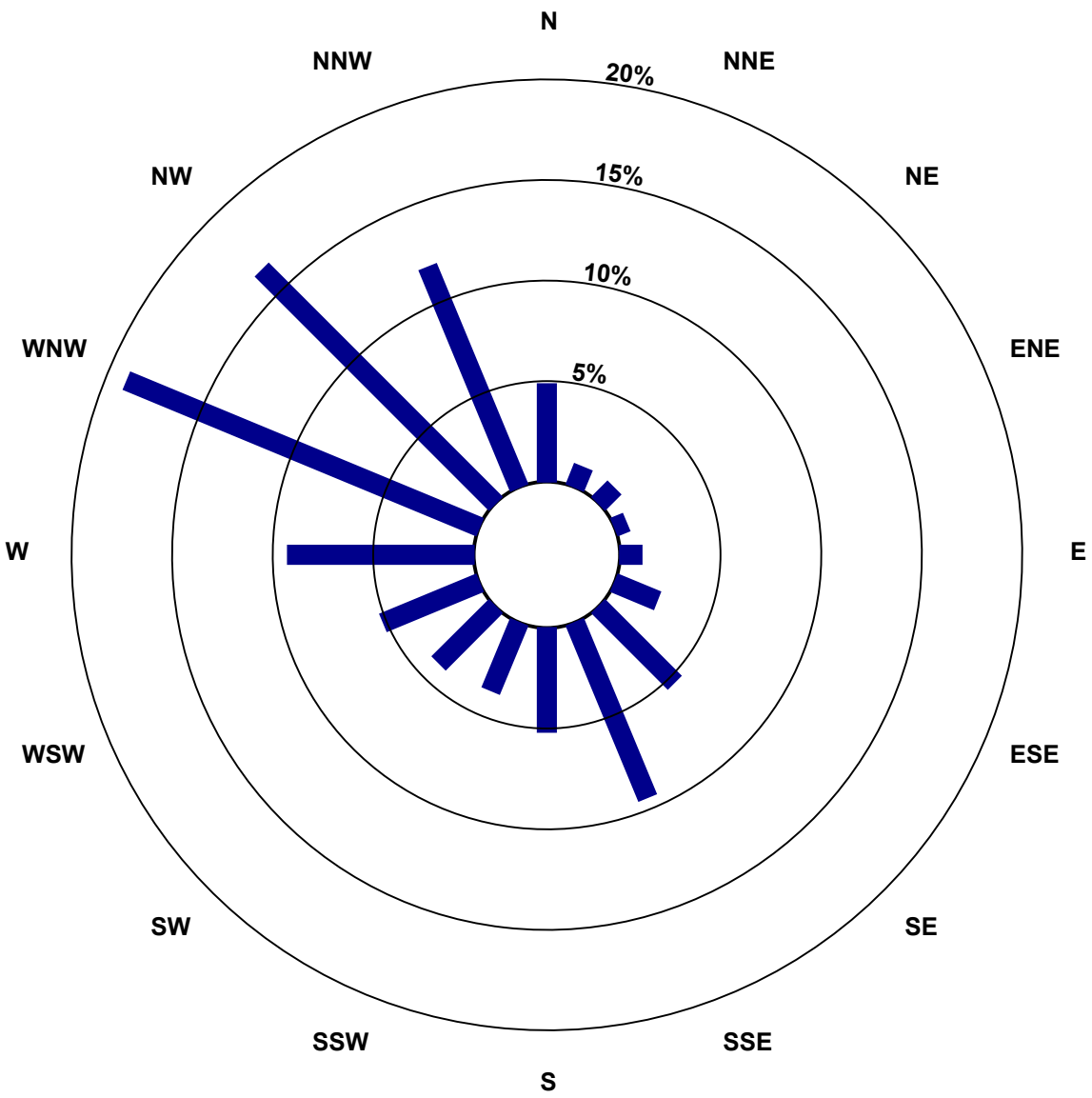
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Reduced Sulphur (TRS) - ppb

Anzac




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

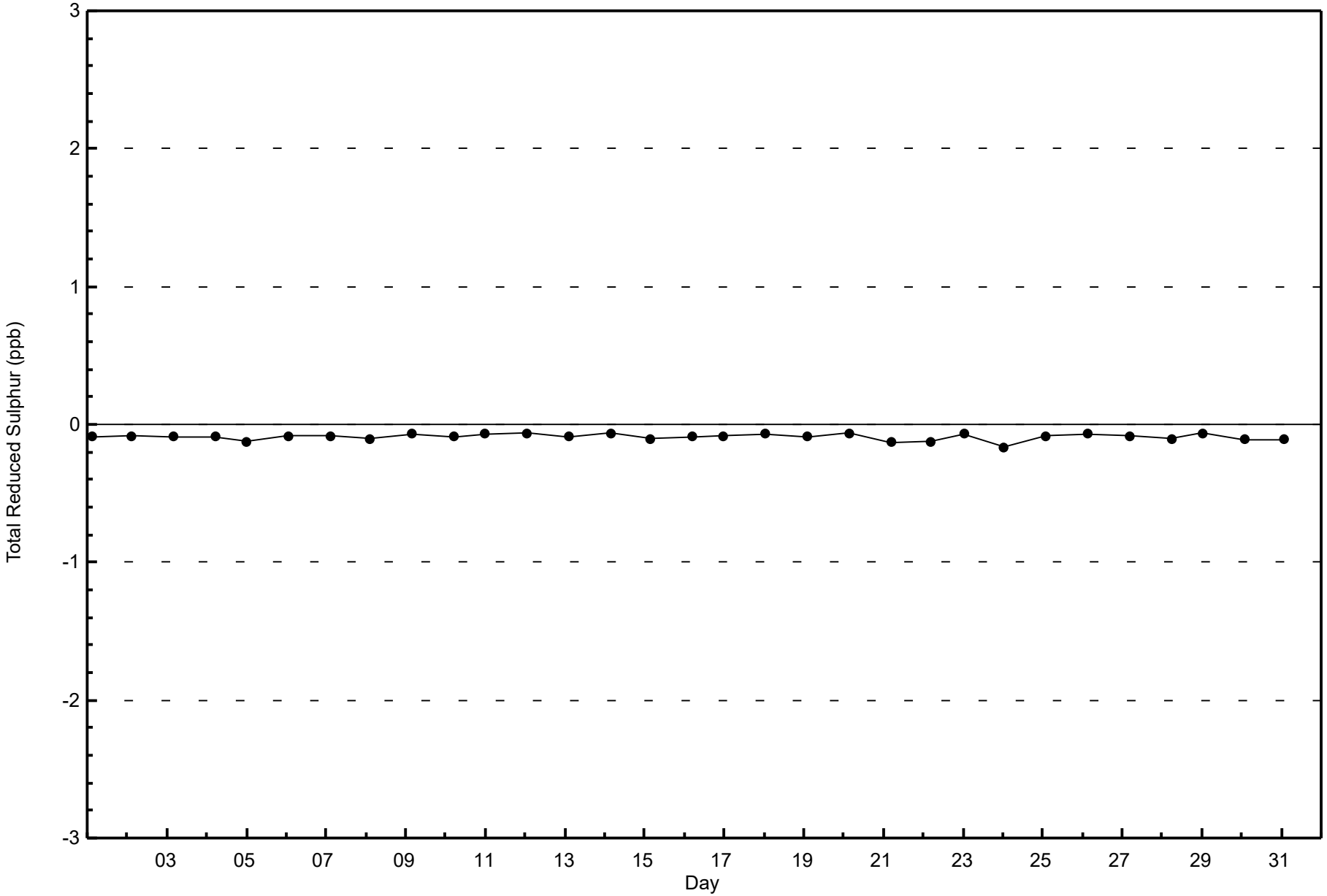
Total Number of Valid Hours: 659

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Anzac - August 2026**

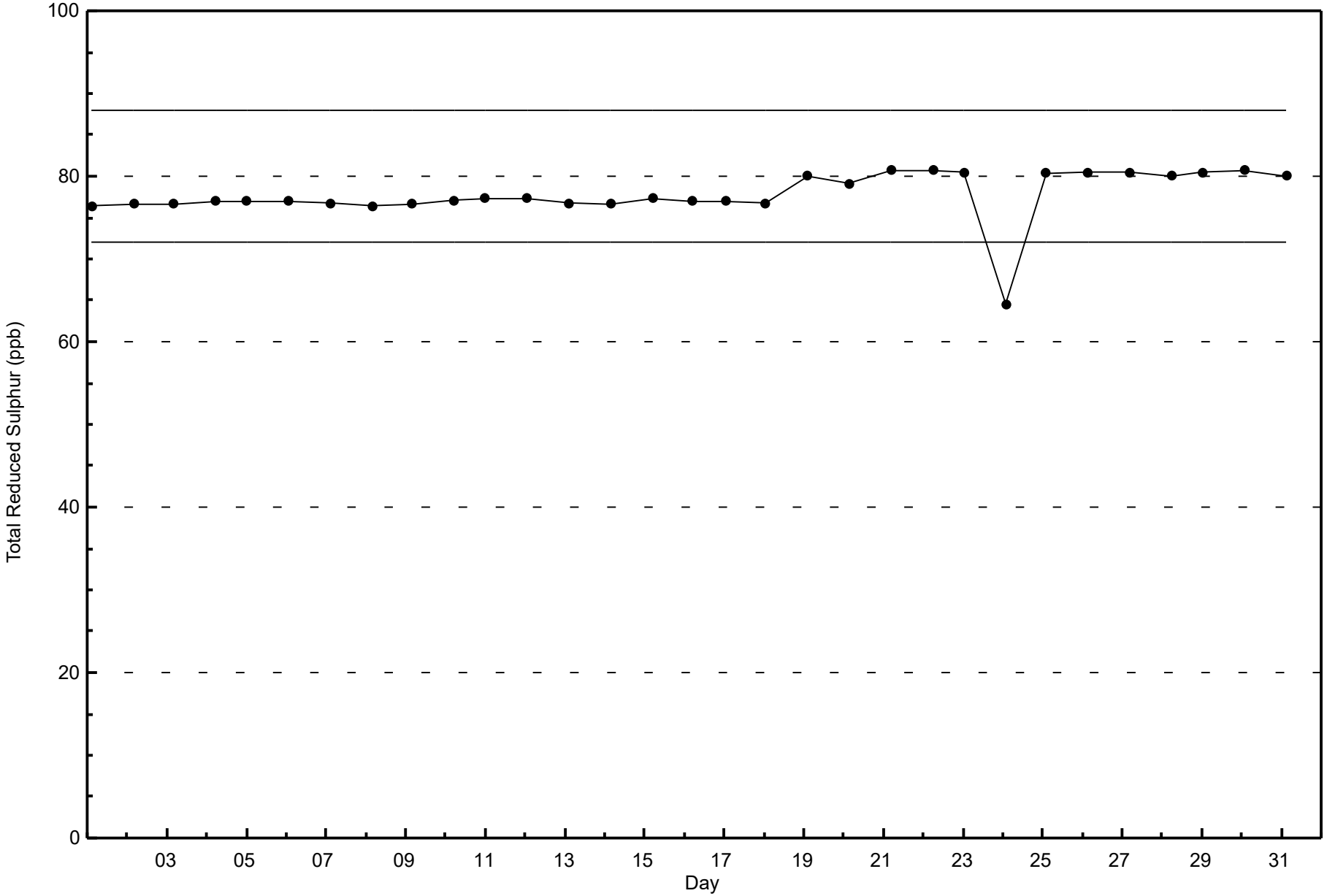


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Anzac - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Anzac - August 2026

Maximum Value: 2.4 ppm on Aug 23 07:00

Maximum Daily Average: 2.2 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 28 15:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.2 ppm at hour 6

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.10 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.1 $P_{90}$ = 2.2 $P_{99}$ = 2.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 2-Aug | 2.1 | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 |
| 3-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 4-Aug | 2.2 | 2.2 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 5-Aug | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 |
| 8-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 9-Aug | 2.2 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 10-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 11-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 12-Aug | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 13-Aug | 2.1 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 14-Aug | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 15-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 16-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 17-Aug | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 18-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 19-Aug | 2.1 | Z | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 20-Aug | 2.2 | 2.1 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | C | C | C | C | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 21-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 22-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 23-Aug | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 24-Aug | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 25-Aug | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | M | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 26-Aug | 2.1 | 2.2 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 27-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 |
| 28-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 29-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 30-Aug | Z | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 31-Aug | 2.4 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.4 |
| | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Diurnal Average | |
| | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | Diurnal Maximum | |

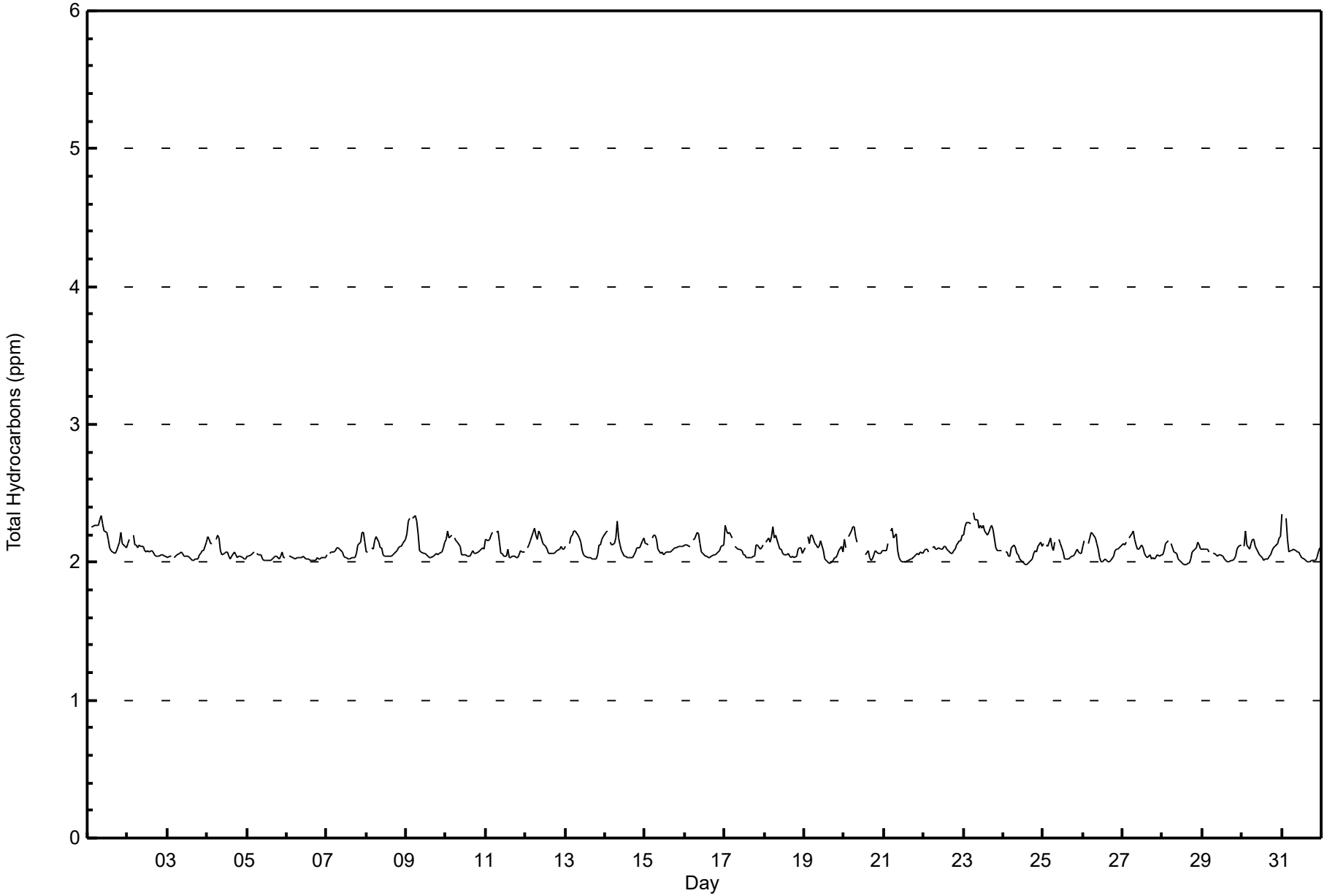
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Anzac - August 2026**



# Total Hydrocarbons (THC) - ppm
## Anzac - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 218 | 30.79 | 30.79 |
| 2.1 - 3.0 | 490 | 69.21 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Anzac - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 13 | 3 | 4 | 3 | 1 | 3 | 12 | 10 | 5 | 3 | 3 | 8 | 22 | 32 | 63 | 33 | 218 |
| 2.1 - 3.0 | 21 | 4 | 3 | 1 | 7 | 11 | 24 | 56 | 32 | 24 | 23 | 30 | 43 | 110 | 50 | 51 | 490 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 14 | 36 | 66 | 37 | 27 | 26 | 38 | 65 | 142 | 113 | 84 | 708 |

Total Number of Valid Hours: 708

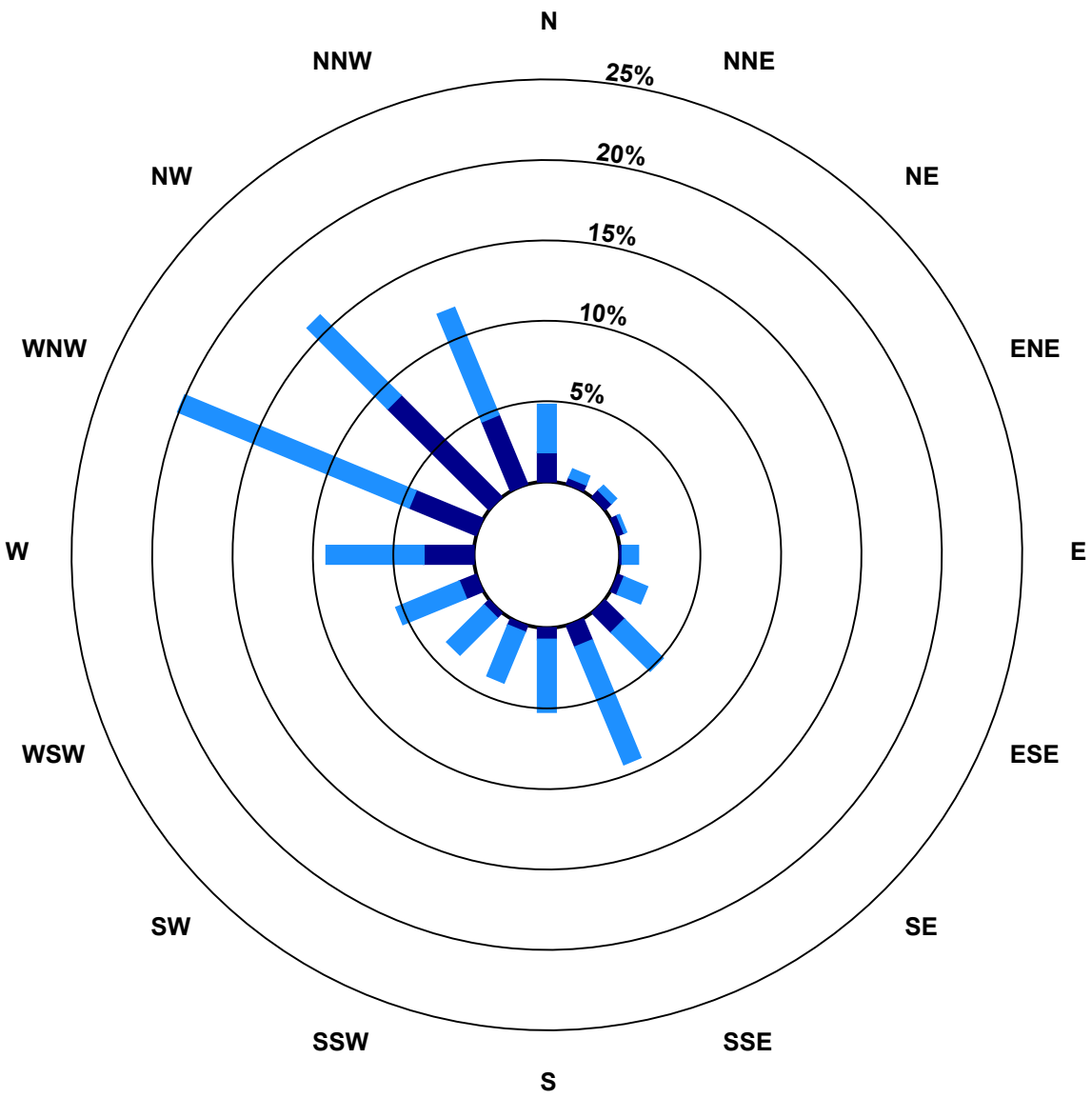
Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Total Hydrocarbons (THC) - ppm

## Anzac




Classes (ppm)

- 0 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

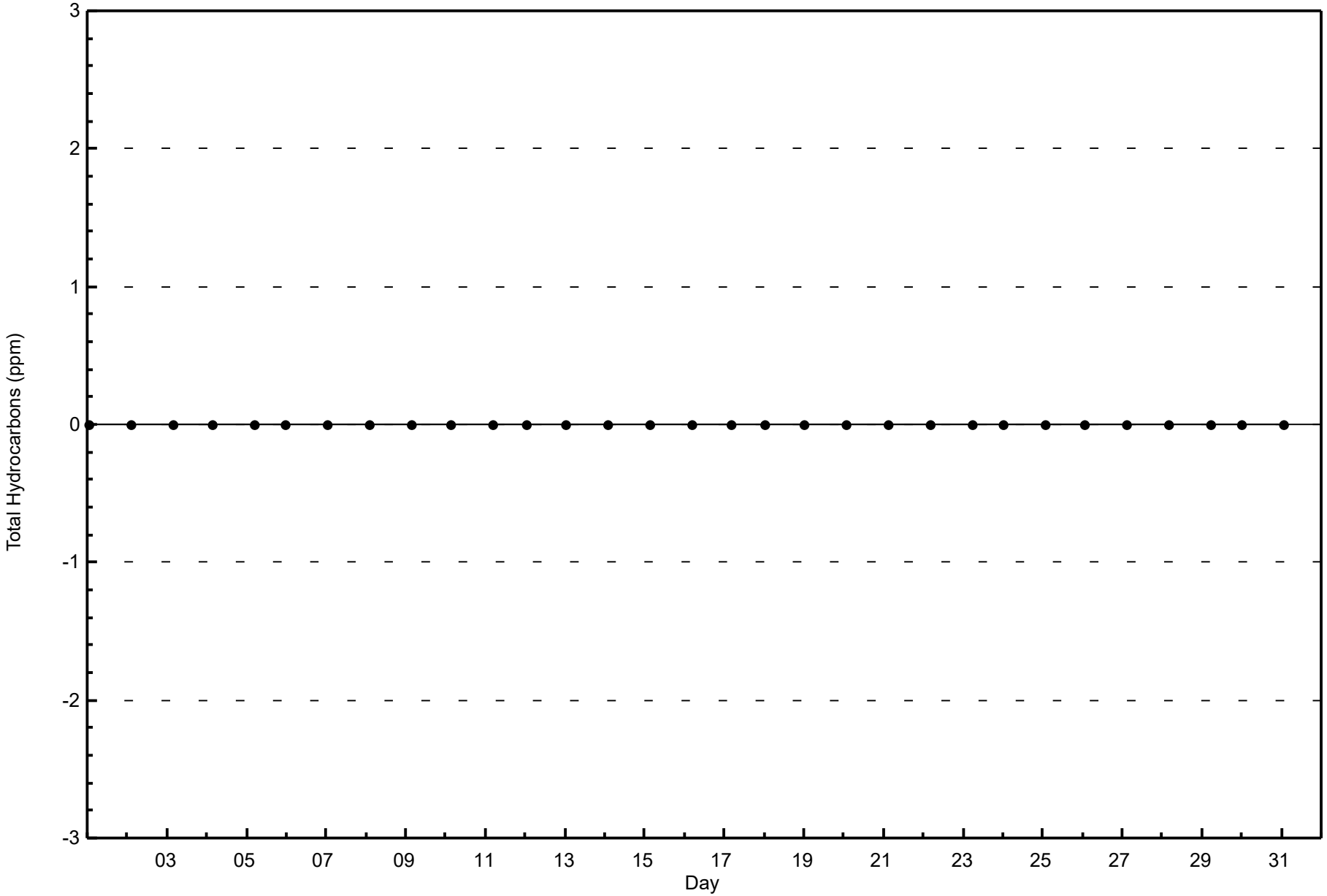
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Anzac - August 2026**

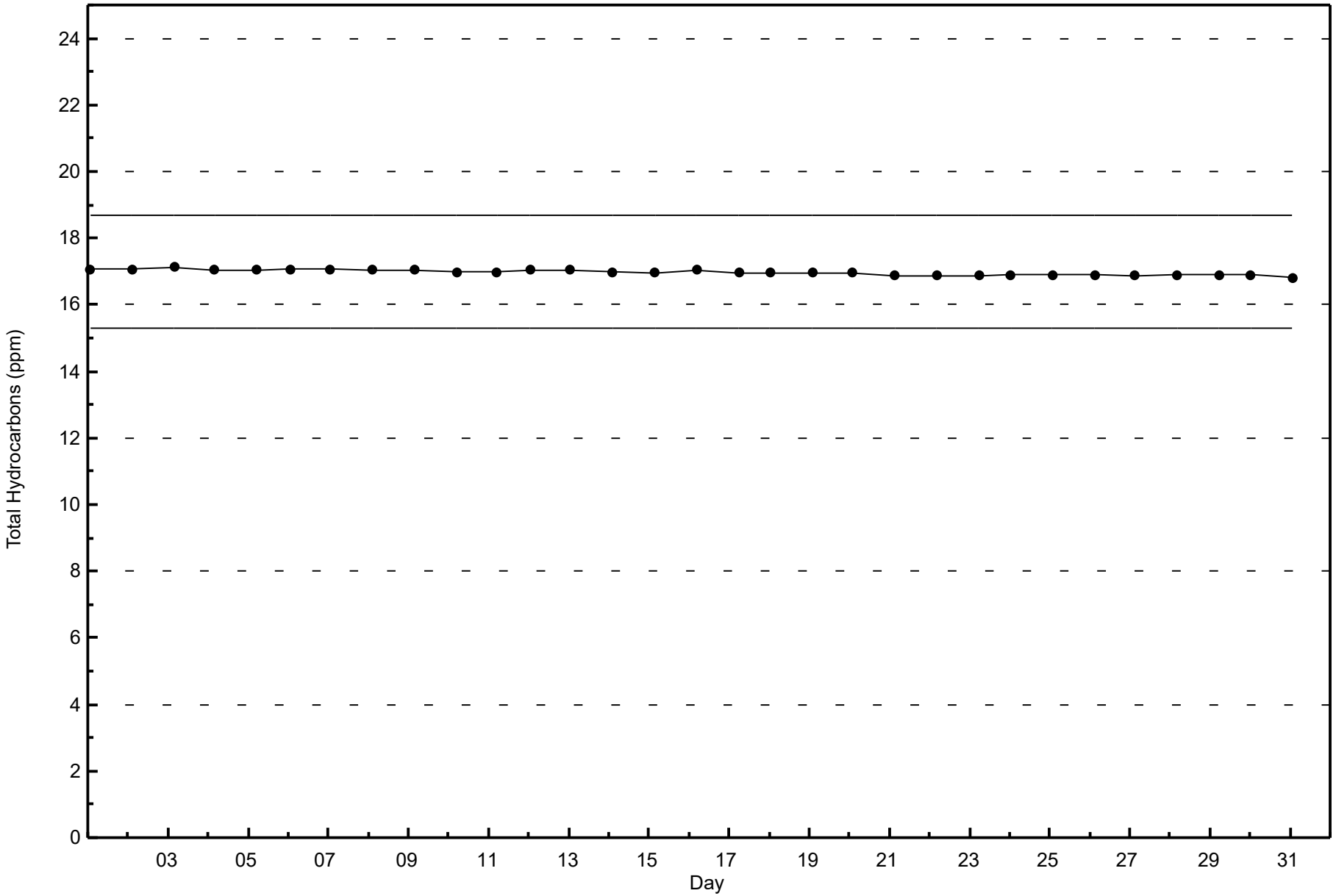


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Anzac - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Non Methane Hydrocarbons (NMHC) - ppm

## Anzac - August 2026

Maximum Value: 0.010 ppm on Aug 6 11:00

Maximum Daily Average: 0.000 ppm on Aug 6

Minimum Value: 0.000 ppm on Aug 1 01:00

Minimum Daily Average: 0.000 ppm on Aug 1

Maximum Diurnal Average: 0.000 ppm at hour 11

Minimum Diurnal Average: 0.000 ppm at hour 1

Monthly Average: 0.000 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 |
| 7-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 11-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 18-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 21-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 22-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 23-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 24-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 25-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | M | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 26-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 28-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 29-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Diurnal Average | |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Diurnal Maximum | |

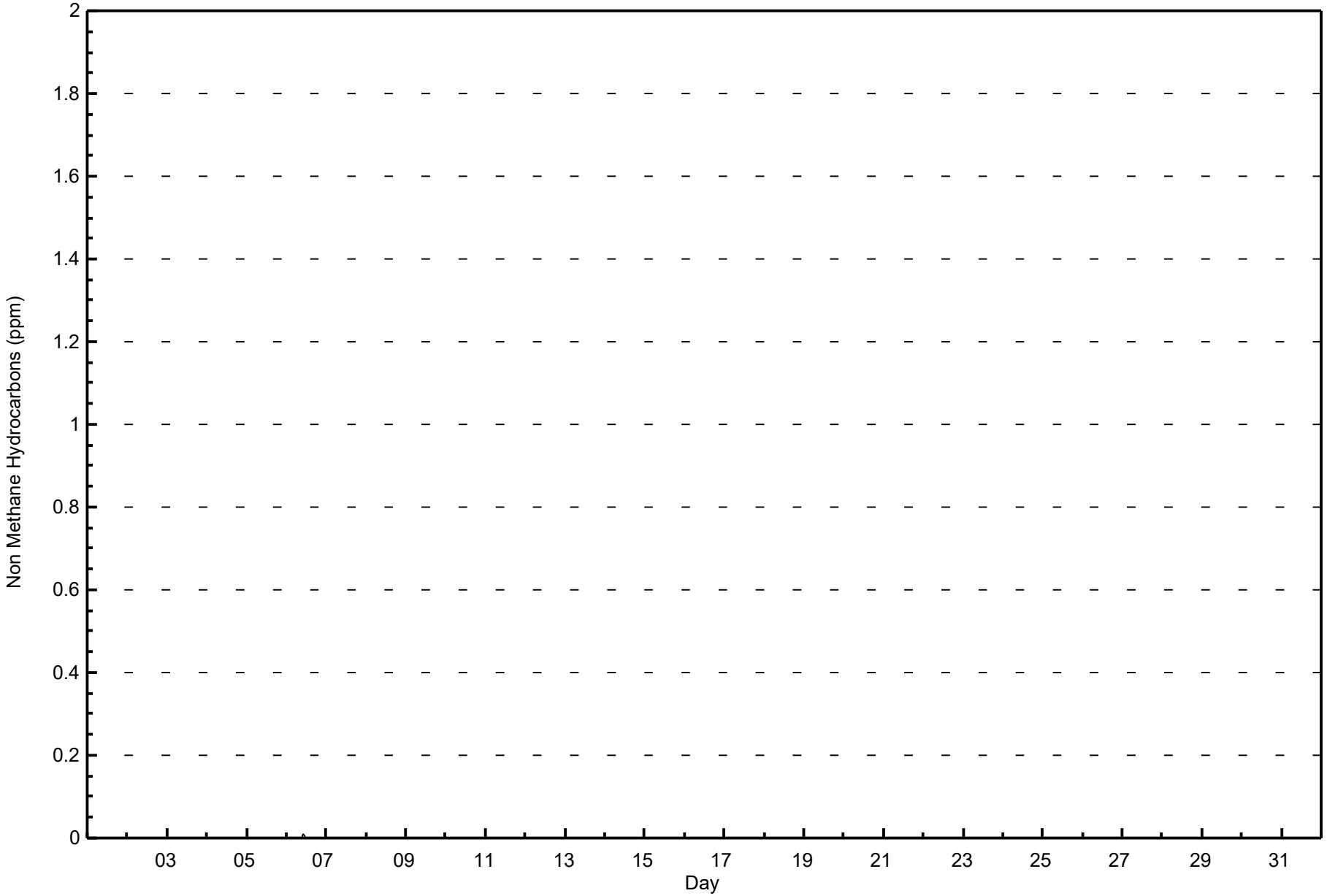
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**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Anzac - August 2026**



# Non Methane Hydrocarbons (NMHC) - ppm
## Anzac - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 707 | 99.86 | 99.86 |
| 0.006 - 0.05 | 1 | 0.14 | 100.00 |
| 0.06 - 0.1 | 0 | 0.00 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Anzac - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 34 | 7 | 7 | 4 | 8 | 14 | 36 | 66 | 37 | 27 | 26 | 38 | 65 | 141 | 113 | 84 | 707 |
| 0.006 - 0.05 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 14 | 36 | 66 | 37 | 27 | 26 | 38 | 65 | 142 | 113 | 84 | 708 |

Total Number of Valid Hours: 708

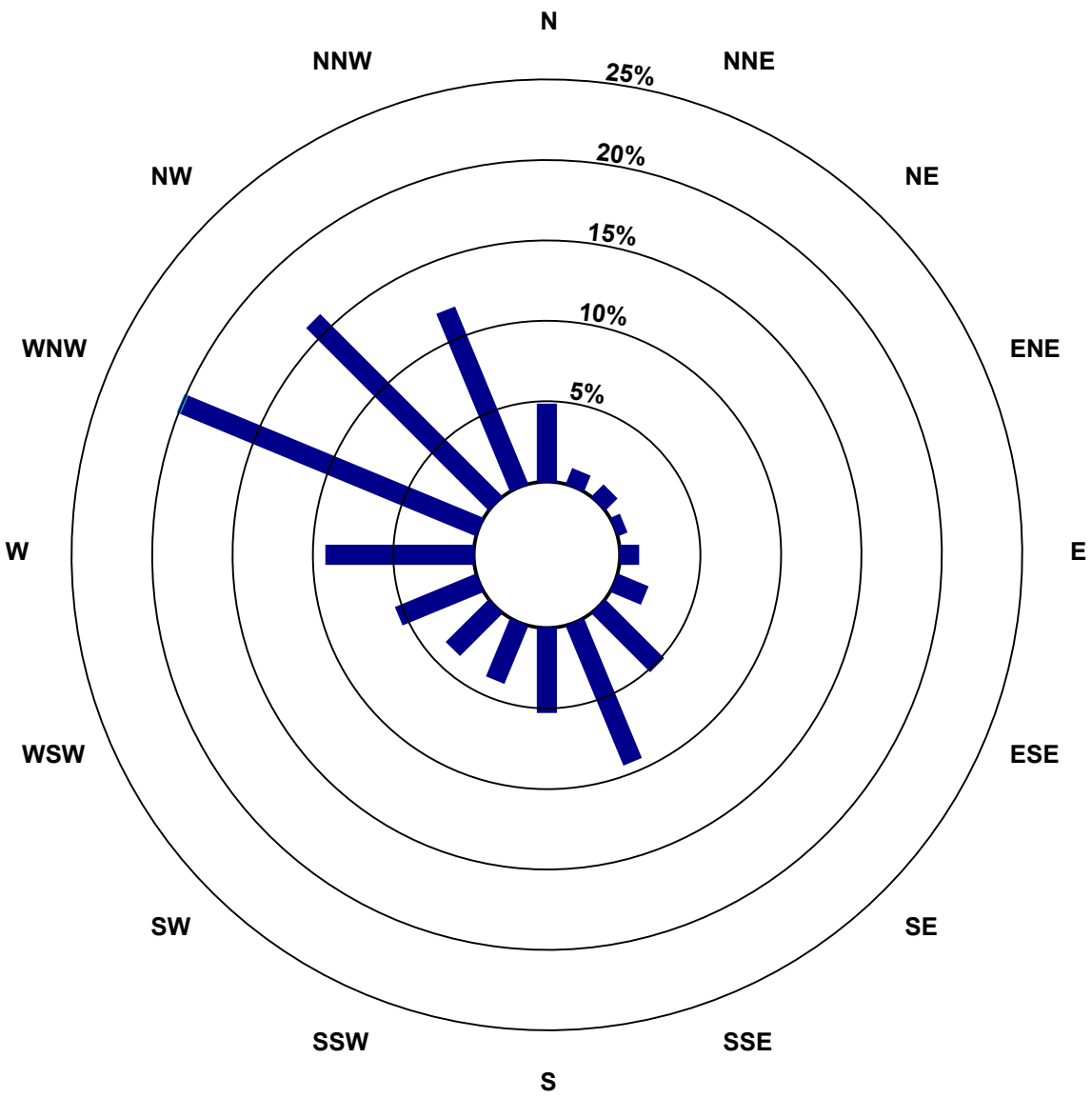
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Anzac**




**Classes (ppm)**

- 0 - 0.005
- 0.006 - 0.05
- 0.06 - 0.1
- > 0.1

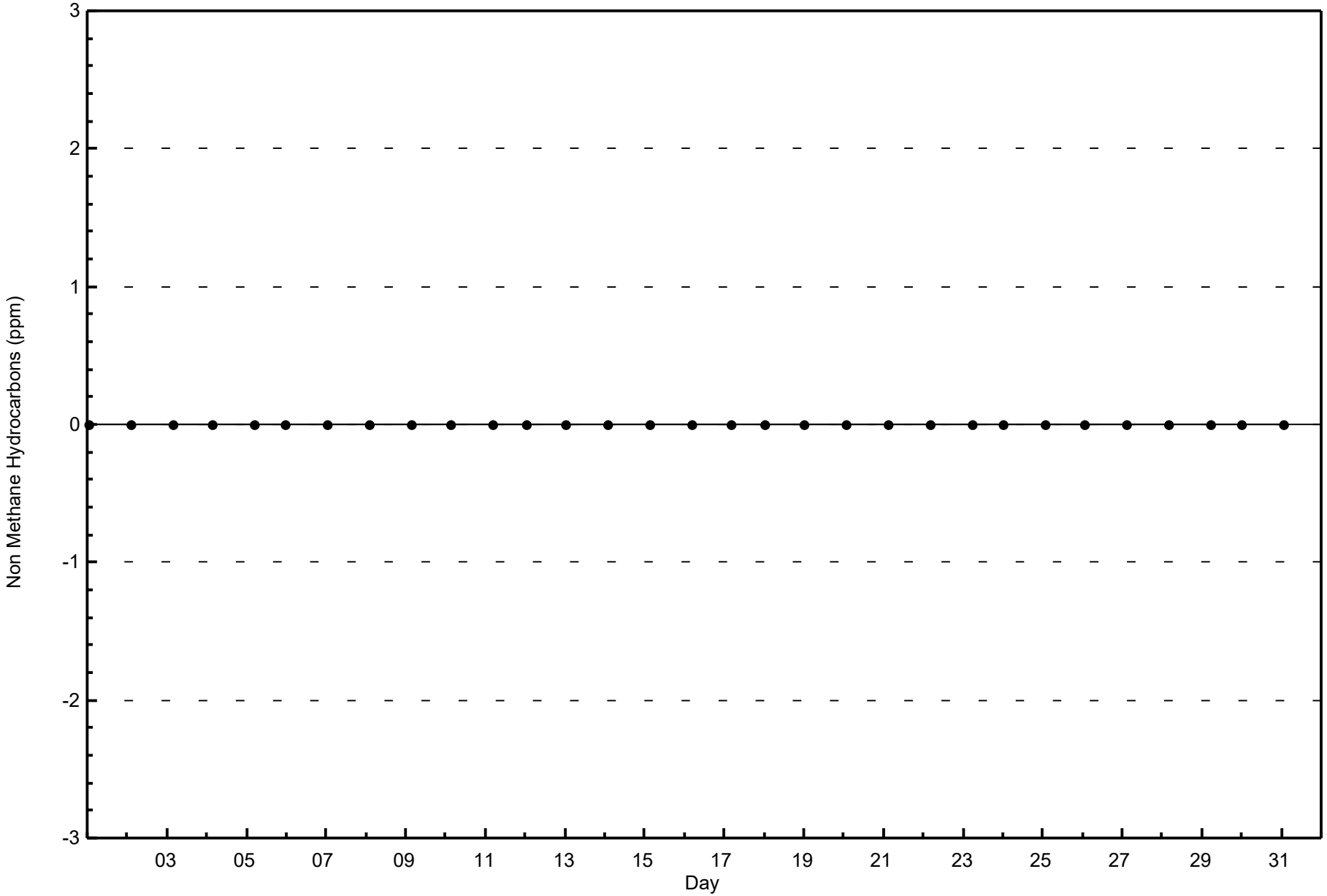
**Total Number of Valid Hours: 708**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Anzac - August 2026**

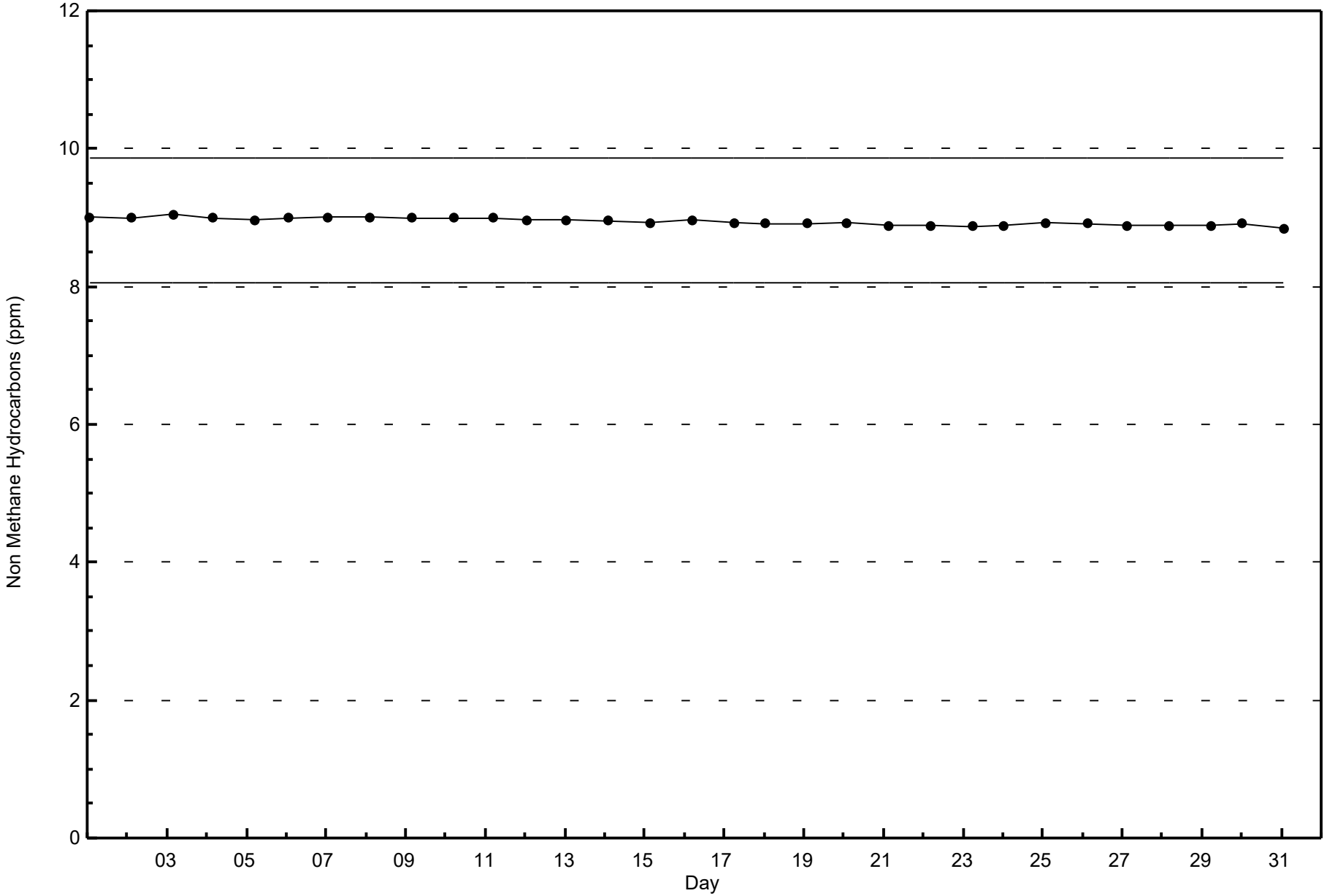


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Anzac - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

**Methane ($CH_4$) - ppm**

**Anzac - August 2026**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.4 ppm on Aug 23 07:00
Maximum Daily Average: 2.2 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 28 15:00
Minimum Daily Average: 2.0 ppm on Aug 6
Maximum Diurnal Average: 2.2 ppm at hour 6
Minimum Diurnal Average: 2.0 ppm at hour 16
Monthly Average: 2.10 ppm
Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.1 $P_{90}$ = 2.2 $P_{99}$ = 2.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 2-Aug | 2.1 | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 |
| 3-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 4-Aug | 2.2 | 2.2 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 5-Aug | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 |
| 8-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 9-Aug | 2.2 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 10-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 11-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 12-Aug | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 13-Aug | 2.1 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 14-Aug | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 15-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 16-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 17-Aug | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 18-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 19-Aug | 2.1 | Z | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 20-Aug | 2.2 | 2.1 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | C | C | C | C | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 21-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 22-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 23-Aug | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 24-Aug | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 25-Aug | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | M | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 26-Aug | 2.1 | 2.2 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 27-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 |
| 28-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 29-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 30-Aug | Z | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 |
| 31-Aug | 2.4 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.4 |
| | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Diurnal Average | |
| | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | Diurnal Maximum | |

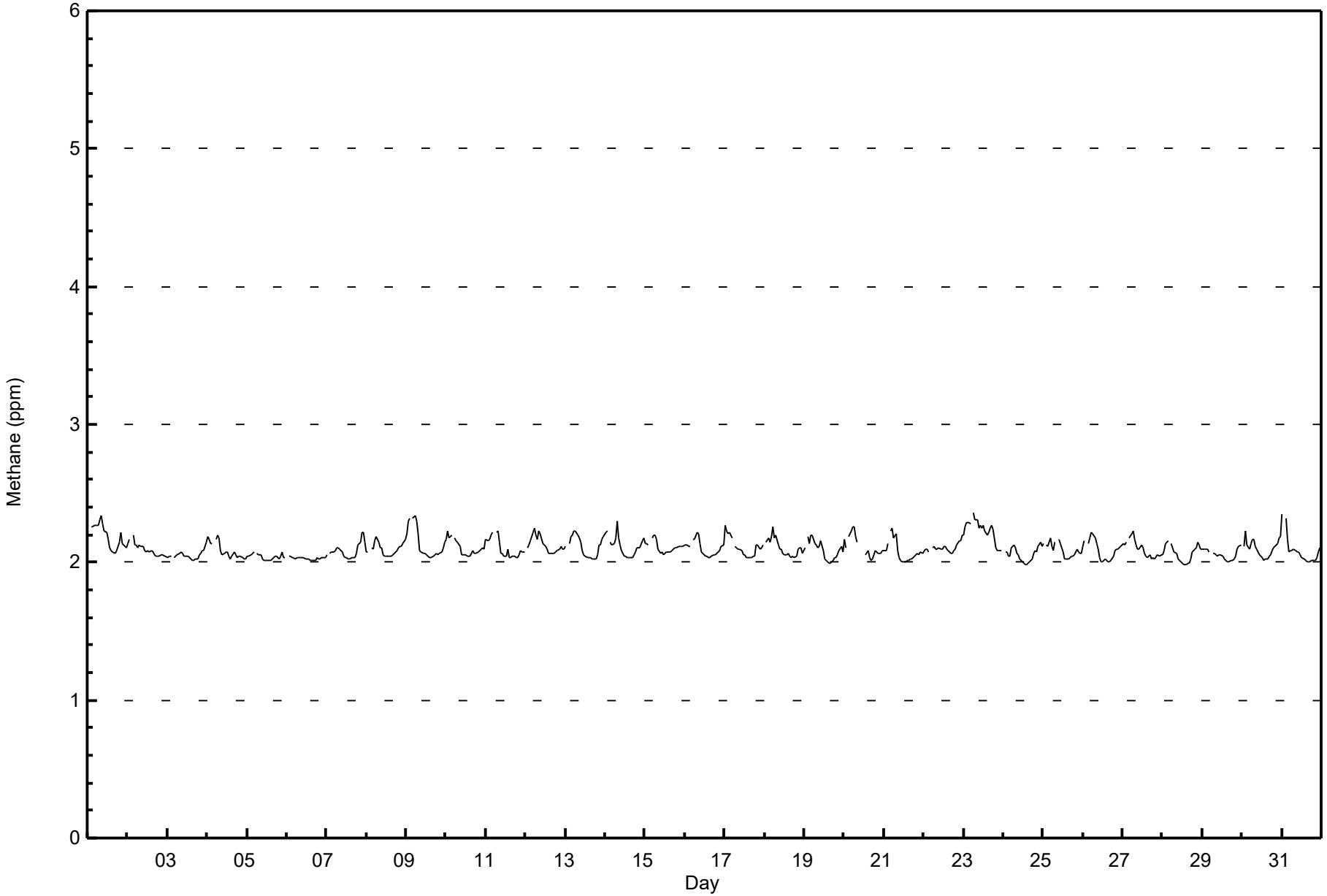
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Anzac - August 2026**



# Methane ($CH_4$) - ppm
## Anzac - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 218 | 30.79 | 30.79 |
| 2.1 - 3.0 | 490 | 69.21 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Anzac - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 13 | 3 | 4 | 3 | 1 | 3 | 12 | 10 | 5 | 3 | 3 | 8 | 22 | 32 | 63 | 33 | 218 |
| 2.1 - 3.0 | 21 | 4 | 3 | 1 | 7 | 11 | 24 | 56 | 32 | 24 | 23 | 30 | 43 | 110 | 50 | 51 | 490 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 14 | 36 | 66 | 37 | 27 | 26 | 38 | 65 | 142 | 113 | 84 | 708 |

Total Number of Valid Hours: 708

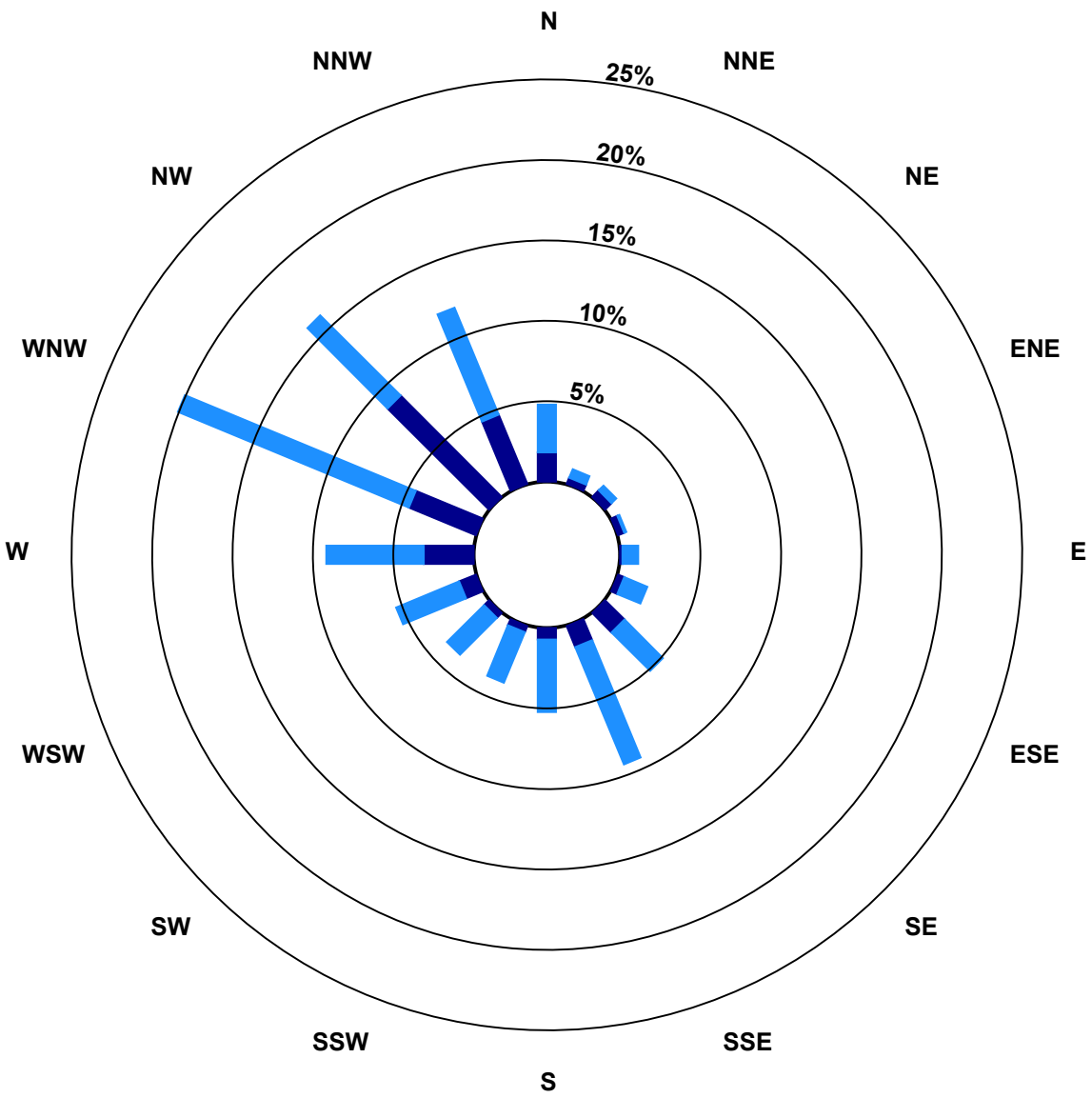
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Anzac




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

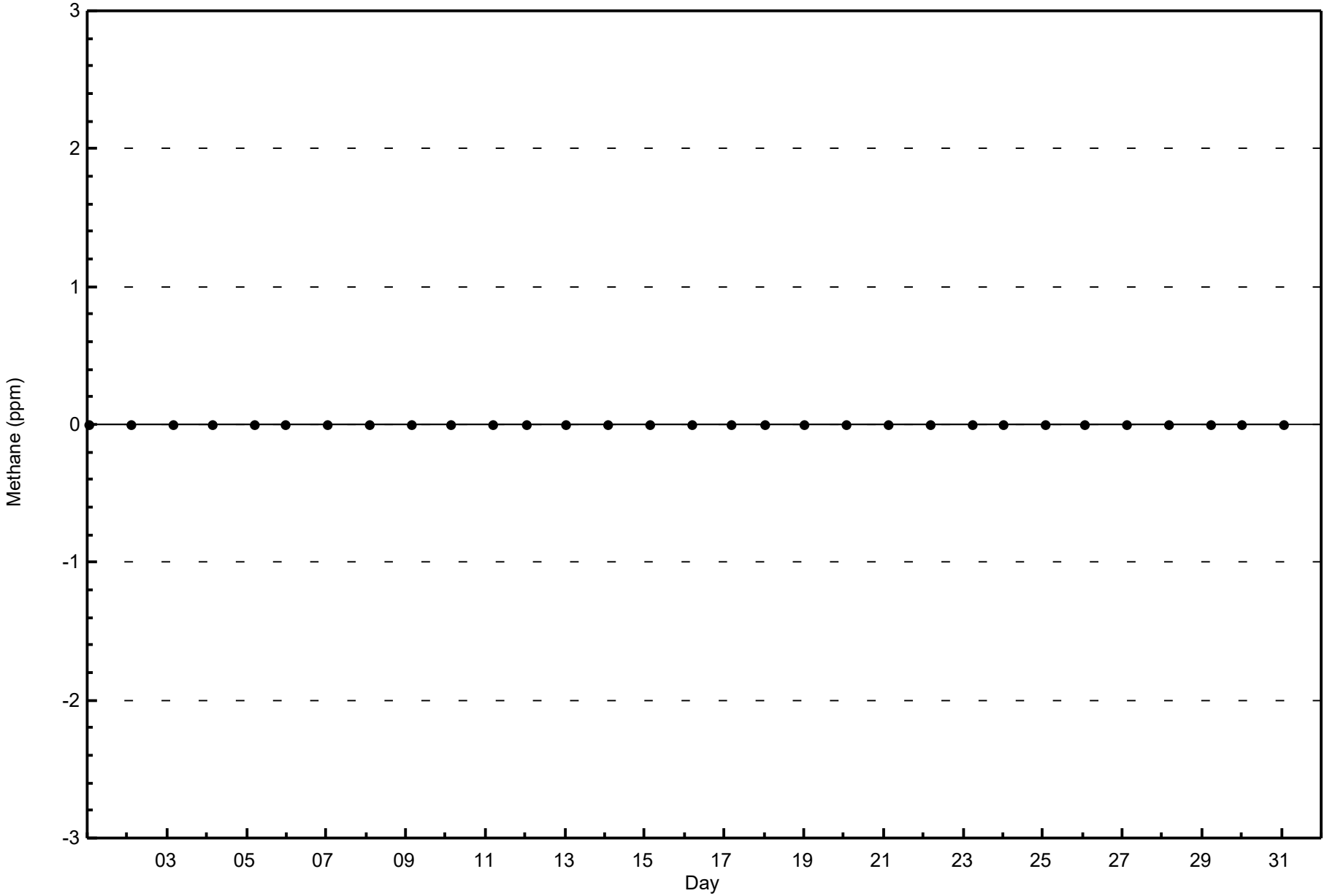
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Anzac - August 2026**

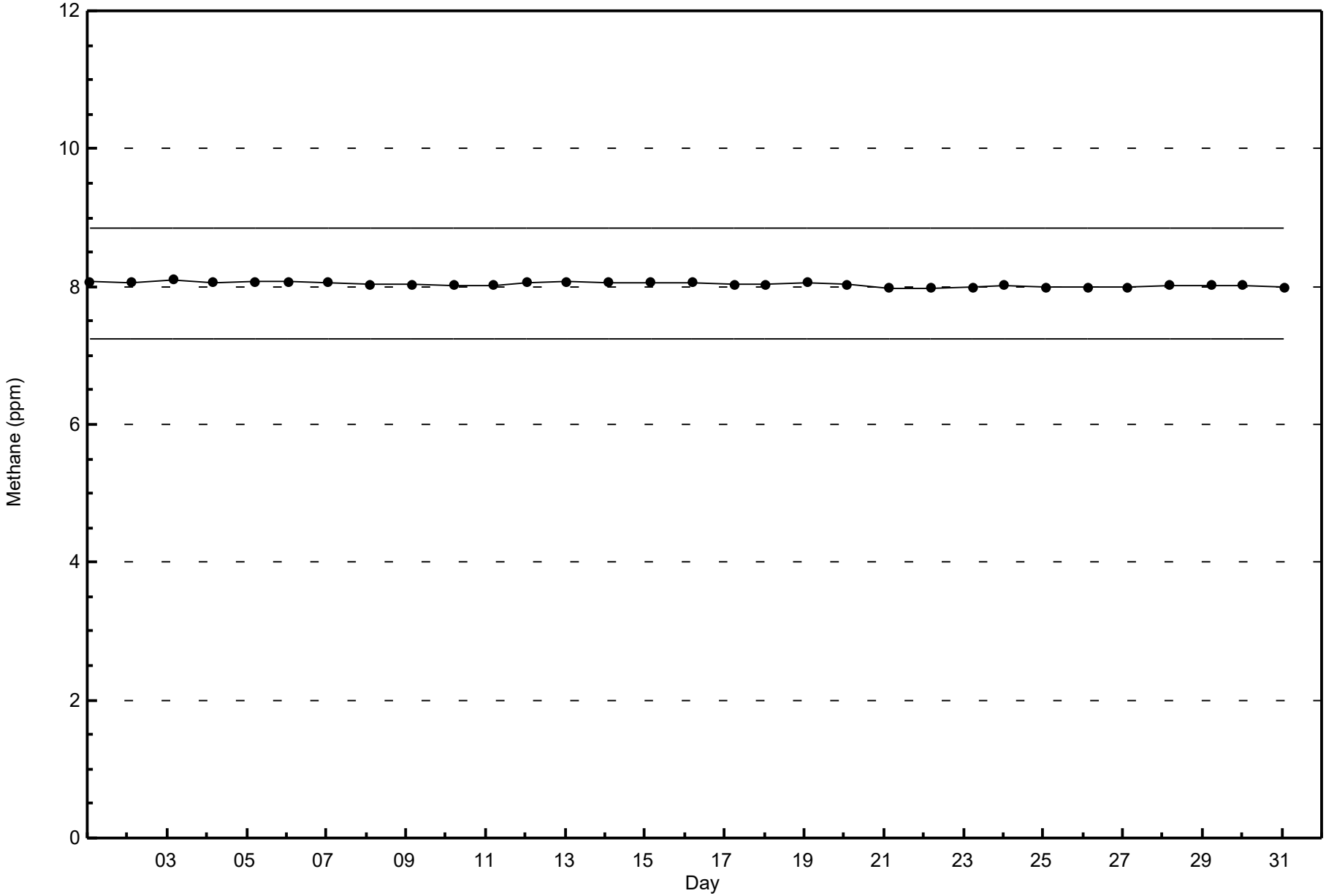


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Anzac - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Anzac - August 2026

Maximum Value: 6.9 ppb on Aug 20 06:00

Maximum Daily Average: 0.7 ppb on Aug 20

Minimum Value: 0.0 ppb on Aug 3 05:00

Minimum Daily Average: 0.1 ppb on Aug 2

Maximum Diurnal Average: 0.7 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 0.24 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.5 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 2-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 3-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.7 | 0.7 | 0.9 | 0.7 | 0.5 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.9 |
| 4-Aug | 0.3 | 0.3 | Z | 0.7 | 0.2 | 0.3 | 0.3 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 |
| 5-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.8 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 1.2 | 0.6 | 0.1 | 0.1 | 0.2 | 1.2 |
| 8-Aug | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 1.9 | 2.0 | 1.4 | 1.7 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.5 | 2.0 |
| 9-Aug | 0.2 | Z | 0.3 | 1.3 | 0.6 | 0.4 | 0.6 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 6.2 | 0.2 | 0.5 | 6.2 |
| 10-Aug | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.6 | 0.3 | 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.6 |
| 11-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.4 | 1.4 | 2.5 | 1.7 | 0.3 | 0.2 | 0.3 | 0.3 | 0.7 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.5 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.9 | 0.9 | 0.8 | 1.6 | 2.1 | 1.4 | 1.3 | 0.8 | 0.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 2.1 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | Z | 2.0 | 1.7 | 1.5 | 1.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 1.9 | 0.4 | 2.0 |
| 14-Aug | Z | 0.7 | 0.2 | 0.1 | 0.1 | 0.2 | 0.6 | 1.2 | 1.8 | 2.4 | 0.8 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 2.4 |
| 15-Aug | 0.1 | Z | 1.0 | 0.1 | 0.1 | 0.4 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.0 | 0.1 | 0.2 | 1.0 |
| 16-Aug | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 | 0.2 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.4 | 0.9 | 0.1 | 0.0 | 0.1 | 0.2 | 0.9 |
| 17-Aug | 0.1 | 0.1 | 0.2 | Z | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 18-Aug | 0.2 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.8 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.8 |
| 19-Aug | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | Z | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 |
| 20-Aug | Z | 0.1 | 0.1 | 0.1 | 0.2 | 6.9 | 4.0 | 1.7 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.9 | 0.1 | 0.1 | 0.1 | 0.7 | 6.9 |
| 21-Aug | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.4 | 2.5 | 1.6 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.9 | 2.4 | 0.4 | 2.5 |
| 22-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 |
| 23-Aug | 0.4 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 24-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.5 | 0.5 | 0.5 | 0.7 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.2 | 0.7 |
| 25-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.5 | C | C | C | C | C | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 | 0.0 | 0.3 | 0.2 | 1.3 |
| 26-Aug | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.7 | 0.6 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 3.3 | 0.0 | 0.0 | 0.3 | 3.3 |
| 27-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 1.0 | 0.6 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 |
| 28-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 30-Aug | 0.0 | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.4 | 0.9 | 0.5 | 0.2 | 0.2 | 1.1 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 3.0 | 0.0 | 0.1 | 0.1 | 0.3 | 3.0 |
| 31-Aug | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.4 | 0.7 | 1.7 | 0.7 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.3 | 0.3 | 0.3 | 1.7 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.2 | Diurnal Average | |
| | 0.4 | 0.7 | 1.0 | 1.3 | 0.6 | 6.9 | 4.0 | 2.5 | 1.8 | 2.4 | 1.7 | 1.3 | 0.8 | 0.7 | 0.7 | 0.4 | 0.2 | 0.2 | 0.3 | 0.4 | 3.0 | 3.3 | 6.2 | 2.4 | Diurnal Maximum | |

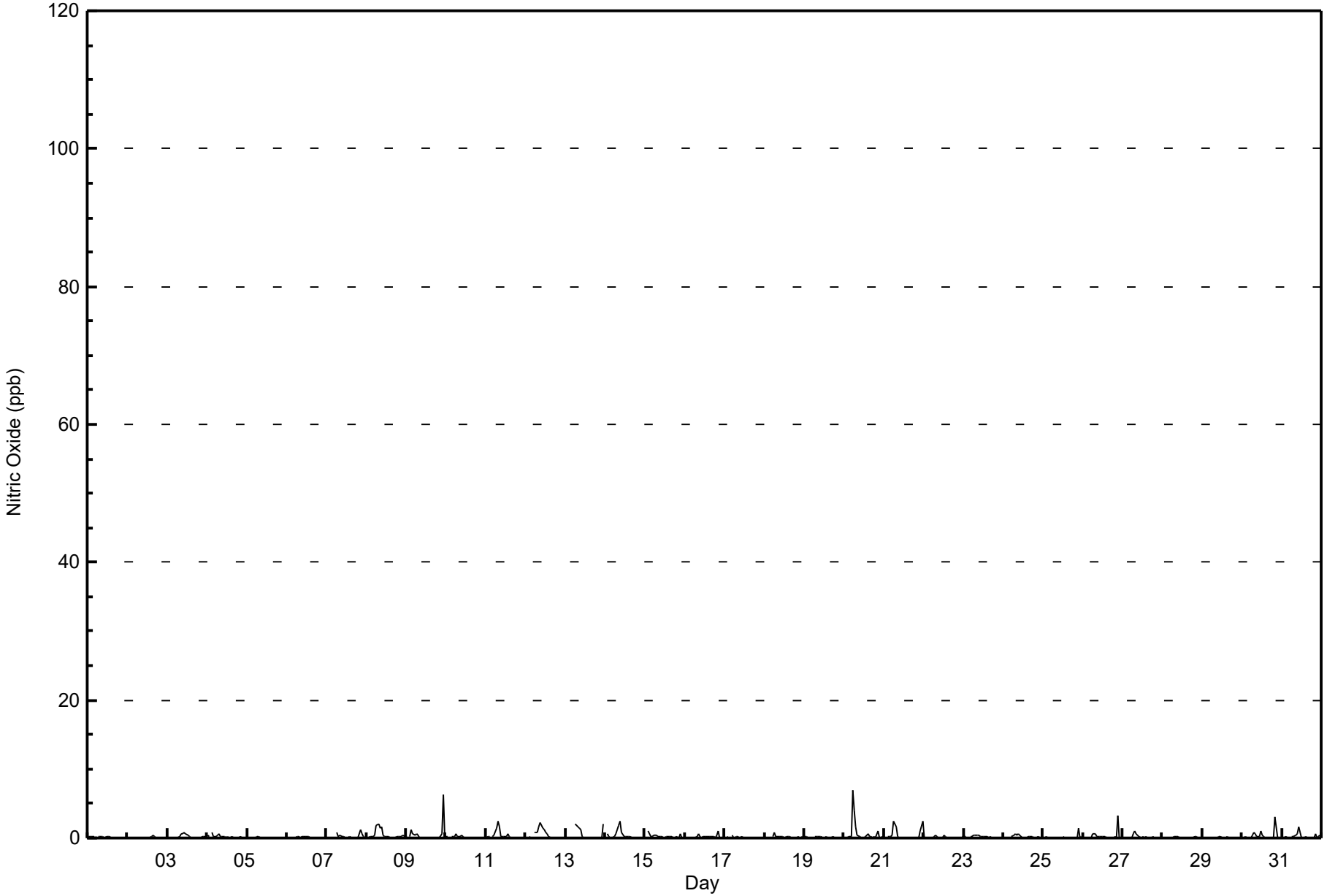
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Anzac - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Anzac - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 34 | 7 | 7 | 4 | 8 | 15 | 37 | 64 | 35 | 27 | 28 | 38 | 67 | 137 | 116 | 84 | 708 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 15 | 37 | 64 | 35 | 27 | 28 | 38 | 67 | 137 | 116 | 84 | 708 |

Total Number of Valid Hours: 708

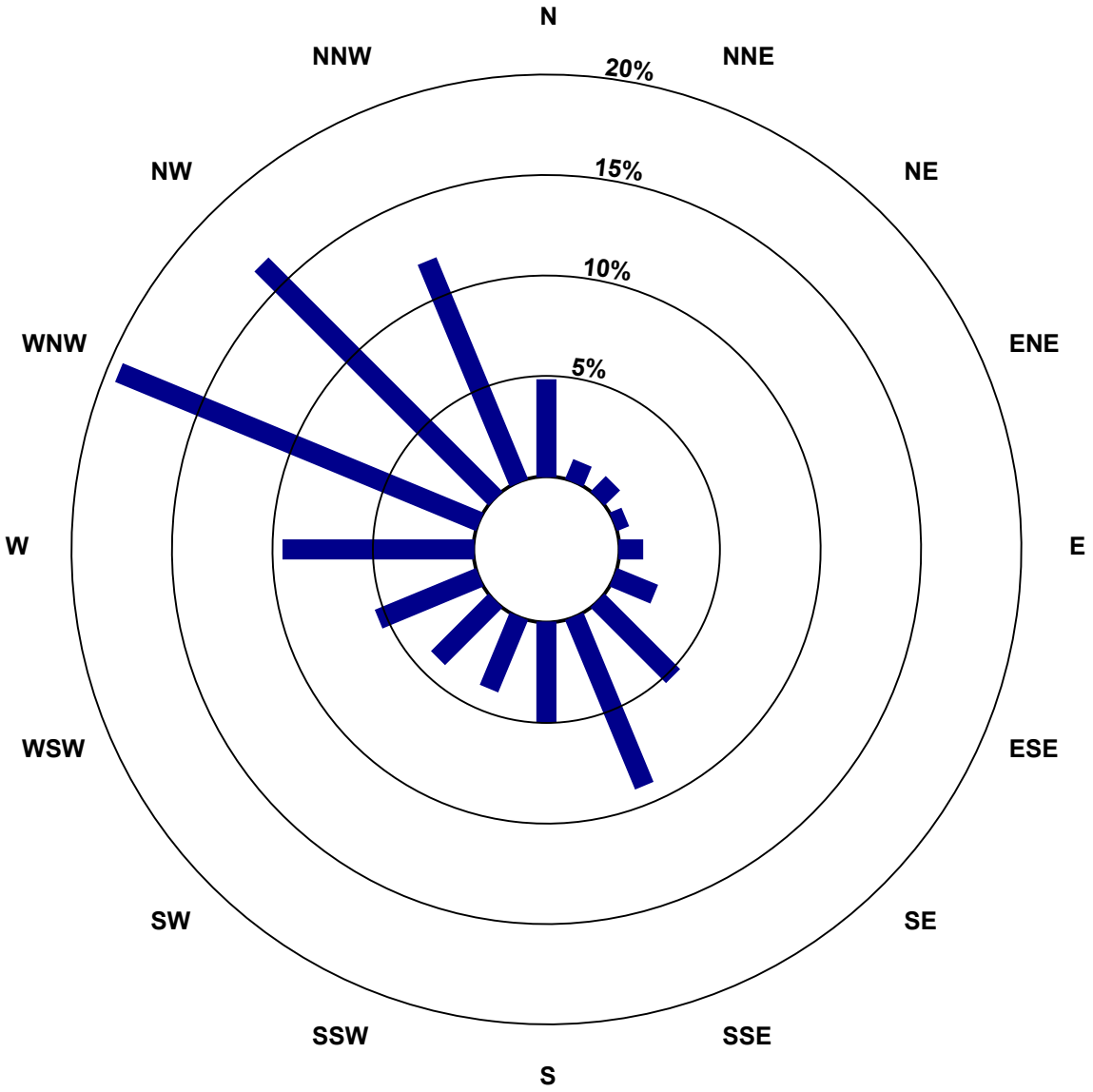
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Anzac




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

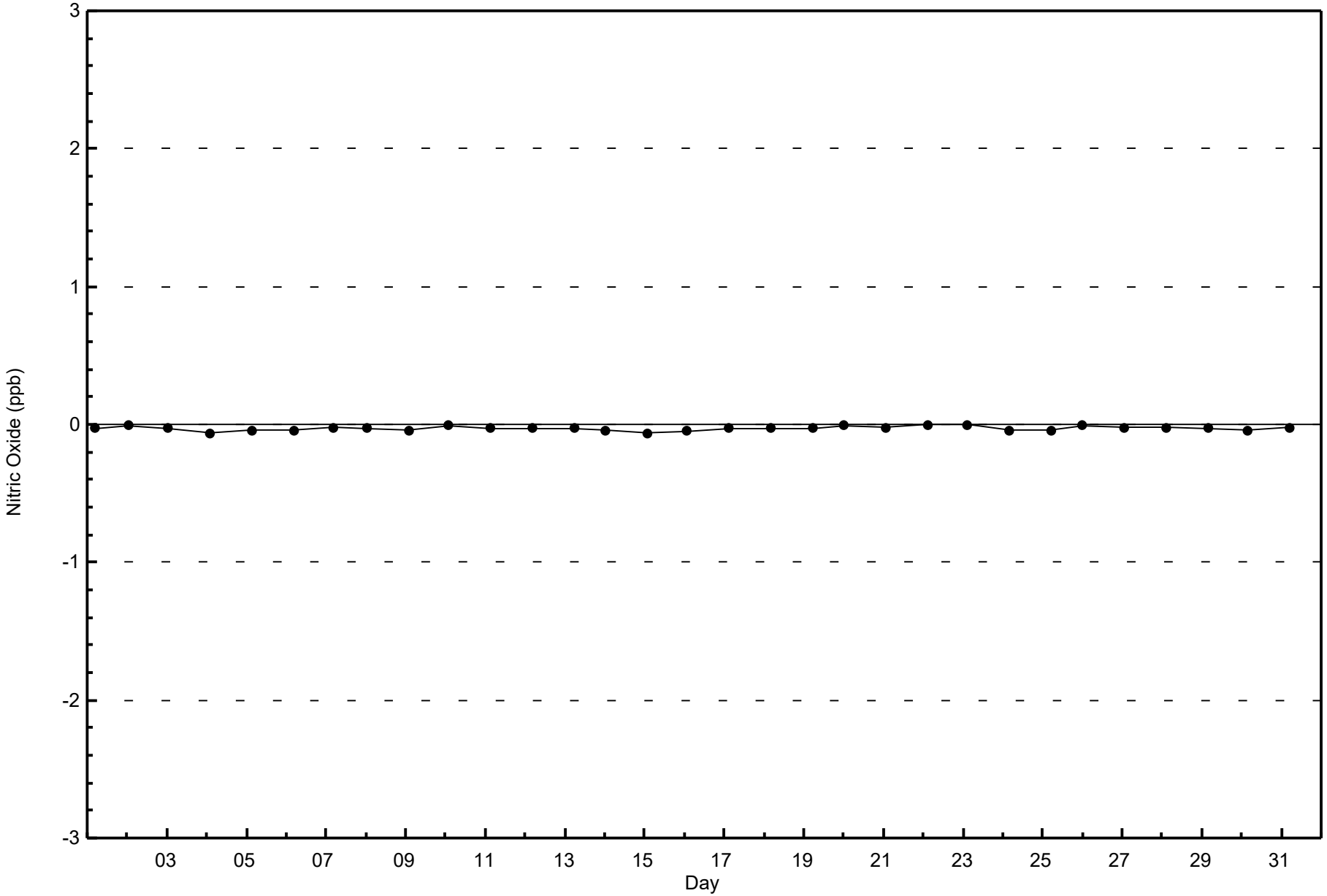
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Anzac - August 2026**

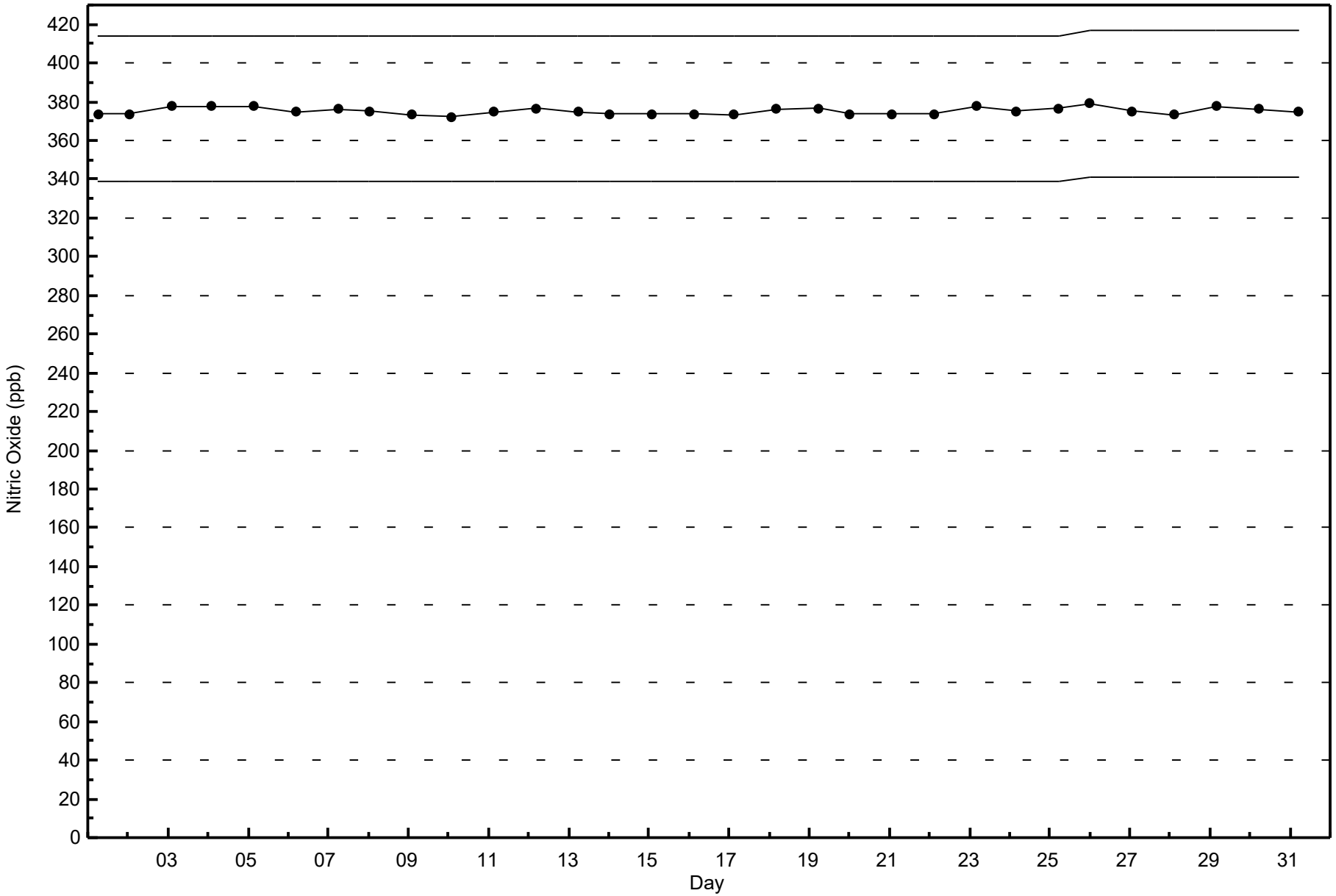


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Anzac - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Anzac - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8.4 ppb on Aug 12 06:00 Maximum Daily Average: 2.5 ppb on Aug 12

Minimum Value: 0.1 ppb on Aug 13 19:00
Maximum Diurnal Average: 2.3 ppb at hour 7
Monthly Average: 1.36 ppb

Minimum Daily Average: 0.5 ppb on Aug 29
Minimum Diurnal Average: 0.8 ppb at hour 16
Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.4 $Q_1$ = 0.6 Median = 1.0 $Q_3$ = 1.7 $P_{90}$ = 2.7 $P_{99}$ = 6.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | Z | 1.0 | 1.3 | 1.1 | 1.3 | 0.8 | 2.0 | 1.0 | 1.7 | 0.6 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 1.2 | 1.2 | 1.5 | 0.9 | 2.0 |
| 2-Aug | Z | 1.7 | 3.5 | 4.8 | 2.4 | 1.5 | 1.4 | 1.3 | 1.2 | 1.4 | 0.6 | 0.7 | 0.5 | 0.5 | 1.5 | 2.3 | 2.0 | 1.0 | 1.3 | 2.1 | 2.1 | 2.7 | 1.8 | 1.5 | 1.7 | 4.8 |
| 3-Aug | 0.6 | Z | 1.1 | 0.9 | 0.7 | 0.7 | 1.0 | 1.5 | 2.1 | 1.9 | 2.3 | 2.4 | 2.0 | 0.9 | 0.4 | 0.3 | 0.2 | 0.3 | 0.5 | 1.0 | 0.9 | 1.3 | 1.1 | 1.2 | 1.1 | 2.4 |
| 4-Aug | 0.8 | 0.9 | Z | 3.4 | 2.6 | 1.8 | 1.4 | 1.6 | 1.3 | 1.0 | 0.8 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.4 | 0.7 | 0.8 | 1.0 | 1.4 | 1.1 | 1.0 | 1.1 | 1.1 | 3.4 |
| 5-Aug | 0.8 | 0.7 | 0.8 | Z | 1.4 | 1.1 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.7 | 0.2 | 2.2 | 3.8 | 1.6 | 0.6 | 0.9 | 3.8 |
| 6-Aug | 0.6 | 0.5 | 0.7 | 0.7 | Z | 1.1 | 1.0 | 1.1 | 0.6 | 0.8 | 0.8 | 0.9 | 1.2 | 0.9 | 0.7 | 0.5 | 0.4 | 0.5 | 0.8 | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 1.2 |
| 7-Aug | 0.6 | 0.5 | 0.4 | 0.6 | 0.6 | Z | 1.6 | 1.0 | 1.3 | 0.8 | 0.7 | 0.4 | 0.4 | 0.5 | 0.7 | 0.4 | 0.4 | 0.7 | 1.2 | 2.6 | 3.9 | 3.3 | 2.5 | 1.2 | 1.1 | 3.9 |
| 8-Aug | Z | 1.0 | 0.8 | 0.8 | 1.0 | 1.7 | 3.4 | 4.0 | 3.3 | 3.7 | 1.8 | 0.8 | 1.0 | 0.8 | 0.6 | 0.7 | 0.5 | 0.9 | 2.9 | 3.5 | 3.2 | 2.8 | 2.5 | 1.6 | 1.9 | 4.0 |
| 9-Aug | 1.6 | Z | 1.7 | 2.8 | 2.5 | 1.6 | 1.5 | 1.3 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 1.2 | 1.4 | 1.3 | 0.7 | 0.7 | 1.2 | 8.0 | 2.6 | 1.5 | 8.0 |
| 10-Aug | 1.7 | 2.2 | Z | 1.4 | 0.8 | 0.7 | 1.2 | 1.5 | 1.2 | 1.5 | 2.1 | 0.9 | 0.6 | 0.7 | 0.7 | 1.4 | 2.1 | 1.5 | 1.9 | 1.6 | 1.7 | 1.5 | 1.4 | 1.0 | 1.4 | 2.2 |
| 11-Aug | 1.1 | 1.5 | 1.3 | Z | 2.8 | 3.5 | 5.5 | 7.7 | 6.0 | 2.3 | 1.7 | 1.6 | 1.8 | 3.8 | 1.3 | 0.8 | 0.8 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 2.0 | 7.7 |
| 12-Aug | 0.9 | 1.7 | 2.6 | 3.6 | Z | 8.4 | 5.7 | 4.2 | 6.3 | 5.4 | 3.9 | 3.9 | 2.9 | 2.0 | 1.0 | 0.7 | 0.5 | 0.5 | 0.2 | 0.4 | 0.5 | 1.5 | 0.6 | 1.1 | 2.5 | 8.4 |
| 13-Aug | 0.9 | 0.7 | 2.2 | 3.4 | 3.7 | Z | 3.8 | 3.1 | 2.9 | 2.8 | 1.2 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.4 | 0.5 | 1.8 | 1.3 | 3.8 |
| 14-Aug | Z | 1.4 | 0.8 | 1.2 | 1.2 | 1.2 | 1.3 | 2.8 | 4.4 | 4.8 | 2.9 | 1.4 | 0.8 | 1.3 | 0.9 | 0.8 | 0.5 | 0.8 | 1.0 | 1.1 | 0.8 | 0.8 | 0.6 | 1.0 | 1.5 | 4.8 |
| 15-Aug | 0.6 | Z | 0.9 | 0.7 | 0.5 | 0.7 | 0.9 | 1.5 | 1.2 | 1.1 | 1.1 | 0.7 | 0.5 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 1.1 | 0.9 | 1.3 | 0.8 | 0.7 | 0.8 | 1.5 |
| 16-Aug | 0.6 | 0.6 | Z | 0.8 | 0.9 | 0.7 | 0.8 | 1.0 | 2.5 | 1.9 | 0.7 | 1.4 | 1.5 | 1.7 | 1.6 | 1.1 | 2.1 | 2.3 | 1.7 | 4.1 | 5.8 | 0.9 | 1.2 | 1.2 | 1.6 | 5.8 |
| 17-Aug | 1.3 | 0.6 | 0.4 | Z | 1.2 | 0.7 | 0.9 | 1.3 | 1.1 | 1.0 | 1.0 | 0.7 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 1.3 |
| 18-Aug | 0.5 | 0.3 | 0.5 | 0.4 | Z | 1.2 | 3.2 | 1.4 | 1.3 | 1.2 | 1.0 | 0.9 | 0.7 | 1.0 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 1.1 | 1.0 | 1.2 | 1.5 | 1.0 | 3.2 |
| 19-Aug | 1.8 | 1.1 | 0.7 | 0.6 | 0.6 | Z | 1.5 | 1.7 | 1.0 | 1.0 | 1.0 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.9 | 0.7 | 0.8 | 0.9 | 1.1 | 1.0 | 0.7 | 0.9 | 1.8 |
| 20-Aug | Z | 1.8 | 1.4 | 1.0 | 0.7 | 3.8 | 3.7 | 2.9 | 2.2 | 1.3 | 1.0 | 1.2 | 1.2 | 2.9 | 5.0 | 2.7 | 1.9 | 2.3 | 3.2 | 2.7 | 1.8 | 1.2 | 0.9 | 1.0 | 2.1 | 5.0 |
| 21-Aug | 0.8 | Z | 1.2 | 0.9 | 1.0 | 0.9 | 2.0 | 2.7 | 2.3 | 1.6 | 1.3 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.6 | 2.3 | 5.4 | 1.4 | 5.4 |
| 22-Aug | 2.2 | 2.1 | Z | 2.5 | 2.3 | 2.7 | 2.7 | 2.6 | 2.0 | 1.5 | 1.4 | 1.2 | 2.8 | 2.6 | 1.4 | 1.3 | 1.3 | 1.6 | 1.4 | 1.3 | 1.7 | 1.1 | 0.9 | 0.8 | 1.8 | 2.8 |
| 23-Aug | 1.2 | 1.8 | 1.0 | Z | 1.7 | 1.5 | 2.9 | 2.2 | 2.2 | 3.6 | 3.6 | 2.5 | 2.1 | 1.8 | 1.9 | 1.7 | 1.8 | 1.2 | 1.0 | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 | 1.7 | 3.6 |
| 24-Aug | 0.6 | 1.1 | 1.9 | 0.9 | Z | 5.0 | 6.2 | 4.7 | 3.2 | 3.4 | 2.6 | 1.0 | 0.8 | 0.8 | 0.6 | 1.1 | 1.6 | 1.9 | 1.1 | 0.7 | 1.1 | 1.7 | 1.3 | 1.4 | 1.9 | 6.2 |
| 25-Aug | 0.9 | 0.5 | 0.5 | 0.6 | 0.6 | Z | 2.6 | C | C | C | C | C | 2.1 | 1.4 | 1.2 | 1.4 | 1.5 | 1.8 | 1.8 | 1.4 | 1.6 | 2.5 | 1.0 | 2.5 | 1.4 | 2.6 |
| 26-Aug | Z | 1.7 | 0.9 | 0.6 | 1.2 | 1.7 | 3.0 | 1.9 | 1.2 | 0.9 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 | 1.0 | 0.8 | 6.5 | 2.3 | 1.7 | 1.4 | 6.5 |
| 27-Aug | 1.3 | Z | 2.6 | 2.1 | 1.6 | 2.9 | 4.5 | 3.3 | 2.0 | 1.7 | 1.4 | 0.7 | 1.1 | 0.7 | 1.2 | 0.4 | 0.5 | 0.7 | 2.9 | 0.5 | 0.8 | 6.6 | 4.9 | 4.9 | 2.1 | 6.6 |
| 28-Aug | 2.3 | 2.7 | Z | 1.2 | 1.0 | 2.7 | 2.0 | 2.2 | 1.5 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 1.0 | 1.2 | 1.3 | 0.9 | 0.7 | 0.5 | 1.1 | 2.7 |
| 29-Aug | 0.5 | 0.5 | 0.5 | Z | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 |
| 30-Aug | 0.5 | 0.5 | 2.5 | 1.7 | Z | 1.6 | 1.9 | 2.7 | 1.6 | 0.9 | 0.8 | 2.6 | 2.0 | 0.9 | 0.2 | 0.2 | 0.4 | 0.3 | 0.4 | 0.4 | 1.7 | 0.5 | 0.6 | 1.2 | 1.1 | 2.7 |
| 31-Aug | 0.9 | 1.0 | 1.2 | 0.4 | 0.6 | Z | 1.1 | 0.9 | 1.0 | 1.5 | 3.1 | 2.0 | 0.5 | 0.4 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 1.0 | 0.5 | 0.8 | 1.5 | 0.9 | 3.1 |
| | 1.0 | 1.1 | 1.3 | 1.5 | 1.4 | 2.0 | 2.3 | 2.2 | 2.0 | 1.8 | 1.4 | 1.2 | 1.1 | 1.1 | 0.9 | 0.8 | 0.8 | 0.9 | 1.0 | 1.1 | 1.4 | 1.7 | 1.5 | 1.4 | Diurnal Average | |
| | 2.3 | 2.7 | 3.5 | 4.8 | 3.7 | 8.4 | 6.2 | 7.7 | 6.3 | 5.4 | 3.9 | 3.9 | 2.9 | 3.8 | 5.0 | 2.7 | 2.1 | 2.3 | 3.2 | 4.1 | 5.8 | 6.6 | 8.0 | 5.4 | Diurnal Maximum | |

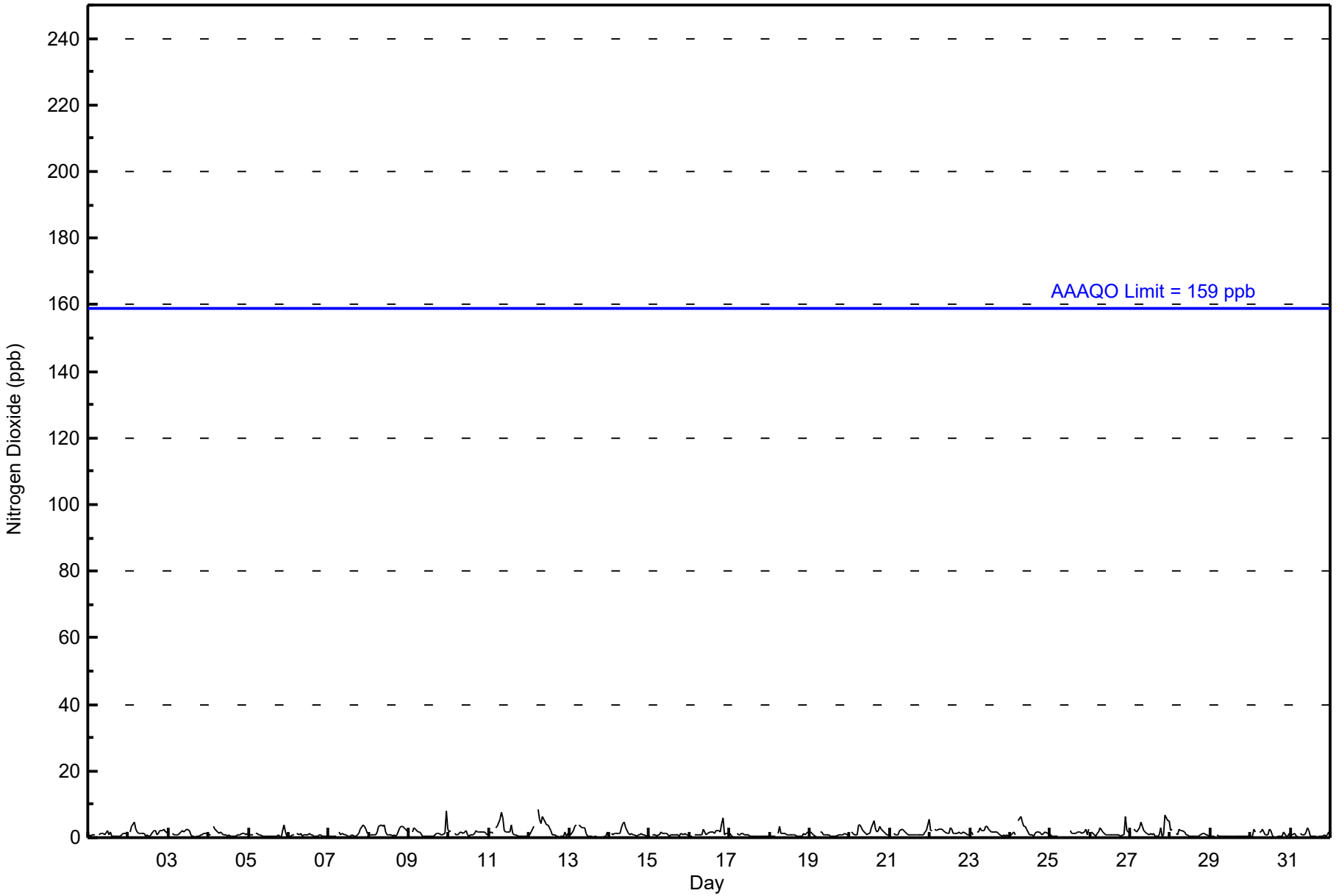
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Anzac - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Anzac - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Anzac - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 34 | 7 | 7 | 4 | 8 | 15 | 37 | 64 | 35 | 27 | 28 | 38 | 67 | 137 | 116 | 84 | 708 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 15 | 37 | 64 | 35 | 27 | 28 | 38 | 67 | 137 | 116 | 84 | 708 |

Total Number of Valid Hours: 708

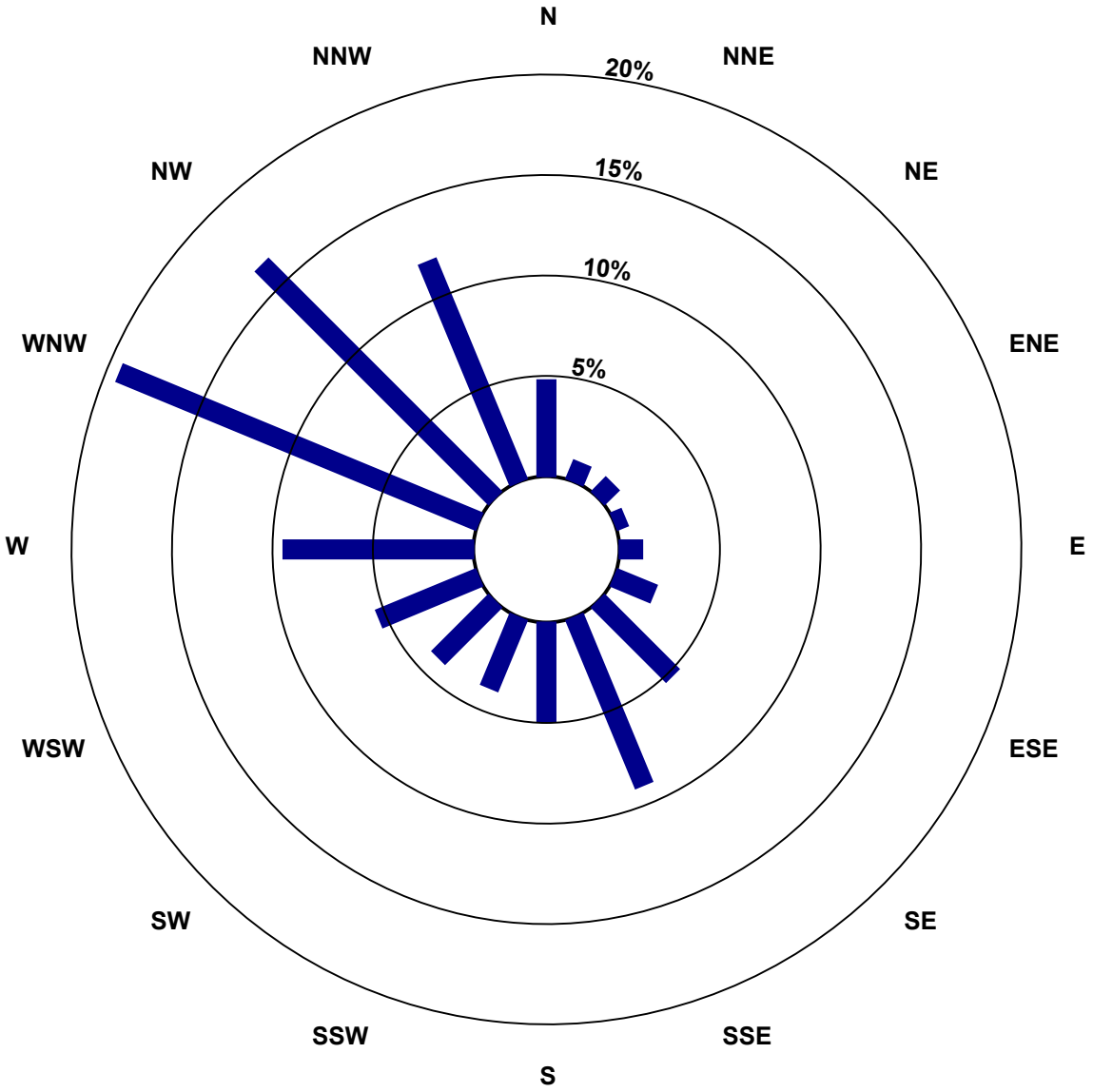
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Anzac




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

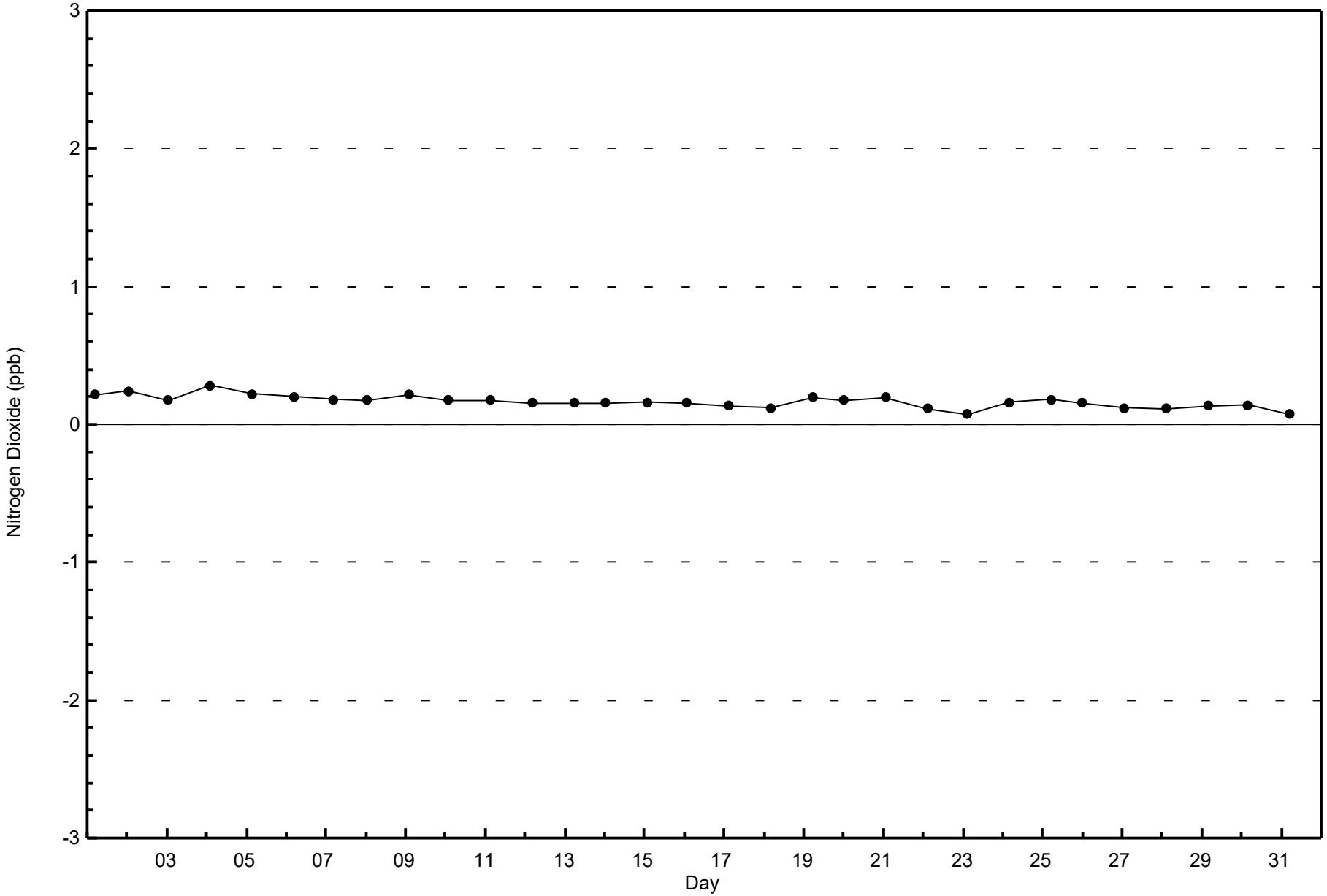
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Anzac - August 2026**

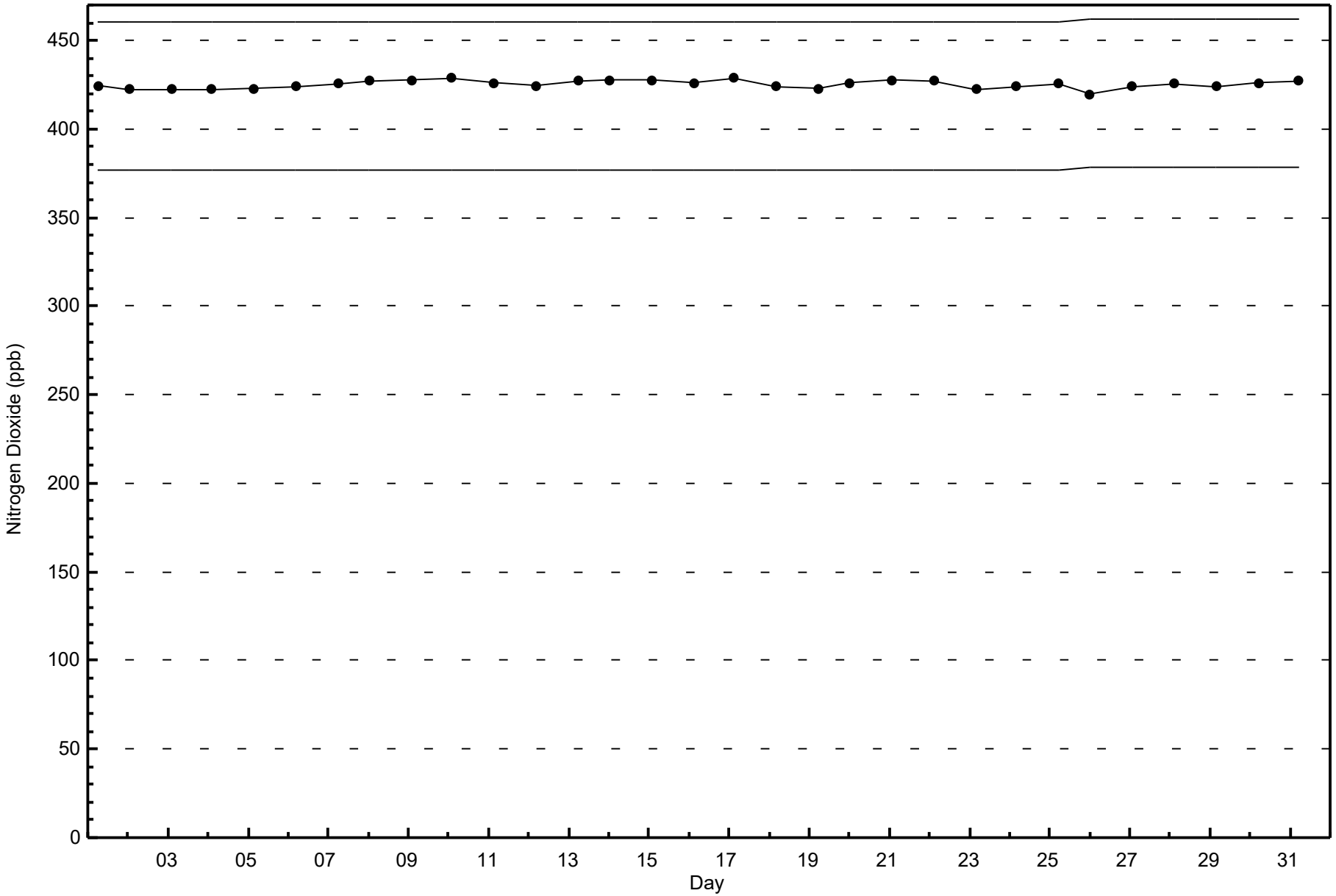


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Anzac - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxides ($NO_X$) - ppb

## Anzac - August 2026

Maximum Value: 14.2 ppb on Aug 9 23:00

Maximum Daily Average: 3.0 ppb on Aug 12

Minimum Value: 0.1 ppb on Aug 13 19:00

Minimum Daily Average: 0.5 ppb on Aug 29

Maximum Diurnal Average: 3.0 ppb at hour 7

Minimum Diurnal Average: 0.9 ppb at hour 16

Monthly Average: 1.60 ppb

Percentiles: $P_1$ = 0.3 $P_{10}$ = 0.5 $Q_1$ = 0.7 Median = 1.1 $Q_3$ = 1.9 $P_{90}$ = 3.2 $P_{99}$ = 7.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.9 | 0.7 | 0.9 | 0.8 | 0.8 | Z | 1.2 | 1.4 | 1.2 | 1.5 | 0.9 | 2.3 | 1.1 | 2.0 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 1.2 | 1.2 | 1.5 | 1.0 | 2.3 |
| 2-Aug | Z | 1.7 | 3.5 | 4.8 | 2.4 | 1.5 | 1.4 | 1.3 | 1.2 | 1.4 | 0.6 | 0.7 | 0.5 | 0.5 | 1.7 | 2.7 | 2.2 | 1.1 | 1.4 | 2.2 | 2.1 | 2.7 | 1.8 | 1.5 | 1.8 | 4.8 |
| 3-Aug | 0.6 | Z | 1.1 | 0.9 | 0.7 | 0.7 | 1.1 | 1.7 | 2.8 | 2.6 | 3.2 | 3.1 | 2.5 | 1.0 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | 1.1 | 1.0 | 1.4 | 1.3 | 1.4 | 1.3 | 3.2 |
| 4-Aug | 1.1 | 1.2 | Z | 4.1 | 2.8 | 2.1 | 1.7 | 2.1 | 1.5 | 1.1 | 0.9 | 0.7 | 0.8 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 1.1 | 1.6 | 1.2 | 1.1 | 1.2 | 1.3 | 4.1 |
| 5-Aug | 0.9 | 0.8 | 0.9 | Z | 1.5 | 1.2 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.4 | 0.5 | 0.4 | 0.7 | 0.2 | 2.2 | 3.9 | 1.6 | 0.6 | 0.9 | 3.9 |
| 6-Aug | 0.6 | 0.5 | 0.7 | 0.8 | Z | 1.2 | 1.1 | 1.2 | 0.7 | 0.9 | 1.0 | 1.1 | 1.5 | 1.1 | 0.8 | 0.5 | 0.5 | 0.6 | 0.9 | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.8 | 1.5 |
| 7-Aug | 0.6 | 0.5 | 0.4 | 0.6 | 0.6 | Z | 2.4 | 1.1 | 1.6 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.9 | 0.4 | 0.4 | 0.8 | 1.3 | 2.7 | 5.1 | 3.9 | 2.6 | 1.3 | 1.3 | 5.1 |
| 8-Aug | Z | 1.1 | 0.9 | 0.9 | 1.2 | 2.2 | 5.3 | 6.0 | 4.7 | 5.4 | 2.2 | 1.0 | 1.2 | 0.9 | 0.7 | 0.8 | 0.6 | 1.0 | 3.2 | 3.7 | 3.3 | 3.1 | 2.8 | 1.8 | 2.4 | 6.0 |
| 9-Aug | 1.8 | Z | 2.0 | 4.1 | 3.1 | 2.0 | 2.1 | 1.6 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 1.3 | 1.5 | 1.3 | 0.7 | 0.7 | 1.8 | 14.2 | 2.8 | 2.0 | 14.2 |
| 10-Aug | 1.9 | 2.5 | Z | 1.6 | 1.0 | 0.9 | 1.8 | 1.8 | 1.4 | 1.8 | 2.3 | 0.9 | 0.6 | 0.7 | 0.8 | 1.5 | 2.2 | 1.6 | 2.0 | 1.7 | 1.7 | 1.5 | 1.4 | 1.1 | 1.5 | 2.5 |
| 11-Aug | 1.2 | 1.6 | 1.4 | Z | 3.1 | 3.9 | 6.9 | 10.2 | 7.7 | 2.6 | 1.9 | 1.9 | 2.1 | 4.5 | 1.4 | 0.9 | 0.9 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 2.4 | 10.2 |
| 12-Aug | 0.9 | 1.7 | 2.6 | 3.7 | Z | 9.3 | 6.6 | 5.0 | 7.9 | 7.5 | 5.3 | 5.2 | 3.7 | 2.6 | 1.2 | 0.8 | 0.6 | 0.5 | 0.2 | 0.4 | 0.5 | 1.5 | 0.6 | 1.1 | 3.0 | 9.3 |
| 13-Aug | 0.9 | 0.7 | 2.2 | 3.5 | 3.8 | Z | 5.8 | 4.8 | 4.4 | 4.1 | 1.4 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.5 | 0.6 | 3.7 | 1.7 | 5.8 |
| 14-Aug | Z | 2.1 | 1.0 | 1.3 | 1.3 | 1.4 | 1.9 | 4.0 | 6.2 | 7.2 | 3.7 | 1.6 | 0.9 | 1.5 | 1.0 | 0.9 | 0.6 | 0.9 | 1.1 | 1.2 | 0.9 | 0.9 | 0.7 | 1.1 | 1.9 | 7.2 |
| 15-Aug | 0.7 | Z | 1.9 | 0.8 | 0.6 | 1.1 | 1.2 | 1.9 | 1.3 | 1.2 | 1.2 | 0.8 | 0.6 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 1.3 | 1.0 | 1.8 | 0.8 | 0.8 | 1.0 | 1.9 |
| 16-Aug | 0.7 | 0.7 | Z | 0.9 | 0.9 | 0.8 | 0.9 | 1.1 | 3.0 | 2.1 | 0.7 | 1.6 | 1.7 | 1.9 | 1.8 | 1.2 | 2.3 | 2.5 | 1.8 | 4.5 | 6.7 | 1.0 | 1.2 | 1.3 | 1.8 | 6.7 |
| 17-Aug | 1.4 | 0.7 | 0.6 | Z | 1.6 | 0.8 | 1.0 | 1.4 | 1.2 | 1.1 | 1.1 | 0.8 | 0.6 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.8 | 1.6 |
| 18-Aug | 0.7 | 0.3 | 0.5 | 0.4 | Z | 1.4 | 4.0 | 1.7 | 1.5 | 1.4 | 1.1 | 1.0 | 0.8 | 1.2 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 1.3 | 1.1 | 1.3 | 1.6 | 1.1 | 4.0 |
| 19-Aug | 1.9 | 1.2 | 0.8 | 0.6 | 0.6 | Z | 1.7 | 2.0 | 1.1 | 1.1 | 1.2 | 0.8 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 1.0 | 0.8 | 0.8 | 0.9 | 1.1 | 1.1 | 0.8 | 1.0 | 2.0 |
| 20-Aug | Z | 1.9 | 1.5 | 1.1 | 0.9 | 10.7 | 7.7 | 4.6 | 2.6 | 1.5 | 1.1 | 1.3 | 1.3 | 3.2 | 5.7 | 2.9 | 2.0 | 2.4 | 3.3 | 2.8 | 2.7 | 1.3 | 1.0 | 1.1 | 2.8 | 10.7 |
| 21-Aug | 1.0 | Z | 1.5 | 1.1 | 1.2 | 1.3 | 4.5 | 4.3 | 2.6 | 1.7 | 1.4 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 1.1 | 0.8 | 0.8 | 0.7 | 1.0 | 1.7 | 3.2 | 7.8 | 1.8 | 7.8 |
| 22-Aug | 2.2 | 2.1 | Z | 2.5 | 2.4 | 2.8 | 3.0 | 3.0 | 2.2 | 1.6 | 1.5 | 1.3 | 3.2 | 2.9 | 1.5 | 1.4 | 1.4 | 1.7 | 1.4 | 1.3 | 1.8 | 1.1 | 0.9 | 0.9 | 1.9 | 3.2 |
| 23-Aug | 1.6 | 1.9 | 1.1 | Z | 1.9 | 1.7 | 3.3 | 2.5 | 2.5 | 3.9 | 3.9 | 2.6 | 2.2 | 1.9 | 2.0 | 1.8 | 1.9 | 1.3 | 1.1 | 0.7 | 0.8 | 0.7 | 0.8 | 0.7 | 1.9 | 3.9 |
| 24-Aug | 0.7 | 1.2 | 2.0 | 1.0 | Z | 5.2 | 6.7 | 5.2 | 3.7 | 4.1 | 3.0 | 1.1 | 0.9 | 0.9 | 0.7 | 1.2 | 1.7 | 2.0 | 1.2 | 0.8 | 1.2 | 2.0 | 1.4 | 1.5 | 2.1 | 6.7 |
| 25-Aug | 1.0 | 0.6 | 0.6 | 0.7 | 0.7 | Z | 3.1 | C | C | C | C | C | 2.2 | 1.5 | 1.3 | 1.4 | 1.5 | 1.8 | 1.8 | 1.4 | 1.7 | 3.8 | 1.0 | 2.8 | 1.6 | 3.8 |
| 26-Aug | Z | 1.7 | 1.0 | 0.6 | 1.2 | 1.8 | 3.7 | 2.5 | 1.5 | 1.1 | 1.0 | 0.9 | 1.2 | 1.0 | 0.8 | 0.8 | 0.8 | 0.9 | 0.7 | 1.1 | 0.9 | 9.8 | 2.3 | 1.7 | 1.7 | 9.8 |
| 27-Aug | 1.3 | Z | 2.6 | 2.1 | 1.6 | 3.0 | 5.2 | 4.3 | 2.6 | 2.1 | 1.6 | 0.8 | 1.2 | 0.8 | 1.4 | 0.5 | 0.6 | 0.8 | 3.0 | 0.5 | 0.8 | 6.7 | 5.0 | 5.0 | 2.3 | 6.7 |
| 28-Aug | 2.3 | 2.7 | Z | 1.2 | 1.0 | 2.8 | 2.1 | 2.3 | 1.7 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.7 | 1.1 | 1.3 | 1.4 | 0.9 | 0.7 | 0.5 | 1.2 | 2.8 |
| 29-Aug | 0.5 | 0.5 | 0.5 | Z | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 |
| 30-Aug | 0.5 | 0.6 | 2.6 | 1.7 | Z | 1.7 | 2.3 | 3.6 | 2.1 | 1.1 | 1.0 | 3.7 | 2.4 | 1.0 | 0.3 | 0.3 | 0.5 | 0.4 | 0.5 | 0.4 | 4.7 | 0.5 | 0.7 | 1.3 | 1.5 | 4.7 |
| 31-Aug | 1.0 | 1.1 | 1.3 | 0.4 | 0.6 | Z | 1.2 | 1.1 | 1.4 | 2.2 | 4.8 | 2.7 | 0.6 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 1.6 | 0.5 | 1.1 | 1.8 | 1.1 | 4.8 |
| | 1.1 | 1.2 | 1.4 | 1.6 | 1.5 | 2.5 | 3.0 | 2.8 | 2.5 | 2.2 | 1.7 | 1.4 | 1.2 | 1.2 | 1.0 | 0.9 | 0.9 | 1.0 | 1.1 | 1.2 | 1.6 | 1.9 | 1.8 | 1.6 | Diurnal Average | |
| | 2.3 | 2.7 | 3.5 | 4.8 | 3.8 | 10.7 | 7.7 | 10.2 | 7.9 | 7.5 | 5.3 | 5.2 | 3.7 | 4.5 | 5.7 | 2.9 | 2.3 | 2.5 | 3.3 | 4.5 | 6.7 | 9.8 | 14.2 | 7.8 | Diurnal Maximum | |

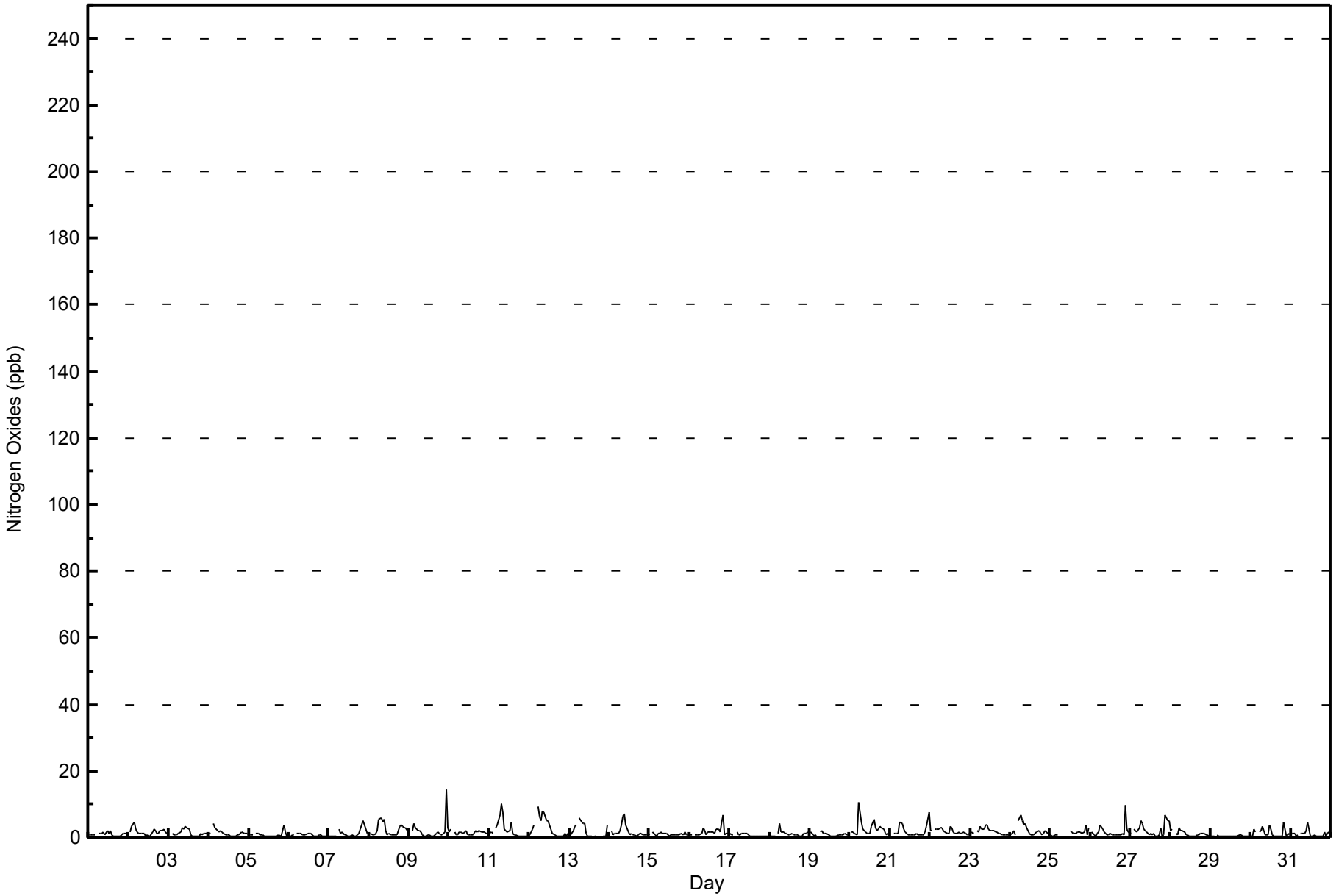
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Anzac - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Anzac - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Anzac - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 34 | 7 | 7 | 4 | 8 | 15 | 37 | 64 | 35 | 27 | 28 | 38 | 67 | 137 | 116 | 84 | 708 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 15 | 37 | 64 | 35 | 27 | 28 | 38 | 67 | 137 | 116 | 84 | 708 |

Total Number of Valid Hours: 708

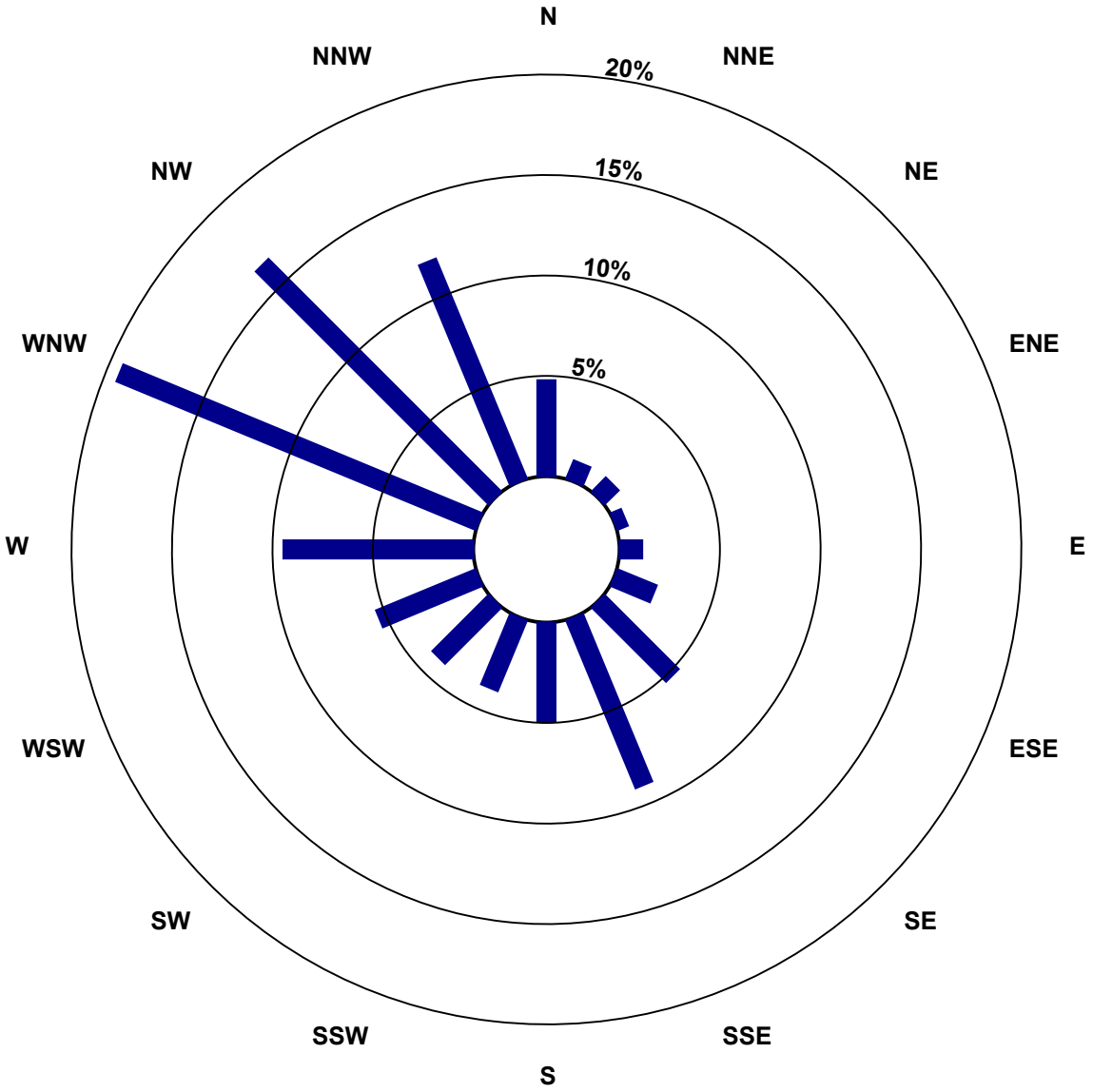
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Anzac




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

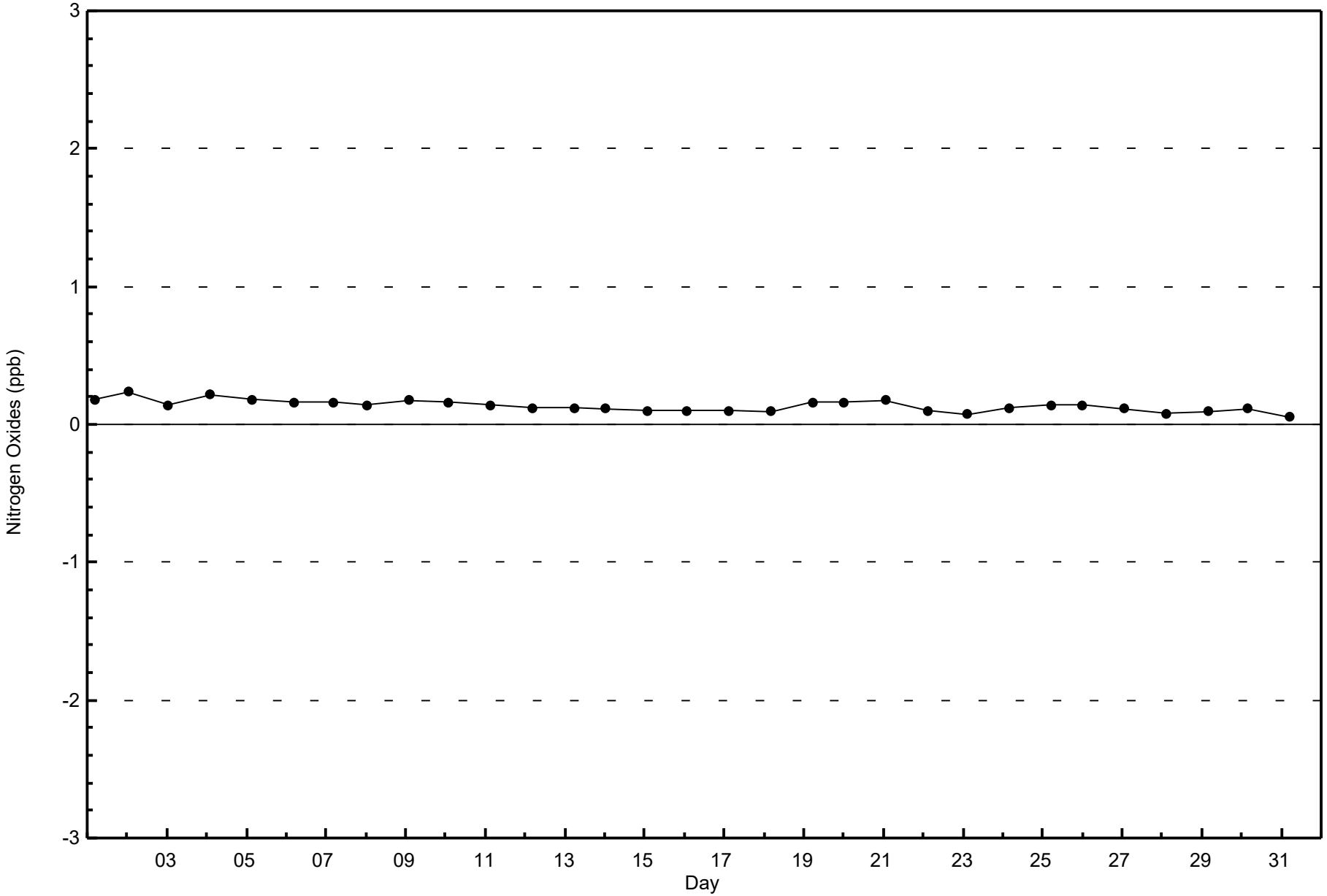
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Anzac - August 2026**

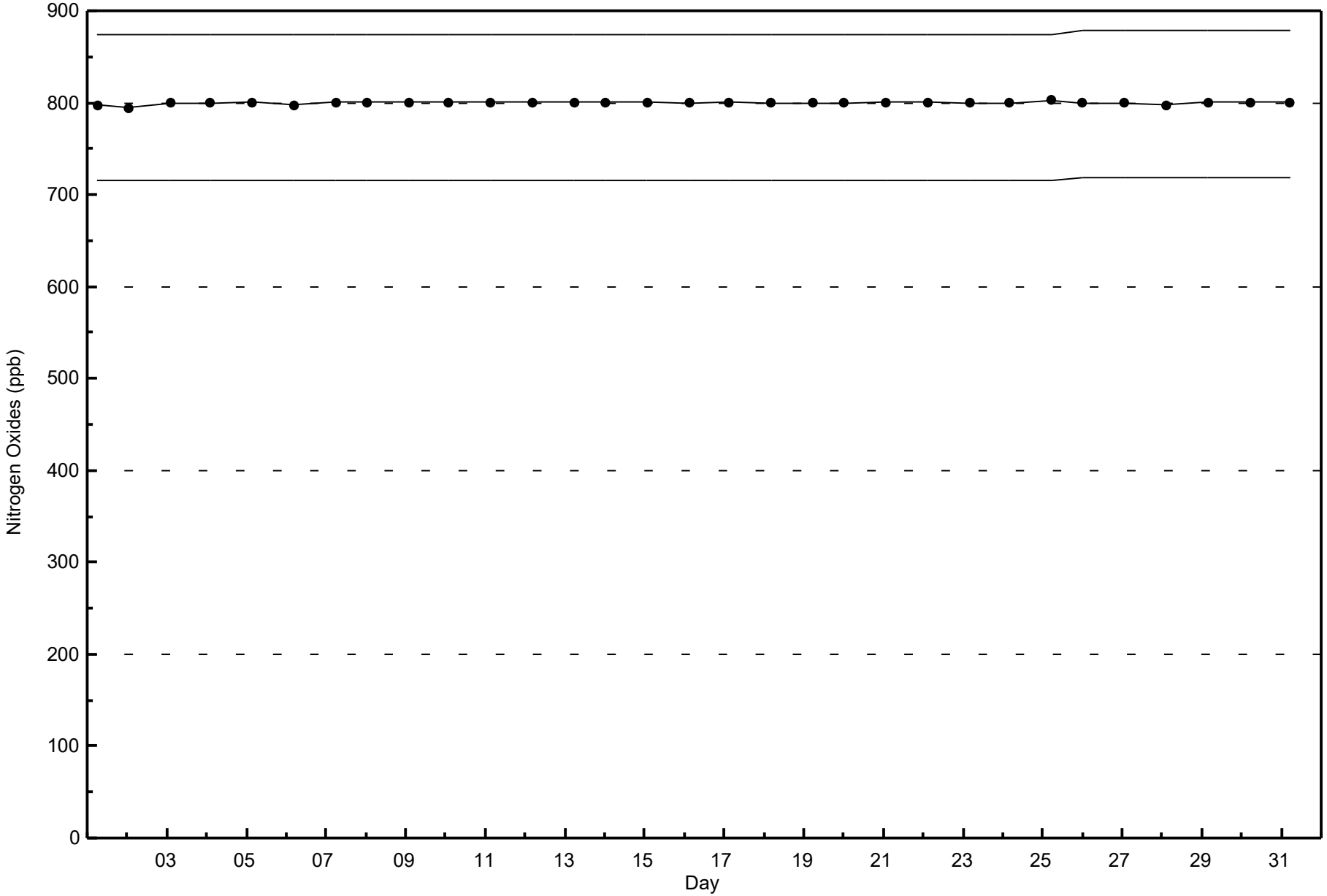


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Anzac - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Anzac - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 43.7 ppb on Aug 25 18:00 Maximum Daily Average: 28.1 ppb on Aug 28

Minimum Value: 1.7 ppb on Aug 14 01:00 Minimum Daily Average: 13.0 ppb on Aug 8
Maximum Diurnal Average: 28.7 ppb at hour 17 Minimum Diurnal Average: 11.8 ppb at hour 3
Monthly Average: 19.44 ppb Percentiles: $P_1$ = 2.4 $P_{10}$ = 6.7 $Q_1$ = 12.3 Median = 19.7 $Q_3$ = 26.1 $P_{90}$ = 32.1 $P_{99}$ = 38.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 9.9 | 9.4 | 12.0 | Z | 13.4 | 9.5 | 10.9 | 18.0 | 13.1 | 14.1 | 16.0 | 22.1 | 24.8 | 27.8 | 33.4 | 35.0 | 35.6 | 34.4 | 29.0 | 20.2 | 23.2 | 39.9 | 38.5 | 32.1 | 22.7 | 39.9 |
| 2-Aug | 30.0 | 27.6 | 22.5 | 26.1 | Z | 29.5 | 27.7 | 27.0 | 26.4 | 24.2 | 21.6 | 18.0 | 15.9 | 16.5 | 16.6 | 17.8 | 20.8 | 23.4 | 24.6 | 23.2 | 21.1 | 19.1 | 20.2 | 20.4 | 22.6 | 30.0 |
| 3-Aug | 20.7 | 19.4 | 19.3 | 19.1 | 18.7 | Z | 17.4 | 16.5 | 15.8 | 16.7 | 18.7 | 21.0 | 22.6 | 24.6 | 25.3 | 26.8 | 26.1 | 26.0 | 26.7 | 23.5 | 9.4 | 8.1 | 7.3 | 6.1 | 19.0 | 26.8 |
| 4-Aug | Z | 5.8 | 8.0 | 8.3 | 8.5 | 10.0 | 10.5 | 15.1 | 23.7 | 26.8 | 25.8 | 27.8 | 27.1 | 29.9 | 31.2 | 28.9 | 24.8 | 25.8 | 27.0 | 24.5 | 21.6 | 22.0 | 23.8 | 22.7 | 20.9 | 31.2 |
| 5-Aug | 19.5 | Z | 19.5 | 17.0 | 16.2 | 16.6 | 17.4 | C | C | C | C | C | 23.4 | 24.5 | 23.8 | 22.6 | 21.3 | 19.7 | 20.6 | 26.3 | 22.1 | 19.2 | 22.5 | 23.7 | 20.9 | 26.3 |
| 6-Aug | 22.0 | 20.9 | Z | 18.2 | 17.5 | 15.2 | 13.1 | 11.6 | 11.2 | 10.5 | 9.7 | 11.0 | 14.7 | 17.9 | 21.2 | 22.9 | 23.2 | 22.1 | 20.9 | 21.8 | 21.7 | 18.8 | 19.8 | 19.0 | 17.6 | 23.2 |
| 7-Aug | 17.8 | 16.4 | 16.2 | Z | 16.4 | 13.7 | 12.3 | 12.3 | 13.4 | 15.5 | 18.2 | 19.4 | 21.1 | 24.7 | 24.8 | 22.1 | 20.6 | 20.8 | 16.5 | 15.1 | 6.8 | 3.7 | 8.5 | 11.3 | 16.0 | 24.8 |
| 8-Aug | 14.7 | 9.0 | 3.8 | 2.4 | Z | 5.7 | 9.0 | 10.6 | 12.6 | 13.0 | 16.8 | 19.0 | 19.0 | 20.0 | 23.3 | 24.5 | 23.3 | 22.1 | 18.0 | 13.3 | 7.9 | 4.2 | 3.6 | 2.5 | 13.0 | 24.5 |
| 9-Aug | 2.5 | 2.0 | 2.0 | 1.9 | 2.0 | Z | 4.6 | 10.9 | 17.4 | 18.0 | 19.9 | 21.1 | 24.3 | 27.9 | 30.6 | 33.4 | 36.3 | 37.4 | 34.3 | 23.4 | 11.8 | 11.3 | 3.2 | 5.1 | 16.6 | 37.4 |
| 10-Aug | Z | 3.0 | 3.7 | 3.0 | 2.6 | 6.2 | 8.3 | 16.0 | 19.3 | 26.1 | 30.3 | 30.2 | 31.5 | 32.1 | 32.5 | 38.8 | 40.5 | 36.2 | 33.9 | 28.5 | 26.3 | 22.8 | 18.2 | 12.3 | 21.8 | 40.5 |
| 11-Aug | 12.0 | Z | 8.4 | 6.3 | 10.8 | 12.3 | 13.6 | 15.1 | 19.5 | 26.1 | 26.6 | 30.0 | 32.8 | 33.4 | 33.4 | 32.7 | 32.0 | 30.8 | 31.1 | 29.4 | 22.4 | 20.6 | 21.0 | 20.8 | 22.7 | 33.4 |
| 12-Aug | 19.8 | 17.6 | Z | 7.9 | 7.4 | 8.4 | 11.1 | 12.2 | 9.2 | 9.6 | 14.2 | 15.0 | 16.2 | 19.6 | 21.2 | 19.7 | 20.3 | 19.5 | 18.0 | 15.4 | 13.9 | 12.6 | 13.4 | 13.3 | 14.6 | 21.2 |
| 13-Aug | 11.9 | 11.8 | 9.6 | Z | 7.3 | 5.2 | 6.6 | 8.5 | 9.7 | 12.3 | 18.2 | 20.2 | 22.4 | 24.6 | 23.9 | 26.0 | 25.4 | 23.9 | 21.4 | 10.7 | 5.8 | 4.8 | 3.9 | 2.9 | 13.8 | 26.0 |
| 14-Aug | 1.7 | 2.1 | 10.1 | 12.0 | Z | 3.2 | 3.7 | 8.0 | 11.4 | 13.9 | 20.1 | 24.7 | 24.5 | 27.6 | 31.2 | 33.6 | 33.8 | 33.3 | 30.9 | 21.7 | 11.3 | 8.0 | 6.0 | 6.4 | 16.5 | 33.8 |
| 15-Aug | 6.8 | 4.7 | 3.5 | 5.6 | 2.6 | Z | 10.4 | 16.9 | 22.9 | 25.8 | 26.9 | 27.2 | 27.1 | 27.9 | 28.1 | 28.0 | 25.7 | 23.1 | 19.4 | 13.9 | 20.3 | 17.2 | 18.3 | 17.2 | 18.2 | 28.1 |
| 16-Aug | Z | 19.9 | 20.1 | 19.1 | 19.8 | 20.5 | 20.6 | 16.7 | 16.9 | 19.5 | 23.8 | 23.8 | 30.7 | 38.8 | 36.5 | 32.1 | 33.1 | 34.4 | 30.6 | 14.8 | 9.3 | 6.7 | 7.4 | 6.1 | 21.8 | 38.8 |
| 17-Aug | 6.3 | Z | 3.6 | 15.8 | 20.4 | 22.8 | 22.6 | 21.9 | 21.0 | 21.4 | 23.8 | 27.8 | 27.6 | 31.5 | 32.0 | 32.1 | 31.6 | 32.1 | 28.9 | 18.9 | 15.1 | 7.8 | 7.1 | 6.7 | 20.8 | 32.1 |
| 18-Aug | 7.2 | 8.7 | Z | 16.5 | 11.8 | 10.9 | 14.7 | 16.8 | 21.3 | 23.4 | 22.3 | 22.7 | 23.0 | 25.8 | 28.3 | 29.3 | 29.6 | 29.3 | 29.8 | 26.2 | 19.9 | 19.5 | 15.7 | 12.0 | 20.2 | 29.8 |
| 19-Aug | 11.7 | 11.2 | 17.0 | Z | 16.9 | 15.6 | 16.8 | 16.0 | 17.9 | 16.3 | 15.6 | 20.1 | 20.9 | 20.3 | 21.0 | 21.1 | 20.8 | 22.4 | 21.4 | 18.5 | 16.3 | 15.0 | 11.4 | 6.1 | 17.0 | 22.4 |
| 20-Aug | 7.7 | 12.0 | 7.4 | 3.9 | Z | 4.2 | 3.6 | 9.3 | 17.5 | 22.2 | 23.7 | 24.5 | 28.5 | 33.2 | 32.5 | 32.1 | 34.6 | 36.4 | 34.8 | 25.2 | 16.3 | 10.2 | 7.4 | 8.4 | 18.9 | 36.4 |
| 21-Aug | 5.3 | 4.4 | 4.4 | 3.0 | 2.1 | Z | 5.2 | 8.2 | 21.7 | 29.2 | 28.5 | 28.0 | 27.6 | 27.9 | 27.2 | 24.5 | 26.2 | 24.3 | 20.3 | 11.5 | 11.7 | 15.8 | 16.4 | 17.1 | 17.0 | 29.2 |
| 22-Aug | Z | 23.1 | 21.9 | 20.3 | 18.1 | 17.1 | 16.8 | 17.5 | 19.8 | 23.6 | 27.0 | 28.9 | 30.5 | 28.7 | 30.7 | 34.3 | 37.8 | 41.2 | 36.5 | 33.7 | 26.5 | 17.0 | 10.4 | 10.0 | 24.8 | 41.2 |
| 23-Aug | 10.8 | Z | 7.7 | 5.3 | 4.4 | 3.6 | 8.1 | 9.6 | 12.8 | 22.2 | 20.9 | 21.1 | 16.2 | 17.2 | 21.2 | 20.4 | 18.9 | 16.9 | 15.6 | 15.2 | 15.6 | 14.4 | 13.4 | 12.7 | 14.1 | 22.2 |
| 24-Aug | 12.1 | 12.4 | Z | 15.7 | 14.6 | 11.7 | 11.1 | 12.5 | 15.2 | 16.6 | 19.6 | 22.3 | 24.0 | 28.1 | 28.0 | 31.8 | 31.8 | 32.2 | 25.0 | 12.4 | 7.9 | 4.8 | 5.3 | 6.5 | 17.5 | 32.2 |
| 25-Aug | 5.0 | 4.1 | 4.7 | Z | 6.7 | 18.5 | 18.3 | 15.1 | M | 20.3 | 29.4 | 34.1 | 36.6 | 35.4 | 36.6 | 38.5 | 42.3 | 43.7 | 35.4 | 19.8 | 20.0 | 15.3 | 14.4 | 12.3 | 23.0 | 43.7 |
| 26-Aug | 8.5 | 10.5 | 11.3 | 6.8 | Z | 11.9 | 12.9 | 17.5 | 22.8 | 27.3 | 34.0 | 37.7 | 37.9 | 38.1 | 38.8 | 38.9 | 37.0 | 36.6 | 32.1 | 27.8 | 21.5 | 16.8 | 24.7 | 28.4 | 25.2 | 38.9 |
| 27-Aug | 28.4 | 28.2 | 22.8 | 22.7 | 19.7 | Z | 15.4 | 18.0 | 23.7 | 28.6 | 31.0 | 27.5 | 30.4 | 31.0 | 31.9 | 28.0 | 27.2 | 29.1 | 29.4 | 32.5 | 32.6 | 26.4 | 29.5 | 28.8 | 27.1 | 32.6 |
| 28-Aug | Z | 27.2 | 26.6 | 31.6 | 27.6 | 23.5 | 24.0 | 22.9 | 26.5 | 32.6 | 37.5 | 36.5 | 35.0 | 34.7 | 33.8 | 36.6 | 35.1 | 31.2 | 28.3 | 25.3 | 23.3 | 16.8 | 15.0 | 14.9 | 28.1 | 37.5 |
| 29-Aug | 14.5 | Z | 13.3 | 14.5 | 14.7 | 15.8 | 18.6 | 18.5 | 19.6 | 20.2 | 21.2 | 22.2 | 22.3 | 23.9 | 25.3 | 27.1 | 27.4 | 27.4 | 25.0 | 13.9 | 12.1 | 12.6 | 15.7 | 11.0 | 19.0 | 27.4 |
| 30-Aug | 10.2 | 10.8 | Z | 16.9 | 15.8 | 9.7 | 9.6 | 13.3 | 19.1 | 18.6 | 23.3 | 27.5 | 34.7 | 33.3 | 26.9 | 26.0 | 24.0 | 20.1 | 18.9 | 9.1 | 5.8 | 5.5 | 4.3 | 4.9 | 16.9 | 34.7 |
| 31-Aug | 3.4 | 7.7 | 7.7 | Z | 15.7 | 14.2 | 13.3 | 13.3 | 13.5 | 15.6 | 19.5 | 24.2 | 22.0 | 22.4 | 22.2 | 22.5 | 23.7 | 26.0 | 22.3 | 13.1 | 9.4 | 5.8 | 4.2 | 3.7 | 15.0 | 26.0 |
| | 12.3 | 12.7 | 11.8 | 12.8 | 12.8 | 12.9 | 13.2 | 14.9 | 17.8 | 20.3 | 22.8 | 24.5 | 25.7 | 27.4 | 28.2 | 28.6 | 28.7 | 28.4 | 26.0 | 20.3 | 16.4 | 14.3 | 13.9 | 13.1 | Diurnal Average | |
| | 30.0 | 28.2 | 26.6 | 31.6 | 27.6 | 29.5 | 27.7 | 27.0 | 26.5 | 32.6 | 37.5 | 37.7 | 37.9 | 38.8 | 38.8 | 38.9 | 42.3 | 43.7 | 36.5 | 33.7 | 32.6 | 39.9 | 38.5 | 32.1 | Diurnal Maximum | |

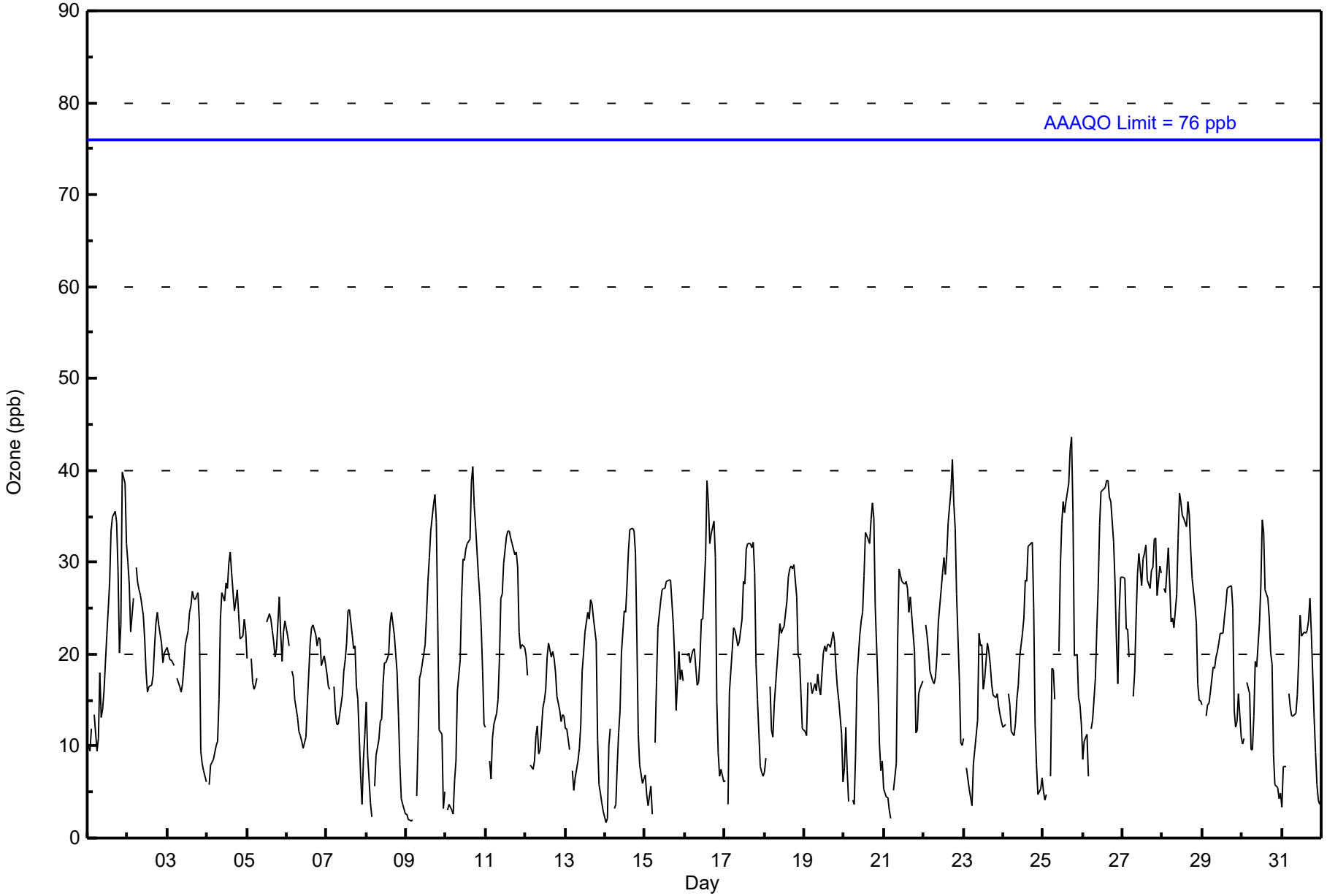
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Anzac - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 383 | 54.17 | 54.17 |
| 21 - 50 | 324 | 45.83 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Anzac - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 11 | 3 | 3 | 0 | 6 | 5 | 9 | 34 | 30 | 19 | 23 | 24 | 34 | 90 | 58 | 34 | 383 |
| 21 - 50 | 22 | 4 | 4 | 4 | 2 | 9 | 27 | 30 | 8 | 9 | 3 | 12 | 33 | 51 | 56 | 50 | 324 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 33 | 7 | 7 | 4 | 8 | 14 | 36 | 64 | 38 | 28 | 26 | 36 | 67 | 141 | 114 | 84 | 707 |

Total Number of Valid Hours: 707

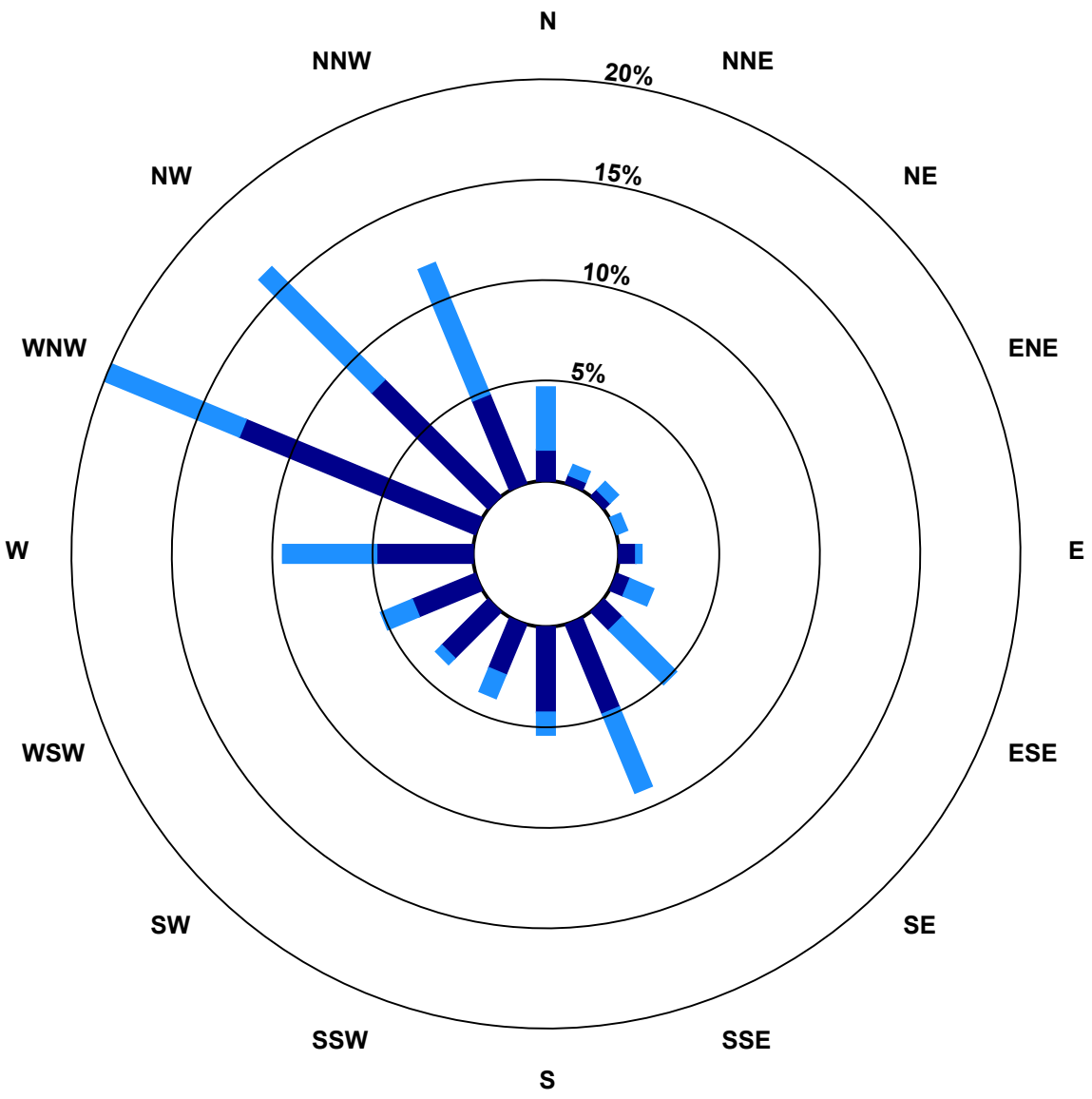
Total Number of Hours: 744

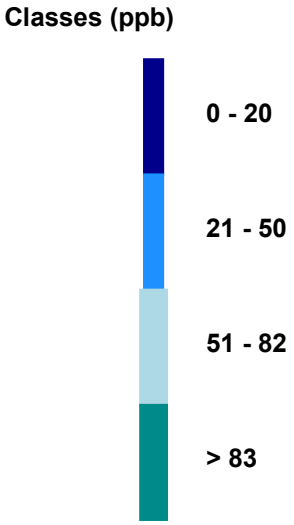
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Ozone ($O_3$) - ppb**

**Anzac**



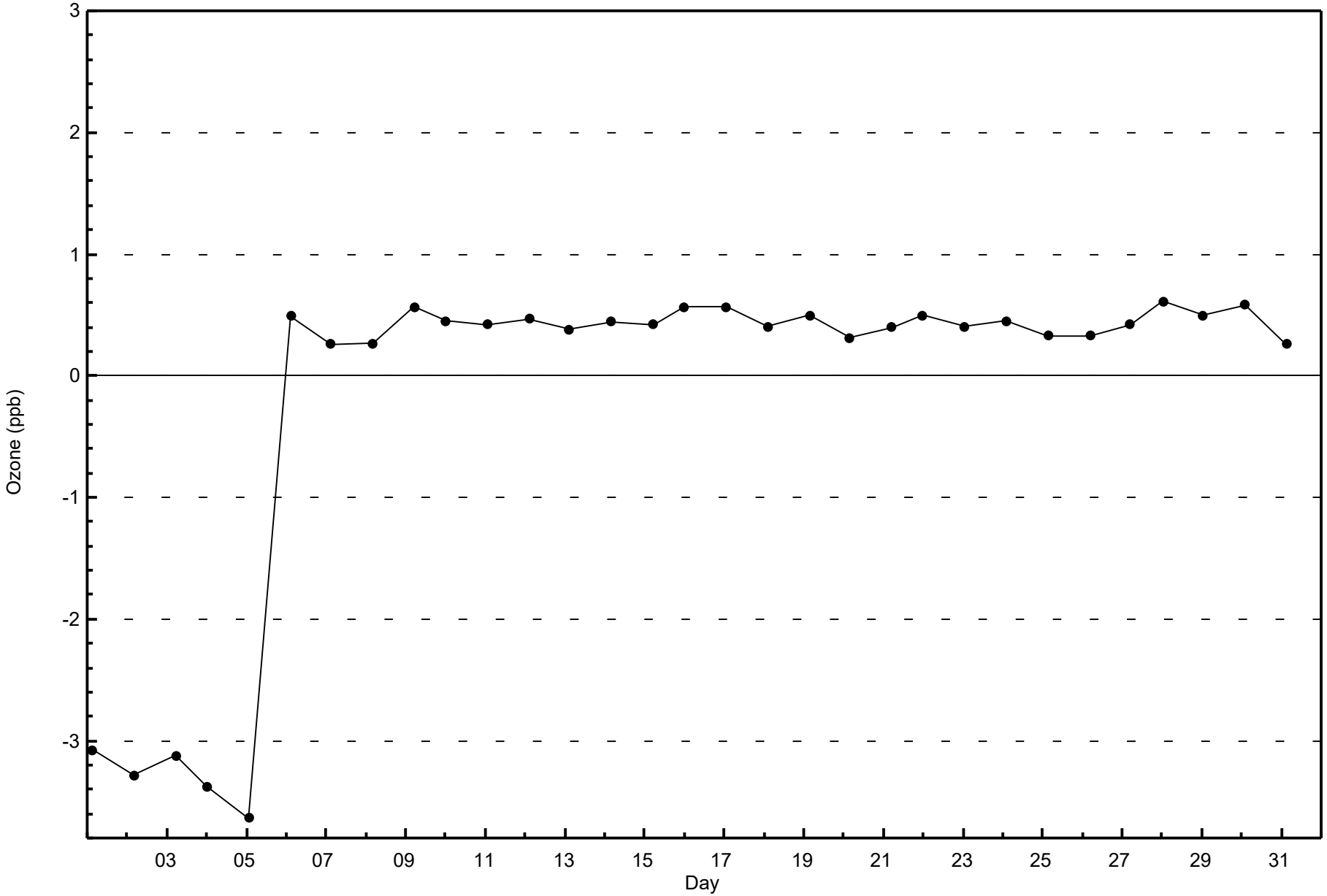

**Total Number of Valid Hours: 707**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Anzac - August 2026**

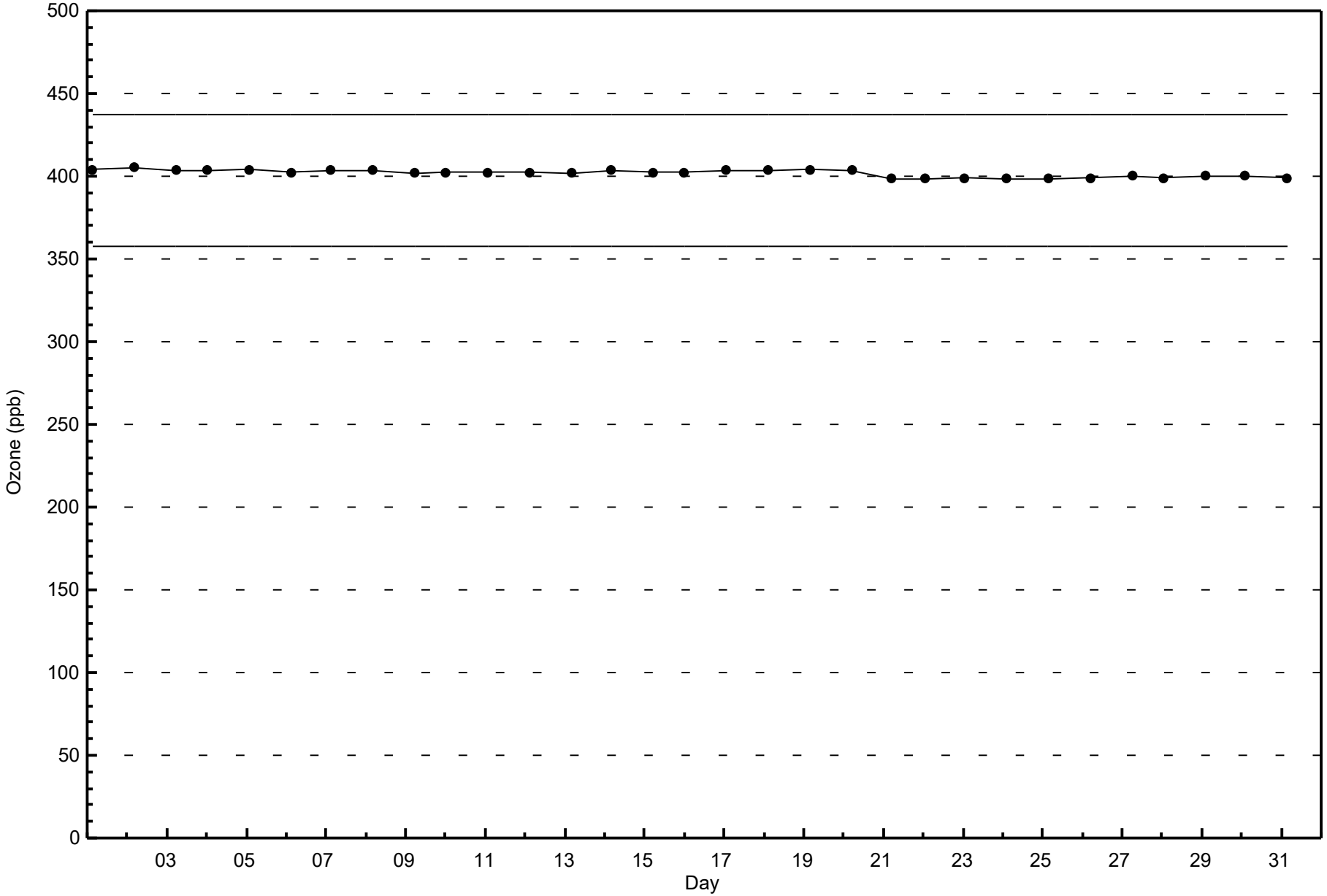


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Anzac - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Anzac - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 77.2 $\mu g/m^3$ on Aug 28 20:00

Maximum Daily Average: 26.8 $\mu g/m^3$ on Aug 20

Minimum Value: 0.9 $\mu g/m^3$ on Aug 6 07:00

Minimum Daily Average: 1.8 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 12.4 $\mu g/m^3$ at hour 23

Minimum Diurnal Average: 7.5 $\mu g/m^3$ at hour 16

Monthly Average: 9.50 $\mu g/m^3$

Percentiles: $P_1$ = 1.1 $P_{10}$ = 2.6 $Q_1$ = 4.1 Median = 6.4 $Q_3$ = 12.0 $P_{90}$ = 19.6 $P_{99}$ = 43.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Hours of Calibration: | 5 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 5.9 | 7.1 | 7.8 | 9.4 | 10.9 | 11.0 | 11.5 | 11.1 | 11.2 | 11.0 | 10.8 | 10.2 | 10.5 | 11.5 | 13.9 | 14.3 | 15.2 | 16.7 | 17.4 | 17.0 | 17.6 | 37.3 | 44.0 | 46.2 | 15.8 | 46.2 |
| 2-Aug | 39.0 | 36.3 | 29.8 | 19.9 | 15.1 | 15.3 | 14.0 | 10.3 | 9.4 | 12.5 | 7.5 | 5.1 | 4.3 | 4.3 | 3.9 | 4.1 | 4.9 | 5.8 | 5.3 | 5.3 | 5.4 | 5.2 | 3.7 | 3.1 | 11.2 | 39.0 |
| 3-Aug | 2.1 | 2.3 | 2.4 | 2.5 | 2.4 | 2.3 | 2.5 | 2.5 | 2.9 | 3.1 | 3.4 | 4.5 | 5.2 | 4.8 | 3.1 | 2.3 | 1.8 | 1.7 | 2.4 | 3.8 | 4.8 | 5.7 | 5.9 | 6.4 | 3.4 | 6.4 |
| 4-Aug | 4.7 | 4.6 | 4.6 | 4.5 | 4.1 | 3.6 | 3.2 | 3.3 | 18.2 | 17.6 | 8.4 | 5.1 | 5.0 | 4.3 | 4.2 | 4.9 | 5.5 | 5.9 | 6.1 | 7.6 | 8.0 | 6.1 | 7.6 | 8.9 | 6.5 | 18.2 |
| 5-Aug | 9.8 | 12.1 | 15.3 | 17.0 | 18.4 | 19.2 | 16.3 | 13.0 | 12.4 | 8.7 | 6.3 | 5.4 | 4.9 | 5.6 | 6.6 | 7.5 | 10.9 | 11.9 | 6.7 | 2.4 | 2.6 | 3.2 | 2.7 | 1.9 | 9.2 | 19.2 |
| 6-Aug | 1.6 | 1.5 | 1.6 | 1.3 | 1.1 | 1.1 | 0.9 | 1.1 | 1.0 | 1.0 | 1.0 | 1.6 | 2.5 | 2.7 | 2.6 | 1.5 | 1.7 | 1.9 | 2.7 | 2.3 | 2.6 | 2.8 | 2.3 | 2.1 | 1.8 | 2.8 |
| 7-Aug | 2.1 | 2.4 | 2.5 | 2.5 | 2.4 | 2.7 | 2.8 | 3.0 | 3.3 | 3.1 | 3.1 | 3.2 | 3.2 | 3.7 | 4.5 | 4.7 | 5.2 | 6.3 | 8.3 | 10.7 | 12.0 | 13.0 | 9.8 | 6.8 | 5.0 | 13.0 |
| 8-Aug | 3.8 | 4.4 | 5.3 | 5.3 | 4.9 | 5.1 | 7.6 | 5.0 | 3.7 | 3.8 | 2.4 | 2.4 | 2.4 | 2.3 | 2.5 | 2.9 | 2.9 | 3.7 | 4.4 | 4.4 | 5.5 | 14.2 | 39.0 | 27.7 | 6.9 | 39.0 |
| 9-Aug | 35.9 | 15.1 | 12.1 | 7.2 | 6.0 | 5.2 | 4.8 | 3.7 | 2.3 | 2.3 | 2.4 | 2.8 | 2.9 | 3.1 | 2.8 | 3.2 | 5.1 | 5.9 | 4.8 | 3.6 | 4.4 | 18.2 | 6.2 | 8.4 | 7.0 | 35.9 |
| 10-Aug | 7.9 | 10.8 | 6.1 | 5.4 | 4.7 | 4.1 | 3.6 | 3.3 | 2.9 | 2.6 | 3.4 | 3.8 | 3.7 | 4.2 | 4.5 | 7.5 | 10.4 | 8.8 | 7.2 | 5.6 | 5.7 | 5.0 | 4.9 | 4.7 | 5.4 | 10.8 |
| 11-Aug | 5.1 | 5.9 | 6.2 | 6.1 | 6.5 | 7.5 | 8.2 | 9.0 | 8.0 | 6.3 | 7.6 | 6.4 | 7.3 | 10.4 | 9.1 | 7.3 | 6.8 | 4.9 | 4.1 | 3.5 | 3.6 | 3.7 | 3.6 | 3.6 | 6.3 | 10.4 |
| 12-Aug | 3.8 | 4.2 | 4.4 | 5.7 | 6.4 | 6.2 | 5.5 | 4.4 | 4.6 | 4.3 | 2.2 | 2.8 | 3.1 | 2.4 | 1.4 | 1.2 | 1.1 | 1.4 | 1.5 | 1.5 | 1.8 | 2.4 | 2.0 | 3.0 | 3.2 | 6.4 |
| 13-Aug | 2.6 | 2.5 | 3.1 | 3.7 | 3.9 | 4.6 | 3.7 | 3.3 | 3.3 | 3.5 | 2.5 | 2.3 | 2.0 | 1.5 | 1.8 | 1.8 | 2.2 | 2.6 | 2.7 | 3.2 | 4.0 | 3.9 | 4.2 | 4.6 | 3.1 | 4.6 |
| 14-Aug | 4.6 | 4.2 | 3.7 | 3.7 | 4.3 | 4.4 | 4.3 | 5.0 | 5.6 | 5.5 | 4.7 | 4.4 | 4.1 | 3.3 | 2.8 | 3.4 | 3.7 | 4.9 | 5.7 | 6.6 | 7.7 | 8.7 | 8.9 | 8.5 | 5.1 | 8.9 |
| 15-Aug | 8.0 | 7.4 | 6.8 | 6.9 | 6.3 | 5.5 | 4.4 | 4.3 | 4.4 | 5.3 | 5.5 | 5.1 | 4.8 | 5.1 | 5.0 | 5.4 | 4.9 | 4.2 | 3.7 | 3.8 | 3.6 | 3.2 | 3.2 | 3.3 | 5.0 | 8.0 |
| 16-Aug | 3.2 | 3.2 | 3.3 | 3.3 | 3.3 | 3.5 | 3.7 | 4.0 | 5.8 | 8.6 | 13.1 | 16.6 | 18.4 | 22.4 | 18.8 | 11.5 | 20.9 | 29.8 | 24.0 | 21.9 | 23.5 | 25.3 | 28.2 | 31.2 | 14.5 | 31.2 |
| 17-Aug | 34.0 | 35.9 | 33.8 | 25.5 | 20.7 | 19.1 | 19.8 | 20.9 | 21.1 | 21.1 | 20.6 | 20.7 | 20.2 | 19.2 | 18.3 | 17.0 | 16.9 | 16.0 | 15.6 | 16.0 | 16.6 | 16.9 | 16.8 | 15.3 | 20.7 | 35.9 |
| 18-Aug | 14.3 | 12.5 | 10.5 | 9.7 | 9.0 | 7.9 | 7.8 | 7.5 | 7.1 | 6.3 | 7.1 | 6.9 | 6.9 | 6.1 | 5.8 | 5.7 | 6.1 | 7.3 | 5.2 | 4.9 | 5.1 | 5.4 | 5.1 | 5.3 | 7.3 | 14.3 |
| 19-Aug | 5.7 | 5.9 | 5.4 | 5.3 | 5.6 | 5.7 | 6.1 | 5.7 | 5.4 | 5.0 | 4.9 | 3.7 | 2.8 | 2.9 | 3.0 | 3.3 | 3.8 | 14.7 | 21.8 | 21.7 | 21.6 | 21.2 | 27.4 | 30.6 | 10.0 | 30.6 |
| 20-Aug | 34.5 | 42.8 | 40.4 | 41.3 | 44.2 | 44.0 | 32.8 | 35.0 | 32.5 | 22.2 | 20.8 | 25.8 | 23.3 | 25.0 | 24.6 | 19.2 | 19.0 | 21.1 | 24.1 | 21.2 | 13.4 | 12.9 | 11.1 | 11.9 | 26.8 | 44.2 |
| 21-Aug | 12.4 | 12.1 | 12.0 | 11.7 | 11.2 | 10.0 | 8.7 | 8.5 | 9.9 | 13.8 | 10.0 | 9.0 | 8.4 | 7.7 | 7.6 | 7.9 | 9.0 | 10.3 | 10.8 | 11.4 | 10.8 | 11.0 | 10.9 | 10.9 | 10.2 | 13.8 |
| 22-Aug | 9.6 | 8.5 | 8.0 | 6.2 | 6.2 | 6.2 | 6.5 | 6.4 | 7.2 | 8.4 | 9.1 | 9.2 | 10.3 | 10.8 | 11.6 | 12.9 | 14.0 | 16.2 | 14.7 | 13.2 | 12.7 | 13.4 | 13.3 | 13.2 | 10.3 | 16.2 |
| 23-Aug | 12.6 | 13.3 | 13.9 | 13.1 | 12.8 | 13.6 | 16.1 | 14.5 | 16.0 | 17.5 | 19.1 | 20.4 | 20.4 | 25.4 | 29.8 | 29.2 | 25.9 | 25.1 | 22.1 | 12.8 | 11.0 | 10.1 | 8.9 | 7.9 | 17.2 | 29.8 |
| 24-Aug | 7.2 | 6.7 | 5.6 | 4.3 | 3.8 | 4.7 | 4.9 | 4.7 | 4.2 | 4.2 | 4.2 | 2.2 | 2.4 | 2.8 | 2.6 | 5.8 | 5.1 | 5.8 | 4.3 | 4.1 | 5.8 | 8.1 | 7.4 | 6.5 | 4.9 | 8.1 |
| 25-Aug | 6.4 | 5.7 | 6.8 | 7.6 | 8.1 | 5.1 | 5.2 | 10.0 | C | C | 26.6 | 25.6 | 22.6 | 17.2 | 15.7 | 14.3 | 15.5 | 17.8 | 17.5 | 16.4 | 18.1 | 17.0 | 16.0 | 15.2 | 14.1 | 26.6 |
| 26-Aug | 14.3 | 14.3 | 11.7 | 10.9 | 10.1 | 10.5 | 9.4 | 7.8 | 5.7 | 4.9 | 4.0 | 3.8 | 4.8 | 4.4 | 4.6 | 4.4 | 4.5 | 5.0 | 5.3 | 4.9 | 5.8 | 7.2 | 7.0 | 7.5 | 7.2 | 14.3 |
| 27-Aug | 8.1 | 9.7 | 10.8 | 10.4 | 10.8 | 12.0 | 13.8 | 12.1 | 13.8 | 16.9 | 18.0 | 16.0 | 15.5 | 13.2 | 12.3 | 11.0 | 10.8 | 10.0 | 10.4 | 10.6 | 12.3 | 15.1 | 19.1 | 19.6 | 13.0 | 19.6 |
| 28-Aug | 19.7 | 20.0 | 19.9 | 14.3 | 13.5 | 14.4 | 14.1 | 14.5 | 14.5 | 12.8 | 8.5 | 5.8 | 4.6 | 3.5 | 3.9 | 3.1 | 3.1 | 10.4 | 67.2 | 77.2 | 63.9 | 61.2 | 42.4 | 18.5 | 22.1 | 77.2 |
| 29-Aug | 14.1 | 12.1 | 11.5 | 11.4 | 11.2 | 12.8 | 10.1 | 8.2 | 7.4 | 6.9 | 7.0 | 6.7 | 8.7 | 7.0 | 5.3 | 4.8 | 6.1 | 8.4 | 8.9 | 7.7 | 7.9 | 8.8 | 8.5 | 9.2 | 8.8 | 14.1 |
| 30-Aug | 9.3 | 9.9 | 9.7 | 9.5 | 8.5 | 7.5 | 7.3 | 7.3 | 6.2 | 5.6 | 5.8 | 6.4 | 7.1 | 6.6 | 6.4 | 6.9 | 6.7 | 7.2 | 7.5 | 7.0 | 7.4 | 8.2 | 8.6 | 9.4 | 7.6 | 9.9 |
| 31-Aug | 10.9 | 9.5 | 6.9 | 4.0 | 3.6 | 3.8 | 3.7 | 3.8 | C | C | C | 7.7 | 4.1 | 3.5 | 3.1 | 2.7 | 1.9 | 1.7 | 2.1 | 2.9 | 5.3 | 4.4 | 5.3 | 4.4 | 4.5 | 10.9 |
| | 11.4 | 11.1 | 10.4 | 9.3 | 9.0 | 9.0 | 8.5 | 8.2 | 8.6 | 8.4 | 8.3 | 8.1 | 8.0 | 8.0 | 7.8 | 7.5 | 8.1 | 9.5 | 11.1 | 10.8 | 10.7 | 12.2 | 12.4 | 11.5 | Diurnal Average | |
| | 39.0 | 42.8 | 40.4 | 41.3 | 44.2 | 44.0 | 32.8 | 35.0 | 32.5 | 22.2 | 26.6 | 25.8 | 23.3 | 25.4 | 29.8 | 29.2 | 25.9 | 29.8 | 67.2 | 77.2 | 63.9 | 61.2 | 44.0 | 46.2 | Diurnal Maximum | |

C - Calibration

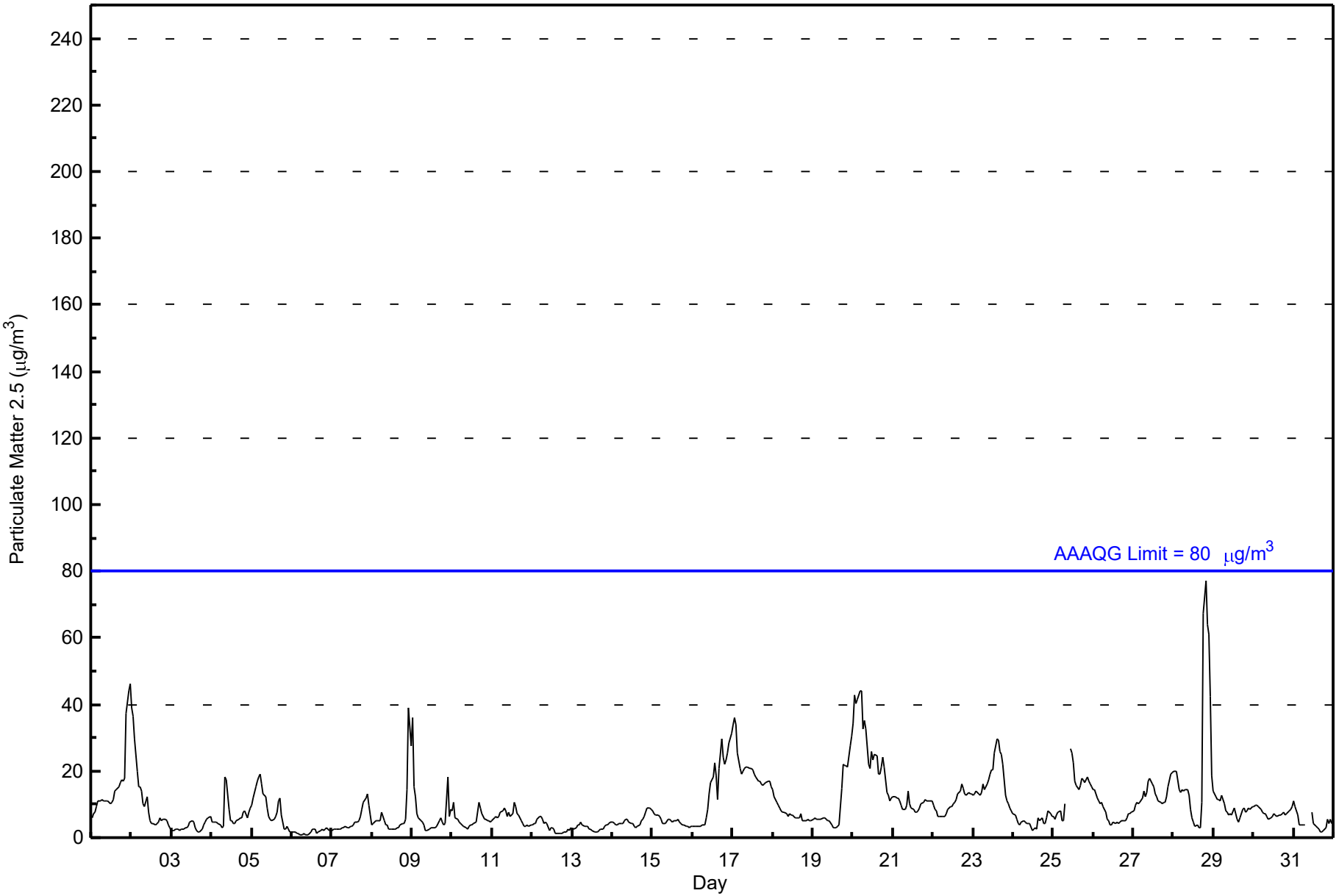
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Anzac - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Anzac - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 307 | 41.54 | 41.54 |
| 6 - 15 | 311 | 42.08 | 83.63 |
| 16 - 25 | 84 | 11.37 | 94.99 |
| 26 - 80 | 37 | 5.01 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 739

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Anzac - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 24 | 6 | 4 | 2 | 2 | 2 | 0 | 12 | 10 | 5 | 10 | 15 | 20 | 74 | 78 | 43 | 307 |
| 6 - 15 | 7 | 0 | 2 | 1 | 6 | 12 | 31 | 46 | 23 | 18 | 16 | 19 | 34 | 41 | 28 | 27 | 311 |
| 16 - 25 | 2 | 1 | 1 | 1 | 0 | 1 | 7 | 9 | 5 | 5 | 0 | 0 | 9 | 20 | 11 | 12 | 84 |
| 26 - 80 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 6 | 6 | 11 | 4 | 3 | 37 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 15 | 38 | 67 | 39 | 30 | 29 | 40 | 69 | 146 | 121 | 85 | 739 |

Total Number of Valid Hours: 739

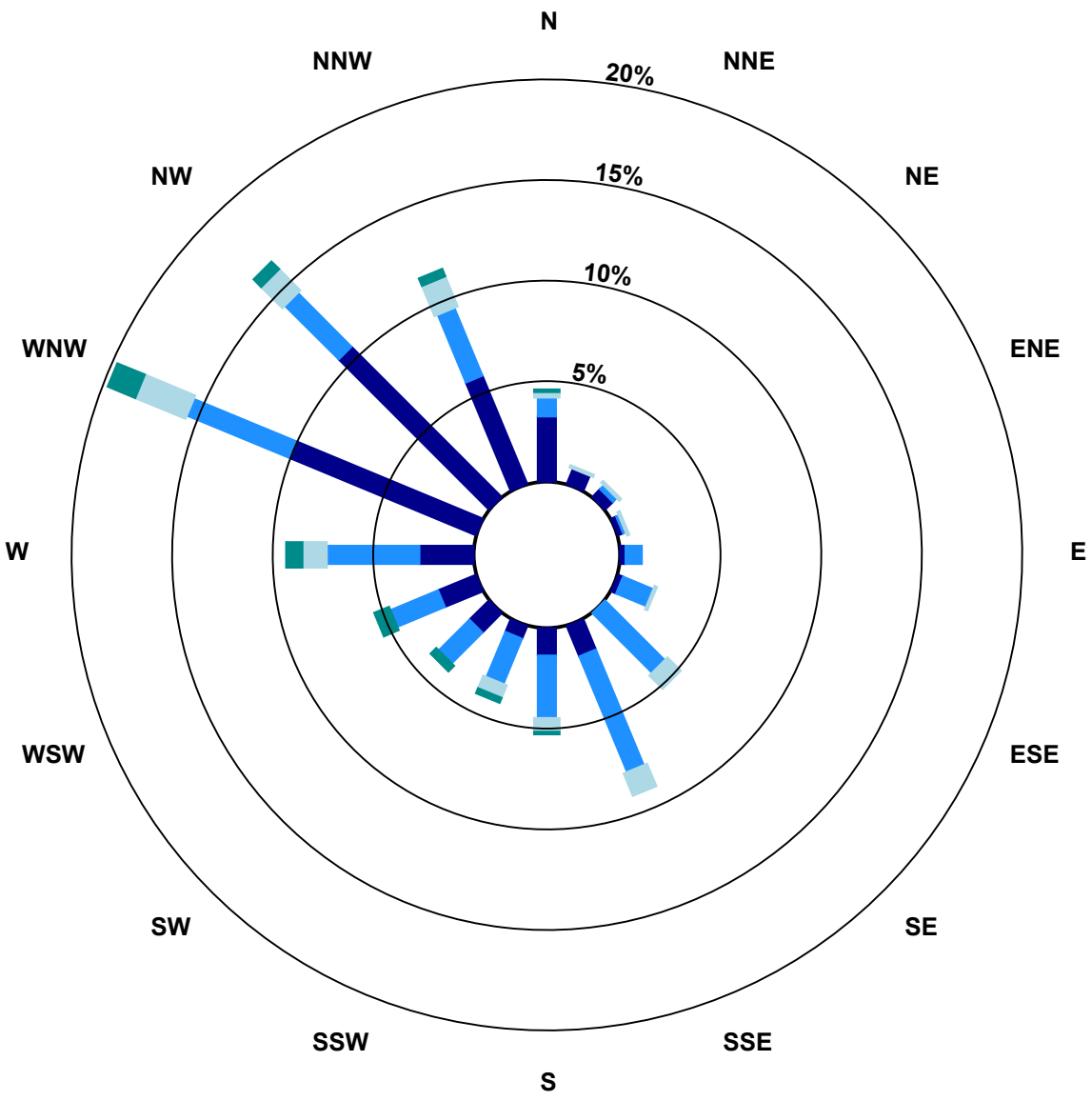
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Anzac




Classes ($\mu g/m^3$)

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 81.0

Total Number of Valid Hours: 739

Maximum Value: 28.1 C on Aug 1 17:00

Maximum Daily Average: 20.7 C on Aug 1

Minimum Value: 4.1 C on Aug 17 03:00

Minimum Daily Average: 11.9 C on Aug 12

Maximum Diurnal Average: 21.4 C at hour 16

Minimum Diurnal Average: 10.8 C at hour 5

Monthly Average: 15.75 C

Percentiles: $P_1$ = 5.9 $P_{10}$ = 9.1 $Q_1$ = 12.0 Median = 15.4 $Q_3$ = 19.7 $P_{90}$ = 22.6 $P_{99}$ = 27.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

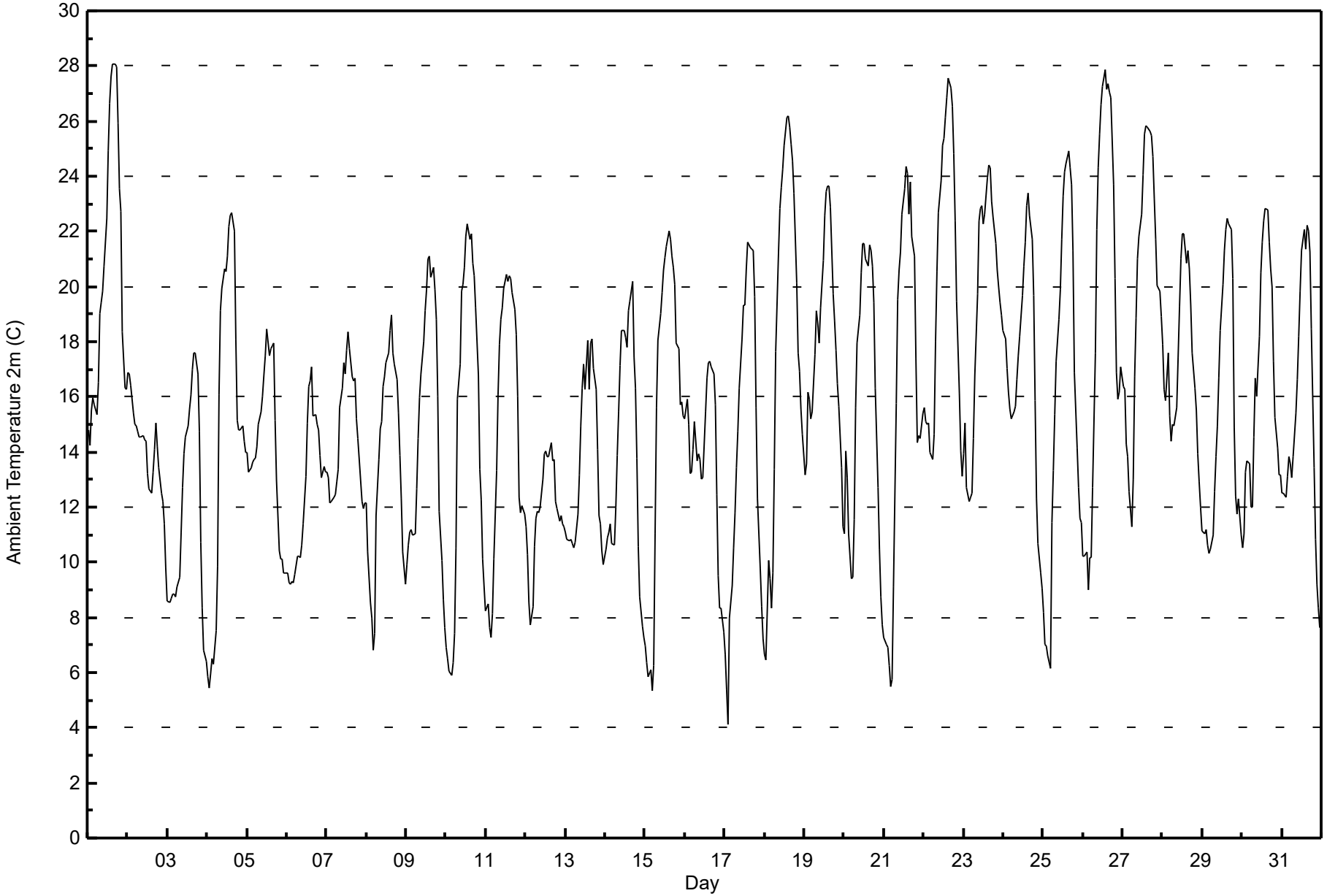
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 14.8 | 14.2 | 15.5 | 15.9 | 15.7 | 15.3 | 16.5 | 19.0 | 19.4 | 19.8 | 20.8 | 22.4 | 24.9 | 26.6 | 27.6 | 28.1 | 28.1 | 28.0 | 25.9 | 23.5 | 22.7 | 18.3 | 16.3 | 16.3 | 20.7 | 28.1 |
| 2-Aug | 16.9 | 16.8 | 16.4 | 15.4 | 15.0 | 15.0 | 14.7 | 14.6 | 14.6 | 14.6 | 14.5 | 14.4 | 13.2 | 12.7 | 12.5 | 13.3 | 14.1 | 15.1 | 14.2 | 13.4 | 12.5 | 12.2 | 11.4 | 9.8 | 14.0 | 16.9 |
| 3-Aug | 8.6 | 8.5 | 8.7 | 8.8 | 8.9 | 8.8 | 9.1 | 9.4 | 11.1 | 12.7 | 13.9 | 14.5 | 14.9 | 15.6 | 16.1 | 17.0 | 17.6 | 17.6 | 16.8 | 14.8 | 10.7 | 8.3 | 6.8 | 6.4 | 11.9 | 17.6 |
| 4-Aug | 5.8 | 5.4 | 6.0 | 6.5 | 6.3 | 7.5 | 9.9 | 16.1 | 19.1 | 20.0 | 20.6 | 20.5 | 21.1 | 22.2 | 22.6 | 22.7 | 22.0 | 18.1 | 15.2 | 14.8 | 14.8 | 15.0 | 14.4 | 14.0 | 15.0 | 22.7 |
| 5-Aug | 14.0 | 13.3 | 13.4 | 13.6 | 13.7 | 13.8 | 14.2 | 15.0 | 15.5 | 16.0 | 16.8 | 17.5 | 18.5 | 17.5 | 17.7 | 17.9 | 17.9 | 15.2 | 13.0 | 10.4 | 10.1 | 10.1 | 9.6 | 9.6 | 14.3 | 18.5 |
| 6-Aug | 9.6 | 9.3 | 9.2 | 9.3 | 9.3 | 9.5 | 10.2 | 10.2 | 10.2 | 10.6 | 11.4 | 13.1 | 15.0 | 16.4 | 16.6 | 17.1 | 15.3 | 15.4 | 15.0 | 14.8 | 13.9 | 13.0 | 13.5 | 13.3 | 12.5 | 17.1 |
| 7-Aug | 13.3 | 13.1 | 12.2 | 12.2 | 12.3 | 12.4 | 12.9 | 13.4 | 15.6 | 16.3 | 17.2 | 16.8 | 17.7 | 18.3 | 17.7 | 16.7 | 16.6 | 16.7 | 15.2 | 14.5 | 13.0 | 12.2 | 12.0 | 12.2 | 14.6 | 18.3 |
| 8-Aug | 12.2 | 10.4 | 8.6 | 8.0 | 6.8 | 7.4 | 11.7 | 13.7 | 14.9 | 15.1 | 16.4 | 16.7 | 17.2 | 17.6 | 18.4 | 19.0 | 17.6 | 17.2 | 16.6 | 15.4 | 13.9 | 12.3 | 10.4 | 9.2 | 13.6 | 19.0 |
| 9-Aug | 9.9 | 10.6 | 11.1 | 11.2 | 11.0 | 11.1 | 12.7 | 14.5 | 16.0 | 16.8 | 18.0 | 19.1 | 19.9 | 21.0 | 21.1 | 20.3 | 20.7 | 19.9 | 18.8 | 16.0 | 11.9 | 10.1 | 8.7 | 7.6 | 14.9 | 21.1 |
| 10-Aug | 6.9 | 6.5 | 6.1 | 5.9 | 6.4 | 7.4 | 10.5 | 15.9 | 17.2 | 19.8 | 20.1 | 20.7 | 21.8 | 22.3 | 21.7 | 21.9 | 20.8 | 20.4 | 19.2 | 16.8 | 13.4 | 12.3 | 10.1 | 9.1 | 14.7 | 22.3 |
| 11-Aug | 8.2 | 8.5 | 7.6 | 7.3 | 8.1 | 10.1 | 13.3 | 16.1 | 17.9 | 18.8 | 19.2 | 19.9 | 20.4 | 20.2 | 20.4 | 20.3 | 19.8 | 19.2 | 18.3 | 16.0 | 12.3 | 11.8 | 12.1 | 11.7 | 14.9 | 20.4 |
| 12-Aug | 11.3 | 10.3 | 8.6 | 7.7 | 8.4 | 10.6 | 11.6 | 11.8 | 11.8 | 12.0 | 13.0 | 13.9 | 14.1 | 13.8 | 13.8 | 14.3 | 13.7 | 13.7 | 12.2 | 12.0 | 11.5 | 11.7 | 11.4 | 11.3 | 11.9 | 14.3 |
| 13-Aug | 11.1 | 10.9 | 10.8 | 10.8 | 10.7 | 10.5 | 10.7 | 11.8 | 13.1 | 15.0 | 16.3 | 17.2 | 16.3 | 18.0 | 16.3 | 17.9 | 18.1 | 17.0 | 16.3 | 14.1 | 11.7 | 11.4 | 10.4 | 9.9 | 13.6 | 18.1 |
| 14-Aug | 10.5 | 10.9 | 11.1 | 11.4 | 10.7 | 10.6 | 12.0 | 13.9 | 15.4 | 17.2 | 18.4 | 18.4 | 18.2 | 17.8 | 19.1 | 19.5 | 20.2 | 17.5 | 16.3 | 13.8 | 10.6 | 8.8 | 7.7 | 7.3 | 14.0 | 20.2 |
| 15-Aug | 6.9 | 6.3 | 5.9 | 6.1 | 5.4 | 6.3 | 11.0 | 15.6 | 18.1 | 19.0 | 19.8 | 20.6 | 21.1 | 21.5 | 22.0 | 21.7 | 21.1 | 20.7 | 20.1 | 18.0 | 17.8 | 15.7 | 15.8 | 15.3 | 15.5 | 22.0 |
| 16-Aug | 15.2 | 15.9 | 15.0 | 13.2 | 13.3 | 14.1 | 15.1 | 13.7 | 14.0 | 13.7 | 13.0 | 13.1 | 15.5 | 16.7 | 17.2 | 17.3 | 17.1 | 16.8 | 15.7 | 12.4 | 9.5 | 8.3 | 8.3 | 7.5 | 13.8 | 17.3 |
| 17-Aug | 6.7 | 5.4 | 4.1 | 8.0 | 9.2 | 10.5 | 11.8 | 13.4 | 14.7 | 16.3 | 18.1 | 19.3 | 19.3 | 20.6 | 21.6 | 21.4 | 21.3 | 21.3 | 19.6 | 15.6 | 12.3 | 9.7 | 8.4 | 7.2 | 14.0 | 21.6 |
| 18-Aug | 6.7 | 6.4 | 10.0 | 9.4 | 8.3 | 9.6 | 13.4 | 17.6 | 21.2 | 22.8 | 23.6 | 24.3 | 25.1 | 26.1 | 26.2 | 25.8 | 25.2 | 24.6 | 23.4 | 20.1 | 17.6 | 17.0 | 15.5 | 14.6 | 18.1 | 26.2 |
| 19-Aug | 13.2 | 13.6 | 16.2 | 15.9 | 15.2 | 15.5 | 17.5 | 19.1 | 18.7 | 18.0 | 19.2 | 21.0 | 22.6 | 23.5 | 23.6 | 23.7 | 22.9 | 19.7 | 18.8 | 17.7 | 16.5 | 15.7 | 13.4 | 11.3 | 18.0 | 23.7 |
| 20-Aug | 11.0 | 14.0 | 13.1 | 11.0 | 9.4 | 9.4 | 11.5 | 15.6 | 17.9 | 19.0 | 20.5 | 21.6 | 21.6 | 21.0 | 20.7 | 21.5 | 21.3 | 20.8 | 19.4 | 16.3 | 12.7 | 10.4 | 8.8 | 7.7 | 15.7 | 21.6 |
| 21-Aug | 7.2 | 7.0 | 6.9 | 6.3 | 5.5 | 5.8 | 9.1 | 15.7 | 19.5 | 20.6 | 21.2 | 22.6 | 23.5 | 24.4 | 24.1 | 22.6 | 23.8 | 21.8 | 21.1 | 17.4 | 14.3 | 14.6 | 14.5 | 15.4 | 16.0 | 24.4 |
| 22-Aug | 15.6 | 15.1 | 15.0 | 15.1 | 14.0 | 13.7 | 14.6 | 18.0 | 20.5 | 22.7 | 23.9 | 25.1 | 25.4 | 26.2 | 26.8 | 27.6 | 27.2 | 26.6 | 24.8 | 22.4 | 19.5 | 16.1 | 14.1 | 13.1 | 20.1 | 27.6 |
| 23-Aug | 13.9 | 15.1 | 12.7 | 12.2 | 12.4 | 12.5 | 14.5 | 16.8 | 19.7 | 22.4 | 22.8 | 22.9 | 22.3 | 22.6 | 24.0 | 24.4 | 24.3 | 23.1 | 22.5 | 21.5 | 20.6 | 20.0 | 19.4 | 19.0 | 19.2 | 24.4 |
| 24-Aug | 18.4 | 18.1 | 17.0 | 16.2 | 15.6 | 15.2 | 15.4 | 15.7 | 16.7 | 17.5 | 18.2 | 19.7 | 20.8 | 21.6 | 22.9 | 23.4 | 22.6 | 21.7 | 19.7 | 15.8 | 12.3 | 10.7 | 9.6 | 9.1 | 17.2 | 23.4 |
| 25-Aug | 8.2 | 7.0 | 7.0 | 6.6 | 6.1 | 11.4 | 13.3 | 15.4 | 17.3 | 18.8 | 19.9 | 21.7 | 23.3 | 24.2 | 24.5 | 24.9 | 24.3 | 23.7 | 21.3 | 16.9 | 14.1 | 12.7 | 11.6 | 11.5 | 16.1 | 24.9 |
| 26-Aug | 10.2 | 10.2 | 10.4 | 9.0 | 10.2 | 10.2 | 12.7 | 17.6 | 22.1 | 24.3 | 25.5 | 26.6 | 27.2 | 27.9 | 27.2 | 27.3 | 27.1 | 26.8 | 23.7 | 20.3 | 16.9 | 15.9 | 16.2 | 17.1 | 19.3 | 27.9 |
| 27-Aug | 16.4 | 16.3 | 14.3 | 13.8 | 12.6 | 11.3 | 13.0 | 16.7 | 18.8 | 21.0 | 21.8 | 22.6 | 24.0 | 25.5 | 25.8 | 25.8 | 25.6 | 25.5 | 24.7 | 23.2 | 21.7 | 20.0 | 19.8 | 18.9 | 20.0 | 25.8 |
| 28-Aug | 17.9 | 16.2 | 15.9 | 17.6 | 15.3 | 14.4 | 15.0 | 15.0 | 15.6 | 17.4 | 19.3 | 21.0 | 21.9 | 21.9 | 20.8 | 21.3 | 20.7 | 19.3 | 17.6 | 16.3 | 15.5 | 13.9 | 12.9 | 12.0 | 17.3 | 21.9 |
| 29-Aug | 11.2 | 11.1 | 11.2 | 10.6 | 10.3 | 10.5 | 11.0 | 12.5 | 13.8 | 14.9 | 16.7 | 18.4 | 20.1 | 21.3 | 22.1 | 22.5 | 22.3 | 22.1 | 20.3 | 14.9 | 12.4 | 11.7 | 12.3 | 11.0 | 15.2 | 22.5 |
| 30-Aug | 10.5 | 11.0 | 13.3 | 13.7 | 13.6 | 12.0 | 12.0 | 14.5 | 16.7 | 16.0 | 18.2 | 20.5 | 21.6 | 22.4 | 22.8 | 22.8 | 21.6 | 20.6 | 20.0 | 17.3 | 15.2 | 14.1 | 13.1 | 13.1 | 16.5 | 22.8 |
| 31-Aug | 12.5 | 12.5 | 12.3 | 13.1 | 13.8 | 13.6 | 13.1 | 13.8 | 15.4 | 16.6 | 18.2 | 19.8 | 21.3 | 22.1 | 21.3 | 22.2 | 22.0 | 21.2 | 18.4 | 13.4 | 10.8 | 9.2 | 8.3 | 7.6 | 15.5 | 22.2 |
| | 11.4 | 11.3 | 11.1 | 11.0 | 10.8 | 11.2 | 12.7 | 14.9 | 16.5 | 17.6 | 18.6 | 19.6 | 20.3 | 20.9 | 21.1 | 21.4 | 21.1 | 20.2 | 18.8 | 16.4 | 14.3 | 13.0 | 12.2 | 11.6 | Diurnal Average | |
| | 18.4 | 18.1 | 17.0 | 17.6 | 15.7 | 15.5 | 17.5 | 19.1 | 22.1 | 24.3 | 25.5 | 26.6 | 27.2 | 27.9 | 27.6 | 28.1 | 28.1 | 28.0 | 25.9 | 23.5 | 22.7 | 20.0 | 19.8 | 19.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Anzac - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 99 | 13.31 | 13.31 |
| 10 - 20 | 472 | 63.44 | 76.75 |
| > 20 | 173 | 23.25 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Relative Humidity 2m (RH2) - %

## Anzac - August 2026

Maximum Value: 99.5 % on Aug 2 04:00

Maximum Daily Average: 91.2 % on Aug 12

Minimum Value: 34.8 % on Aug 24 16:00

Minimum Daily Average: 66.2 % on Aug 27

Maximum Diurnal Average: 92.2 % at hour 5

Minimum Diurnal Average: 52.1 % at hour 16

Monthly Average: 75.62 %

Percentiles: $P_1$ = 39.9 $P_{10}$ = 49.2 $Q_1$ = 59.2 Median = 78.9 $Q_3$ = 93.6 $P_{90}$ = 97.3 $P_{99}$ = 98.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

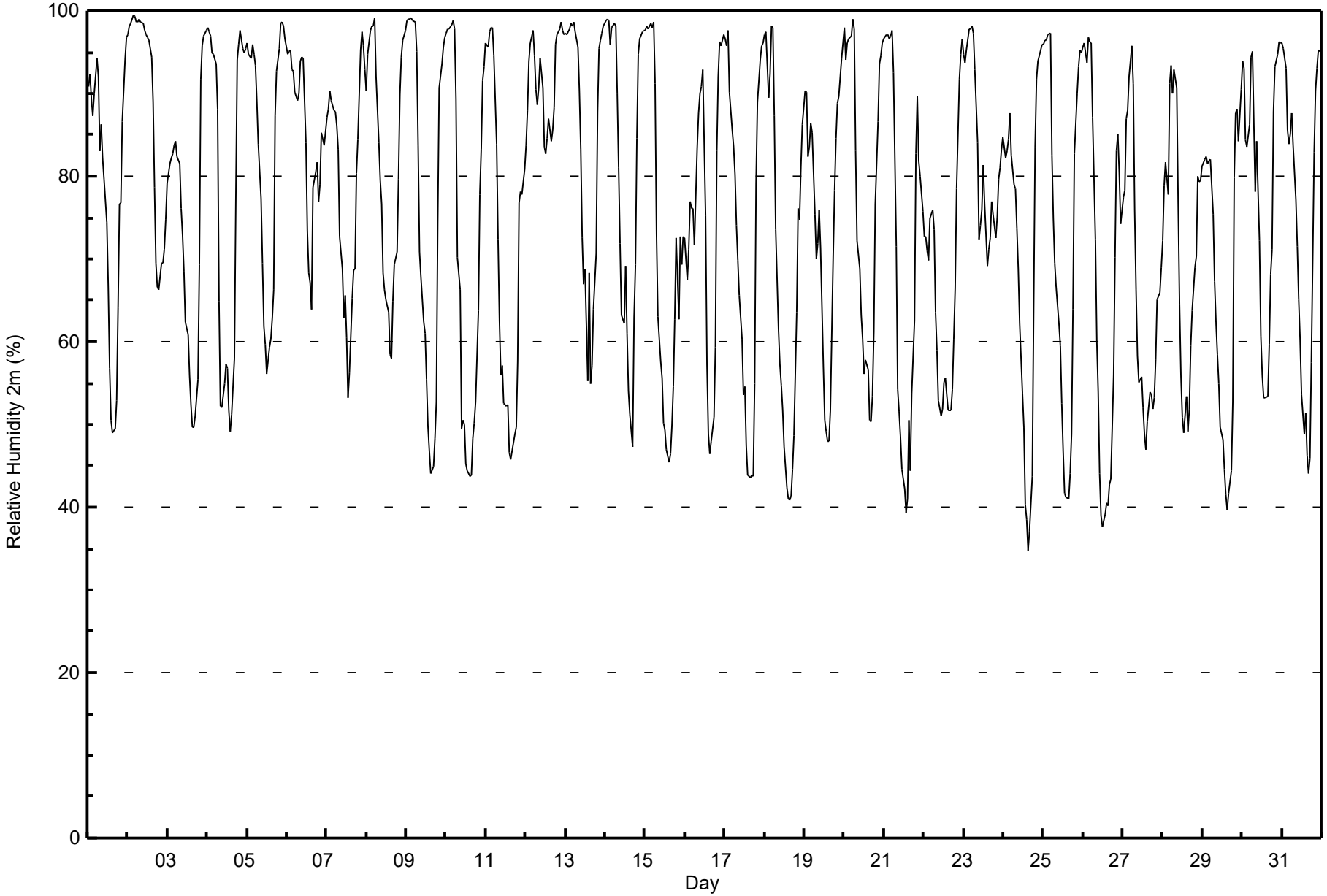
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 90.9 | 92.4 | 89.4 | 87.3 | 90.1 | 94.2 | 92.1 | 83.1 | 86.3 | 82.2 | 79.6 | 74.4 | 66.7 | 56.8 | 50.5 | 48.9 | 49.5 | 53.0 | 64.2 | 76.7 | 76.8 | 86.5 | 94.1 | 96.7 | 77.6 | 96.7 |
| 2-Aug | 97.1 | 98.1 | 98.6 | 99.5 | 99.2 | 98.7 | 98.6 | 99.0 | 98.7 | 98.4 | 97.6 | 97.1 | 96.8 | 96.5 | 94.4 | 89.0 | 78.7 | 69.5 | 66.6 | 66.3 | 69.4 | 69.4 | 71.2 | 74.8 | 88.5 | 99.5 |
| 3-Aug | 79.1 | 81.6 | 82.3 | 82.7 | 83.7 | 84.3 | 82.4 | 81.6 | 76.1 | 72.9 | 68.4 | 62.4 | 60.9 | 55.9 | 52.3 | 49.7 | 49.7 | 51.1 | 55.5 | 69.3 | 91.8 | 95.8 | 97.0 | 97.6 | 73.5 | 97.6 |
| 4-Aug | 98.0 | 97.4 | 97.0 | 94.8 | 94.8 | 93.6 | 88.1 | 64.9 | 52.2 | 52.1 | 54.9 | 57.3 | 56.7 | 51.6 | 49.2 | 51.3 | 58.0 | 77.0 | 94.1 | 95.9 | 97.7 | 95.4 | 95.0 | 95.4 | 77.6 | 98.0 |
| 5-Aug | 96.2 | 94.8 | 94.3 | 95.9 | 94.7 | 93.5 | 89.1 | 83.8 | 77.2 | 69.5 | 61.9 | 59.7 | 56.1 | 59.4 | 60.3 | 62.9 | 66.2 | 87.3 | 92.8 | 95.4 | 98.4 | 98.6 | 98.1 | 96.5 | 82.6 | 98.6 |
| 6-Aug | 94.8 | 95.1 | 95.3 | 92.8 | 92.7 | 90.2 | 89.2 | 90.1 | 93.9 | 94.4 | 94.2 | 84.1 | 73.5 | 68.3 | 67.1 | 63.9 | 78.6 | 80.5 | 81.7 | 76.9 | 79.0 | 85.2 | 83.8 | 85.5 | 84.6 | 95.3 |
| 7-Aug | 87.1 | 88.1 | 90.4 | 89.1 | 87.9 | 87.9 | 86.1 | 83.2 | 72.7 | 68.8 | 62.9 | 65.7 | 60.5 | 53.2 | 56.3 | 65.2 | 68.6 | 68.9 | 80.3 | 84.4 | 95.2 | 97.5 | 95.8 | 93.0 | 78.7 | 97.5 |
| 8-Aug | 90.3 | 94.8 | 97.6 | 98.2 | 98.1 | 99.1 | 92.1 | 84.0 | 79.5 | 76.6 | 68.3 | 66.3 | 65.0 | 63.5 | 58.5 | 58.0 | 64.9 | 69.3 | 70.9 | 79.7 | 89.8 | 94.4 | 96.5 | 97.6 | 81.4 | 99.1 |
| 9-Aug | 98.8 | 99.0 | 99.0 | 99.1 | 98.8 | 98.7 | 95.0 | 83.8 | 70.9 | 67.7 | 62.3 | 60.9 | 55.4 | 49.9 | 46.7 | 44.0 | 44.9 | 48.4 | 52.8 | 74.5 | 90.6 | 93.5 | 95.5 | 96.8 | 76.1 | 99.1 |
| 10-Aug | 97.3 | 97.7 | 97.9 | 98.3 | 98.8 | 97.8 | 89.3 | 70.2 | 66.3 | 49.5 | 50.6 | 50.0 | 45.2 | 44.4 | 43.7 | 43.8 | 48.2 | 50.1 | 52.8 | 63.7 | 77.8 | 83.2 | 91.5 | 93.2 | 70.9 | 98.8 |
| 11-Aug | 96.1 | 95.6 | 97.4 | 98.0 | 98.0 | 94.7 | 83.9 | 72.4 | 62.6 | 56.0 | 57.1 | 52.5 | 52.2 | 52.5 | 46.6 | 45.7 | 46.8 | 48.8 | 49.6 | 57.7 | 76.8 | 78.1 | 77.8 | 80.8 | 69.9 | 98.0 |
| 12-Aug | 83.7 | 88.0 | 93.9 | 96.0 | 97.7 | 94.7 | 90.5 | 88.7 | 90.8 | 94.2 | 90.8 | 83.5 | 82.7 | 84.6 | 86.9 | 84.2 | 85.6 | 88.3 | 95.9 | 97.1 | 97.7 | 98.6 | 97.7 | 97.2 | 91.2 | 98.6 |
| 13-Aug | 97.2 | 97.1 | 97.8 | 98.4 | 98.2 | 98.6 | 97.5 | 95.6 | 90.3 | 83.2 | 72.6 | 66.9 | 68.8 | 55.3 | 68.3 | 55.0 | 57.0 | 63.9 | 70.6 | 87.8 | 95.4 | 96.5 | 97.3 | 98.2 | 83.7 | 98.6 |
| 14-Aug | 98.8 | 98.9 | 98.8 | 95.9 | 98.0 | 98.5 | 98.2 | 90.1 | 81.0 | 71.9 | 63.2 | 62.3 | 69.1 | 61.0 | 54.1 | 51.2 | 47.4 | 62.9 | 69.3 | 84.6 | 94.8 | 96.7 | 97.5 | 97.6 | 80.9 | 98.9 |
| 15-Aug | 97.6 | 98.1 | 97.8 | 98.5 | 97.9 | 98.7 | 91.2 | 73.1 | 63.0 | 57.7 | 55.6 | 50.2 | 49.3 | 47.0 | 45.4 | 46.4 | 49.9 | 54.5 | 62.6 | 72.6 | 62.8 | 72.7 | 69.3 | 72.7 | 70.2 | 98.7 |
| 16-Aug | 72.6 | 67.5 | 71.2 | 77.0 | 76.1 | 76.0 | 71.8 | 83.5 | 87.6 | 90.0 | 90.9 | 92.8 | 75.3 | 57.2 | 48.9 | 46.4 | 48.0 | 50.9 | 59.3 | 83.1 | 92.0 | 96.2 | 95.7 | 97.0 | 75.3 | 97.0 |
| 17-Aug | 96.7 | 95.8 | 97.6 | 90.3 | 85.6 | 83.5 | 80.2 | 74.1 | 69.8 | 65.6 | 60.4 | 53.6 | 54.5 | 47.5 | 43.9 | 43.6 | 43.9 | 43.7 | 54.8 | 79.1 | 89.0 | 94.1 | 95.7 | 96.2 | 72.5 | 97.6 |
| 18-Aug | 97.0 | 97.5 | 89.6 | 92.4 | 98.1 | 98.0 | 87.2 | 73.5 | 61.5 | 57.4 | 54.7 | 51.7 | 47.4 | 42.3 | 41.1 | 40.8 | 41.3 | 44.6 | 48.6 | 63.6 | 76.1 | 74.7 | 81.2 | 86.3 | 68.6 | 98.1 |
| 19-Aug | 90.4 | 90.1 | 82.4 | 83.6 | 86.4 | 85.3 | 75.4 | 70.0 | 71.9 | 75.9 | 71.4 | 56.9 | 50.5 | 49.1 | 48.0 | 47.9 | 51.7 | 70.4 | 78.3 | 84.6 | 88.8 | 89.6 | 94.3 | 96.1 | 74.5 | 96.1 |
| 20-Aug | 97.9 | 94.1 | 96.1 | 96.6 | 96.9 | 99.0 | 97.9 | 83.0 | 72.2 | 68.8 | 63.3 | 60.3 | 56.0 | 57.8 | 56.6 | 50.5 | 50.3 | 53.4 | 61.2 | 76.6 | 86.6 | 93.5 | 94.6 | 96.0 | 77.5 | 99.0 |
| 21-Aug | 96.7 | 97.1 | 97.2 | 96.6 | 97.0 | 97.6 | 92.6 | 71.6 | 54.2 | 51.5 | 48.5 | 44.6 | 42.2 | 39.4 | 41.1 | 50.5 | 44.4 | 53.7 | 62.6 | 82.8 | 89.6 | 81.9 | 80.0 | 75.7 | 70.4 | 97.6 |
| 22-Aug | 72.7 | 72.7 | 71.1 | 69.9 | 74.9 | 76.0 | 73.6 | 63.5 | 59.0 | 52.8 | 51.0 | 51.9 | 55.1 | 55.5 | 53.5 | 51.8 | 51.8 | 54.3 | 60.3 | 66.5 | 78.5 | 91.7 | 94.8 | 96.7 | 66.6 | 96.7 |
| 23-Aug | 94.8 | 93.7 | 95.2 | 97.8 | 97.9 | 98.2 | 97.4 | 92.9 | 84.2 | 72.4 | 74.0 | 75.9 | 81.4 | 76.7 | 69.2 | 71.2 | 72.6 | 76.9 | 75.4 | 72.6 | 75.1 | 79.7 | 81.0 | 83.3 | 82.9 | 98.2 |
| 24-Aug | 84.7 | 82.2 | 83.1 | 84.3 | 87.7 | 82.6 | 79.0 | 78.4 | 73.7 | 68.9 | 62.2 | 53.7 | 49.7 | 40.3 | 38.4 | 34.8 | 37.1 | 43.7 | 64.4 | 83.6 | 91.7 | 93.8 | 95.3 | 96.0 | 70.4 | 96.0 |
| 25-Aug | 96.0 | 96.4 | 96.5 | 97.1 | 97.4 | 82.5 | 74.8 | 69.5 | 66.5 | 62.3 | 59.5 | 52.5 | 46.7 | 41.7 | 41.2 | 41.1 | 44.0 | 48.8 | 63.9 | 82.8 | 90.0 | 93.3 | 95.3 | 95.0 | 72.3 | 97.4 |
| 26-Aug | 95.6 | 96.2 | 93.7 | 96.8 | 96.3 | 96.1 | 87.1 | 72.4 | 60.1 | 53.8 | 44.1 | 39.0 | 37.6 | 39.1 | 40.5 | 40.2 | 42.8 | 43.4 | 55.9 | 70.2 | 83.0 | 85.1 | 80.5 | 74.3 | 67.7 | 96.8 |
| 27-Aug | 77.4 | 78.3 | 86.9 | 88.0 | 92.0 | 95.8 | 91.2 | 76.0 | 66.3 | 58.3 | 55.1 | 55.7 | 52.1 | 48.8 | 47.0 | 50.3 | 53.9 | 53.5 | 51.9 | 53.2 | 57.7 | 65.1 | 65.9 | 68.9 | 66.2 | 95.8 |
| 28-Aug | 72.2 | 78.8 | 81.6 | 77.9 | 91.2 | 93.4 | 90.1 | 93.0 | 90.7 | 77.2 | 64.6 | 55.9 | 50.9 | 49.0 | 53.3 | 49.2 | 51.8 | 59.5 | 63.7 | 69.0 | 70.4 | 80.0 | 79.3 | 79.5 | 71.7 | 93.4 |
| 29-Aug | 81.1 | 82.1 | 82.3 | 81.5 | 81.9 | 82.1 | 75.4 | 67.4 | 62.3 | 58.4 | 54.9 | 49.7 | 48.2 | 44.6 | 41.5 | 39.7 | 41.8 | 44.4 | 52.7 | 79.9 | 87.6 | 88.1 | 84.2 | 90.4 | 66.8 | 90.4 |
| 30-Aug | 93.9 | 93.1 | 84.4 | 83.6 | 86.3 | 94.5 | 95.1 | 86.5 | 78.1 | 84.2 | 72.2 | 60.7 | 56.0 | 53.3 | 53.3 | 53.3 | 59.7 | 68.2 | 71.3 | 87.8 | 93.2 | 94.8 | 96.2 | 96.1 | 79.0 | 96.2 |
| 31-Aug | 96.2 | 95.5 | 93.1 | 85.7 | 84.0 | 85.2 | 87.6 | 83.8 | 77.1 | 71.5 | 65.0 | 60.2 | 53.5 | 48.7 | 51.3 | 46.2 | 44.1 | 45.9 | 57.4 | 82.9 | 90.3 | 93.1 | 95.2 | 95.1 | 74.5 | 96.2 |
| | 90.9 | 91.2 | 91.3 | 91.1 | 92.2 | 91.9 | 87.7 | 80.1 | 74.1 | 69.8 | 65.5 | 61.6 | 58.6 | 54.5 | 53.2 | 52.1 | 54.0 | 59.0 | 65.8 | 77.4 | 85.0 | 88.3 | 89.3 | 90.2 | Diurnal Average | |
| | 98.8 | 99.0 | 99.0 | 99.5 | 99.2 | 99.1 | 98.6 | 99.0 | 98.7 | 98.4 | 97.6 | 97.1 | 96.8 | 96.5 | 94.4 | 89.0 | 85.6 | 88.3 | 95.9 | 97.1 | 98.4 | 98.6 | 98.1 | 98.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Anzac - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 8 | 1.08 | 1.08 |
| 40 - 60 | 184 | 24.73 | 25.81 |
| 60 - 80 | 193 | 25.94 | 51.75 |
| 80 - 100 | 359 | 48.25 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 61.0 % on Aug 4 01:00

Maximum Daily Average: 16.8 % on Aug 14

Minimum Value: 0.0 % on Aug 1 01:00

Minimum Daily Average: 0.0 % on Aug 29

Maximum Diurnal Average: 19.6 % at hour 2

Minimum Diurnal Average: 0.3 % at hour 16

Monthly Average: 7.89 %

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 10.9 $P_{90}$ = 30.9 $P_{99}$ = 52.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

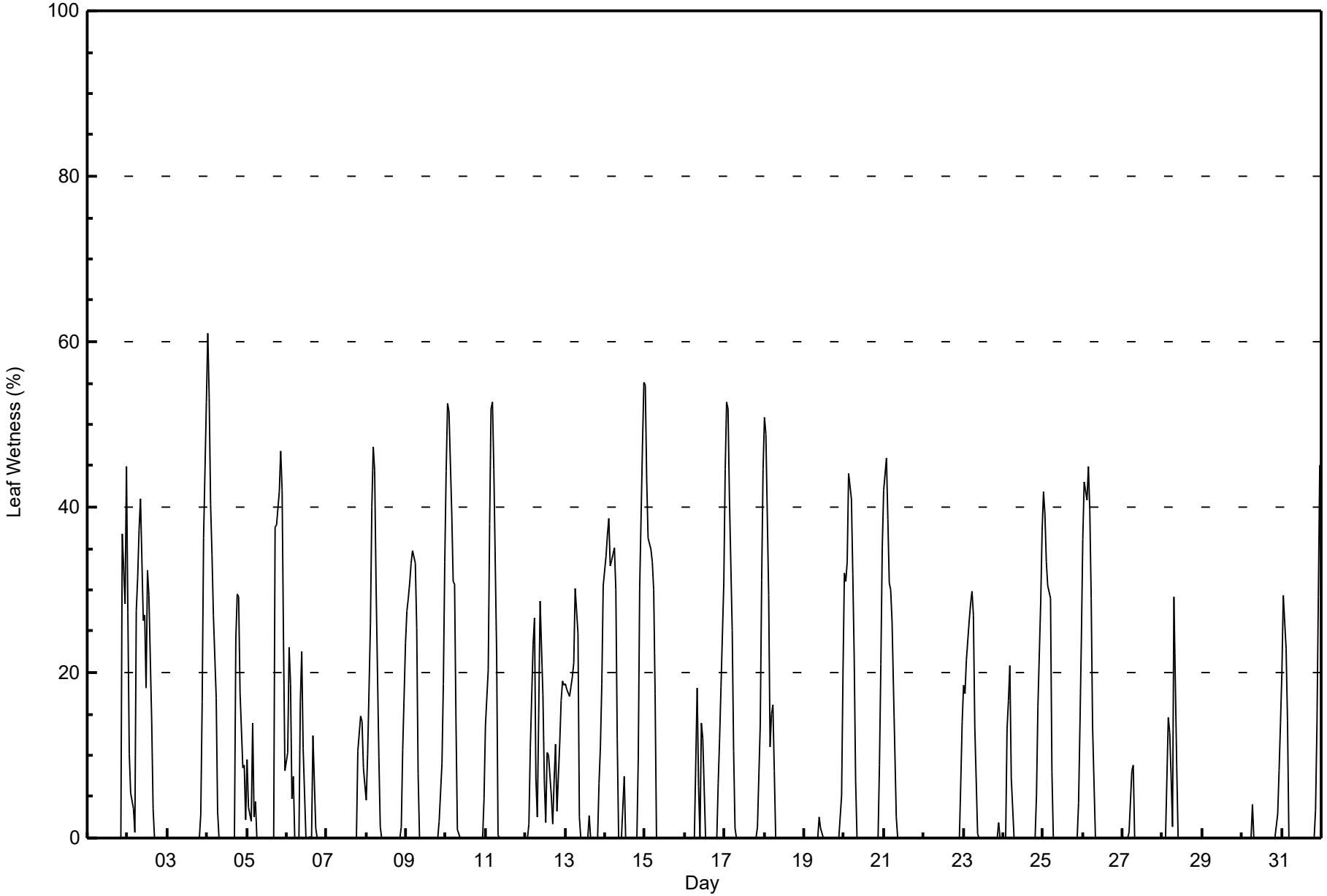
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.7 | 28.3 | 44.9 | 4.6 | 44.9 |
| 2-Aug | 27.2 | 10.1 | 5.4 | 3.6 | 0.8 | 27.5 | 31.6 | 37.4 | 41.0 | 26.2 | 26.9 | 18.2 | 32.4 | 29.4 | 14.0 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.0 | 41.0 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 16.4 | 36.3 | 52.8 | 4.5 | 52.8 |
| 4-Aug | 61.0 | 53.3 | 40.3 | 34.3 | 27.0 | 17.0 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.0 | 29.6 | 29.1 | 17.6 | 8.5 | 8.9 | 2.3 | 14.8 | 61.0 |
| 5-Aug | 9.5 | 3.8 | 2.1 | 13.9 | 2.6 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.7 | 37.8 | 41.8 | 46.8 | 42.0 | 23.7 | 8.1 | 11.4 | 46.8 |
| 6-Aug | 10.4 | 23.1 | 18.7 | 4.7 | 7.4 | 0.0 | 0.0 | 0.0 | 16.5 | 22.6 | 10.8 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 12.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.3 | 23.1 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.5 | 14.8 | 14.0 | 8.5 | 6.4 | 2.3 | 14.8 |
| 8-Aug | 4.6 | 10.2 | 25.9 | 40.1 | 47.2 | 44.3 | 30.7 | 9.8 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 10.7 | 23.5 | 10.4 | 47.2 |
| 9-Aug | 27.4 | 29.0 | 30.9 | 33.3 | 34.7 | 33.3 | 25.4 | 7.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 9.1 | 18.7 | 33.3 | 11.9 | 34.7 |
| 10-Aug | 44.4 | 52.6 | 51.5 | 39.1 | 31.1 | 30.7 | 14.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 | 11.2 | 52.6 |
| 11-Aug | 13.6 | 20.3 | 38.0 | 51.8 | 52.7 | 44.6 | 22.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.1 | 52.7 |
| 12-Aug | 0.0 | 0.0 | 1.7 | 10.9 | 23.3 | 26.7 | 7.0 | 2.5 | 15.1 | 28.7 | 17.3 | 7.0 | 1.8 | 10.3 | 10.0 | 5.1 | 1.7 | 6.9 | 11.4 | 3.3 | 11.5 | 16.7 | 19.0 | 18.5 | 10.7 | 28.7 |
| 13-Aug | 18.6 | 18.0 | 17.0 | 18.4 | 19.5 | 21.2 | 30.1 | 24.8 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 | 10.9 | 18.7 | 30.5 | 10.0 | 30.5 |
| 14-Aug | 34.1 | 36.6 | 38.7 | 32.9 | 33.6 | 35.0 | 29.9 | 12.0 | 0.0 | 0.0 | 0.0 | 7.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6 | 30.2 | 47.4 | 55.0 | 16.8 | 55.0 |
| 15-Aug | 54.7 | 43.4 | 36.2 | 35.0 | 33.5 | 30.0 | 17.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.4 | 54.7 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.1 | 6.3 | 0.0 | 13.9 | 12.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 | 12.1 | 18.2 | 30.8 | 4.9 | 30.8 |
| 17-Aug | 44.5 | 52.7 | 51.8 | 41.2 | 25.1 | 10.5 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 13.7 | 31.2 | 44.6 | 13.2 | 52.7 |
| 18-Aug | 50.9 | 48.9 | 29.3 | 11.1 | 15.0 | 16.1 | 8.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5 | 50.9 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.1 | 20.0 | 1.2 | 20.0 |
| 20-Aug | 32.1 | 31.1 | 33.5 | 44.0 | 41.0 | 31.9 | 21.7 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.8 | 20.9 | 35.1 | 12.8 | 44.0 |
| 21-Aug | 42.0 | 45.9 | 38.5 | 30.9 | 29.9 | 26.0 | 18.2 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7 | 45.9 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.8 | 14.1 | 0.9 | 14.1 |
| 23-Aug | 18.5 | 17.5 | 21.6 | 26.2 | 28.3 | 29.8 | 27.0 | 13.4 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 | 7.7 | 29.8 |
| 24-Aug | 0.0 | 0.0 | 13.2 | 16.7 | 20.9 | 7.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.3 | 15.9 | 28.5 | 37.1 | 6.0 | 37.1 |
| 25-Aug | 41.8 | 39.1 | 33.4 | 30.5 | 29.0 | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 | 13.7 | 24.1 | 9.3 | 41.8 |
| 26-Aug | 36.2 | 43.0 | 40.9 | 44.9 | 39.7 | 28.9 | 13.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.3 | 44.9 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 8.1 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 8.7 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 14.6 | 12.7 | 7.4 | 1.3 | 29.2 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1 | 29.2 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 8.2 | 13.8 | 1.2 | 13.8 |
| 31-Aug | 19.9 | 29.4 | 22.8 | 14.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 13.6 | 29.2 | 45.0 | 7.4 | 45.0 |
| | 19.1 | 19.6 | 19.1 | 19.1 | 17.9 | 15.8 | 10.2 | 5.4 | 3.0 | 2.6 | 2.3 | 1.4 | 1.1 | 1.3 | 0.9 | 0.3 | 0.5 | 2.3 | 2.5 | 2.7 | 4.1 | 8.3 | 12.3 | 17.6 | Diurnal Average | |
| | 61.0 | 53.3 | 51.8 | 51.8 | 52.7 | 44.6 | 31.6 | 37.4 | 41.0 | 28.7 | 26.9 | 18.2 | 32.4 | 29.4 | 14.0 | 5.1 | 12.4 | 37.7 | 37.8 | 41.8 | 46.8 | 42.0 | 47.4 | 55.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Leaf Wetness (LW) - %**

**Anzac - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 477 | 64.11 | 64.11 |
| 0.4 - 0.5 | 0 | 0.00 | 64.11 |
| 0.6 - 0.7 | 2 | 0.27 | 64.38 |
| 0.8 - 1.4 | 9 | 1.21 | 65.59 |
| 1.5 - 10 | 60 | 8.06 | 73.66 |
| > 10 | 196 | 26.34 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 20m (WS20) - km/h

## Anzac - August 2026

Maximum Speed: 32 km/h on Aug 2 13:00

Maximum Daily Speed Average: 19.2 km/h on Aug 2

Minimum Speed Value: 1 km/h on Aug 9 11:00

Minimum Daily Speed Average: 2.5 km/h on Aug 9

Maximum Diurnal Speed Average: 8.0 km/h at hour 13

Minimum Diurnal Speed Average: 2.7 km/h at hour 21

Monthly Average Velocity: 5.3 km/h 294.1 deg

Percentiles: $P_1 = 2$ $P_{10} = 5$ $Q_1 = 7$ Median = 10 $Q_3 = 14$ $P_{90} = 17$ $P_{99} = 25$

Hours in Service: 744

Hours of Data: 744

Hours of Missing Data: 0

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSW9 | SSW6 | SSW7 | S8 | S7 | S6 | S7 | SSW8 | ESE4 | ESE8 | E13 | ESE15 | ESE16 | SE18 | SE20 | SSE19 | SE15 | SE10 | SSE8 | SE9 | SSE10 | W11 | S9 | SSW10 | SSE8.5 | SE20 |
| 2-Aug | SSW8 | WNW8 | NNW16 | NW16 | NNW14 | NNW14 | NW16 | NW15 | NNW17 | NNW18 | N24 | NNW25 | NNW32 | NNW27 | NW25 | NW22 | NNW27 | NNW29 | NNW25 | NNW22 | NNW20 | NNW24 | NW21 | NW18 | NNW19.2 | NNW32 |
| 3-Aug | NW17 | NW17 | NW17 | NW17 | NW17 | WNW17 | WNW16 | WNW16 | WNW17 | NW17 | NNW19 | NNW22 | NW19 | NW19 | NNW18 | NNW16 | NW13 | NNW11 | NNW11 | N8 | N6 | NE4 | SSE4 | S6 | NW12.9 | NNW22 |
| 4-Aug | SSW7 | S7 | S10 | S11 | S9 | S8 | SW6 | SW2 | W1 | WNW13 | W16 | WNW18 | W16 | WNW16 | WNW16 | W15 | W13 | W15 | W9 | WNW5 | W7 | WNW15 | NW19 | NW15 | W8.3 | NW19 |
| 5-Aug | NW16 | NW16 | WNW16 | WNW16 | WNW17 | WNW17 | WNW17 | NW19 | NW20 | NW21 | NW24 | NW23 | NW22 | NW20 | NW20 | NW14 | WNW13 | NW9 | NNW15 | N16 | NW15 | NW15 | NW19 | NW21 | NW17.2 | NW24 |
| 6-Aug | NW24 | NW24 | NW24 | NW27 | NW27 | NW23 | WNW22 | NW21 | NW21 | NW19 | NW16 | NW17 | NW20 | WNW17 | NW16 | NW18 | NW14 | NW12 | NW10 | NW14 | NW13 | NW8 | WNW11 | WNW12 | NW17.7 | NW27 |
| 7-Aug | WNW14 | WNW14 | WNW12 | WNW14 | WNW13 | WNW14 | WNW15 | WNW14 | WNW14 | WNW16 | WNW16 | NW13 | NW15 | NW15 | NW12 | N11 | N9 | NNW8 | NNW4 | NNW6 | NW4 | NW6 | NNW7 | NNW9 | NW10.8 | WNW16 |
| 8-Aug | NNW9 | NW6 | W6 | W5 | WNW4 | NW8 | NNW8 | NNW9 | NNW13 | NNW13 | N13 | NNW12 | NW8 | NNW8 | N9 | NW7 | N9 | N8 | N9 | NNW7 | NNW4 | NW4 | NNW5 | WNW4 | NNW7.2 | NNW13 |
| 9-Aug | WNW5 | WNW6 | NW4 | NW4 | NW4 | N3 | W2 | NE2 | ESE3 | SSE2 | SW1 | WNW7 | W7 | W10 | NNW11 | NNW9 | N6 | N8 | NNE7 | ENE6 | E6 | SSE4 | SSW5 | SW4 | NW2.5 | NNW11 |
| 10-Aug | SW2 | SW4 | SSW5 | S6 | SSW3 | S6 | SW4 | SSW2 | ESE2 | SSE4 | WNW5 | WNW5 | WNW7 | NW9 | NNW10 | NW15 | NNW12 | NNW12 | NNW12 | NNW10 | NNW10 | NNW10 | NNW10 | NW5 | NW4.3 | NW15 |
| 11-Aug | WNW10 | WNW10 | W7 | WNW8 | WNW10 | WNW8 | WNW9 | WNW9 | WNW11 | WNW12 | NW13 | NNW16 | NNW16 | NNW20 | N20 | NNW20 | NNW17 | N17 | N15 | NNW12 | NNW11 | N12 | NNW10 | NNW10 | NW11.4 | NNW20 |
| 12-Aug | NW11 | NW9 | NW8 | WNW7 | WNW10 | WNW12 | WNW12 | NW11 | NW10 | NNW11 | NNW11 | NNW12 | NNW12 | N13 | NNW11 | N10 | N11 | NNW11 | N9 | NW7 | NW6 | NW7 | NNW8 | NNW8 | NNW9.3 | N13 |
| 13-Aug | NW7 | NW7 | NW7 | WNW6 | WNW7 | NW6 | WNW6 | NW7 | NW8 | NNW5 | NE7 | NNE10 | N16 | NNE7 | ENE11 | NNE5 | NNE13 | NE12 | NE8 | NNE5 | N7 | WNW5 | WNW5 | WNW5 | N5.4 | N16 |
| 14-Aug | WNW6 | WNW5 | NW7 | WNW6 | WNW4 | NW3 | NW1 | WSW3 | WNW5 | W4 | N4 | E3 | SSE4 | SSW13 | SW7 | WNW11 | NW6 | N11 | N4 | NW3 | WSW2 | SW4 | SSW6 | WSW7 | WNW3.2 | SSW13 |
| 15-Aug | SW7 | W8 | WSW6 | W6 | W8 | W8 | W8 | W7 | WNW11 | WNW10 | WNW9 | WNW9 | NW10 | WNW12 | W10 | WNW9 | NW9 | W5 | WSW3 | SW7 | SW10 | SW8 | WSW8 | WSW7 | W7.4 | WNW12 |
| 16-Aug | SW8 | WSW8 | WSW8 | WSW7 | WSW8 | WNW11 | WNW17 | NW15 | NNW13 | NNW16 | N17 | NNW14 | NW14 | NNW22 | NNW21 | NNW21 | NNW18 | NNW14 | NW10 | NW6 | NNW2 | NNE5 | W2 | W6 | NW9.7 | NNW22 |
| 17-Aug | SW6 | WSW7 | WNW9 | W9 | W11 | WNW12 | WNW14 | WNW14 | WNW14 | WNW11 | WNW12 | WNW16 | WNW11 | NW13 | W10 | W7 | NW5 | W7 | SSW5 | S8 | S7 | S8 | S6 | SSW6 | W7.4 | WNW16 |
| 18-Aug | SSW8 | SSW9 | SSW10 | SSW5 | S6 | S7 | SSE9 | SSE7 | S6 | WSW7 | WSW7 | WNW13 | WNW10 | WNW13 | WNW12 | WNW13 | W12 | W12 | W14 | WNW10 | W7 | W8 | WSW8 | W6 | WSW6.7 | W14 |
| 19-Aug | W7 | W10 | WNW11 | WNW11 | WNW11 | WNW12 | W11 | W6 | WNW15 | WNW14 | WNW15 | WNW15 | WNW16 | WNW16 | WNW17 | NW16 | WNW14 | W14 | W9 | WNW11 | WNW10 | WNW9 | WNW8 | WNW6 | WNW11.6 | WNW17 |
| 20-Aug | NW9 | WNW6 | SW6 | SW7 | WSW6 | N6 | WSW3 | SW5 | WNW10 | WNW11 | WNW11 | NW14 | NW17 | NNW16 | NW18 | NNW18 | NNW18 | NNW15 | NNW9 | N9 | N8 | WNW4 | WSW6 | W2 | NW7.9 | NW18 |
| 21-Aug | SW2 | SW5 | SW6 | SW5 | SW5 | SW6 | SW5 | WSW3 | WNW3 | WNW6 | NW7 | WNW5 | SSE2 | SSE4 | SE8 | SE6 | SE10 | SE10 | SE8 | SSE9 | SSE10 | SSE11 | SSE12 | SSE12 | S4.2 | SSE12 |
| 22-Aug | SSE12 | SSE12 | SSE14 | SSE15 | SSE15 | SSE16 | SSE14 | SSE11 | SSE9 | S7 | S4 | SE7 | ESE11 | SE12 | SE15 | SE16 | SSE18 | SSE14 | SSE12 | SSE12 | S9 | SSW4 | S5 | S5 | SSE10.8 | SSE18 |
| 23-Aug | SSW7 | SSE9 | SSE6 | S7 | SE6 | SE7 | SSE9 | S7 | SSW4 | SSW6 | W3 | SSW2 | NNW6 | NNW8 | W4 | WNW6 | WNW9 | WNW9 | WNW10 | WNW13 | WNW16 | WNW14 | WNW14 | WNW15 | W3.9 | WNW16 |
| 24-Aug | NW15 | WNW14 | NW14 | WNW13 | WNW13 | NW14 | WNW11 | NW11 | WNW12 | NW12 | NW14 | NW15 | NW15 | NNW21 | NNW21 | NNW24 | NNW17 | N13 | N7 | NNW6 | WNW5 | W6 | W6 | WSW6 | NW11.7 | NNW24 |
| 25-Aug | WSW6 | W6 | W6 | WSW7 | WNW5 | WNW15 | WNW16 | WNW14 | NW11 | NW9 | NW10 | NW9 | NW9 | NW9 | NW8 | NW6 | N8 | NE6 | ENE6 | SE6 | S8 | S7 | SSE8 | SSE8 | WNW4.5 | WNW16 |
| 26-Aug | SE9 | SE10 | SE8 | SSE9 | SE7 | SSE8 | S10 | SSE7 | SE6 | SSE8 | S11 | SSE13 | S15 | SSE15 | SSE16 | SSE15 | SSE13 | SSE12 | SSE10 | SSE11 | SSE10 | SSE12 | SSE12 | SSE12 | SSE10.6 | SSE16 |
| 27-Aug | SSE13 | SSE12 | SE9 | ESE13 | E11 | ESE9 | E8 | ESE9 | SE13 | SE14 | SE17 | SSE18 | SSE18 | SE19 | SE15 | ESE11 | ESE12 | ESE11 | SE13 | SE14 | SE13 | SE11 | SE14 | ESE15 | SE12.6 | SE19 |
| 28-Aug | SE12 | SE11 | SSW9 | WSW8 | NW5 | SE8 | SW10 | SSW7 | WSW12 | WSW14 | W14 | W15 | WSW18 | WSW20 | WSW23 | W22 | WSW16 | W18 | W18 | W14 | WSW12 | WNW15 | W16 | W16 | WSW11.3 | WSW23 |
| 29-Aug | WSW12 | WSW15 | W17 | WSW16 | W19 | W18 | W19 | W19 | W17 | W16 | WNW14 | W15 | W15 | W16 | W17 | WSW17 | WSW13 | SW9 | SSW7 | S8 | S9 | SSW10 | SSW9 | SW8 | WSW12.7 | W19 |
| 30-Aug | S6 | S8 | SSE13 | SSE10 | SSE10 | E3 | SSE6 | SSE8 | SSE5 | E6 | E7 | S5 | NE4 | ENE7 | ESE8 | SE8 | SE8 | SSE6 | S6 | SE4 | SSE6 | SSE5 | SSE2 | S4 | SE5.2 | SSE13 |
| 31-Aug | W6 | SW6 | SW6 | W14 | WNW15 | WNW15 | WNW14 | WNW17 | WNW14 | WNW14 | NW14 | WNW15 | WNW14 | WNW13 | WNW11 | WNW11 | WNW11 | NW10 | NW9 | NW5 | WSW4 | SW6 | SSW7 | S7 | WNW9.4 | WNW17 |
| | W4.7 | W5.2 | W5.2 | W5.7 | W5.6 | WNW5.7 | W6.5 | WNW6.1 | WNW6.7 | WNW7.1 | NW7.4 | NW8.0 | NW8.0 | NW7.9 | NW6.7 | NW7.3 | NW6.1 | NNW5.3 | NW3.8 | NW3.0 | WNW2.7 | WNW3.9 | W3.9 | W4.2 | Diurnal Average | |
| | NW24 | NW24 | NW24 | NW27 | NW27 | NW23 | WNW22 | NW21 | NW21 | NW21 | NW24 | NNW25 | NNW32 | NNW27 | NW25 | NNW24 | NNW27 | NNW29 | NNW25 | NNW22 | NNW20 | NNW24 | NW21 | NW21 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 20m (WS20) - km/h

## Anzac - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Aug 1 22:00

Minimum Value: 0 km/h on Aug 3 22:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 4 $P_{90}$ = 5 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

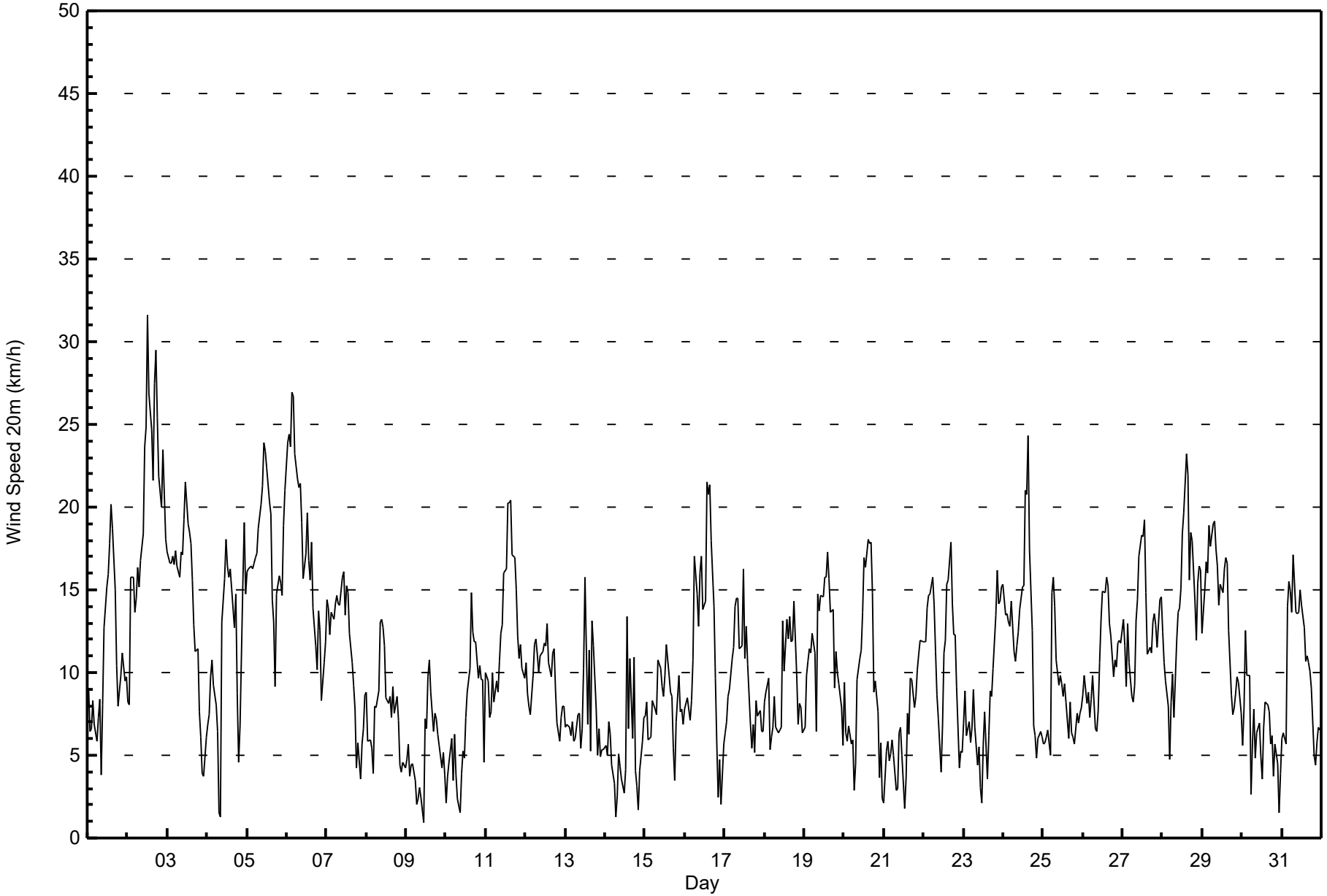
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 2 | 3 | 1 | 2 | 10 | 5 | 4 | 10 |
| 2-Aug | 2 | 3 | 5 | 4 | 5 | 3 | 4 | 3 | 4 | 4 | 6 | 7 | 7 | 6 | 5 | 5 | 6 | 7 | 6 | 5 | 5 | 5 | 5 | 4 | 7 |
| 3-Aug | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 0 | 1 | 1 | 5 |
| 4-Aug | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 6 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 8 | 4 | 2 | 3 | 4 | 5 | 3 | 8 |
| 5-Aug | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 7 | 5 | 7 | 7 | 6 | 5 | 6 | 4 | 4 | 5 | 7 | 5 | 4 | 4 | 5 | 6 | 7 |
| 6-Aug | 6 | 7 | 7 | 7 | 7 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 3 | 2 | 4 | 3 | 2 | 2 | 3 | 7 |
| 7-Aug | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 4 |
| 8-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 4 |
| 9-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 3 | 4 | 2 | 2 | 1 | 0 | 1 | 1 | 2 | 4 |
| 10-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 1 | 1 | 1 | 2 | 1 | 4 |
| 11-Aug | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 2 | 2 | 1 | 2 | 2 | 5 |
| 12-Aug | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 5 | 3 | 4 | 4 | 5 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 13-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 6 | 5 | 2 | 5 | 4 | 5 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 6 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 3 |
| 16-Aug | 2 | 2 | 2 | 1 | 2 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 4 | 6 | 5 | 5 | 4 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 6 |
| 17-Aug | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 18-Aug | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 4 |
| 19-Aug | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 2 | 2 | 2 | 1 | 1 | 2 | 5 |
| 20-Aug | 4 | 2 | 1 | 1 | 1 | 3 | 2 | 1 | 3 | 2 | 2 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 4 |
| 23-Aug | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 3 | 3 | 3 | 4 |
| 24-Aug | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 5 | 7 | 6 | 6 | 4 | 3 | 1 | 1 | 1 | 1 | 0 | 1 | 7 |
| 25-Aug | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 4 |
| 26-Aug | 1 | 3 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 4 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 5 |
| 27-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 5 |
| 28-Aug | 2 | 2 | 3 | 5 | 4 | 4 | 3 | 2 | 5 | 4 | 4 | 4 | 5 | 6 | 7 | 7 | 5 | 6 | 6 | 4 | 3 | 4 | 5 | 5 | 7 |
| 29-Aug | 3 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 5 |
| 30-Aug | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 3 |
| 31-Aug | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 4 |
| | 6 | 7 | 7 | 7 | 7 | 5 | 5 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 8 | 7 | 5 | 5 | 10 | 5 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 20m (WS20) - km/h**

**Anzac - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 101 | 13.58 | 13.58 |
| 6 - 11 | 340 | 45.70 | 59.27 |
| 12 - 19 | 258 | 34.68 | 93.95 |
| 20 - 28 | 43 | 5.78 | 99.73 |
| 29 - 38 | 2 | 0.27 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 20m (WS20) - km/h**

**Anzac - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 3 | 3 | 3 | 0 | 2 | 3 | 1 | 10 | 5 | 9 | 13 | 6 | 9 | 17 | 12 | 5 | 101 |
| 6 - 11 | 20 | 3 | 3 | 4 | 5 | 7 | 22 | 28 | 33 | 20 | 16 | 22 | 31 | 53 | 42 | 31 | 340 |
| 12 - 19 | 9 | 1 | 1 | 0 | 1 | 5 | 14 | 29 | 1 | 1 | 0 | 10 | 28 | 77 | 50 | 31 | 258 |
| 20 - 28 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 20 | 16 | 43 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 7 | 7 | 4 | 8 | 15 | 38 | 67 | 39 | 30 | 29 | 40 | 69 | 148 | 124 | 85 | 744 |

Total Number of Valid Hours: 744

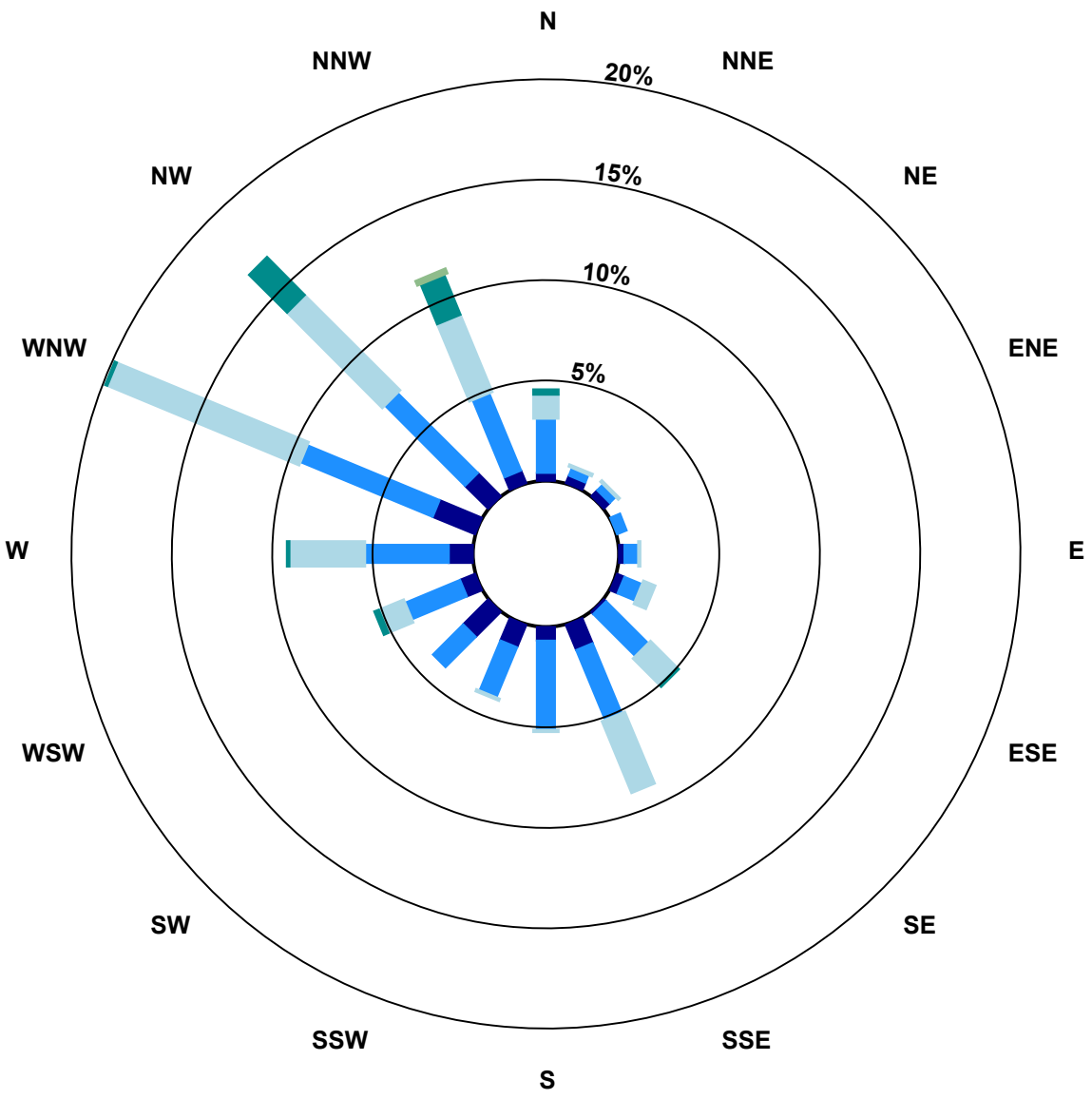
Total Number of Hours: 744

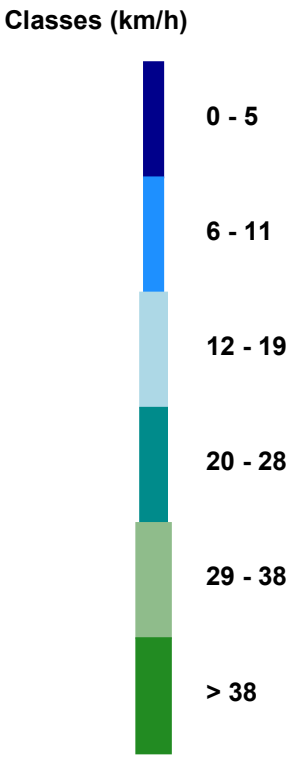
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Wind Speed 20m (WS20) - km/h

## Anzac




Total Number of Valid Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 20m (WD20) - deg

## Anzac - August 2026

Direction of Maximum Speed: 346 deg on Aug 2 13:00
Direction of Maximum Daily Speed Average: 333.7 deg on Aug 2

Direction of Minimum Speed: 217 deg on Aug 9 11:00

Direction of Minimum Daily Speed Average: 2.5 deg on Aug 9

Monthly Average Direction: 294.1 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 192 | 204 | 193 | 182 | 184 | 183 | 175 | 194 | 120 | 109 | 101 | 112 | 119 | 133 | 141 | 148 | 144 | 146 | 149 | 143 | 164 | 277 | 177 | 206 | 153.7 |
| 2-Aug | 210 | 296 | 332 | 320 | 341 | 327 | 324 | 325 | 336 | 343 | 351 | 346 | 346 | 340 | 326 | 323 | 331 | 343 | 343 | 336 | 338 | 338 | 326 | 316 | 333.7 |
| 3-Aug | 311 | 308 | 307 | 307 | 305 | 303 | 303 | 301 | 301 | 317 | 327 | 340 | 325 | 325 | 327 | 329 | 325 | 333 | 343 | 352 | 10 | 49 | 151 | 191 | 318.9 |
| 4-Aug | 194 | 177 | 179 | 182 | 174 | 183 | 219 | 215 | 263 | 287 | 281 | 283 | 275 | 283 | 283 | 265 | 263 | 280 | 268 | 292 | 264 | 298 | 313 | 315 | 267.6 |
| 5-Aug | 318 | 305 | 302 | 294 | 295 | 297 | 302 | 306 | 318 | 324 | 314 | 311 | 317 | 311 | 310 | 313 | 292 | 317 | 347 | 352 | 315 | 313 | 317 | 311 | 312.5 |
| 6-Aug | 310 | 306 | 306 | 307 | 307 | 308 | 303 | 306 | 305 | 304 | 304 | 310 | 316 | 294 | 311 | 314 | 323 | 324 | 313 | 310 | 321 | 307 | 299 | 296 | 307.9 |
| 7-Aug | 296 | 294 | 299 | 294 | 290 | 288 | 292 | 289 | 295 | 292 | 295 | 312 | 305 | 309 | 321 | 352 | 353 | 343 | 335 | 333 | 321 | 316 | 327 | 337 | 306.5 |
| 8-Aug | 346 | 313 | 281 | 271 | 285 | 309 | 331 | 336 | 333 | 337 | 357 | 340 | 325 | 333 | 8 | 311 | 0 | 359 | 351 | 344 | 341 | 321 | 333 | 295 | 333.6 |
| 9-Aug | 285 | 299 | 304 | 308 | 325 | 355 | 262 | 51 | 107 | 167 | 217 | 287 | 266 | 279 | 329 | 327 | 10 | 6 | 20 | 58 | 86 | 158 | 202 | 229 | 320.6 |
| 10-Aug | 228 | 230 | 201 | 186 | 196 | 187 | 215 | 198 | 117 | 168 | 296 | 286 | 292 | 316 | 345 | 325 | 343 | 343 | 342 | 327 | 327 | 344 | 345 | 314 | 315.6 |
| 11-Aug | 292 | 288 | 281 | 282 | 292 | 291 | 291 | 291 | 283 | 293 | 316 | 330 | 328 | 343 | 352 | 346 | 339 | 350 | 350 | 340 | 346 | 352 | 342 | 333 | 325.4 |
| 12-Aug | 326 | 313 | 315 | 301 | 298 | 299 | 303 | 307 | 315 | 330 | 328 | 332 | 336 | 353 | 340 | 359 | 357 | 343 | 353 | 323 | 306 | 308 | 331 | 336 | 326.5 |
| 13-Aug | 317 | 318 | 314 | 297 | 298 | 306 | 290 | 311 | 311 | 332 | 49 | 30 | 4 | 27 | 58 | 25 | 21 | 51 | 53 | 18 | 356 | 290 | 294 | 289 | 352.2 |
| 14-Aug | 292 | 287 | 308 | 296 | 300 | 305 | 318 | 257 | 287 | 278 | 350 | 92 | 147 | 208 | 235 | 298 | 324 | 9 | 10 | 304 | 238 | 215 | 213 | 247 | 282.2 |
| 15-Aug | 235 | 260 | 257 | 259 | 281 | 273 | 259 | 273 | 289 | 287 | 292 | 295 | 304 | 291 | 276 | 288 | 309 | 271 | 257 | 222 | 227 | 235 | 237 | 241 | 270.2 |
| 16-Aug | 230 | 244 | 257 | 250 | 258 | 287 | 293 | 306 | 343 | 345 | 352 | 330 | 324 | 339 | 337 | 336 | 341 | 333 | 325 | 306 | 329 | 20 | 262 | 259 | 319.1 |
| 17-Aug | 230 | 258 | 282 | 277 | 267 | 287 | 289 | 288 | 292 | 287 | 290 | 302 | 302 | 304 | 267 | 275 | 307 | 281 | 197 | 174 | 171 | 178 | 183 | 202 | 272.4 |
| 18-Aug | 213 | 201 | 204 | 201 | 190 | 174 | 161 | 161 | 179 | 250 | 253 | 294 | 292 | 294 | 287 | 284 | 272 | 269 | 276 | 285 | 277 | 270 | 258 | 265 | 254.7 |
| 19-Aug | 260 | 275 | 285 | 286 | 290 | 289 | 272 | 265 | 286 | 287 | 283 | 292 | 292 | 298 | 300 | 307 | 302 | 276 | 278 | 289 | 298 | 302 | 298 | 292 | 289.0 |
| 20-Aug | 314 | 286 | 234 | 236 | 251 | 358 | 257 | 235 | 288 | 292 | 289 | 316 | 323 | 328 | 323 | 335 | 337 | 343 | 347 | 1 | 11 | 284 | 244 | 262 | 314.9 |
| 21-Aug | 221 | 229 | 236 | 224 | 222 | 225 | 217 | 238 | 288 | 295 | 305 | 300 | 160 | 149 | 142 | 140 | 129 | 139 | 146 | 165 | 166 | 167 | 164 | 157 | 180.2 |
| 22-Aug | 157 | 158 | 154 | 151 | 150 | 154 | 159 | 161 | 158 | 176 | 169 | 134 | 104 | 124 | 140 | 146 | 156 | 156 | 156 | 166 | 187 | 200 | 171 | 176 | 153.9 |
| 23-Aug | 201 | 163 | 162 | 170 | 145 | 136 | 166 | 176 | 193 | 194 | 260 | 197 | 338 | 331 | 269 | 295 | 303 | 298 | 290 | 299 | 301 | 300 | 303 | 302 | 270.0 |
| 24-Aug | 305 | 301 | 311 | 302 | 299 | 319 | 303 | 304 | 301 | 306 | 308 | 317 | 320 | 330 | 340 | 342 | 343 | 360 | 8 | 340 | 284 | 275 | 270 | 251 | 317.5 |
| 25-Aug | 247 | 278 | 260 | 250 | 286 | 286 | 295 | 296 | 307 | 320 | 325 | 315 | 305 | 310 | 320 | 315 | 0 | 46 | 74 | 135 | 170 | 169 | 168 | 154 | 294.9 |
| 26-Aug | 140 | 146 | 146 | 149 | 145 | 161 | 170 | 148 | 145 | 149 | 177 | 168 | 175 | 163 | 153 | 149 | 152 | 152 | 148 | 154 | 160 | 166 | 158 | 149 | 156.0 |
| 27-Aug | 150 | 148 | 128 | 110 | 100 | 118 | 100 | 117 | 135 | 136 | 146 | 149 | 147 | 141 | 138 | 117 | 106 | 120 | 128 | 137 | 144 | 132 | 132 | 123 | 131.6 |
| 28-Aug | 132 | 143 | 198 | 246 | 316 | 138 | 219 | 205 | 249 | 258 | 272 | 274 | 256 | 251 | 247 | 267 | 255 | 265 | 264 | 260 | 258 | 289 | 262 | 264 | 251.9 |
| 29-Aug | 244 | 254 | 264 | 258 | 265 | 270 | 268 | 265 | 272 | 272 | 284 | 280 | 269 | 265 | 262 | 255 | 256 | 230 | 205 | 188 | 188 | 201 | 211 | 221 | 255.9 |
| 30-Aug | 188 | 177 | 156 | 160 | 154 | 93 | 161 | 164 | 155 | 93 | 84 | 172 | 55 | 70 | 120 | 128 | 134 | 153 | 183 | 138 | 156 | 162 | 168 | 190 | 145.5 |
| 31-Aug | 264 | 218 | 216 | 280 | 283 | 288 | 293 | 289 | 296 | 294 | 304 | 287 | 292 | 287 | 282 | 294 | 298 | 311 | 319 | 317 | 246 | 218 | 201 | 191 | 283.8 |
| | 264.0 | 262.5 | 265.4 | 266.0 | 276.5 | 282.6 | 276.1 | 281.8 | 294.9 | 299.7 | 309.3 | 309.6 | 310.4 | 308.2 | 309.0 | 311.8 | 323.5 | 326.3 | 324.6 | 309.3 | 281.4 | 282.9 | 269.0 | 265.9 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 20m (WD20) - deg

## Anzac - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Aug 9 11:00

Minimum Value: 4 deg on Aug 24 23:00

Percentiles: $P_1$ = 6 $P_{10}$ = 10 $Q_1$ = 13 Median = 16 $Q_3$ = 22 $P_{90}$ = 35 $P_{99}$ = 81

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

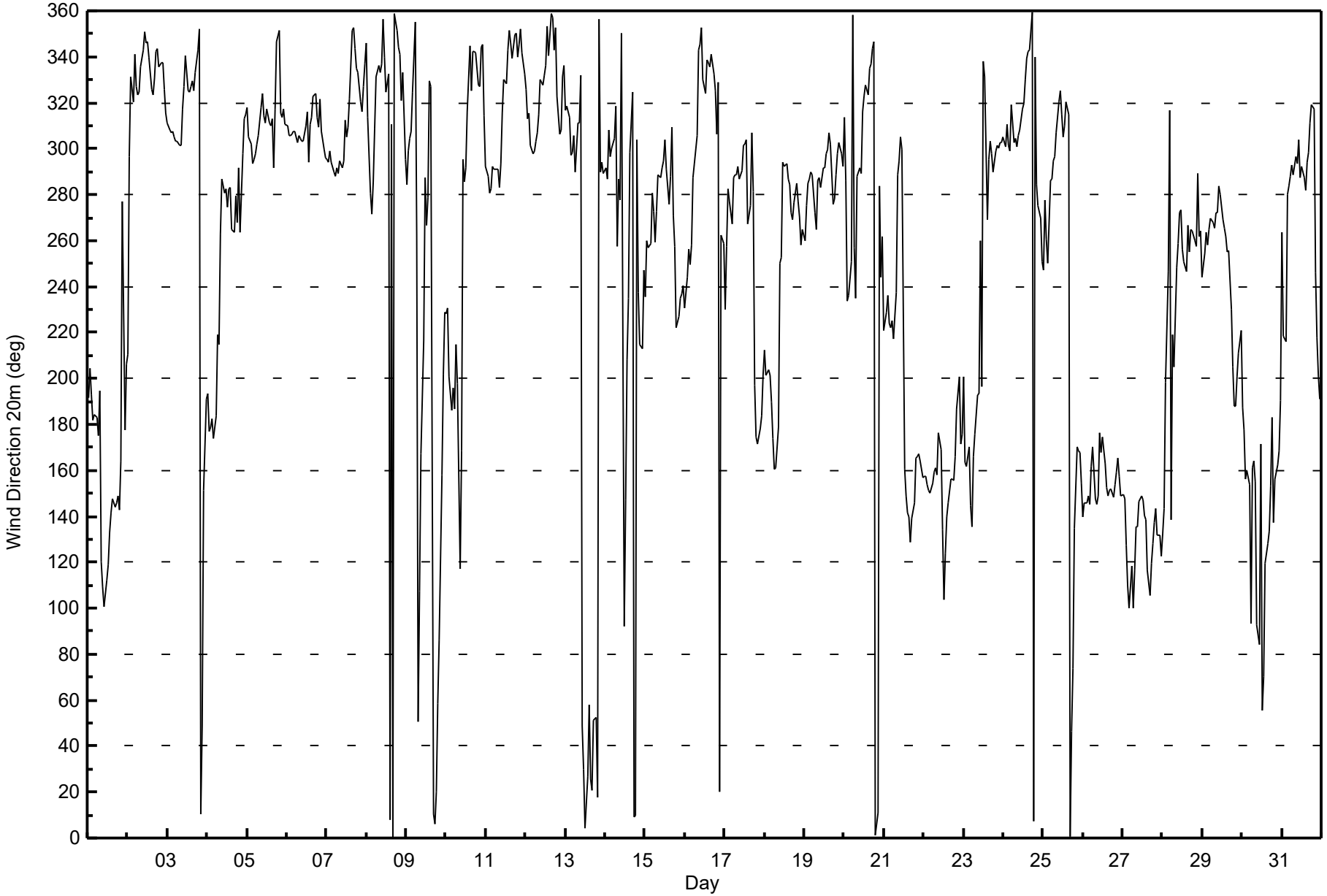
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 21 | 35 | 15 | 5 | 9 | 11 | 7 | 14 | 39 | 15 | 14 | 16 | 18 | 17 | 15 | 15 | 15 | 14 | 13 | 14 | 20 | 87 | 62 | 31 | 87 |
| 2-Aug | 34 | 48 | 21 | 14 | 15 | 13 | 13 | 12 | 15 | 13 | 15 | 14 | 15 | 14 | 13 | 13 | 13 | 15 | 14 | 13 | 13 | 13 | 14 | 13 | 48 |
| 3-Aug | 13 | 12 | 13 | 12 | 13 | 13 | 13 | 16 | 17 | 21 | 20 | 19 | 20 | 20 | 19 | 21 | 26 | 24 | 17 | 10 | 7 | 29 | 34 | 9 | 34 |
| 4-Aug | 7 | 5 | 6 | 7 | 7 | 6 | 12 | 83 | 87 | 17 | 17 | 17 | 18 | 19 | 16 | 20 | 20 | 23 | 28 | 38 | 21 | 18 | 14 | 14 | 87 |
| 5-Aug | 15 | 14 | 16 | 16 | 16 | 16 | 16 | 18 | 17 | 16 | 16 | 17 | 17 | 16 | 17 | 17 | 20 | 37 | 22 | 19 | 15 | 15 | 15 | 15 | 37 |
| 6-Aug | 15 | 15 | 15 | 15 | 14 | 14 | 15 | 15 | 14 | 15 | 16 | 16 | 17 | 24 | 23 | 18 | 17 | 15 | 15 | 15 | 13 | 19 | 13 | 16 | 24 |
| 7-Aug | 16 | 16 | 16 | 15 | 16 | 16 | 15 | 16 | 18 | 17 | 21 | 20 | 18 | 19 | 20 | 14 | 14 | 17 | 22 | 26 | 29 | 27 | 14 | 12 | 29 |
| 8-Aug | 10 | 12 | 16 | 14 | 41 | 14 | 22 | 20 | 17 | 21 | 21 | 26 | 43 | 32 | 34 | 32 | 18 | 16 | 15 | 11 | 11 | 11 | 17 | 22 | 43 |
| 9-Aug | 15 | 12 | 28 | 26 | 29 | 36 | 42 | 33 | 43 | 60 | 100 | 47 | 40 | 25 | 43 | 35 | 64 | 26 | 19 | 12 | 9 | 45 | 8 | 18 | 100 |
| 10-Aug | 54 | 20 | 29 | 16 | 27 | 10 | 44 | 56 | 68 | 34 | 79 | 72 | 42 | 36 | 32 | 19 | 25 | 22 | 14 | 10 | 8 | 6 | 7 | 21 | 79 |
| 11-Aug | 10 | 9 | 11 | 12 | 11 | 11 | 13 | 15 | 17 | 17 | 20 | 23 | 20 | 18 | 18 | 19 | 19 | 17 | 17 | 11 | 9 | 8 | 9 | 11 | 23 |
| 12-Aug | 13 | 11 | 10 | 12 | 10 | 11 | 12 | 14 | 14 | 15 | 18 | 19 | 22 | 28 | 22 | 34 | 22 | 21 | 17 | 15 | 12 | 15 | 9 | 10 | 34 |
| 13-Aug | 12 | 11 | 12 | 14 | 13 | 15 | 15 | 20 | 23 | 42 | 33 | 36 | 19 | 41 | 27 | 75 | 25 | 15 | 13 | 15 | 25 | 12 | 15 | 18 | 75 |
| 14-Aug | 12 | 12 | 10 | 11 | 18 | 27 | 91 | 56 | 37 | 35 | 74 | 86 | 60 | 23 | 42 | 17 | 45 | 21 | 49 | 22 | 55 | 19 | 14 | 16 | 91 |
| 15-Aug | 14 | 7 | 7 | 22 | 7 | 7 | 9 | 19 | 18 | 17 | 24 | 24 | 23 | 17 | 21 | 19 | 22 | 20 | 30 | 14 | 14 | 16 | 16 | 16 | 30 |
| 16-Aug | 15 | 16 | 14 | 14 | 13 | 16 | 18 | 14 | 20 | 17 | 14 | 17 | 20 | 19 | 18 | 16 | 20 | 17 | 10 | 9 | 52 | 15 | 67 | 18 | 67 |
| 17-Aug | 11 | 14 | 7 | 12 | 14 | 16 | 15 | 17 | 16 | 21 | 18 | 19 | 26 | 26 | 25 | 43 | 29 | 22 | 34 | 10 | 8 | 6 | 6 | 17 | 43 |
| 18-Aug | 14 | 12 | 16 | 19 | 12 | 12 | 11 | 18 | 27 | 43 | 46 | 16 | 19 | 19 | 22 | 19 | 20 | 20 | 19 | 14 | 16 | 10 | 8 | 19 | 46 |
| 19-Aug | 11 | 11 | 12 | 12 | 10 | 10 | 15 | 22 | 16 | 15 | 17 | 17 | 18 | 19 | 19 | 22 | 17 | 23 | 16 | 13 | 10 | 11 | 17 | 12 | 23 |
| 20-Aug | 12 | 32 | 15 | 8 | 17 | 25 | 44 | 22 | 22 | 16 | 19 | 25 | 19 | 18 | 17 | 19 | 20 | 16 | 13 | 14 | 11 | 53 | 7 | 25 | 53 |
| 21-Aug | 33 | 6 | 7 | 6 | 6 | 11 | 8 | 36 | 58 | 22 | 25 | 51 | 90 | 85 | 30 | 21 | 19 | 11 | 11 | 8 | 6 | 7 | 6 | 11 | 90 |
| 22-Aug | 11 | 11 | 11 | 9 | 8 | 8 | 12 | 15 | 24 | 36 | 63 | 35 | 19 | 22 | 16 | 16 | 14 | 13 | 14 | 11 | 15 | 49 | 20 | 35 | 63 |
| 23-Aug | 14 | 10 | 12 | 12 | 25 | 13 | 9 | 12 | 30 | 29 | 53 | 65 | 35 | 30 | 49 | 17 | 17 | 15 | 15 | 14 | 14 | 14 | 14 | 12 | 65 |
| 24-Aug | 12 | 16 | 15 | 11 | 11 | 14 | 15 | 11 | 13 | 16 | 14 | 14 | 17 | 16 | 17 | 16 | 14 | 15 | 10 | 10 | 9 | 6 | 4 | 12 | 17 |
| 25-Aug | 24 | 14 | 15 | 7 | 50 | 12 | 11 | 12 | 14 | 23 | 22 | 29 | 34 | 26 | 37 | 42 | 25 | 22 | 19 | 20 | 6 | 6 | 6 | 22 | 50 |
| 26-Aug | 13 | 12 | 10 | 11 | 8 | 17 | 12 | 15 | 13 | 19 | 27 | 23 | 27 | 28 | 16 | 15 | 14 | 13 | 10 | 7 | 7 | 8 | 10 | 11 | 28 |
| 27-Aug | 9 | 9 | 16 | 10 | 9 | 14 | 13 | 17 | 16 | 17 | 15 | 15 | 15 | 14 | 15 | 15 | 13 | 15 | 13 | 11 | 11 | 15 | 12 | 12 | 17 |
| 28-Aug | 14 | 16 | 33 | 66 | 67 | 50 | 29 | 29 | 18 | 20 | 22 | 21 | 21 | 21 | 20 | 19 | 19 | 18 | 16 | 19 | 17 | 17 | 18 | 18 | 67 |
| 29-Aug | 19 | 18 | 18 | 18 | 18 | 17 | 18 | 17 | 20 | 19 | 19 | 20 | 22 | 26 | 21 | 23 | 21 | 24 | 17 | 16 | 10 | 11 | 14 | 12 | 26 |
| 30-Aug | 27 | 7 | 9 | 9 | 7 | 58 | 47 | 15 | 35 | 26 | 37 | 44 | 74 | 36 | 30 | 30 | 17 | 13 | 12 | 28 | 12 | 26 | 57 | 32 | 74 |
| 31-Aug | 10 | 27 | 36 | 11 | 13 | 15 | 14 | 15 | 17 | 19 | 21 | 16 | 21 | 25 | 19 | 24 | 19 | 18 | 11 | 10 | 31 | 10 | 12 | 10 | 36 |
| | 54 | 48 | 36 | 66 | 67 | 58 | 91 | 83 | 87 | 60 | 100 | 86 | 90 | 85 | 49 | 75 | 64 | 37 | 49 | 38 | 55 | 87 | 67 | 35 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 20m (WD20) - deg**

**Anzac - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS17
## WAPASU
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 707 | 35 | 37 | 99.73 | 6.3 | 0 | 1.9 | 0 |
| H2S (ppb) Average | 705 | 37 | 39 | 99.73 | 1.7 | 0 | 0.5 | 0 |
| THC (ppm) Average | 707 | 35 | 37 | 99.73 | 2.9 | - | 2.5 | - |
| O3 (ppb) Average | 709 | 35 | 35 | 100 | 42.8 | 0 | 33.5 | - |
| NO2 (ppb) Average | 705 | 37 | 39 | 99.73 | 17.9 | 0 | 5 | - |
| NO (ppb) Average | 705 | 37 | 39 | 99.73 | 24.4 | - | 2.6 | - |
| NOX (ppb) Average | 705 | 37 | 39 | 99.73 | 41 | - | 7.2 | - |
| PM2.5 (ug/m3) Average | 741 | 2 | 3 | 99.87 | 80.5 | 1 | 29.2 | 1 |
| Temperature 2 m (C) Average | 722 | 0 | 22 | 97.04 | 27.7 | - | 22.3 | - |
| Relative Humidity (%) Average | 711 | 0 | 33 | 95.56 | 100 | - | 93.3 | - |
| Wind Speed 10 m (km/h) Average | 741 | 3 | 3 | 100 | 27 | - | 16 | - |
| Wind Direction 10 m (deg) Average | 741 | 3 | 3 | 100 | - | - | - | - |
| Precipitation (mm) Total | 744 | 0 | 0 | 100 | 9.6 | - | 16.1 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 707 | 0.27 | 0.7 | - | 0 | 0 | 0 | 0 | 0.1 | 0.8 | 6.3 |
| H2S (ppb) Average | 705 | 0.19 | 0.2 | - | 0 | 0 | 0.1 | 0.1 | 0.2 | 0.4 | 1.7 |
| THC (ppm) Average | 707 | 2.3 | 0.2 | - | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.6 | 2.9 |
| O3 (ppb) Average | 709 | 19.67 | 10.7 | - | 0.6 | 2.9 | 12 | 20.8 | 28.1 | 33.5 | 42.8 |
| NO2 (ppb) Average | 705 | 2.32 | 2.5 | - | 0 | 0.3 | 0.7 | 1.5 | 2.9 | 5.6 | 17.9 |
| NO (ppb) Average | 705 | 0.69 | 2 | - | 0 | 0 | 0 | 0 | 0.5 | 1.9 | 24.4 |
| NOX (ppb) Average | 705 | 3.01 | 4 | - | 0 | 0.3 | 0.7 | 1.7 | 3.6 | 7.4 | 41 |
| PM2.5 (ug/m3) Average | 741 | 10.42 | 10.6 | - | 0.4 | 2.5 | 3.6 | 7.3 | 13 | 22.2 | 80.5 |
| Temperature 2 m (C) Average | 722 | 15.63 | 5 | - | 2.8 | 9.2 | 12 | 15.5 | 19.3 | 22.3 | 27.7 |
| Relative Humidity (%) Average | 711 | 73.09 | 18.8 | - | 33.2 | 47.4 | 57.5 | 73.8 | 90.7 | 98.4 | 100 |
| Wind Speed 10 m (km/h) Average | 741 | 8.4 | 4 | - | 1 | 3 | 5 | 8 | 11 | 14 | 27 |
| Wind Direction 10 m (deg) Average | 741 | - | - | - | - | - | - | - | - | - | - |
| Precipitation (mm) Total | 744 | - | - | 57.92 | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Start | End | (Hours) | Notes |
|---|---|---|---|---|
| H2S, NO2, SO2, THC | 07 Aug 2026 12:00 | 07 Aug 2026 13:00 | 2 | Maintenance - sample manifold cleaned |
| PM2.5 | 21 Aug 2026 04:00 | 21 Aug 2026 04:00 | 1 | Unstable Operation - flatline in analyzer output signal |
| Ambient Temperature, Relative Humidity | 20 Aug 2026 14:00 | 20 Aug 2026 14:00 | 1 | Maintenance - sensor replaced |
| Ambient Temperature, Relative Humidity | 20 Aug 2026 15:00 | 21 Aug 2026 11:00 | 21 | Unstable Operation - flatline in sensor output signal |
| Relative Humidity | 02 Aug 2026 03:00 | 17 Aug 2026 07:00 | 11 | Sensor operated out of range |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Wapasu - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.3 ppb on Aug 21 09:00 Maximum Daily Average: 1.9 ppb on Aug 29

Minimum Value: 0.0 ppb on Aug 1 01:00
Maximum Diurnal Average: 1.0 ppb at hour 9
Monthly Average: 0.27 ppb

Minimum Daily Average: 0.0 ppb on Aug 2
Minimum Diurnal Average: 0.0 ppb at hour 21
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.8 $P_{99}$ = 3.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 2-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 1.7 | 2.2 | 5.1 | 1.6 | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 5.1 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | M | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.8 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.8 |
| 15-Aug | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.3 | 0.7 | 2.1 | 3.2 | 1.7 | 0.9 | 0.9 | 1.9 | 0.6 | 0.0 | 0.1 | 0.0 | 1.3 | 0.9 | 0.3 | 0.0 | 0.3 | 0.9 | 0.9 | 0.7 | 3.2 |
| 16-Aug | 0.7 | 1.0 | 0.3 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 1.3 | 3.6 | 0.7 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 3.3 | 1.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 3.6 |
| 18-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 1.0 | 2.6 | 2.8 | 4.5 | 1.5 | 0.8 | 0.4 | 0.4 | 0.0 | 0.0 | 0.3 | 0.6 | 0.4 | 0.7 | 4.5 |
| 19-Aug | 0.2 | Z | 0.1 | 0.1 | 0.0 | 0.3 | 0.7 | 1.9 | 4.1 | 2.3 | 2.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 4.1 |
| 20-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 1.9 | 6.3 | 3.2 | 1.7 | 2.0 | 3.5 | 2.2 | 1.3 | 1.1 | 0.9 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 6.3 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.5 |
| 23-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | Z | 0.5 | 1.2 | 2.2 | 1.1 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 | 2.0 | 1.6 | 0.5 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.5 | 2.2 |
| 24-Aug | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 25-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 |
| 27-Aug | 0.3 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.5 |
| 28-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.7 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.8 | 2.3 | 0.7 | 1.8 | 3.3 | 0.4 | 2.4 | 1.9 | 0.2 | 0.0 | 0.3 | 0.4 | 0.0 | 0.7 | 3.3 |
| 29-Aug | 0.1 | 0.4 | 2.5 | 0.8 | 0.4 | Z | 0.9 | 3.7 | 3.8 | 2.3 | 3.1 | 3.5 | 3.5 | 3.5 | 2.4 | 3.4 | 3.4 | 3.6 | 0.6 | 0.4 | 0.2 | 0.2 | 0.0 | 0.1 | 1.9 | 3.8 |
| 30-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.9 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.0 | 0.0 | 0.1 | 0.4 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.9 |
| 31-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 1.3 | 1.4 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.5 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 1.0 | 0.5 | 0.4 | 0.4 | 0.6 | 0.4 | 0.3 | 0.4 | 0.2 | 0.4 | 0.3 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.7 | 1.0 | 2.5 | 0.8 | 0.4 | 0.7 | 1.7 | 3.7 | 6.3 | 3.2 | 3.1 | 3.5 | 3.5 | 3.5 | 4.5 | 3.4 | 3.4 | 3.6 | 3.3 | 1.5 | 0.5 | 0.5 | 0.9 | 0.9 | Diurnal Maximum | |

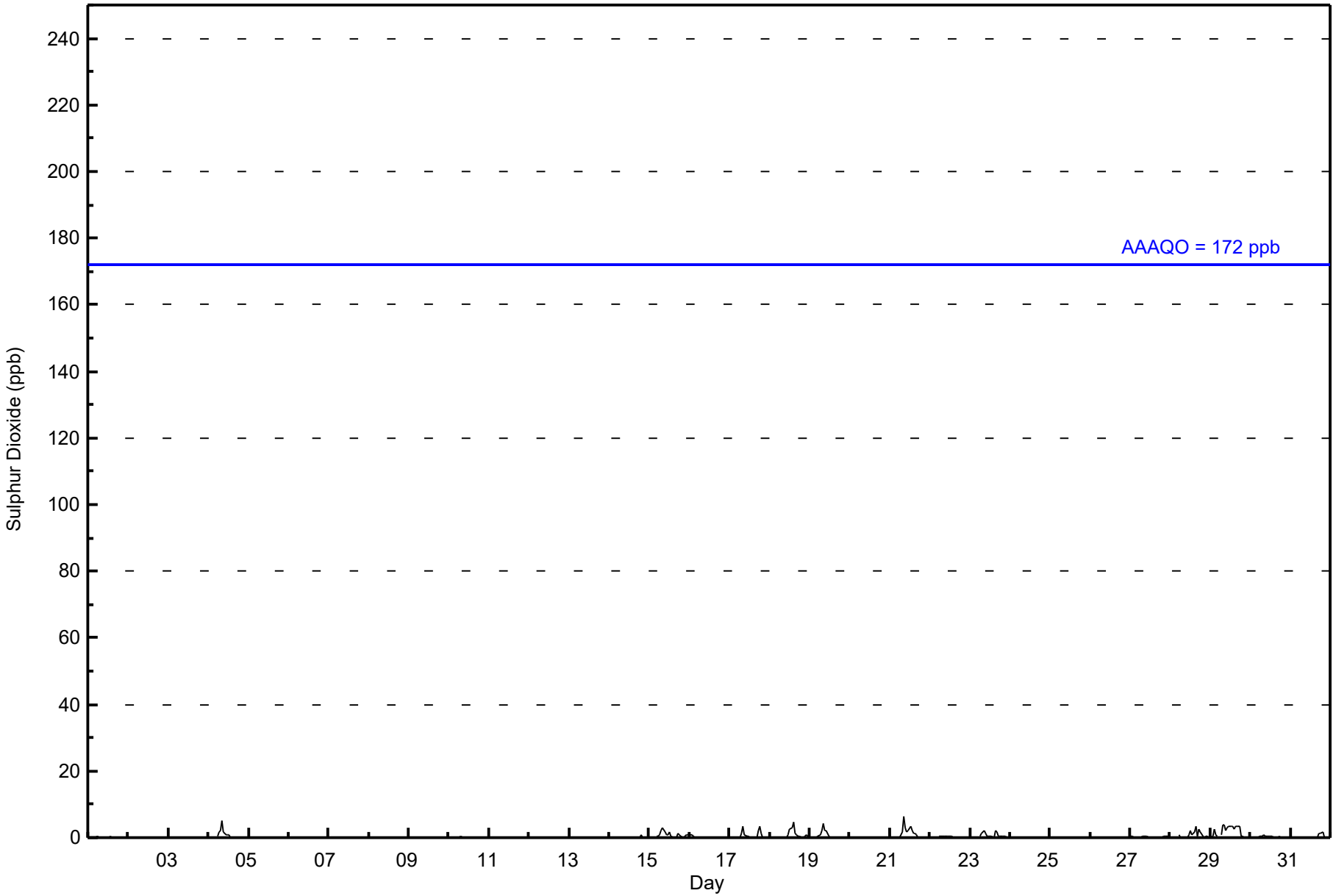
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Wapasu - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Wapasu - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 707 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Wapasu - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 86 | 45 | 27 | 11 | 9 | 30 | 33 | 110 | 66 | 38 | 37 | 55 | 21 | 16 | 33 | 87 | 704 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 86 | 45 | 27 | 11 | 9 | 30 | 33 | 110 | 66 | 38 | 37 | 55 | 21 | 16 | 33 | 87 | 704 |

Total Number of Valid Hours: 704

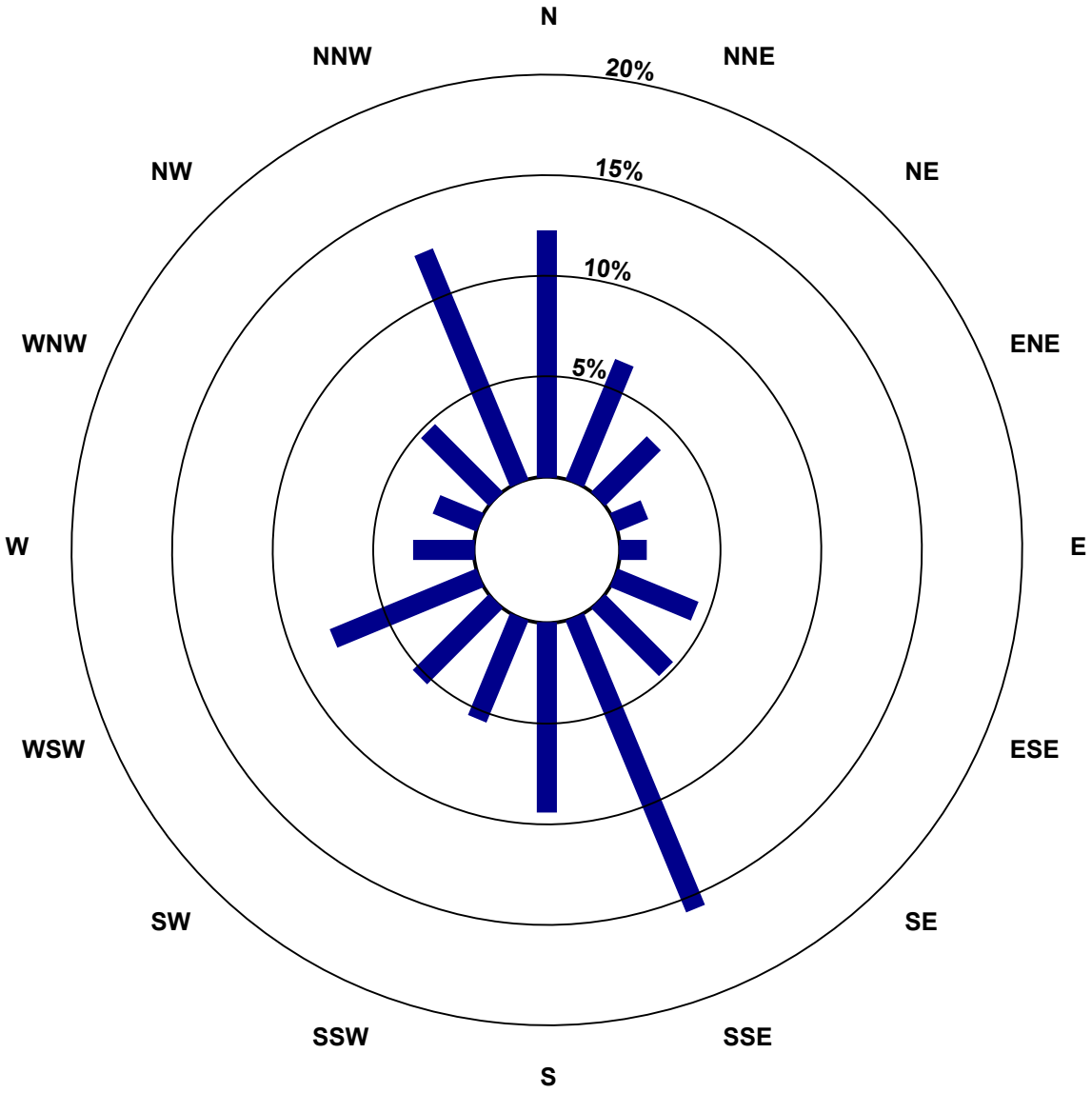
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Wapasu




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

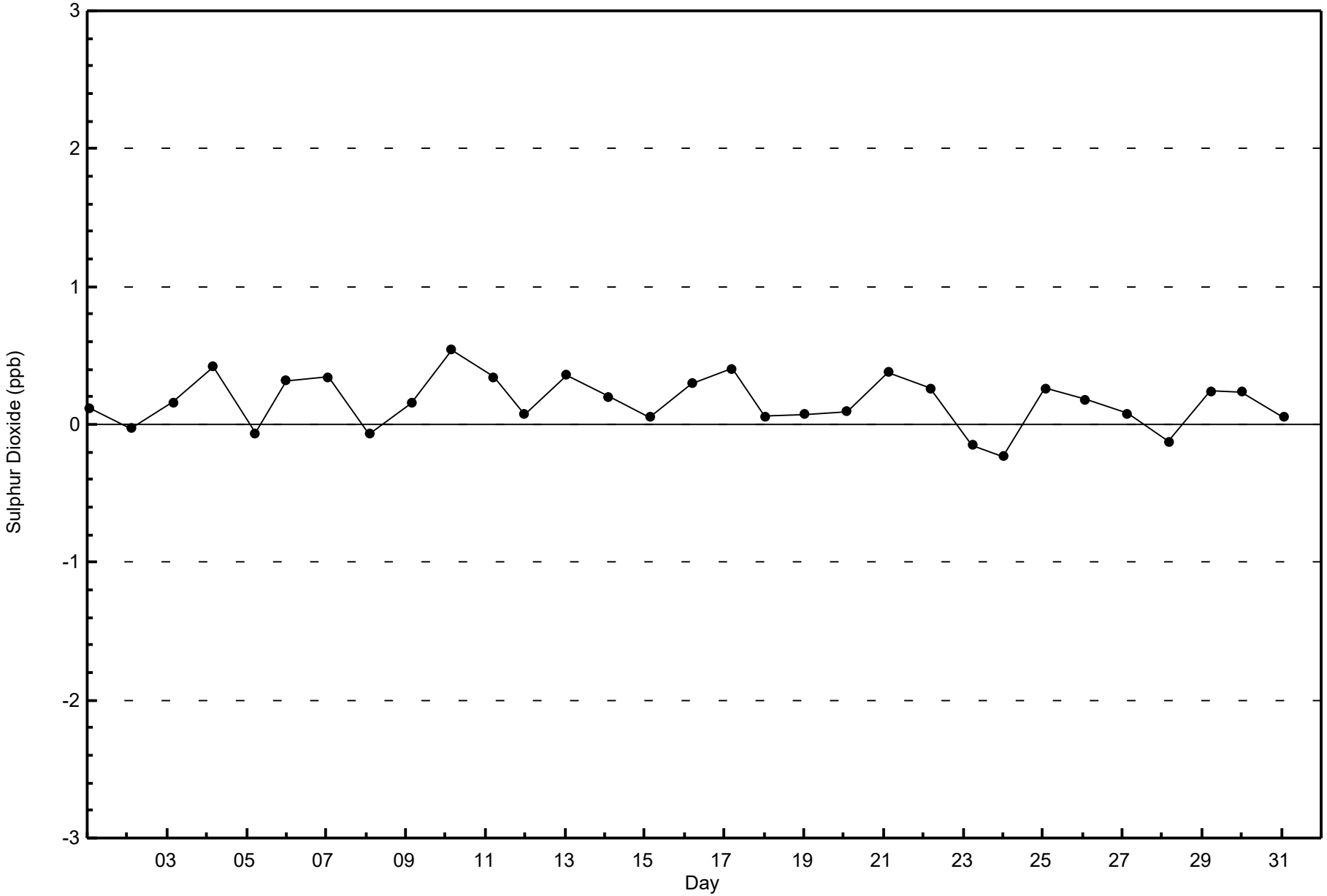
Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Wapasu - August 2026**

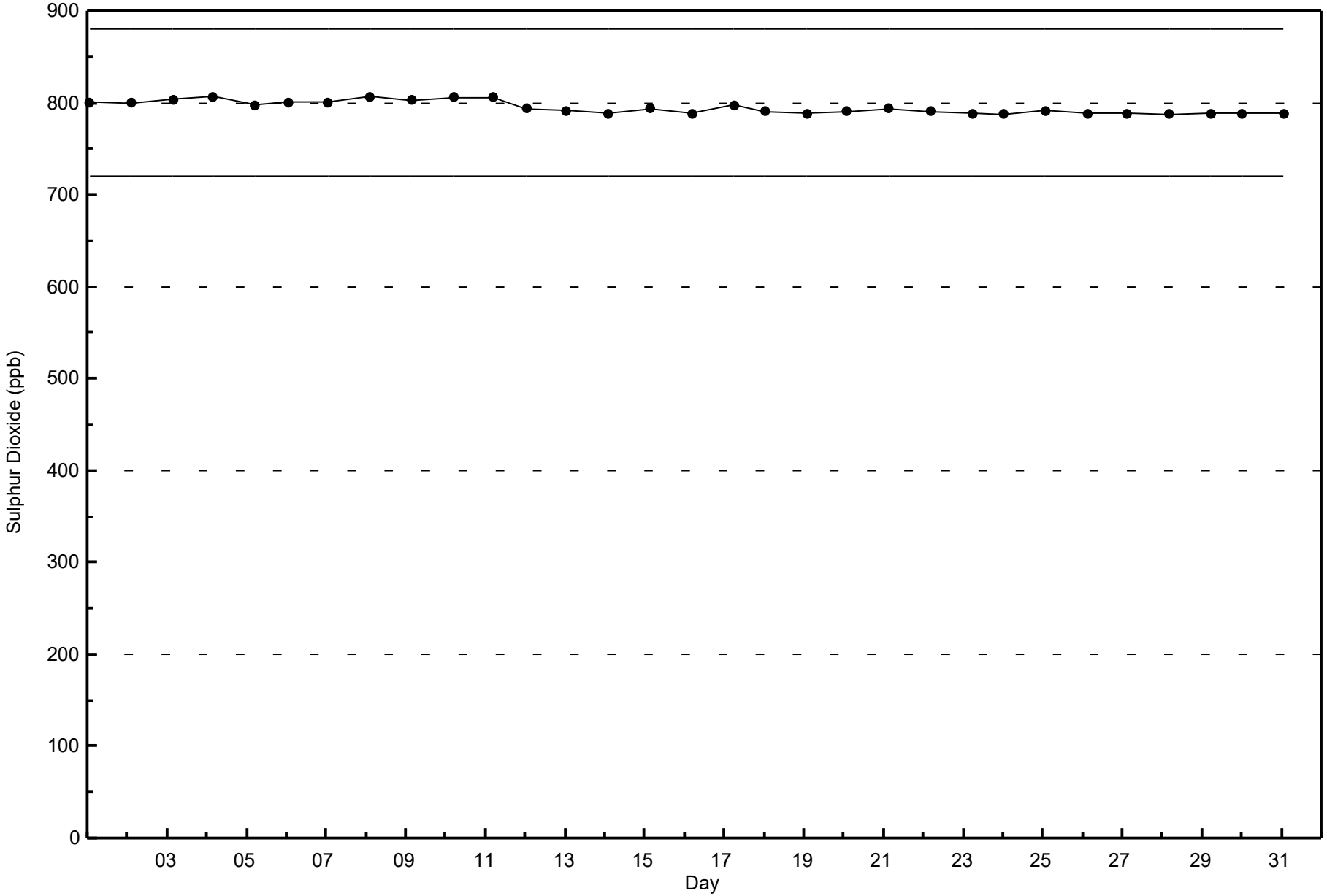


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Wapasu - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## Wapasu - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.7 ppb on Aug 16 00:00 Maximum Daily Average: 0.5 ppb on Aug 19

Minimum Value: 0.0 ppb on Aug 5 14:00
Maximum Diurnal Average: 0.3 ppb at hour 9
Monthly Average: 0.19 ppb

Minimum Daily Average: 0.1 ppb on Aug 26
Minimum Diurnal Average: 0.1 ppb at hour 15
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.4 $P_{99}$ = 1.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 2-Aug | 0.1 | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 3-Aug | 0.2 | 0.2 | 0.3 | 0.3 | Z | 0.3 | 0.5 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.5 |
| 4-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.4 | 0.7 | 0.8 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.8 |
| 5-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | 0.1 | Z | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | M | M | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 |
| 8-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 9-Aug | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.1 | 0.5 |
| 10-Aug | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.8 | 0.8 | 0.6 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.8 |
| 11-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 |
| 12-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 |
| 13-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 14-Aug | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.5 | 0.6 | 0.6 | 0.2 | 0.2 | 0.6 |
| 15-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.4 | 0.5 | 0.9 | 0.4 | 0.2 | 0.6 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.6 | 1.4 | 1.1 | 1.7 | 0.4 | 1.7 |
| 16-Aug | 1.6 | 1.3 | 0.9 | 0.6 | 0.4 | Z | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 1.6 |
| 17-Aug | Z | 0.3 | 0.5 | 0.6 | 0.4 | 0.4 | 0.7 | 0.7 | 1.6 | 0.6 | C | C | C | C | C | C | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | -- | 1.6 |
| 18-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 1.4 | 0.8 | 0.5 | 0.2 | 1.4 |
| 19-Aug | 0.9 | 0.8 | Z | 1.1 | 1.0 | 0.9 | 0.7 | 0.8 | 0.8 | 0.5 | 1.2 | 0.9 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.2 |
| 20-Aug | 0.4 | 0.3 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 |
| 21-Aug | 0.2 | 0.2 | 0.3 | 0.3 | Z | 0.4 | 0.5 | 0.6 | 0.5 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 23-Aug | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.6 | 0.4 | 0.2 | 0.5 | 0.2 | 0.6 |
| 24-Aug | 0.5 | Z | 0.3 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| 25-Aug | 0.1 | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 | 0.2 | 0.6 |
| 26-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 28-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.6 | 0.5 | 0.1 | 0.1 | 0.3 | 0.4 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.2 | 0.3 | 0.7 |
| 29-Aug | Z | 0.5 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.6 | 0.6 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 30-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 31-Aug | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 1.6 | 1.3 | 0.9 | 1.1 | 1.0 | 0.9 | 0.7 | 0.8 | 1.6 | 0.7 | 1.2 | 0.9 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.5 | 0.4 | 0.5 | 0.7 | 1.4 | 1.1 | 1.7 | Diurnal Maximum | |

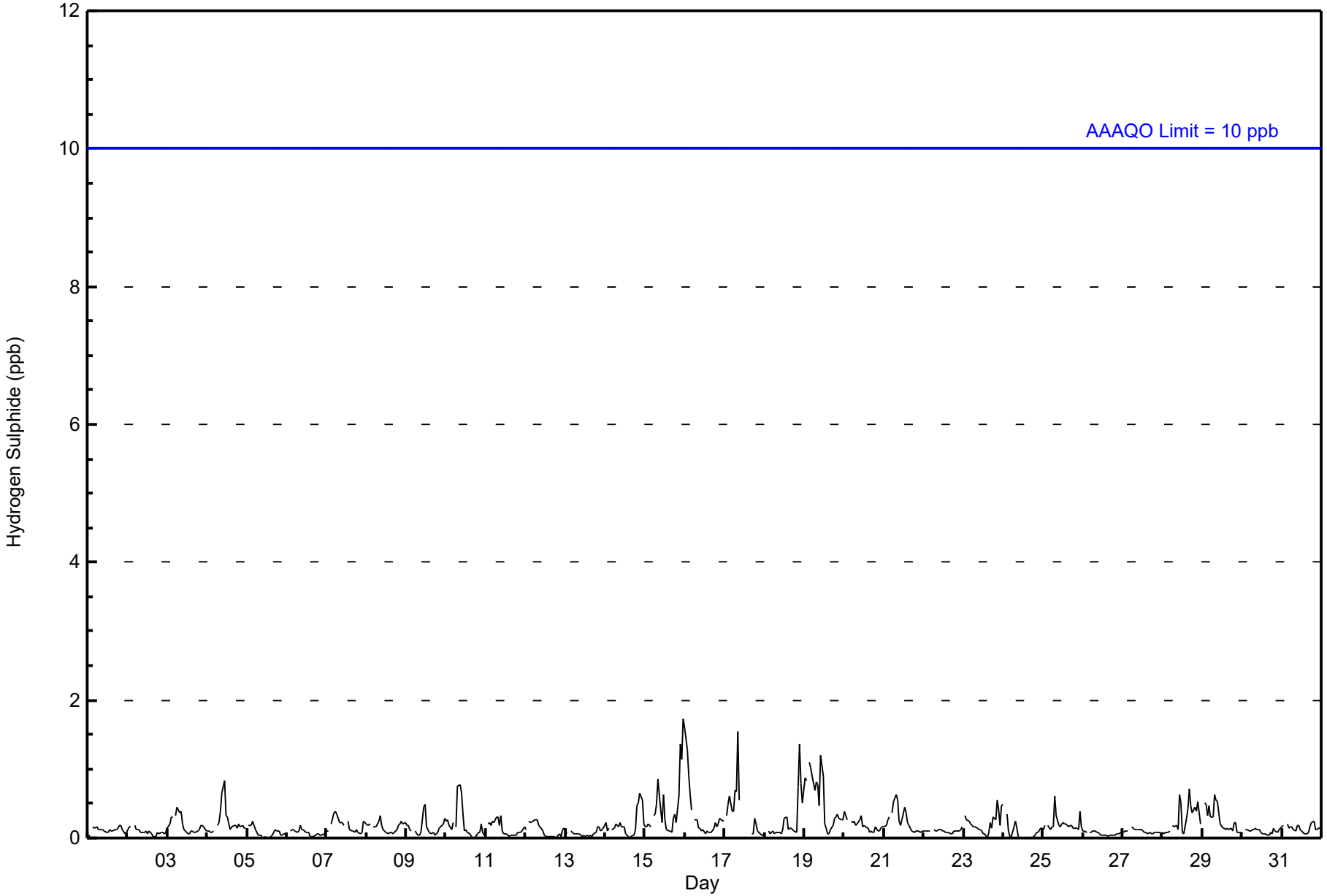
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Wapasu - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 705 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Wapasu - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 92 | 43 | 28 | 10 | 9 | 29 | 36 | 109 | 66 | 37 | 38 | 54 | 19 | 14 | 30 | 88 | 702 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 92 | 43 | 28 | 10 | 9 | 29 | 36 | 109 | 66 | 37 | 38 | 54 | 19 | 14 | 30 | 88 | 702 |

Total Number of Valid Hours: 702

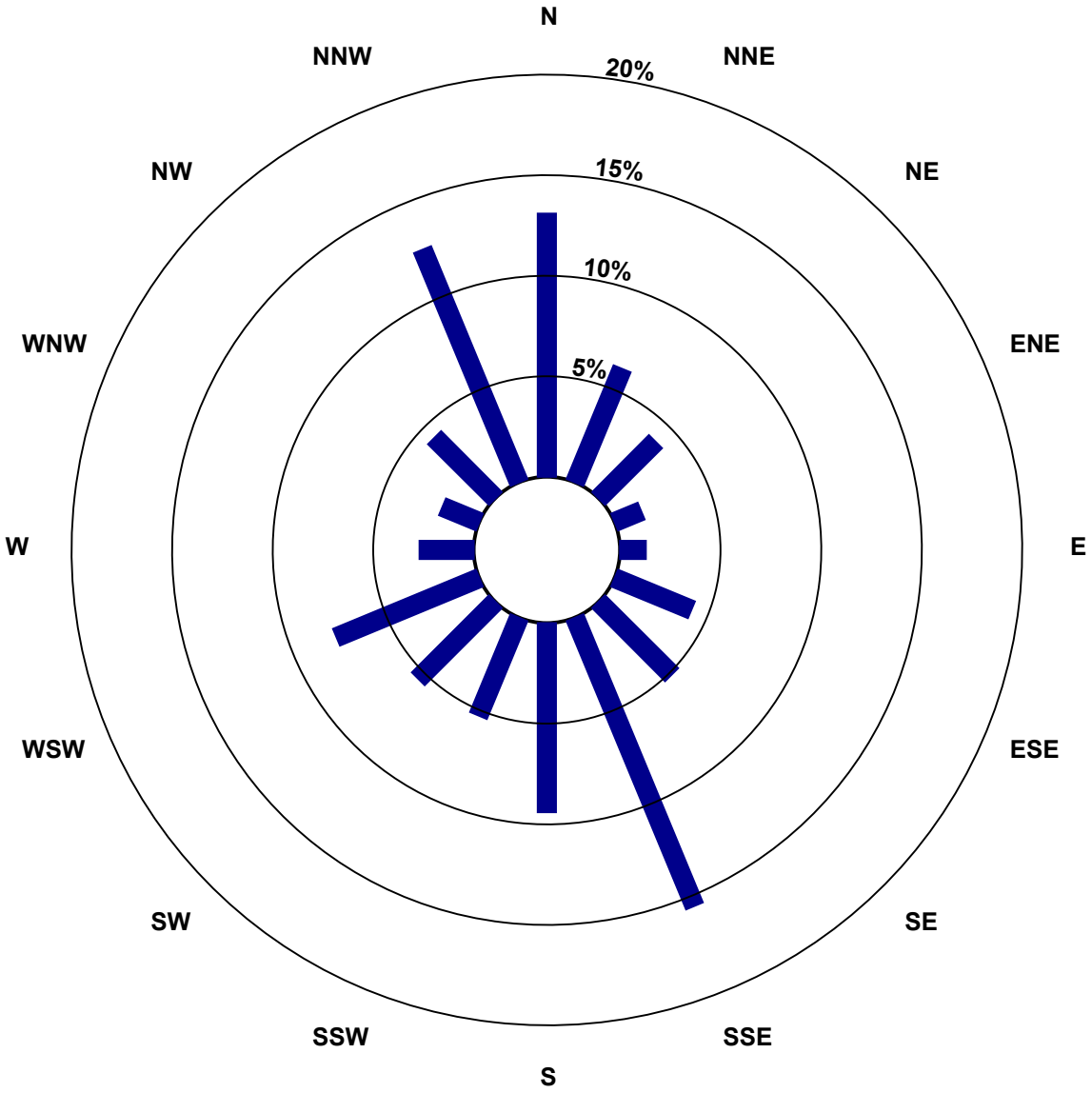
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Wapasu




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

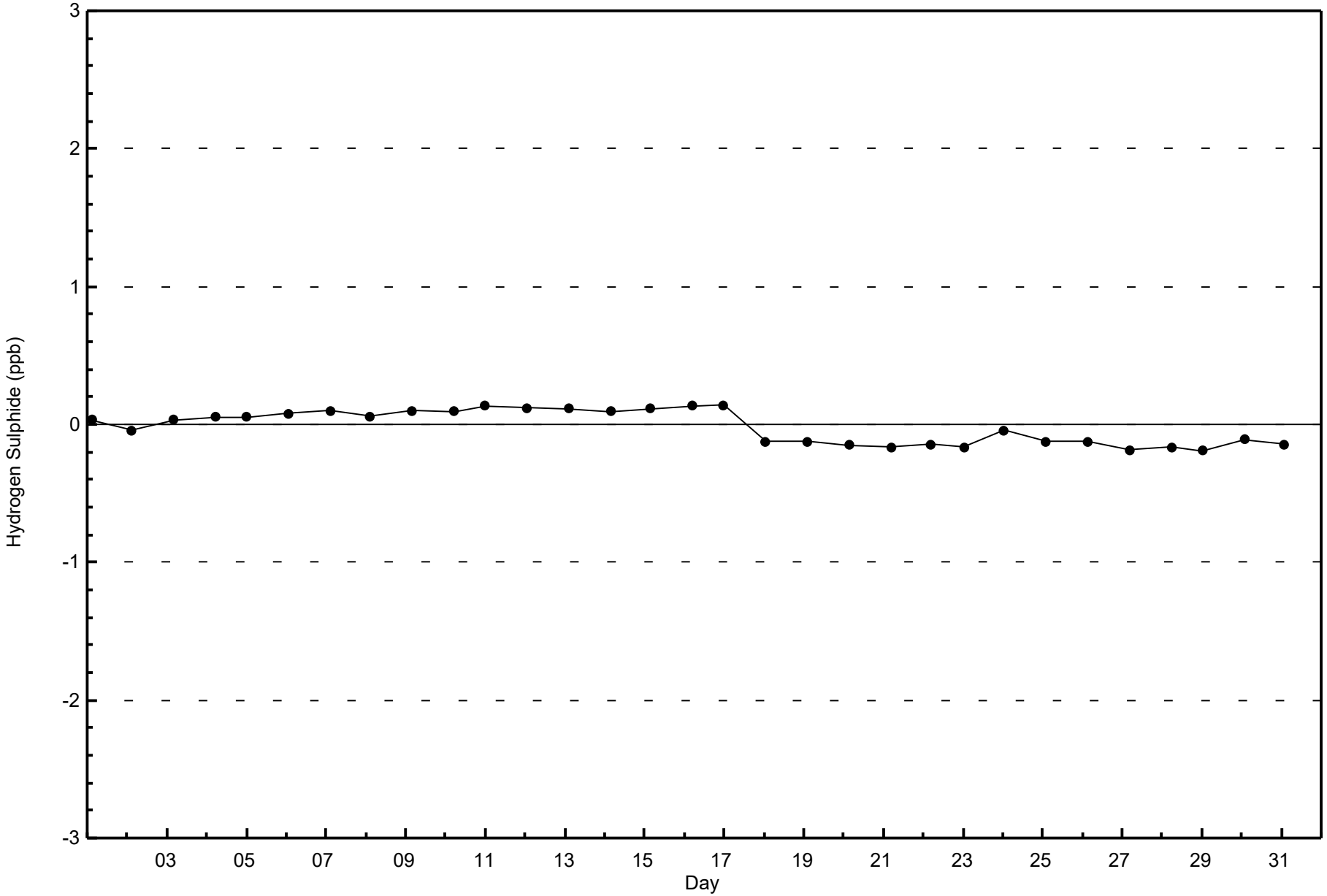
Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Wapasu - August 2026**

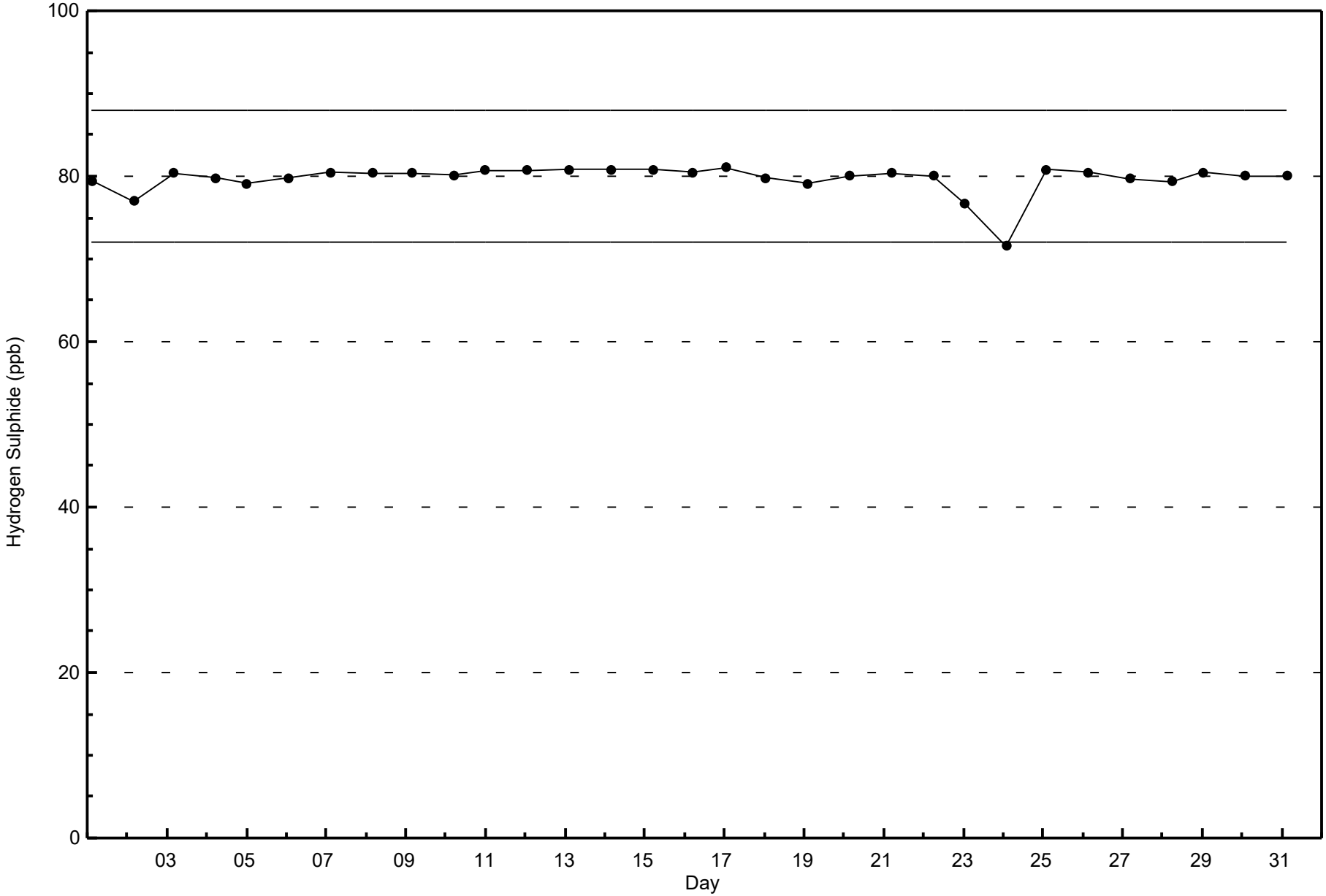


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Wapasu - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Hydrocarbons (THC) - ppm

## Wapasu - August 2026

Maximum Value: 2.9 ppm on Aug 20 04:00

Maximum Daily Average: 2.5 ppm on Aug 7

Minimum Value: 2.1 ppm on Aug 26 15:00

Minimum Daily Average: 2.1 ppm on Aug 26

Maximum Diurnal Average: 2.4 ppm at hour 4

Minimum Diurnal Average: 2.2 ppm at hour 16

Monthly Average: 2.30 ppm

Percentiles: $P_1$ = 2.1 $P_{10}$ = 2.1 $Q_1$ = 2.2 Median = 2.3 $Q_3$ = 2.4 $P_{90}$ = 2.6 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 |
| 2-Aug | 2.2 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 3-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.6 | 2.6 | 2.5 | 2.3 | 2.3 | 2.6 |
| 4-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 | 2.4 |
| 5-Aug | 2.2 | 2.1 | 2.3 | 2.5 | 2.4 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 |
| 6-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.1 | 2.3 |
| 7-Aug | 2.4 | Z | 2.5 | 2.6 | 2.8 | 2.8 | 2.7 | 2.6 | 2.4 | 2.5 | 2.4 | M | M | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.6 | 2.8 | 2.7 | 2.5 | 2.8 |
| 8-Aug | 2.6 | 2.6 | Z | 2.7 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.7 | 2.6 | 2.5 | 2.4 | 2.7 |
| 9-Aug | 2.6 | 2.6 | 2.5 | Z | 2.3 | 2.4 | 2.3 | 2.2 | 2.3 | 2.3 | 2.6 | 2.6 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.5 | 2.4 | 2.6 |
| 10-Aug | 2.5 | 2.5 | 2.4 | 2.3 | Z | 2.4 | 2.4 | 2.5 | 2.4 | 2.5 | 2.5 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 2.4 | 2.3 | 2.4 | 2.5 |
| 11-Aug | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | Z | 2.7 | 2.6 | 2.5 | 2.7 | C | C | C | C | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 2.4 | 2.7 |
| 12-Aug | Z | 2.5 | 2.7 | 2.6 | 2.6 | 2.6 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.3 | 2.7 |
| 13-Aug | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.4 | 2.4 | 2.5 | 2.2 | 2.5 |
| 14-Aug | 2.6 | 2.5 | Z | 2.5 | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.3 | 2.4 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.8 | 2.6 | 2.4 | 2.4 | 2.4 | 2.8 |
| 15-Aug | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.3 | 2.6 |
| 16-Aug | 2.6 | 2.5 | 2.5 | 2.7 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.6 | 2.8 | 2.7 | 2.8 | 2.4 | 2.8 |
| 17-Aug | 2.8 | 2.6 | 2.6 | 2.8 | 2.7 | Z | 2.6 | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.4 | 2.8 |
| 18-Aug | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 |
| 19-Aug | 2.4 | Z | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.6 | 2.4 | 2.3 | 2.3 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.4 | 2.7 |
| 20-Aug | 2.8 | 2.7 | Z | 2.9 | 2.8 | 2.7 | 2.6 | 2.4 | 2.4 | 2.4 | 2.6 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | 2.7 | 2.5 | 2.9 |
| 21-Aug | 2.7 | 2.7 | 2.7 | Z | 2.6 | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 2.7 |
| 22-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 |
| 23-Aug | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.5 | 2.6 | 2.5 | 2.6 | 2.4 | 2.2 | 2.5 | 2.4 | 2.6 |
| 24-Aug | Z | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.6 | 2.5 | 2.7 | 2.3 | 2.7 |
| 25-Aug | 2.4 | Z | 2.3 | 2.6 | 2.5 | 2.6 | 2.6 | 2.8 | 2.5 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 | 2.8 |
| 26-Aug | 2.3 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 27-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 28-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.4 |
| 29-Aug | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 30-Aug | Z | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.2 | 2.4 |
| 31-Aug | 2.7 | Z | 2.8 | 2.5 | 2.6 | 2.5 | 2.6 | 2.4 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.6 | 2.6 | 2.6 | 2.4 | 2.8 |
| | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | Diurnal Average | |
| | 2.8 | 2.7 | 2.8 | 2.9 | 2.8 | 2.8 | 2.7 | 2.8 | 2.6 | 2.7 | 2.6 | 2.6 | 2.4 | 2.3 | 2.3 | 2.4 | 2.5 | 2.5 | 2.6 | 2.5 | 2.8 | 2.8 | 2.8 | 2.8 | Diurnal Maximum | |

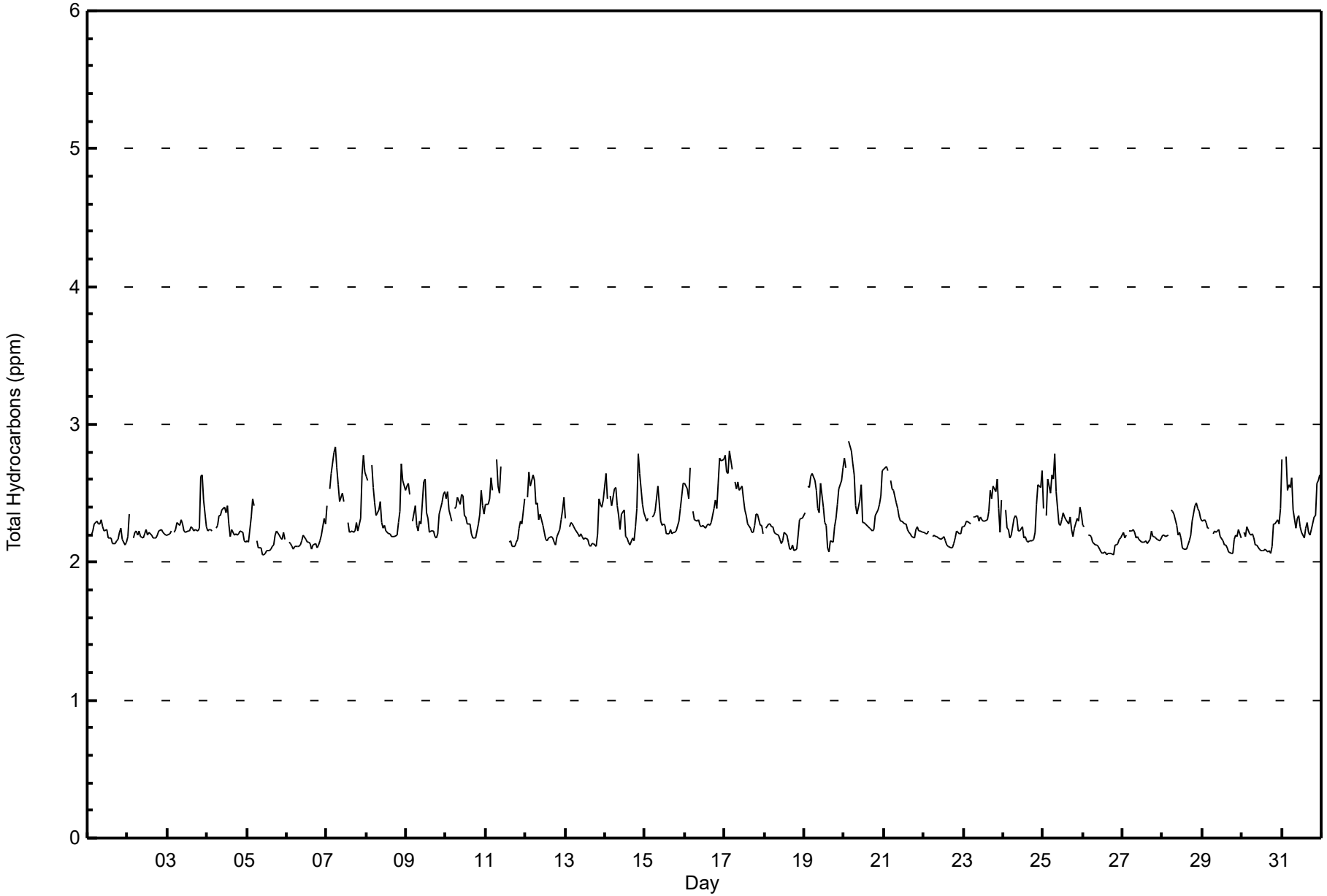
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Wapasu - August 2026**



# Total Hydrocarbons (THC) - ppm
## Wapasu - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 0 | 0.00 | 0.00 |
| 2.1 - 3.0 | 707 | 100.00 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Wapasu - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.1 - 3.0 | 86 | 45 | 27 | 11 | 9 | 30 | 33 | 110 | 66 | 38 | 37 | 55 | 21 | 16 | 33 | 87 | 704 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 86 | 45 | 27 | 11 | 9 | 30 | 33 | 110 | 66 | 38 | 37 | 55 | 21 | 16 | 33 | 87 | 704 |

Total Number of Valid Hours: 704

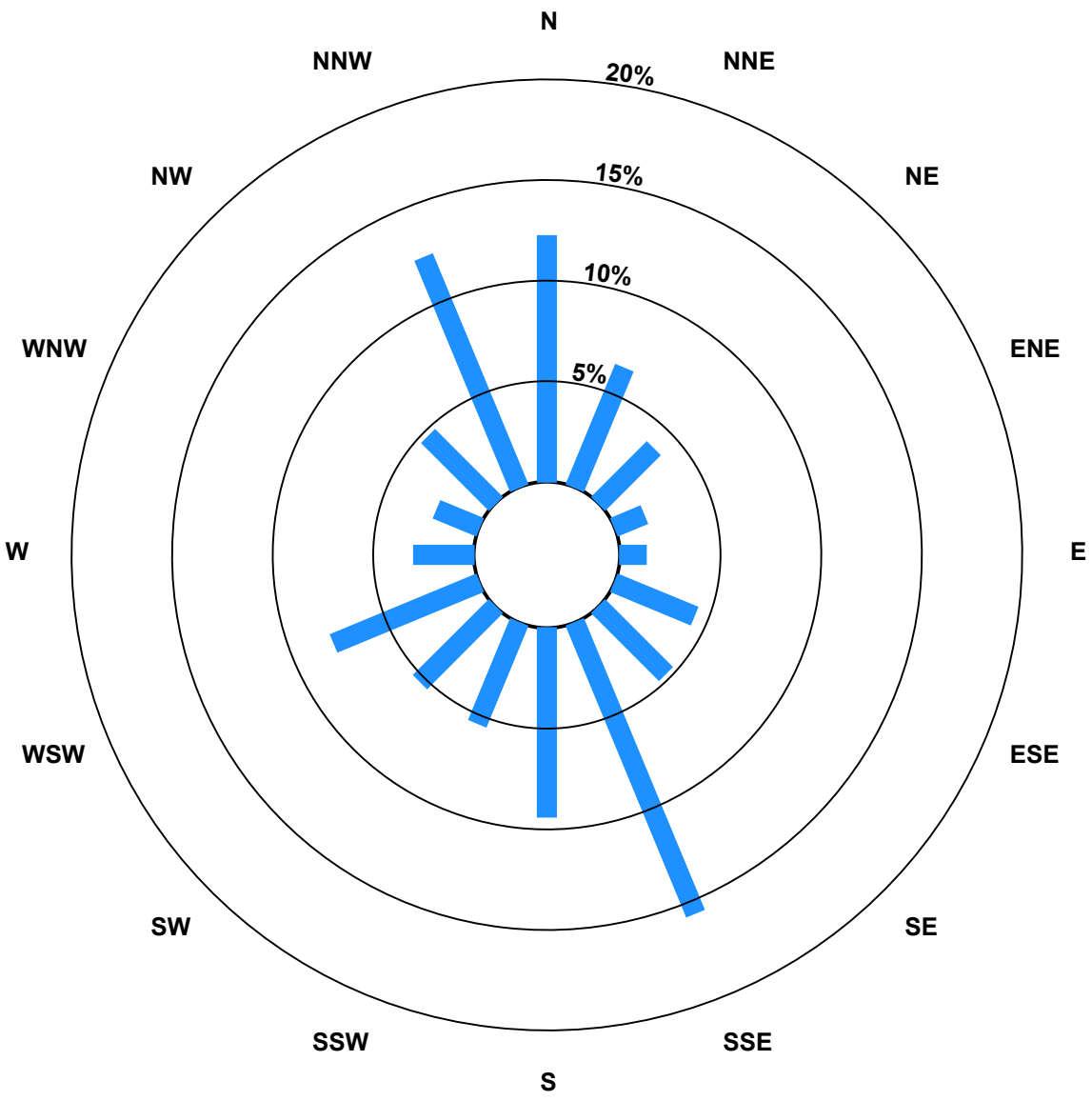
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Hydrocarbons (THC) - ppm**

**Wapasu**




**Classes (ppm)**

- 0 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

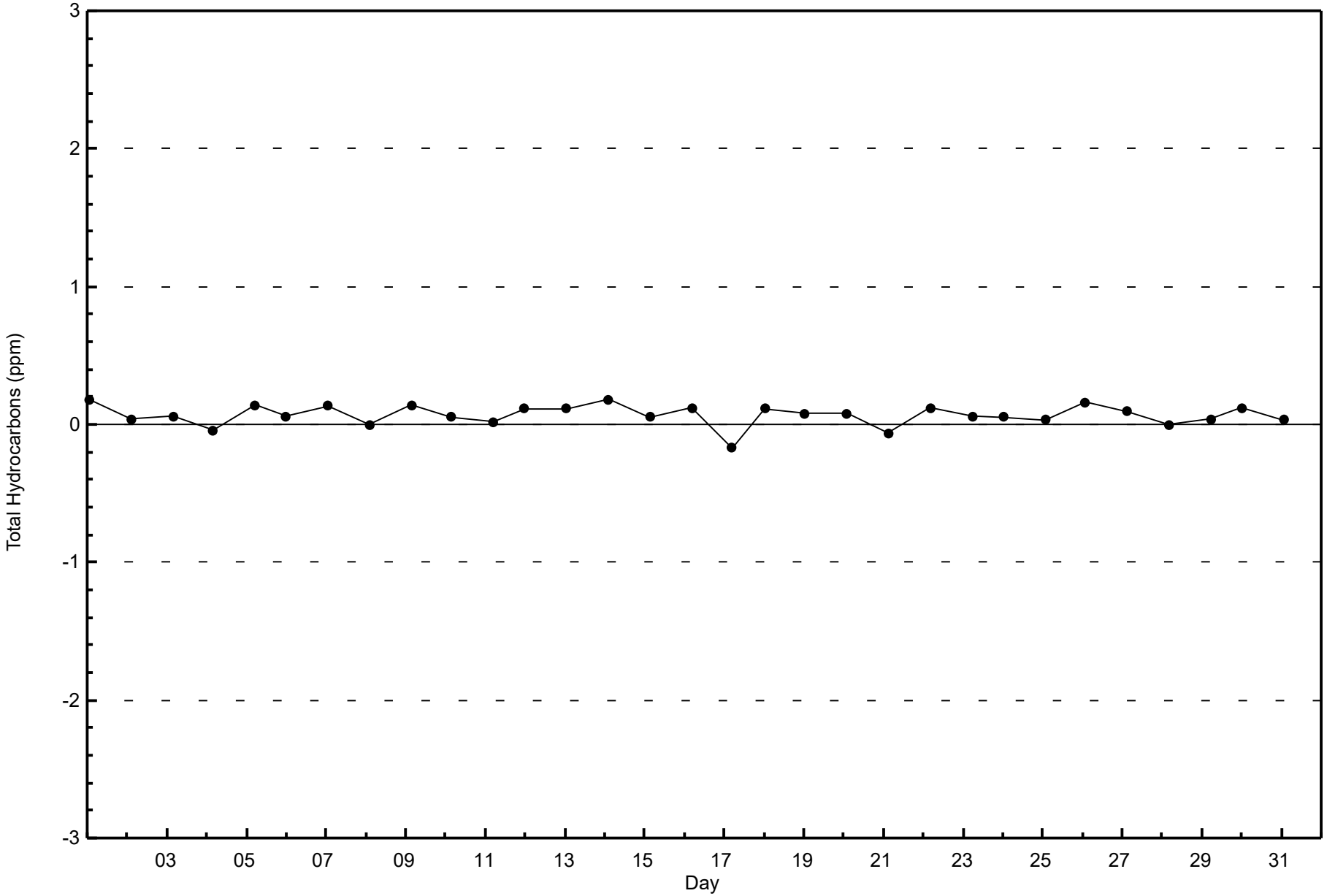
**Total Number of Valid Hours: 704**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Wapasu - August 2026**

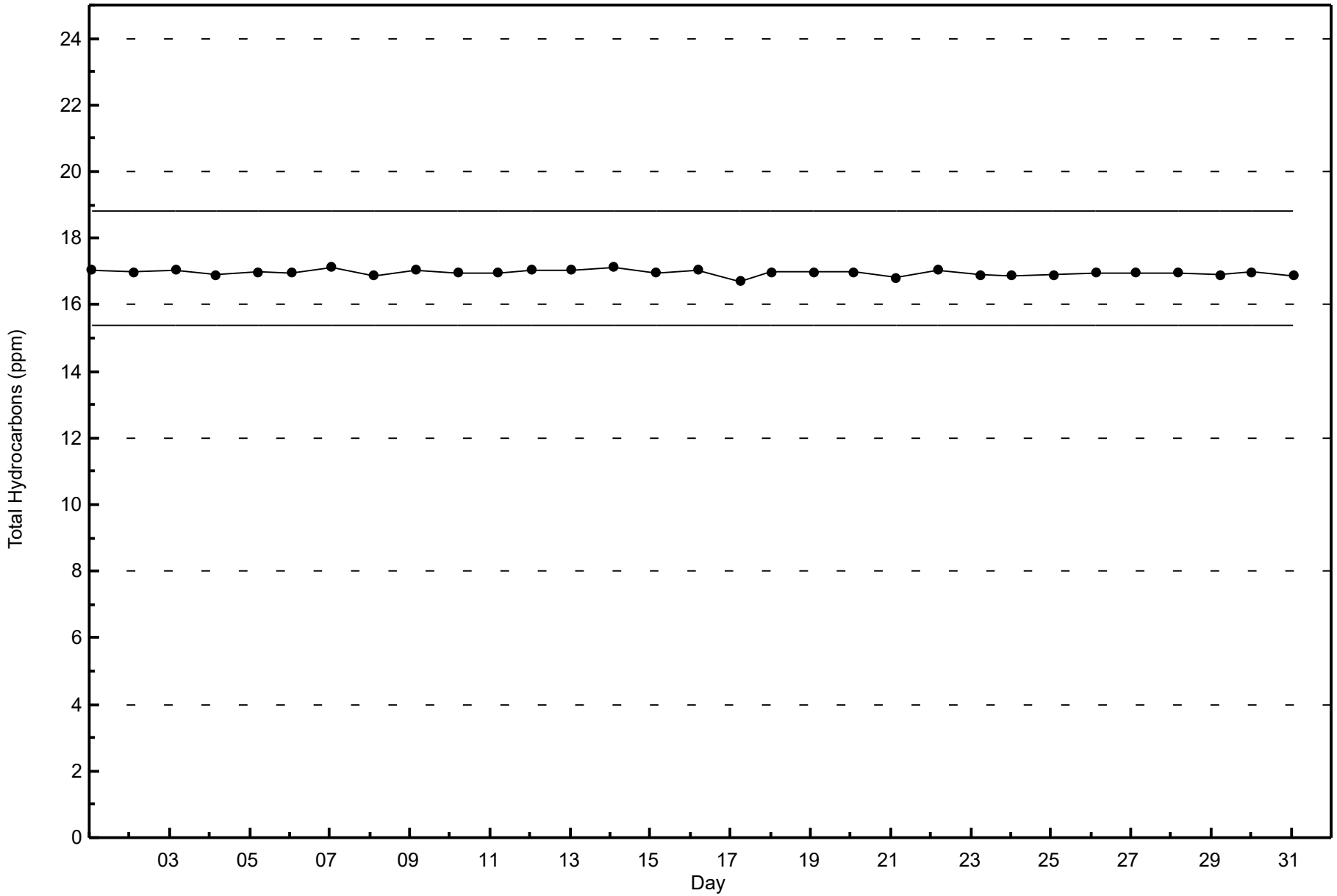


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Wapasu - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Wapasu - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 42.8 ppb on Aug 30 18:00
Maximum Daily Average: 33.5 ppb on Aug 27

Minimum Value: 0.6 ppb on Aug 21 04:00
Minimum Daily Average: 8.7 ppb on Aug 7
Maximum Diurnal Average: 30.2 ppb at hour 15
Minimum Diurnal Average: 11.5 ppb at hour 3
Monthly Average: 19.67 ppb
Percentiles: $P_1$ = 0.7 $P_{10}$ = 2.9 $Q_1$ = 12.0 Median = 20.8 $Q_3$ = 28.1 $P_{90}$ = 33.5 $P_{99}$ = 40.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 18.4 | 17.2 | 15.5 | Z | 13.3 | 12.0 | 12.5 | 12.8 | 12.2 | 13.2 | 17.4 | 21.7 | 26.7 | 29.1 | 30.2 | 31.8 | 30.6 | 27.9 | 26.8 | 26.0 | 28.0 | 39.4 | 36.2 | 34.5 | 23.2 | 39.4 |
| 2-Aug | 29.8 | 23.5 | 24.8 | 26.8 | Z | 27.0 | 25.0 | 20.8 | 19.2 | 17.0 | 13.9 | 14.8 | 17.5 | 17.6 | 20.1 | 21.9 | 23.6 | 25.4 | 22.7 | 17.9 | 21.4 | 21.2 | 21.0 | 20.2 | 21.4 | 29.8 |
| 3-Aug | 18.2 | 17.0 | 14.3 | 17.4 | 17.3 | Z | 13.5 | 14.9 | 17.3 | 19.6 | 22.4 | 23.8 | 25.7 | 26.3 | 25.8 | 25.4 | 26.6 | 26.1 | 25.2 | 20.0 | 5.1 | 1.7 | 3.1 | 9.2 | 18.1 | 26.6 |
| 4-Aug | Z | 13.9 | 14.8 | 17.4 | 18.7 | 17.9 | 18.3 | 20.2 | 23.4 | 26.3 | 29.8 | 32.0 | 34.0 | 35.6 | 31.9 | 24.0 | 20.8 | 21.6 | 17.2 | 15.8 | 17.9 | 24.4 | 24.2 | 22.4 | 22.7 | 35.6 |
| 5-Aug | 19.9 | Z | 11.3 | 8.5 | 8.0 | 13.9 | 16.9 | 18.7 | 21.7 | 26.1 | 27.1 | 28.9 | 29.9 | 30.1 | 28.2 | 26.3 | 22.8 | 16.7 | 13.8 | 16.6 | 17.7 | 16.7 | 17.3 | 21.1 | 19.9 | 30.1 |
| 6-Aug | 21.4 | 18.8 | Z | 13.8 | 12.2 | 10.3 | 11.3 | 11.2 | 11.9 | 14.5 | 16.3 | 21.7 | 23.1 | 21.8 | 22.2 | 22.1 | 22.6 | 22.8 | 20.5 | 18.2 | 18.5 | 14.2 | 9.6 | 11.7 | 17.0 | 23.1 |
| 7-Aug | 8.1 | 6.4 | 4.5 | Z | 1.7 | 2.2 | 4.3 | 6.0 | 11.8 | 12.8 | C | C | C | C | 18.0 | 17.8 | 16.9 | 15.3 | 14.0 | 15.8 | 6.9 | 2.1 | 0.6 | 0.7 | 8.7 | 18.0 |
| 8-Aug | 0.8 | 0.7 | 0.6 | 0.9 | Z | 4.5 | 7.6 | 6.9 | 8.4 | 12.5 | 14.9 | 16.2 | 17.1 | 20.1 | 19.9 | 18.9 | 20.3 | 22.0 | 19.7 | 13.9 | 7.6 | 3.2 | 1.2 | 2.2 | 10.4 | 22.0 |
| 9-Aug | 2.7 | 1.5 | 1.3 | 2.1 | 6.7 | Z | 15.6 | 18.7 | 18.2 | 18.1 | 10.6 | 18.9 | 23.9 | 28.2 | 28.0 | 28.6 | 25.4 | 29.4 | 28.4 | 20.4 | 7.2 | 3.0 | 1.2 | 2.0 | 14.8 | 29.4 |
| 10-Aug | Z | 2.2 | 6.0 | 8.6 | 5.3 | 7.9 | 7.1 | 13.4 | 22.0 | 21.6 | 22.7 | 27.5 | 28.1 | 32.1 | 33.4 | 35.2 | 33.9 | 33.8 | 32.0 | 20.8 | 8.8 | 3.3 | 3.0 | 3.2 | 17.9 | 35.2 |
| 11-Aug | 1.5 | Z | 1.2 | 0.8 | 0.8 | 1.0 | 1.9 | 15.0 | 20.8 | 18.8 | 28.4 | 30.4 | 29.8 | 31.5 | 31.2 | 31.3 | 31.0 | 29.5 | 28.3 | 23.2 | 18.3 | 15.4 | 14.0 | 4.1 | 17.7 | 31.5 |
| 12-Aug | 1.2 | 0.7 | Z | 1.8 | 2.5 | 7.3 | 7.8 | 8.6 | 13.3 | 15.4 | 17.2 | 19.7 | 25.0 | 24.4 | 24.0 | 22.0 | 21.5 | 21.2 | 22.8 | 12.5 | 4.3 | 4.2 | 1.5 | 0.8 | 12.2 | 25.0 |
| 13-Aug | 6.6 | 7.4 | 7.4 | Z | 8.9 | 6.2 | 9.1 | 9.9 | 15.3 | 15.5 | 18.6 | 19.5 | 19.3 | 20.8 | 21.7 | 24.2 | 23.3 | 21.7 | 19.6 | 10.7 | 2.9 | 1.5 | 1.0 | 1.1 | 12.7 | 24.2 |
| 14-Aug | 1.3 | 2.1 | 2.2 | 2.2 | Z | 3.4 | 2.9 | 5.7 | 11.2 | 20.5 | 18.7 | 20.0 | 25.3 | 30.7 | 39.9 | 36.7 | 34.6 | 35.1 | 28.3 | 19.2 | 5.5 | 7.6 | 15.0 | 14.9 | 16.7 | 39.9 |
| 15-Aug | 13.1 | 15.0 | 14.2 | 13.5 | 9.6 | Z | 11.9 | 13.2 | 16.2 | 25.4 | 26.6 | 31.5 | 35.3 | 34.2 | 34.1 | 31.6 | 32.9 | 31.4 | 25.8 | 24.9 | 20.1 | 17.3 | 13.4 | 10.1 | 21.8 | 35.3 |
| 16-Aug | Z | 13.4 | 14.9 | 8.0 | 10.5 | 14.2 | 18.8 | 21.7 | 24.5 | 29.2 | 34.5 | 32.7 | 28.8 | 28.7 | 29.9 | 30.8 | 27.7 | 22.7 | 21.4 | 20.8 | 10.2 | 2.7 | 1.3 | 0.7 | 19.5 | 34.5 |
| 17-Aug | 0.7 | Z | 4.1 | 1.3 | 0.7 | 1.0 | 5.9 | 8.8 | 16.4 | 24.9 | 25.4 | 28.7 | 31.4 | 32.2 | 34.5 | 35.2 | 32.7 | 34.6 | 35.2 | 28.4 | 24.0 | 24.9 | 25.3 | 25.4 | 20.9 | 35.2 |
| 18-Aug | 23.7 | 24.4 | Z | 22.0 | 21.7 | 23.4 | 22.9 | 23.0 | 22.9 | 23.3 | 24.8 | 28.7 | 32.8 | 37.0 | 37.0 | 35.5 | 33.0 | 30.4 | 31.7 | 27.7 | 25.3 | 23.9 | 19.7 | 16.0 | 26.6 | 37.0 |
| 19-Aug | 12.2 | 8.9 | 7.7 | Z | 6.3 | 5.9 | 8.4 | 9.0 | 12.1 | 12.7 | 12.3 | 21.8 | 26.7 | 30.8 | 31.6 | 28.7 | 22.9 | 19.7 | 16.1 | 16.1 | 9.4 | 4.6 | 2.5 | 2.7 | 14.3 | 31.6 |
| 20-Aug | 1.4 | 1.2 | 1.1 | 1.0 | Z | 1.7 | 2.9 | 10.1 | 18.4 | 17.0 | 17.1 | 23.7 | 25.0 | 25.3 | 26.3 | 28.0 | 28.8 | 29.9 | 27.6 | 17.3 | 10.4 | 5.2 | 3.0 | 1.1 | 14.1 | 29.9 |
| 21-Aug | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | Z | 3.8 | 11.2 | 22.5 | 29.5 | 30.8 | 32.6 | 32.9 | 36.7 | 36.3 | 38.3 | 35.7 | 33.5 | 30.1 | 25.5 | 25.5 | 26.3 | 25.0 | 24.2 | 21.9 | 38.3 |
| 22-Aug | Z | 25.4 | 25.1 | 26.3 | 26.1 | 24.1 | 22.7 | 22.9 | 23.5 | 27.6 | 27.6 | 29.1 | 32.8 | 37.7 | 39.9 | 39.9 | 40.0 | 41.9 | 37.6 | 34.2 | 36.5 | 36.8 | 33.1 | 29.3 | 31.3 | 41.9 |
| 23-Aug | 26.7 | Z | 22.7 | 21.5 | 20.4 | 17.7 | 16.8 | 16.6 | 18.3 | 20.8 | 22.5 | 21.4 | 25.2 | 28.7 | 29.3 | 28.3 | 27.7 | 27.5 | 22.1 | 12.5 | 3.5 | 7.2 | 12.8 | 3.4 | 19.7 | 29.3 |
| 24-Aug | 2.3 | 9.4 | Z | 15.9 | 20.7 | 18.8 | 15.4 | 14.2 | 17.9 | 24.0 | 26.7 | 28.9 | 29.9 | 29.1 | 29.3 | 28.4 | 28.3 | 29.3 | 30.9 | 22.0 | 8.9 | 4.4 | 1.7 | 1.2 | 19.0 | 30.9 |
| 25-Aug | 1.1 | 1.9 | 5.0 | Z | 2.1 | 1.0 | 1.2 | 4.8 | 13.1 | 21.3 | 24.2 | 26.5 | 28.3 | 29.5 | 29.3 | 28.2 | 28.5 | 26.3 | 21.9 | 13.5 | 11.2 | 15.0 | 10.3 | 17.7 | 15.7 | 29.5 |
| 26-Aug | 21.3 | 20.9 | 21.1 | 20.8 | Z | 22.6 | 22.5 | 22.4 | 24.6 | 28.8 | 34.5 | 38.0 | 38.7 | 41.7 | 42.1 | 42.1 | 41.4 | 40.6 | 38.7 | 35.3 | 35.6 | 35.0 | 31.9 | 31.7 | 31.8 | 42.1 |
| 27-Aug | 32.4 | 33.5 | 32.5 | 31.0 | 29.9 | Z | 28.1 | 27.8 | 29.2 | 31.6 | 34.4 | 38.1 | 36.0 | 34.4 | 34.6 | 34.2 | 30.2 | 28.6 | 33.0 | 36.2 | 39.3 | 39.6 | 38.4 | 37.2 | 33.5 | 39.6 |
| 28-Aug | Z | 34.9 | 32.5 | 31.2 | 28.7 | 21.8 | 23.3 | 26.0 | 23.8 | 27.2 | 26.3 | 29.4 | 38.2 | 36.1 | 36.0 | 33.5 | 30.1 | 26.2 | 17.8 | 10.7 | 7.8 | 7.7 | 7.9 | 11.6 | 24.7 | 38.2 |
| 29-Aug | 12.0 | Z | 11.4 | 13.5 | 13.8 | 13.4 | 14.3 | 11.4 | 11.6 | 14.4 | 18.7 | 20.7 | 21.8 | 22.5 | 23.9 | 24.3 | 23.9 | 23.5 | 23.2 | 18.9 | 17.3 | 18.1 | 19.1 | 19.9 | 17.9 | 24.3 |
| 30-Aug | 19.8 | 20.8 | Z | 21.7 | 21.4 | 21.0 | 20.1 | 20.1 | 24.2 | 25.1 | 31.0 | 32.0 | 32.4 | 34.9 | 36.2 | 39.8 | 42.4 | 42.8 | 31.8 | 18.5 | 18.0 | 17.3 | 15.7 | 10.0 | 25.9 | 42.8 |
| 31-Aug | 5.0 | 2.7 | 1.3 | Z | 3.2 | 3.3 | 4.4 | 12.1 | 16.8 | 15.3 | 16.0 | 20.1 | 22.5 | 25.5 | 33.0 | 36.6 | 36.8 | 33.7 | 28.1 | 18.9 | 13.9 | 8.5 | 2.4 | 1.8 | 15.7 | 36.8 |
| | 11.6 | 12.5 | 11.5 | 13.1 | 12.0 | 11.7 | 12.8 | 14.8 | 18.2 | 21.0 | 23.1 | 26.0 | 28.1 | 29.8 | 30.2 | 30.0 | 28.9 | 28.1 | 25.6 | 20.4 | 15.7 | 14.6 | 13.3 | 12.7 | Diurnal Average | |
| | 32.4 | 34.9 | 32.5 | 31.2 | 29.9 | 27.0 | 28.1 | 27.8 | 29.2 | 31.6 | 34.5 | 38.1 | 38.7 | 41.7 | 42.1 | 42.1 | 42.4 | 42.8 | 38.7 | 36.2 | 39.3 | 39.6 | 38.4 | 37.2 | Diurnal Maximum | |

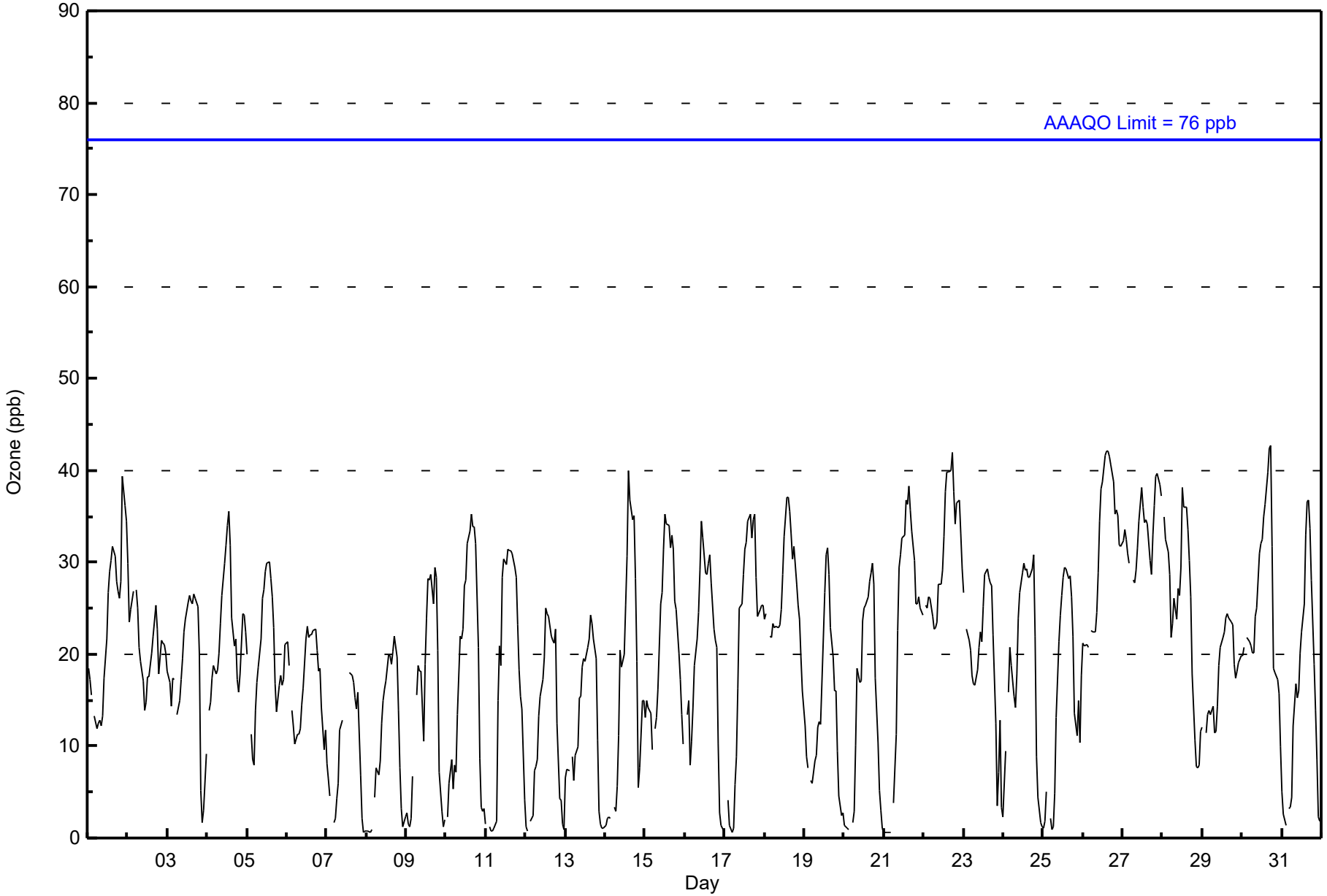
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Wapasu - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 351 | 49.51 | 49.51 |
| 21 - 50 | 358 | 50.49 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Wapasu - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 44 | 22 | 15 | 8 | 9 | 25 | 21 | 67 | 22 | 11 | 16 | 14 | 9 | 5 | 21 | 42 | 351 |
| 21 - 50 | 46 | 22 | 13 | 2 | 1 | 5 | 14 | 42 | 45 | 27 | 21 | 40 | 10 | 10 | 12 | 45 | 355 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 90 | 44 | 28 | 10 | 10 | 30 | 35 | 109 | 67 | 38 | 37 | 54 | 19 | 15 | 33 | 87 | 706 |

Total Number of Valid Hours: 706

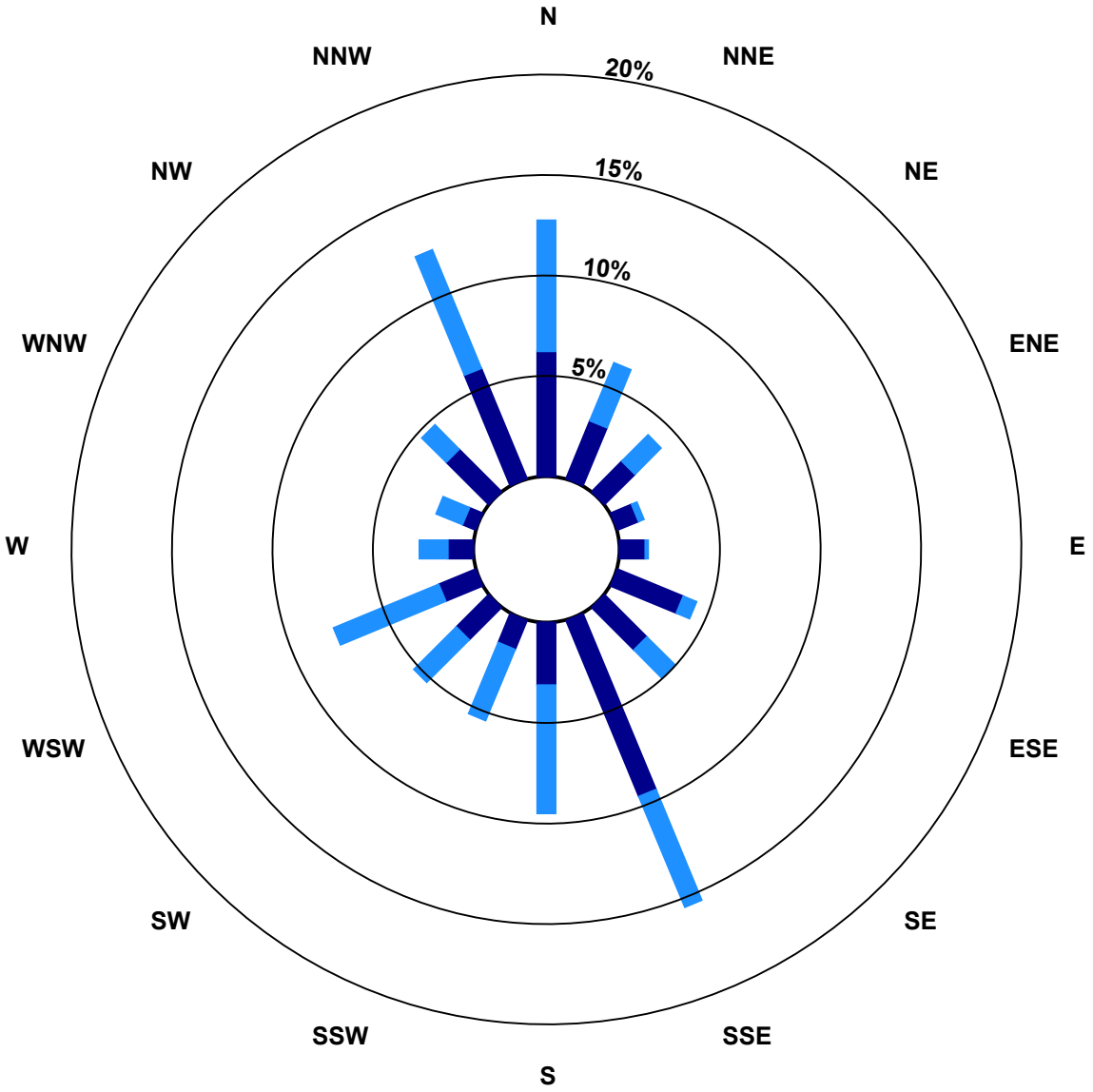
Total Number of Hours: 744

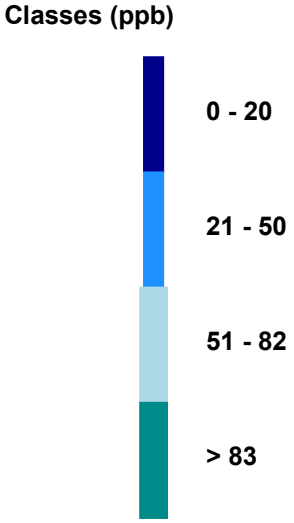
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Ozone ($O_3$) - ppb

## Wapasu



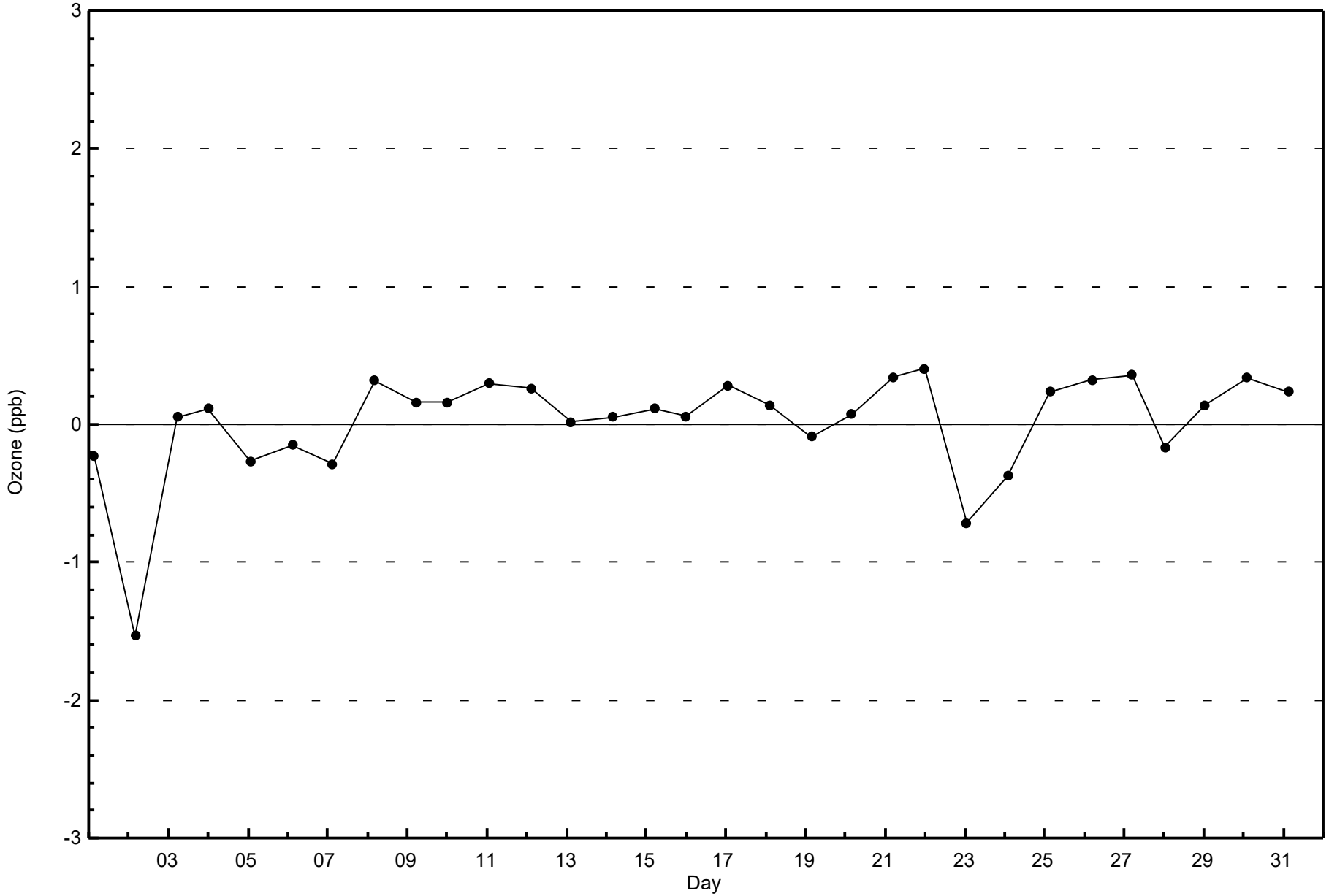

Total Number of Valid Hours: 706

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Wapasu - August 2026**

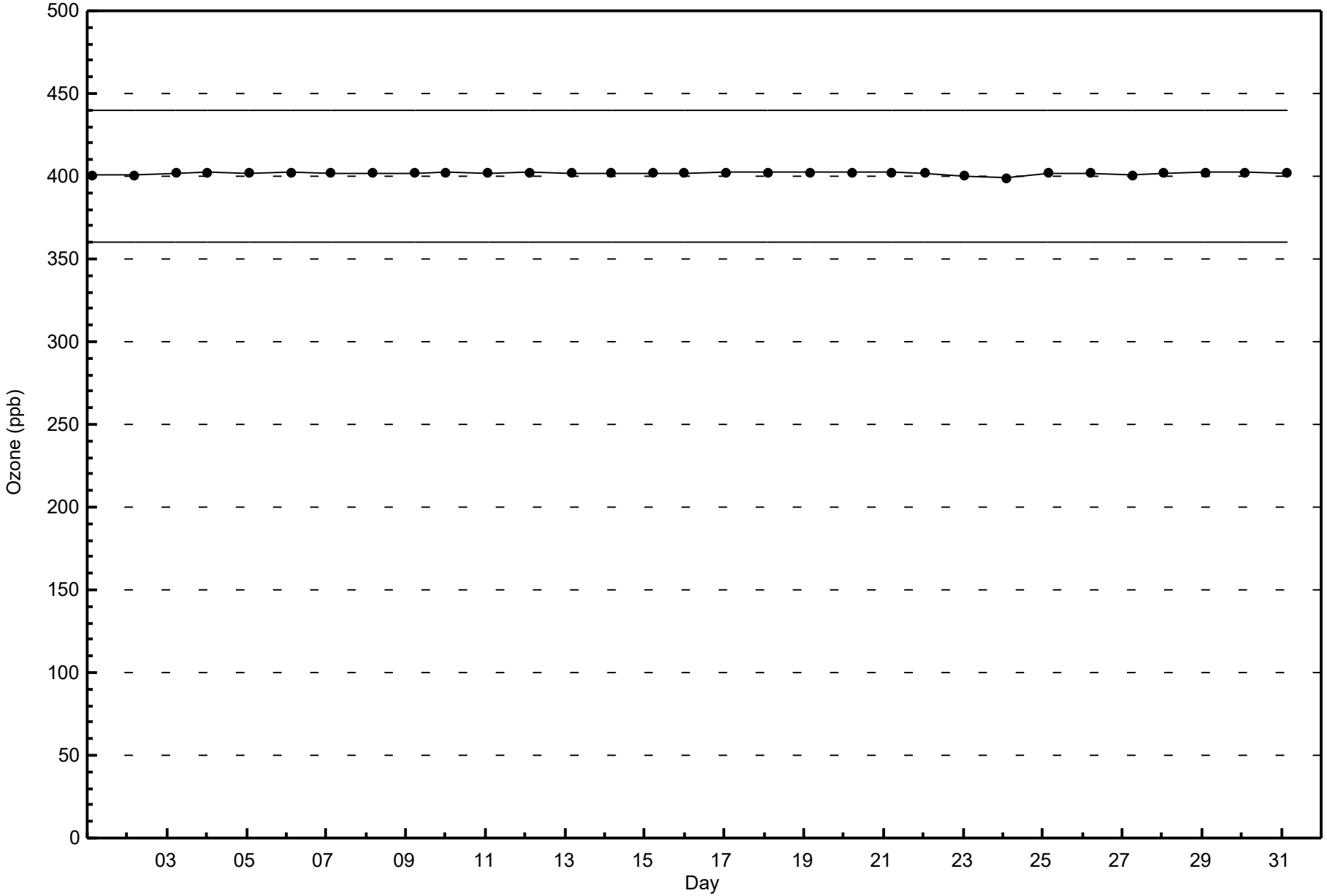


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Wapasu - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Wapasu - August 2026

Maximum Value: 24.4 ppb on Aug 25 08:00

Maximum Daily Average: 2.6 ppb on Aug 21

Minimum Value: 0.0 ppb on Aug 1 01:00

Minimum Daily Average: 0.0 ppb on Aug 27

Maximum Diurnal Average: 2.5 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 22

Monthly Average: 0.69 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.5 $P_{90}$ = 1.9 $P_{99}$ = 8.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 2-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.6 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 3-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 2.3 | 1.7 | 1.2 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 0.6 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.3 |
| 4-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.7 | 1.4 | 1.9 | 1.5 | 0.6 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.9 |
| 5-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.3 | 0.9 | 0.5 | 0.9 | 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 |
| 7-Aug | 0.0 | 0.0 | 3.1 | 5.6 | 8.6 | Z | 7.5 | 6.5 | 5.5 | 5.8 | 2.3 | M | M | 2.4 | 0.0 | 0.0 | 0.0 | 0.7 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 2.3 | 8.6 |
| 8-Aug | Z | 0.4 | 0.4 | 0.5 | 0.2 | 1.1 | 0.8 | 4.1 | 6.6 | 2.3 | 1.7 | 1.6 | 1.1 | 0.9 | 0.9 | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 | 0.1 | 0.1 | 0.6 | 0.2 | 1.1 | 6.6 |
| 9-Aug | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 5.4 | 23.7 | 9.2 | 2.5 | 1.8 | 1.0 | 0.9 | 0.9 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 2.0 | 23.7 |
| 10-Aug | 1.3 | 1.3 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 2.4 | 1.9 | 3.7 | 5.1 | 1.4 | 0.8 | 0.2 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 5.1 |
| 11-Aug | 0.4 | 1.9 | 4.7 | Z | 9.4 | 6.2 | 7.2 | 5.7 | 4.0 | 7.1 | 1.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 2.1 | 9.4 |
| 12-Aug | 0.1 | 0.4 | 0.3 | 0.5 | Z | 0.2 | 0.6 | 1.0 | 0.9 | 1.1 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 3.7 | 0.4 | 3.7 |
| 13-Aug | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 1.2 |
| 14-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.7 | 1.8 | 0.5 | 2.4 | 2.9 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 2.9 |
| 15-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.7 | 2.3 | 3.7 | 4.3 | 1.5 | 1.1 | 0.6 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 4.3 |
| 16-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.3 | 0.1 | 0.1 | 0.8 | 1.4 | 0.2 | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 1.4 |
| 17-Aug | 2.0 | 0.7 | 0.4 | Z | 1.6 | 3.8 | 3.4 | 7.0 | 5.2 | 1.0 | 1.4 | 0.8 | 0.9 | 0.7 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 7.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.4 | 0.4 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 1.6 | 2.1 | 2.4 | 1.7 | 3.8 | 1.7 | 2.4 | 1.5 | 0.0 | 0.0 | 0.2 | 0.2 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 3.8 |
| 20-Aug | Z | 3.8 | 2.6 | 2.9 | 8.7 | 8.0 | 4.3 | 1.0 | 1.5 | C | C | C | C | C | C | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 8.7 |
| 21-Aug | 1.3 | Z | 13.1 | 11.9 | 7.2 | 4.0 | 8.8 | 7.2 | 2.3 | 0.8 | 0.5 | 0.5 | 0.6 | 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 13.1 |
| 22-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 23-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 2.6 | 0.3 | 2.6 |
| 24-Aug | 2.3 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 1.1 | 3.0 | 3.0 | 0.5 | 0.4 | 0.9 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 1.7 | 0.6 | 3.0 |
| 25-Aug | 3.2 | 3.5 | 0.0 | 0.0 | 0.0 | Z | 1.1 | 24.4 | 6.0 | 0.2 | 0.2 | 1.9 | 2.1 | 1.1 | 0.8 | 0.6 | 1.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 2.1 | 24.4 |
| 26-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 27-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 2.1 | 2.2 | 0.8 | 0.8 | 0.8 | 0.6 | 0.6 | 0.4 | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.2 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.3 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | Z | 0.6 | 0.5 | 0.3 | 3.2 | 2.4 | 0.6 | 0.1 | 0.0 | 0.6 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 3.2 |
| | 0.5 | 0.5 | 0.9 | 0.8 | 1.4 | 1.0 | 1.4 | 2.5 | 1.7 | 1.3 | 1.7 | 0.9 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | Diurnal Average | |
| | 3.2 | 3.8 | 13.1 | 11.9 | 9.4 | 8.0 | 8.8 | 24.4 | 6.6 | 7.1 | 23.7 | 9.2 | 2.5 | 2.4 | 1.0 | 0.9 | 1.0 | 0.8 | 1.4 | 0.5 | 0.8 | 0.1 | 1.2 | 3.7 | Diurnal Maximum | |

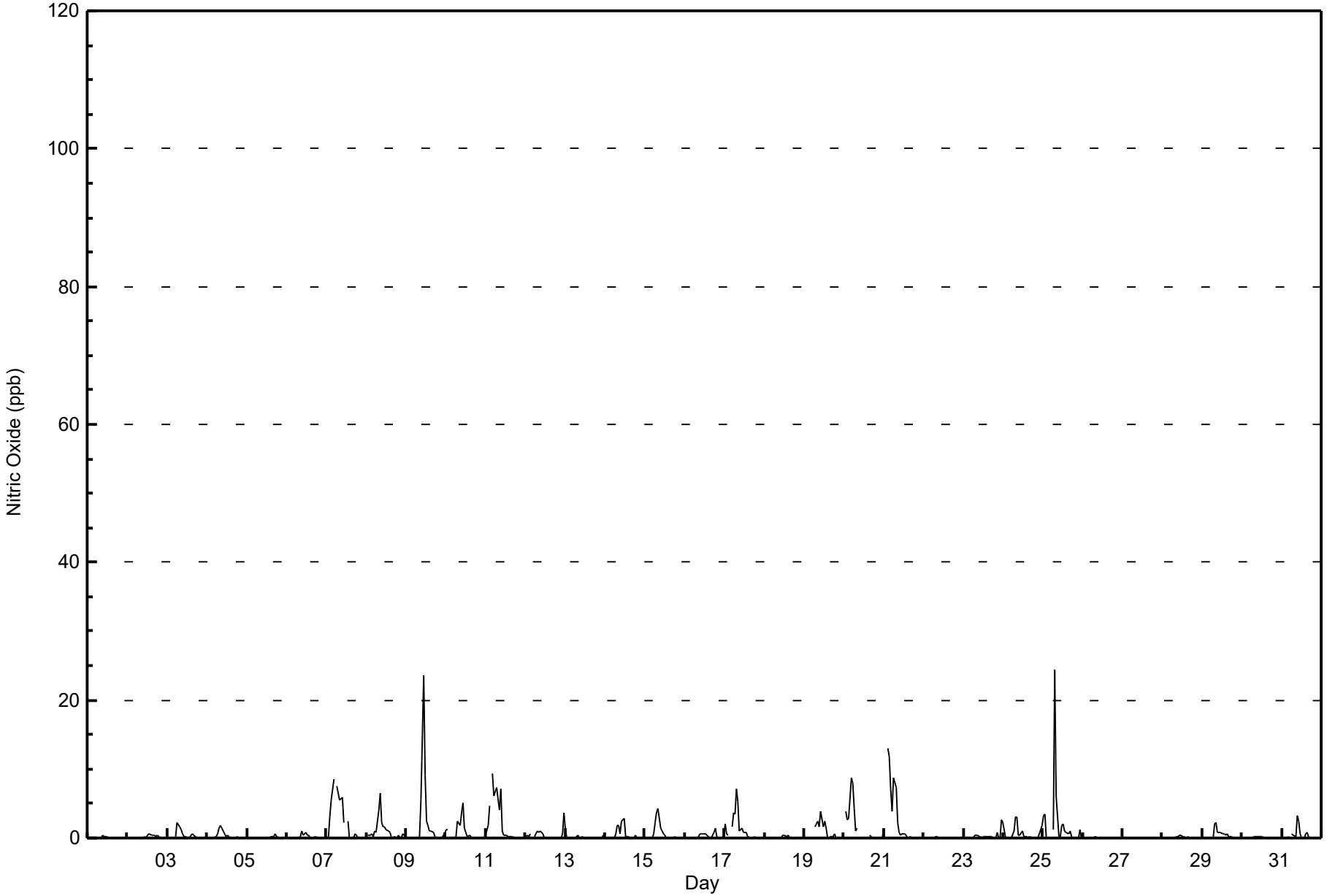
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Wapasu - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 703 | 99.72 | 99.72 |
| 21 - 40 | 2 | 0.28 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Wapasu - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 89 | 43 | 28 | 10 | 10 | 30 | 34 | 109 | 67 | 37 | 38 | 52 | 21 | 16 | 33 | 86 | 703 |
| 21 - 40 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 89 | 44 | 28 | 10 | 10 | 30 | 34 | 109 | 67 | 37 | 38 | 52 | 21 | 16 | 33 | 87 | 705 |

Total Number of Valid Hours: 705

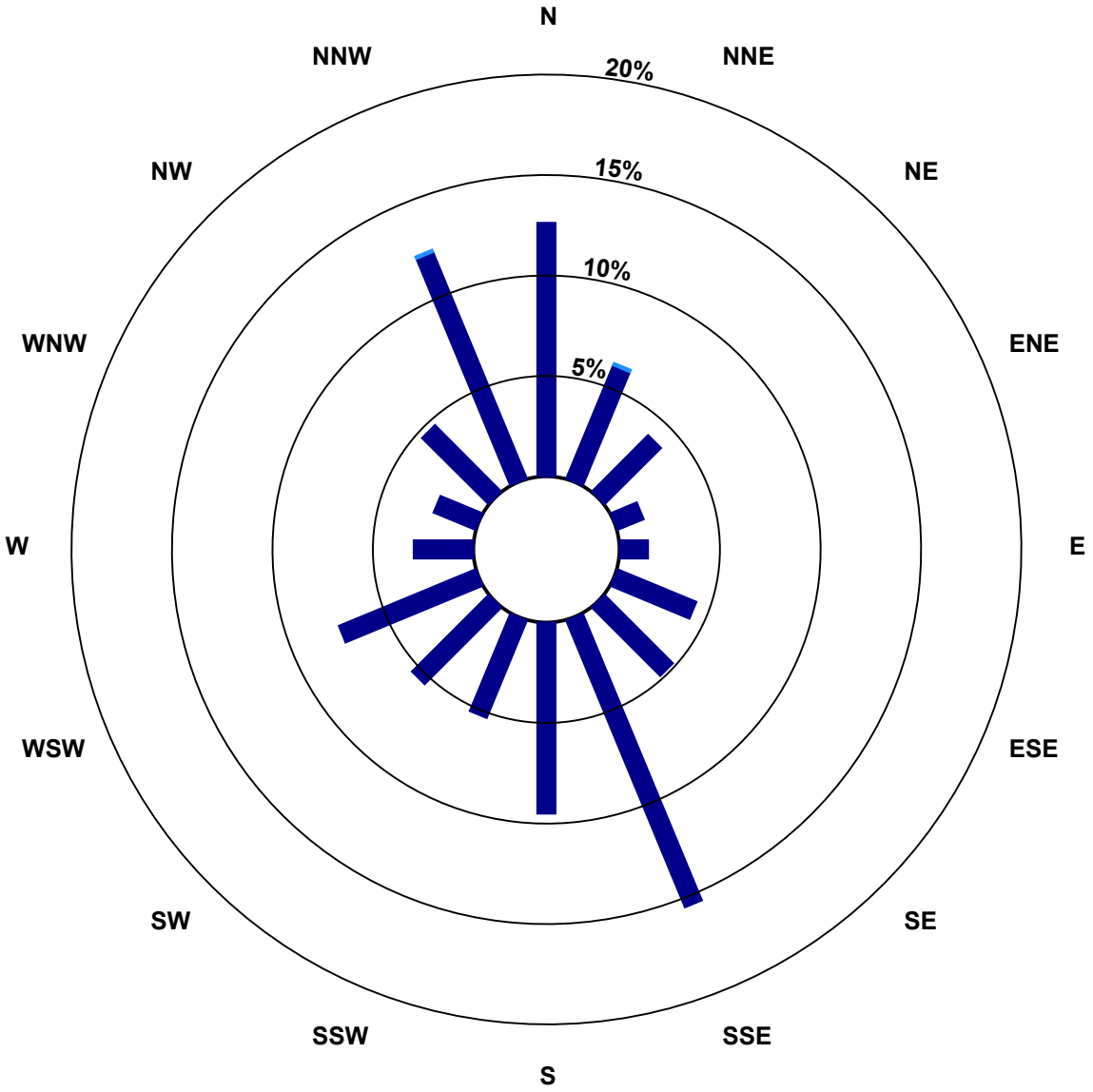
Total Number of Hours: 744

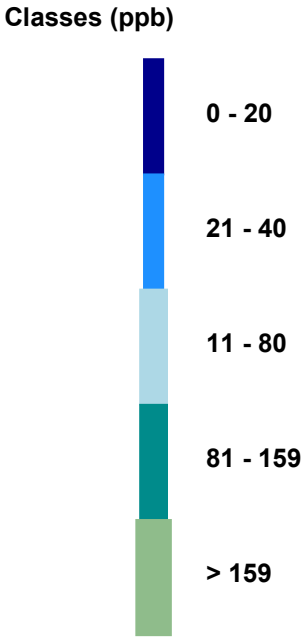
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Wapasu



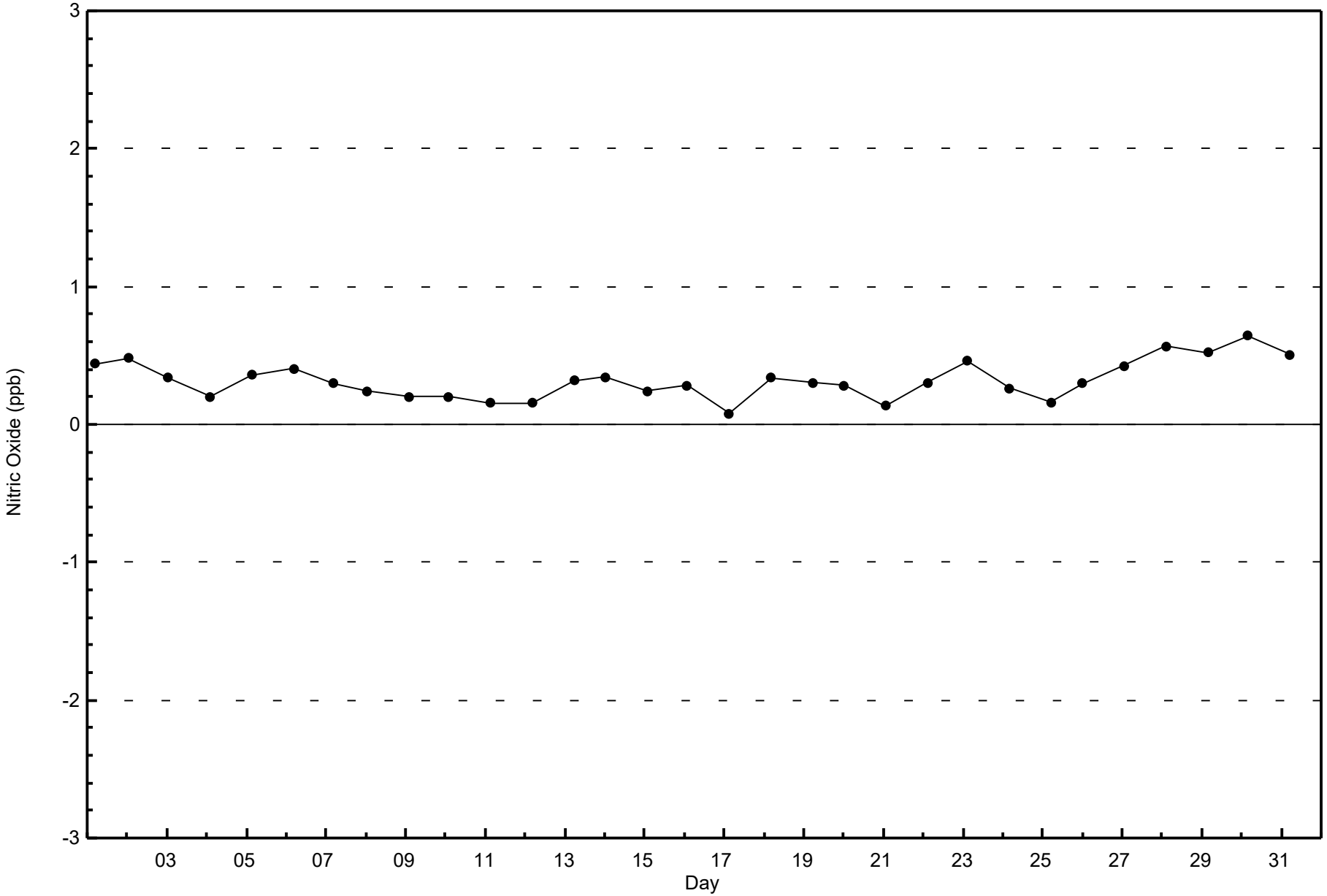

Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Wapasu - August 2026**

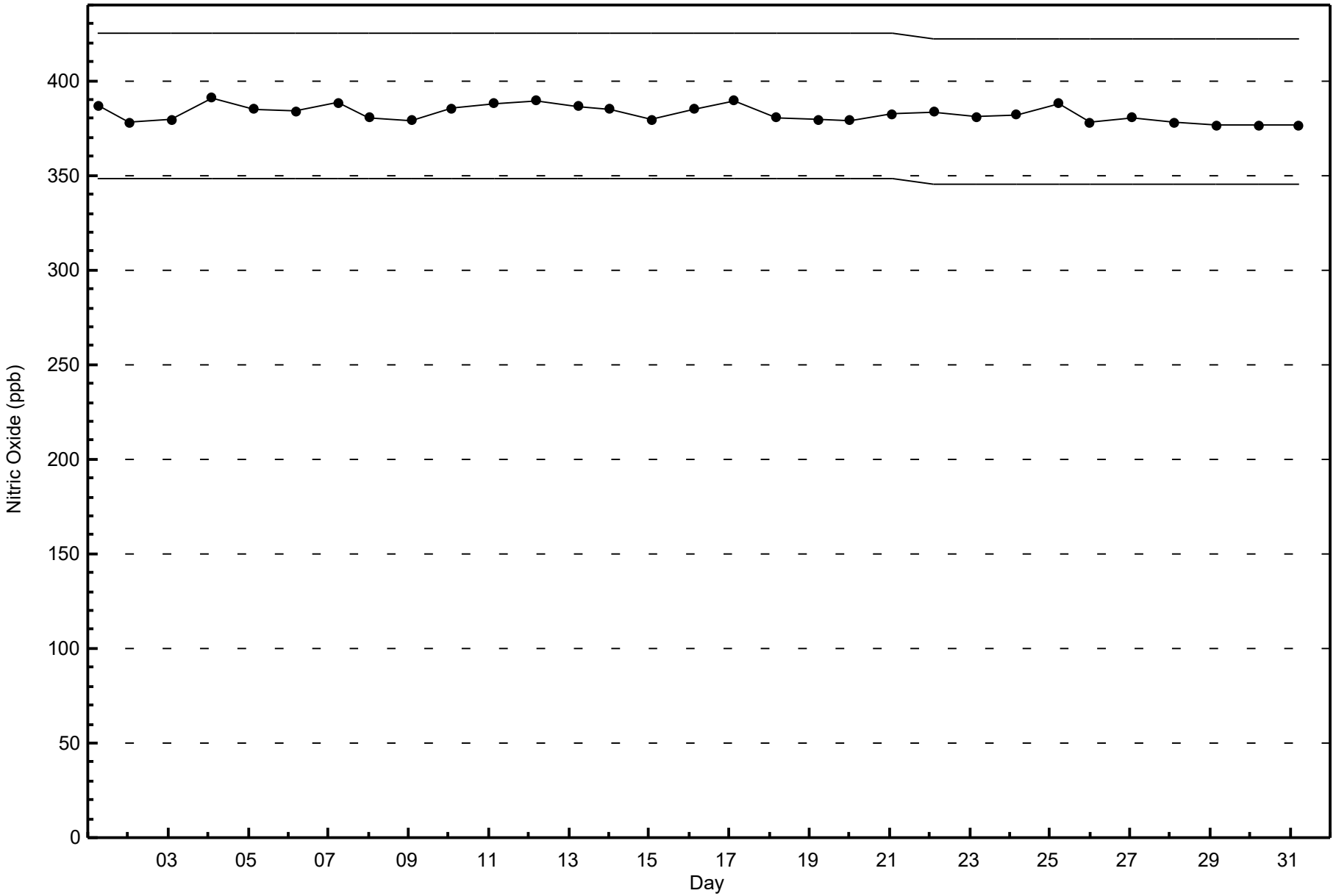


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Wapasu - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Wapasu - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 17.9 ppb on Aug 24 01:00
Maximum Daily Average: 5.0 ppb on Aug 19

Minimum Value: 0.0 ppb on Aug 6 02:00
Minimum Daily Average: 0.5 ppb on Aug 26
Maximum Diurnal Average: 3.9 ppb at hour 8
Minimum Diurnal Average: 1.3 ppb at hour 16
Monthly Average: 2.32 ppb
Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.3 $Q_1$ = 0.7 Median = 1.5 $Q_3$ = 2.9 $P_{90}$ = 5.6 $P_{99}$ = 12.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.3 | 0.7 | 0.4 | 0.9 | Z | 0.9 | 0.5 | 1.3 | 2.5 | 1.8 | 1.8 | 0.8 | 1.0 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 1.9 | 4.2 | 1.4 | 2.2 | 1.1 | 4.2 |
| 2-Aug | Z | 6.0 | 2.9 | 1.0 | 0.9 | 0.6 | 1.0 | 0.8 | 1.4 | 2.8 | 2.9 | 1.8 | 1.4 | 2.0 | 1.5 | 2.1 | 2.5 | 2.3 | 3.3 | 5.2 | 1.2 | 0.7 | 0.1 | 0.4 | 1.9 | 6.0 |
| 3-Aug | 2.4 | Z | 6.2 | 2.7 | 2.3 | 2.7 | 6.4 | 4.5 | 2.6 | 1.3 | 0.6 | 0.7 | 0.4 | 0.4 | 1.2 | 1.6 | 1.4 | 0.8 | 0.7 | 0.3 | 0.2 | 0.4 | 1.9 | 3.1 | 1.9 | 6.4 |
| 4-Aug | 1.3 | 1.6 | Z | 1.7 | 0.9 | 2.2 | 2.7 | 3.3 | 5.3 | 3.9 | 2.6 | 1.9 | 2.2 | 1.4 | 0.9 | 2.3 | 1.0 | 1.8 | 2.0 | 2.0 | 3.2 | 3.0 | 0.8 | 0.3 | 2.1 | 5.3 |
| 5-Aug | 0.4 | 1.2 | 9.4 | Z | 6.4 | 1.9 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.3 | 2.2 | 3.4 | 4.9 | 6.0 | 2.6 | 0.1 | 2.2 | 2.5 | 0.8 | 2.0 | 9.4 |
| 6-Aug | 0.1 | 0.0 | 0.1 | 0.3 | Z | 0.9 | 0.4 | 0.2 | 1.0 | 1.9 | 1.2 | 1.7 | 1.1 | 1.5 | 0.2 | 0.3 | 0.3 | 0.8 | 0.4 | 0.4 | 0.3 | 2.2 | 7.9 | 4.0 | 1.2 | 7.9 |
| 7-Aug | 7.0 | 9.3 | 11.1 | 13.8 | 14.1 | Z | 8.2 | 7.7 | 4.9 | 6.2 | 6.9 | M | M | 4.3 | 0.4 | 0.2 | 0.5 | 2.3 | 3.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.7 | 4.9 | 14.1 |
| 8-Aug | Z | 0.5 | 0.4 | 0.5 | 3.1 | 6.1 | 3.9 | 5.8 | 5.9 | 2.6 | 1.9 | 2.0 | 1.9 | 1.5 | 1.5 | 0.5 | 0.4 | 0.9 | 1.0 | 6.9 | 6.1 | 4.7 | 6.0 | 4.9 | 3.0 | 6.9 |
| 9-Aug | 1.0 | Z | 0.9 | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 4.9 | 17.3 | 10.7 | 5.8 | 4.7 | 3.0 | 2.9 | 4.1 | 1.4 | 0.2 | 0.2 | 0.2 | 0.3 | 2.4 | 2.5 | 2.8 | 17.3 |
| 10-Aug | 3.8 | 2.6 | Z | 2.4 | 1.9 | 1.1 | 1.0 | 5.0 | 4.6 | 6.0 | 8.0 | 3.4 | 2.2 | 1.0 | 1.6 | 0.8 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.7 | 0.6 | 2.1 | 8.0 |
| 11-Aug | 1.6 | 3.3 | 2.7 | Z | 2.8 | 2.4 | 2.3 | 8.1 | 7.0 | 9.2 | 2.5 | 1.2 | 1.2 | 1.0 | 0.7 | 0.7 | 0.8 | 0.6 | 0.3 | 0.2 | 0.4 | 3.5 | 6.1 | 4.6 | 2.7 | 9.2 |
| 12-Aug | 2.6 | 4.2 | 1.9 | 5.5 | Z | 2.8 | 3.8 | 3.9 | 3.3 | 3.9 | 2.5 | 0.3 | 0.2 | 0.2 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 1.1 | 0.3 | 1.2 | 3.7 | 1.9 | 5.5 |
| 13-Aug | 3.2 | 0.7 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 1.1 | 0.1 | 0.3 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 1.9 | 1.0 | 0.7 | 1.4 | 4.6 | 0.8 | 4.6 |
| 14-Aug | Z | 0.8 | 0.5 | 1.3 | 1.0 | 0.2 | 1.5 | 3.1 | 3.7 | 1.9 | 2.9 | 6.0 | 1.9 | 0.8 | 1.2 | 0.8 | 0.8 | 1.4 | 5.3 | 3.6 | 2.1 | 3.7 | 3.6 | 2.9 | 2.2 | 6.0 |
| 15-Aug | 2.9 | Z | 3.1 | 4.3 | 6.2 | 6.0 | 6.0 | 5.7 | 6.1 | 3.3 | 2.7 | 2.1 | 2.0 | 1.2 | 0.9 | 1.3 | 0.8 | 1.5 | 2.4 | 2.4 | 2.3 | 4.5 | 8.1 | 11.9 | 3.8 | 11.9 |
| 16-Aug | 9.0 | 8.4 | Z | 3.3 | 4.7 | 5.9 | 3.8 | 3.0 | 3.4 | 2.8 | 2.2 | 2.0 | 1.5 | 1.7 | 1.6 | 0.9 | 2.3 | 5.5 | 8.5 | 5.3 | 3.1 | 1.5 | 1.0 | 1.3 | 3.6 | 9.0 |
| 17-Aug | 1.2 | 1.9 | 2.2 | Z | 4.2 | 3.1 | 5.2 | 8.1 | 7.5 | 3.1 | 3.4 | 2.6 | 2.8 | 2.7 | 1.6 | 1.0 | 0.5 | 1.7 | 3.6 | 3.0 | 1.7 | 2.0 | 1.8 | 0.9 | 2.9 | 8.1 |
| 18-Aug | 1.9 | 1.4 | 2.3 | 2.4 | Z | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 | 0.8 | 2.1 | 2.7 | 2.3 | 2.8 | 1.2 | 1.0 | 0.9 | 0.9 | 1.1 | 1.3 | 1.8 | 2.8 | 2.8 | 1.6 | 2.8 |
| 19-Aug | 3.9 | 5.2 | 7.6 | 9.3 | 10.6 | Z | 8.1 | 8.5 | 7.2 | 5.2 | 6.7 | 3.7 | 4.9 | 4.5 | 1.2 | 0.6 | 1.9 | 2.0 | 4.9 | 5.3 | 3.7 | 4.1 | 2.7 | 2.4 | 5.0 | 10.6 |
| 20-Aug | Z | 6.0 | 4.1 | 1.9 | 2.0 | 2.2 | 2.0 | 2.1 | 4.9 | C | C | C | C | C | C | 1.6 | 1.4 | 1.4 | 1.5 | 1.8 | 0.9 | 0.4 | 0.3 | 1.5 | -- | 6.0 |
| 21-Aug | 1.7 | Z | 3.3 | 2.8 | 2.9 | 4.3 | 7.5 | 9.8 | 5.8 | 2.8 | 2.0 | 2.5 | 2.9 | 2.7 | 1.4 | 1.6 | 2.1 | 1.3 | 0.6 | 1.0 | 0.4 | 0.4 | 0.4 | 1.3 | 2.7 | 9.8 |
| 22-Aug | 1.7 | 1.3 | Z | 1.4 | 1.1 | 1.1 | 1.6 | 1.8 | 1.8 | 1.2 | 1.2 | 1.0 | 0.9 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 | 0.8 | 1.1 | 1.1 | 1.0 | 1.1 | 1.8 |
| 23-Aug | 1.0 | 1.8 | 1.6 | Z | 1.1 | 2.0 | 1.1 | 2.1 | 2.0 | 1.4 | 1.1 | 1.2 | 1.5 | 1.6 | 2.0 | 2.8 | 3.0 | 2.8 | 3.8 | 7.0 | 15.0 | 12.0 | 4.5 | 16.3 | 3.9 | 16.3 |
| 24-Aug | 17.9 | 10.0 | 5.3 | 5.3 | Z | 4.0 | 7.9 | 10.0 | 7.7 | 1.9 | 1.9 | 3.0 | 0.8 | 1.1 | 0.9 | 0.4 | 1.1 | 0.8 | 0.8 | 0.6 | 0.5 | 1.1 | 4.3 | 3.4 | 3.9 | 17.9 |
| 25-Aug | 5.8 | 9.4 | 3.2 | 0.9 | 0.5 | Z | 0.8 | 13.9 | 6.5 | 1.2 | 1.1 | 4.4 | 5.5 | 3.8 | 3.2 | 2.9 | 4.8 | 2.8 | 0.7 | 0.8 | 1.2 | 0.3 | 7.4 | 3.0 | 3.7 | 13.9 |
| 26-Aug | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 1.3 | 0.9 | 0.9 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.4 | 0.5 | 1.3 |
| 27-Aug | 0.9 | Z | 0.6 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.4 | 0.3 | 0.5 | 0.9 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 | 1.0 |
| 28-Aug | 0.3 | 0.3 | Z | 0.3 | 0.5 | 2.6 | 0.6 | 1.0 | 2.3 | 1.6 | 1.6 | 2.1 | 1.6 | 1.3 | 1.7 | 2.2 | 1.0 | 2.6 | 2.5 | 1.3 | 1.1 | 1.3 | 1.5 | 1.2 | 1.4 | 2.6 |
| 29-Aug | 0.9 | 1.1 | 2.2 | Z | 1.1 | 1.4 | 1.5 | 4.6 | 3.8 | 1.9 | 1.7 | 1.8 | 1.7 | 1.4 | 1.2 | 1.8 | 1.5 | 1.8 | 0.8 | 1.4 | 0.6 | 0.4 | 0.7 | 0.5 | 1.6 | 4.6 |
| 30-Aug | 0.6 | 0.9 | 0.7 | 0.7 | Z | 1.0 | 1.0 | 1.4 | 1.8 | 1.5 | 1.1 | 1.3 | 1.0 | 0.9 | 0.8 | 0.7 | 0.9 | 0.9 | 0.6 | 1.7 | 1.0 | 0.3 | 0.8 | 0.6 | 1.0 | 1.8 |
| 31-Aug | 0.7 | 1.1 | 0.9 | 1.7 | 7.9 | Z | 2.3 | 1.7 | 1.0 | 4.1 | 3.8 | 1.4 | 0.7 | 0.6 | 3.0 | 4.2 | 2.7 | 2.0 | 2.2 | 3.6 | 1.7 | 0.7 | 1.8 | 1.6 | 2.2 | 7.9 |
| | 2.8 | 3.1 | 2.9 | 2.5 | 3.0 | 2.2 | 2.7 | 3.9 | 3.4 | 2.7 | 2.8 | 2.2 | 1.7 | 1.6 | 1.3 | 1.3 | 1.4 | 1.5 | 1.9 | 2.0 | 1.8 | 1.9 | 2.4 | 2.8 | Diurnal Average | |
| | 17.9 | 10.0 | 11.1 | 13.8 | 14.1 | 6.1 | 8.2 | 13.9 | 7.7 | 9.2 | 17.3 | 10.7 | 5.8 | 4.7 | 3.2 | 4.2 | 4.8 | 5.5 | 8.5 | 7.0 | 15.0 | 12.0 | 8.1 | 16.3 | Diurnal Maximum | |

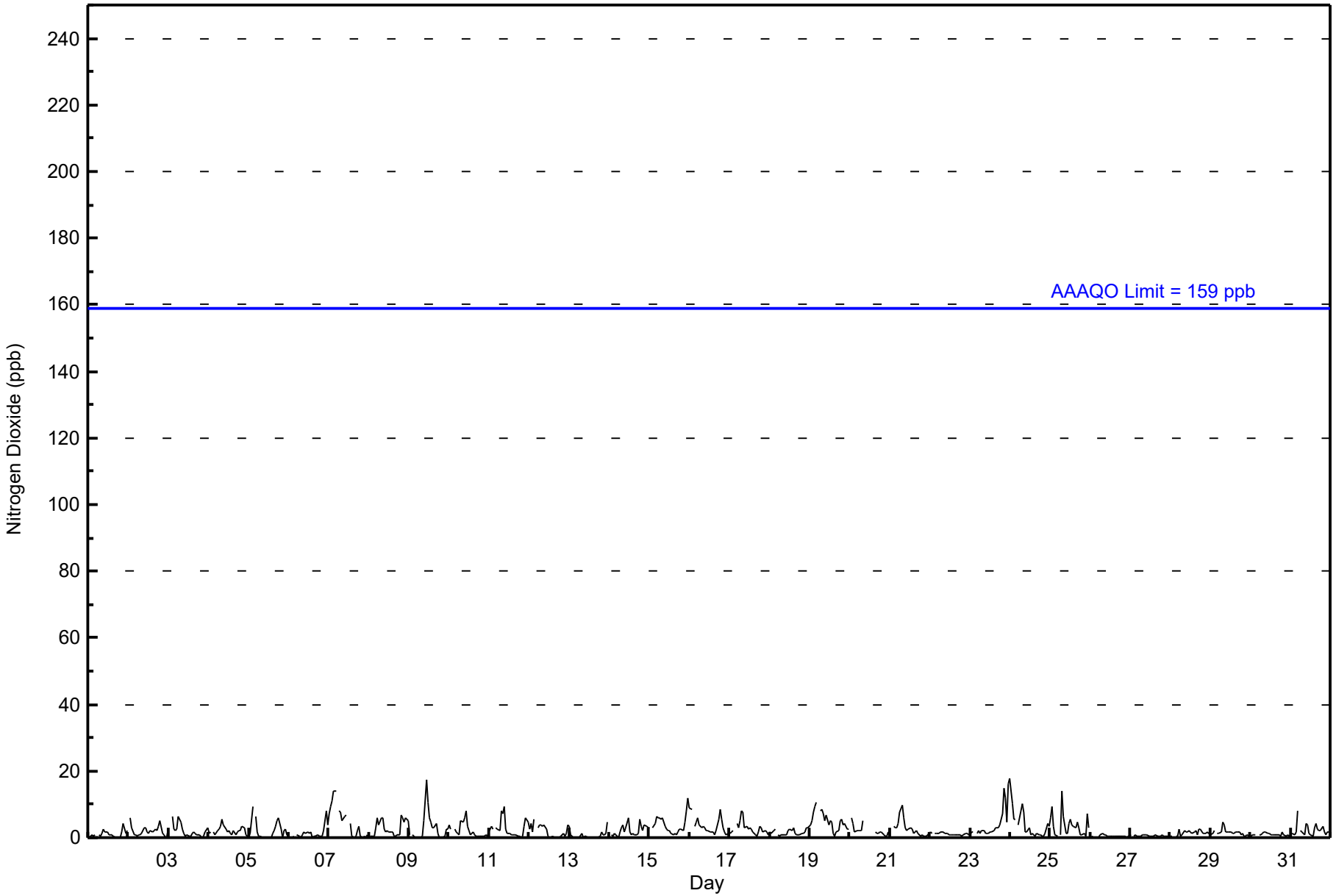
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Wapasu - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Wapasu - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Wapasu - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 89 | 44 | 28 | 10 | 10 | 30 | 34 | 109 | 67 | 37 | 38 | 52 | 21 | 16 | 33 | 87 | 705 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 89 | 44 | 28 | 10 | 10 | 30 | 34 | 109 | 67 | 37 | 38 | 52 | 21 | 16 | 33 | 87 | 705 |

Total Number of Valid Hours: 705

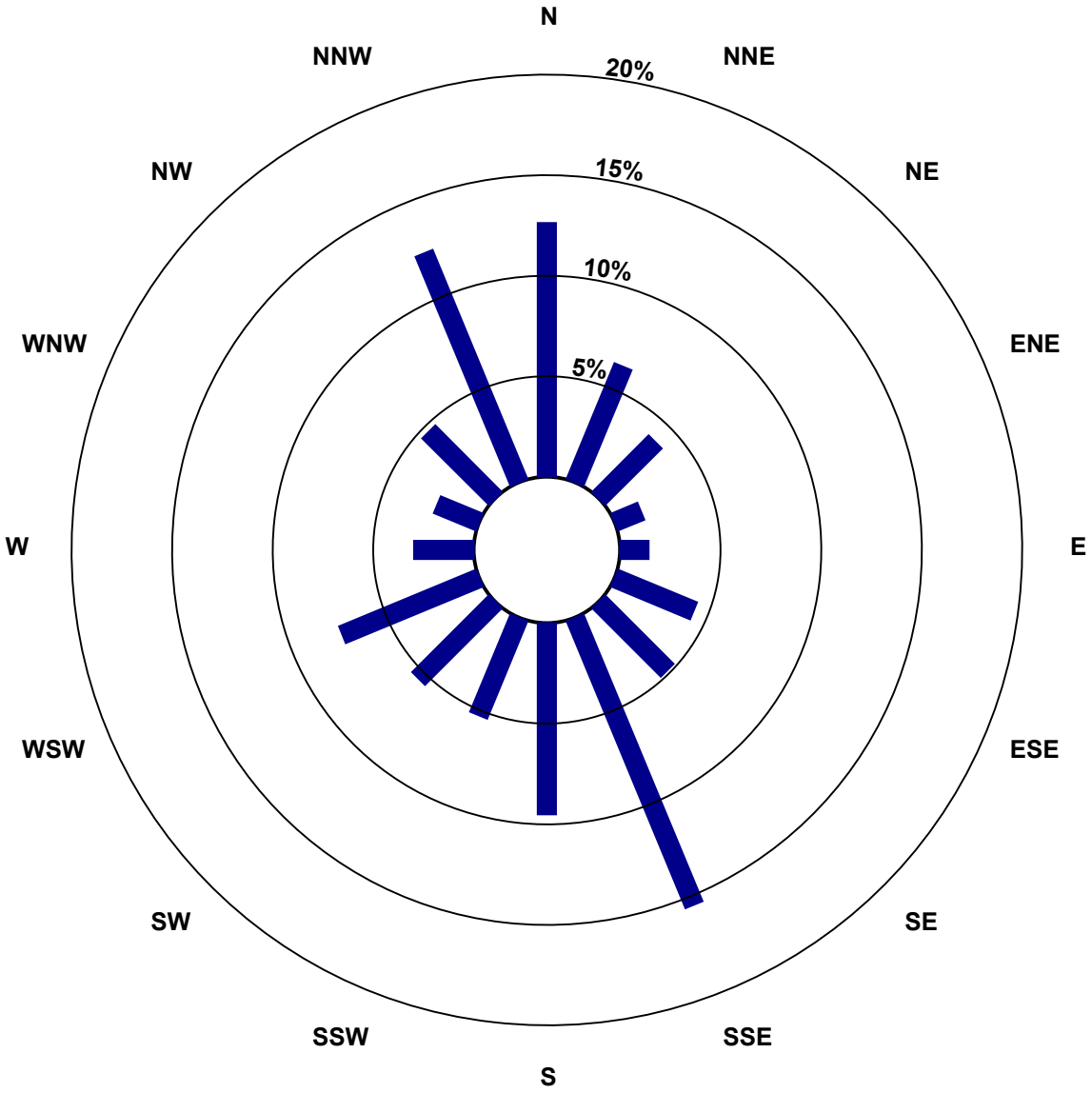
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Wapasu




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

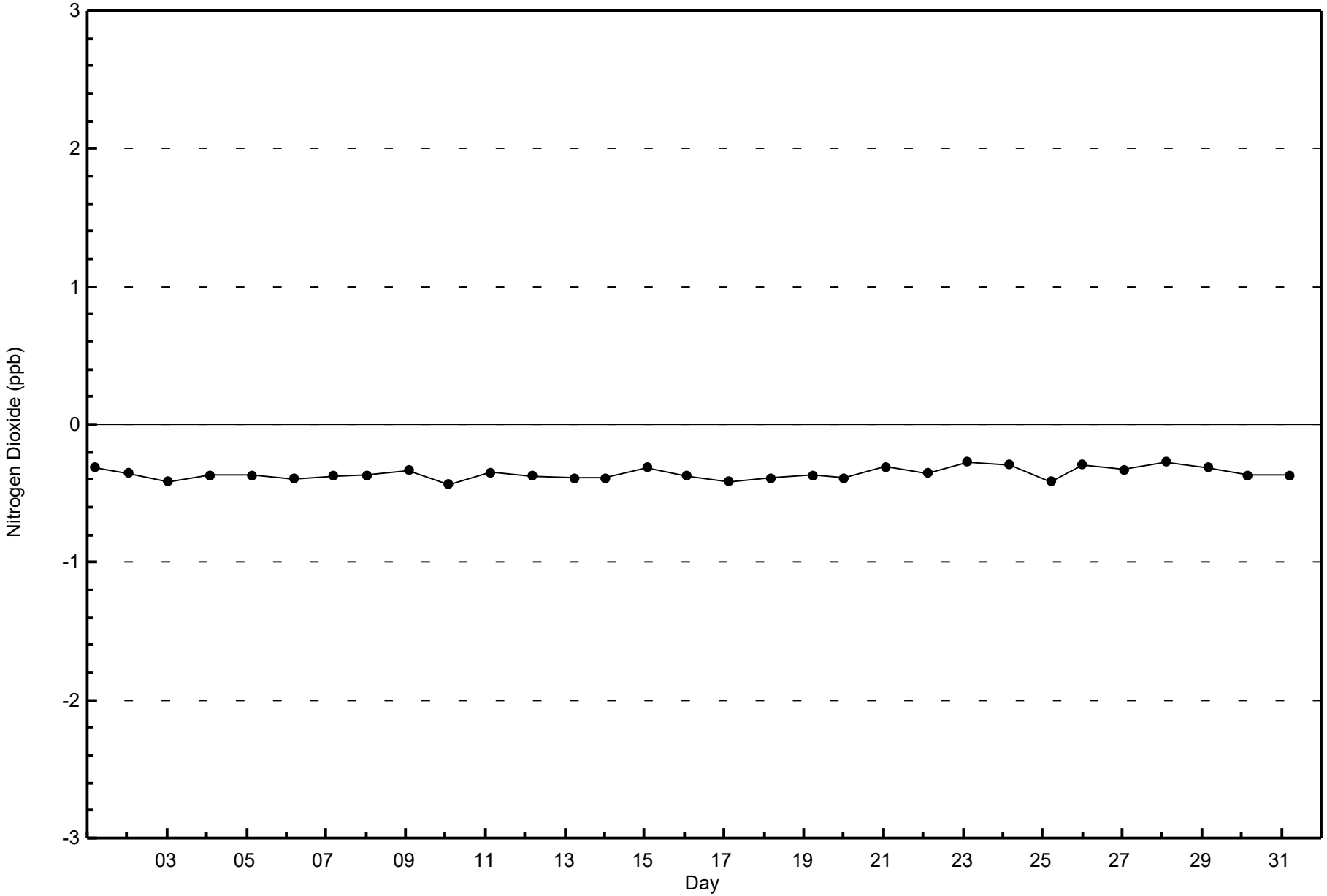
Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Wapasu - August 2026**

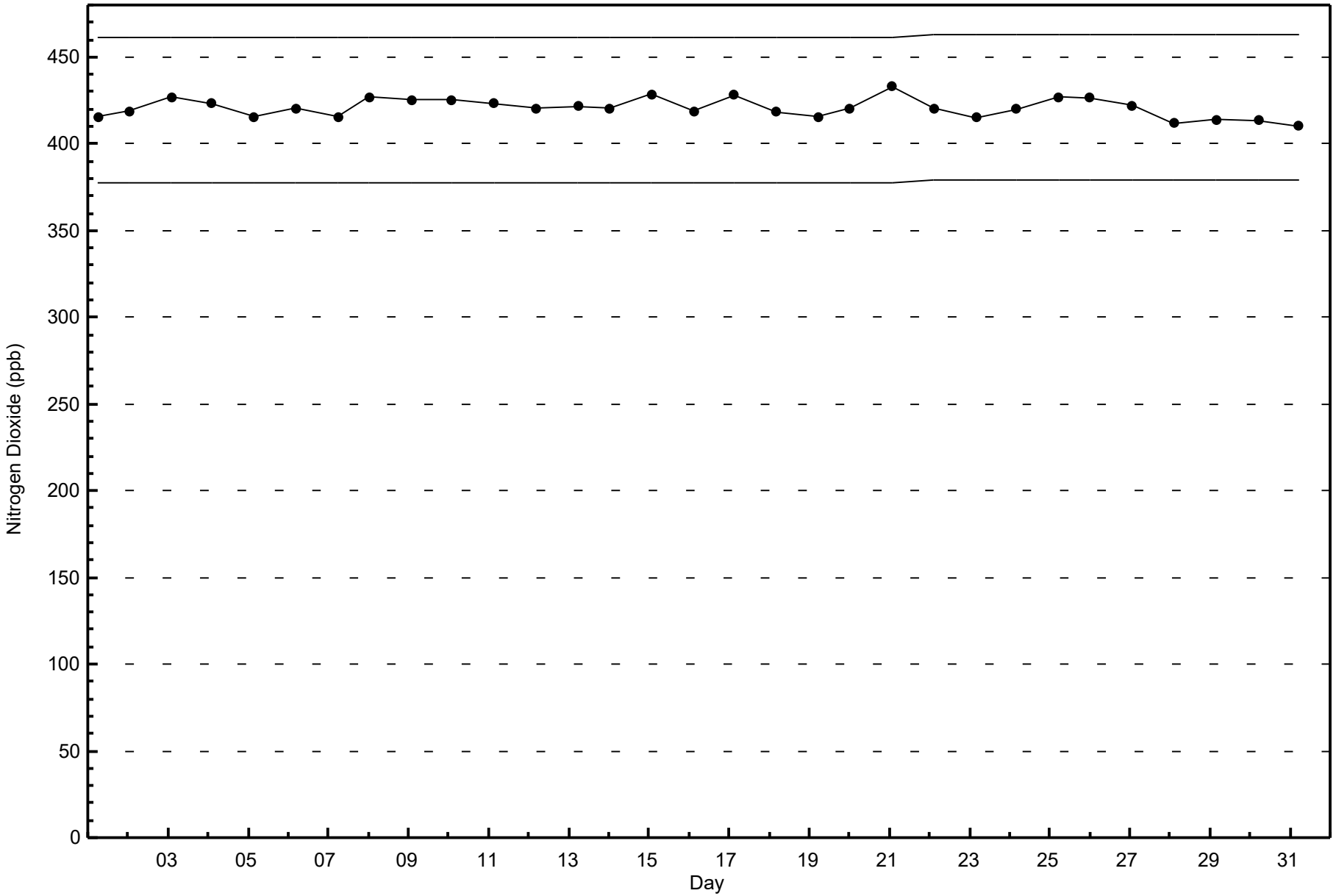


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Wapasu - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Wapasu - August 2026

Maximum Value: 41.0 ppb on Aug 9 11:00

Maximum Daily Average: 7.2 ppb on Aug 7

Minimum Value: 0.0 ppb on Aug 6 02:00

Minimum Daily Average: 0.5 ppb on Aug 26

Maximum Diurnal Average: 6.4 ppb at hour 8

Minimum Diurnal Average: 1.5 ppb at hour 16

Monthly Average: 3.01 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.3 $Q_1$ = 0.7 Median = 1.7 $Q_3$ = 3.6 $P_{90}$ = 7.4 $P_{99}$ = 16.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.3 | 0.7 | 0.4 | 0.9 | Z | 0.9 | 0.5 | 1.3 | 3.0 | 2.0 | 2.0 | 0.8 | 1.0 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 1.9 | 4.2 | 1.4 | 2.2 | 1.1 | 4.2 |
| 2-Aug | Z | 6.0 | 2.9 | 1.0 | 0.9 | 0.6 | 1.0 | 0.8 | 1.4 | 2.8 | 3.0 | 1.9 | 1.8 | 2.6 | 1.9 | 2.6 | 3.0 | 2.6 | 3.6 | 5.5 | 1.2 | 0.7 | 0.1 | 0.4 | 2.1 | 6.0 |
| 3-Aug | 2.4 | Z | 6.2 | 2.7 | 2.3 | 2.8 | 8.7 | 6.2 | 3.8 | 1.9 | 0.8 | 0.8 | 0.5 | 0.5 | 1.6 | 2.2 | 1.9 | 1.0 | 0.8 | 0.3 | 0.2 | 0.4 | 1.9 | 3.1 | 2.3 | 8.7 |
| 4-Aug | 1.3 | 1.6 | Z | 1.7 | 0.9 | 2.4 | 3.4 | 4.7 | 7.2 | 5.4 | 3.2 | 2.2 | 2.5 | 1.5 | 0.9 | 2.3 | 1.0 | 1.9 | 2.1 | 2.0 | 3.2 | 3.0 | 0.8 | 0.3 | 2.4 | 7.2 |
| 5-Aug | 0.4 | 1.2 | 9.4 | Z | 6.4 | 2.0 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.5 | 2.4 | 3.6 | 5.5 | 6.3 | 2.6 | 0.1 | 2.2 | 2.5 | 0.8 | 2.1 | 9.4 |
| 6-Aug | 0.1 | 0.0 | 0.1 | 0.3 | Z | 0.9 | 0.4 | 0.2 | 1.3 | 2.8 | 1.7 | 2.6 | 1.4 | 1.9 | 0.2 | 0.3 | 0.3 | 0.9 | 0.4 | 0.4 | 0.3 | 2.2 | 7.9 | 4.0 | 1.3 | 7.9 |
| 7-Aug | 7.0 | 9.3 | 14.2 | 19.4 | 22.7 | Z | 15.7 | 14.2 | 10.4 | 12.0 | 9.2 | M | M | 6.7 | 0.4 | 0.2 | 0.5 | 3.0 | 3.9 | 0.3 | 0.2 | 0.3 | 0.3 | 0.8 | 7.2 | 22.7 |
| 8-Aug | Z | 0.9 | 0.8 | 1.0 | 3.3 | 7.2 | 4.7 | 9.9 | 12.5 | 4.9 | 3.6 | 3.6 | 3.0 | 2.4 | 2.4 | 0.5 | 0.4 | 1.0 | 1.1 | 7.4 | 6.2 | 4.8 | 6.6 | 5.1 | 4.1 | 12.5 |
| 9-Aug | 1.1 | Z | 0.9 | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.9 | 10.3 | 41.0 | 19.9 | 8.3 | 6.5 | 4.0 | 3.8 | 5.0 | 1.6 | 0.2 | 0.2 | 0.2 | 0.3 | 2.8 | 3.0 | 4.8 | 41.0 |
| 10-Aug | 5.1 | 3.9 | Z | 2.4 | 1.9 | 1.1 | 1.2 | 7.4 | 6.5 | 9.7 | 13.1 | 4.8 | 3.0 | 1.2 | 2.1 | 0.9 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.7 | 0.6 | 2.9 | 13.1 |
| 11-Aug | 2.0 | 5.2 | 7.4 | Z | 12.2 | 8.6 | 9.5 | 13.8 | 11.0 | 16.3 | 3.6 | 1.5 | 1.5 | 1.2 | 0.9 | 0.8 | 1.0 | 0.7 | 0.3 | 0.2 | 0.4 | 3.6 | 6.2 | 4.7 | 4.9 | 16.3 |
| 12-Aug | 2.7 | 4.6 | 2.2 | 6.0 | Z | 3.0 | 4.4 | 4.9 | 4.2 | 5.0 | 3.2 | 0.3 | 0.2 | 0.2 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 1.1 | 0.3 | 1.7 | 7.4 | 2.3 | 7.4 |
| 13-Aug | 4.4 | 0.7 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 1.5 | 0.1 | 0.3 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 1.9 | 1.0 | 0.7 | 1.4 | 5.0 | 0.8 | 5.0 |
| 14-Aug | Z | 0.8 | 0.5 | 1.3 | 1.0 | 0.2 | 2.0 | 4.8 | 5.5 | 2.4 | 5.3 | 8.9 | 2.1 | 1.0 | 1.4 | 0.8 | 0.9 | 1.5 | 5.8 | 3.7 | 2.1 | 3.7 | 3.6 | 2.9 | 2.7 | 8.9 |
| 15-Aug | 2.9 | Z | 3.1 | 4.3 | 6.2 | 6.7 | 8.3 | 9.4 | 10.4 | 4.8 | 3.8 | 2.7 | 2.4 | 1.2 | 0.9 | 1.4 | 0.8 | 1.6 | 2.5 | 2.4 | 2.3 | 4.5 | 8.1 | 12.0 | 4.5 | 12.0 |
| 16-Aug | 9.0 | 8.4 | Z | 3.3 | 4.7 | 5.9 | 3.8 | 3.0 | 3.6 | 3.3 | 2.8 | 2.6 | 2.0 | 2.2 | 1.9 | 1.0 | 2.4 | 6.3 | 9.9 | 5.5 | 3.1 | 1.6 | 1.1 | 1.6 | 3.9 | 9.9 |
| 17-Aug | 3.2 | 2.6 | 2.6 | Z | 5.8 | 6.9 | 8.6 | 15.1 | 12.7 | 4.1 | 4.8 | 3.4 | 3.7 | 3.4 | 1.8 | 1.0 | 0.5 | 1.8 | 3.7 | 3.0 | 1.7 | 2.0 | 1.8 | 0.9 | 4.1 | 15.1 |
| 18-Aug | 1.9 | 1.4 | 2.3 | 2.4 | Z | 0.7 | 0.6 | 0.8 | 0.9 | 0.7 | 0.8 | 2.5 | 3.1 | 2.5 | 3.2 | 1.2 | 1.0 | 0.9 | 0.9 | 1.1 | 1.3 | 1.8 | 2.8 | 2.8 | 1.6 | 3.2 |
| 19-Aug | 3.9 | 5.2 | 7.6 | 9.3 | 10.6 | Z | 9.7 | 10.6 | 9.6 | 6.9 | 10.5 | 5.4 | 7.3 | 6.0 | 1.2 | 0.6 | 2.1 | 2.2 | 5.5 | 5.3 | 3.7 | 4.1 | 2.7 | 2.4 | 5.8 | 10.6 |
| 20-Aug | Z | 9.8 | 6.7 | 4.8 | 10.7 | 10.2 | 6.3 | 3.1 | 6.4 | C | C | C | C | C | C | 1.9 | 1.6 | 1.5 | 1.5 | 1.8 | 0.9 | 0.4 | 0.3 | 1.5 | -- | 10.7 |
| 21-Aug | 3.0 | Z | 16.4 | 14.7 | 10.1 | 8.3 | 16.3 | 17.0 | 8.1 | 3.6 | 2.5 | 3.0 | 3.5 | 3.1 | 1.5 | 1.6 | 2.2 | 1.3 | 0.6 | 1.0 | 0.4 | 0.4 | 0.4 | 1.3 | 5.2 | 17.0 |
| 22-Aug | 1.7 | 1.3 | Z | 1.4 | 1.1 | 1.1 | 1.6 | 1.9 | 2.0 | 1.2 | 1.2 | 1.0 | 0.9 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 | 0.8 | 1.1 | 1.1 | 1.0 | 1.1 | 2.0 |
| 23-Aug | 1.0 | 1.8 | 1.6 | Z | 1.1 | 2.1 | 1.2 | 2.6 | 2.4 | 1.6 | 1.2 | 1.3 | 1.8 | 1.8 | 2.1 | 3.0 | 3.1 | 2.9 | 3.8 | 7.0 | 15.8 | 12.0 | 4.5 | 18.9 | 4.1 | 18.9 |
| 24-Aug | 20.2 | 10.0 | 5.3 | 5.3 | Z | 4.1 | 9.0 | 13.0 | 10.7 | 2.4 | 2.3 | 3.9 | 1.0 | 1.3 | 1.0 | 0.4 | 1.2 | 0.9 | 0.8 | 0.6 | 0.5 | 1.1 | 5.5 | 5.1 | 4.6 | 20.2 |
| 25-Aug | 9.0 | 12.9 | 3.2 | 0.9 | 0.5 | Z | 1.9 | 38.3 | 12.5 | 1.4 | 1.3 | 6.3 | 7.6 | 4.9 | 4.0 | 3.5 | 5.8 | 3.1 | 0.7 | 0.8 | 1.2 | 0.3 | 8.6 | 3.0 | 5.7 | 38.3 |
| 26-Aug | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 1.4 | 0.9 | 0.9 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.4 | 0.5 | 1.4 |
| 27-Aug | 0.9 | Z | 0.6 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.4 | 0.3 | 0.5 | 0.9 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 | 1.0 |
| 28-Aug | 0.3 | 0.3 | Z | 0.3 | 0.5 | 2.6 | 0.6 | 1.0 | 2.5 | 1.9 | 2.0 | 2.4 | 1.9 | 1.4 | 1.8 | 2.4 | 1.0 | 2.6 | 2.5 | 1.3 | 1.1 | 1.3 | 1.5 | 1.2 | 1.5 | 2.6 |
| 29-Aug | 0.9 | 1.1 | 2.2 | Z | 1.1 | 1.4 | 1.5 | 6.7 | 6.0 | 2.7 | 2.5 | 2.6 | 2.3 | 2.0 | 1.6 | 2.4 | 1.8 | 1.9 | 0.8 | 1.4 | 0.6 | 0.4 | 0.7 | 0.5 | 2.0 | 6.7 |
| 30-Aug | 0.6 | 0.9 | 0.7 | 0.7 | Z | 1.0 | 1.0 | 1.6 | 2.1 | 1.8 | 1.2 | 1.6 | 1.1 | 1.0 | 0.8 | 0.7 | 0.9 | 0.9 | 0.6 | 1.7 | 1.0 | 0.3 | 0.8 | 0.6 | 1.0 | 2.1 |
| 31-Aug | 0.7 | 1.1 | 0.9 | 1.7 | 8.1 | Z | 2.9 | 2.2 | 1.3 | 7.3 | 6.2 | 2.0 | 0.8 | 0.6 | 3.6 | 4.9 | 2.8 | 2.0 | 2.2 | 3.6 | 1.7 | 0.7 | 1.8 | 1.6 | 2.6 | 8.1 |
| | 3.3 | 3.5 | 3.8 | 3.3 | 4.4 | 3.2 | 4.1 | 6.4 | 5.1 | 4.1 | 4.5 | 3.1 | 2.3 | 2.0 | 1.5 | 1.5 | 1.5 | 1.7 | 2.0 | 2.1 | 1.8 | 1.9 | 2.6 | 3.1 | Diurnal Average | |
| | 20.2 | 12.9 | 16.4 | 19.4 | 22.7 | 10.2 | 16.3 | 38.3 | 12.7 | 16.3 | 41.0 | 19.9 | 8.3 | 6.7 | 4.0 | 4.9 | 5.8 | 6.3 | 9.9 | 7.4 | 15.8 | 12.0 | 8.6 | 18.9 | Diurnal Maximum | |

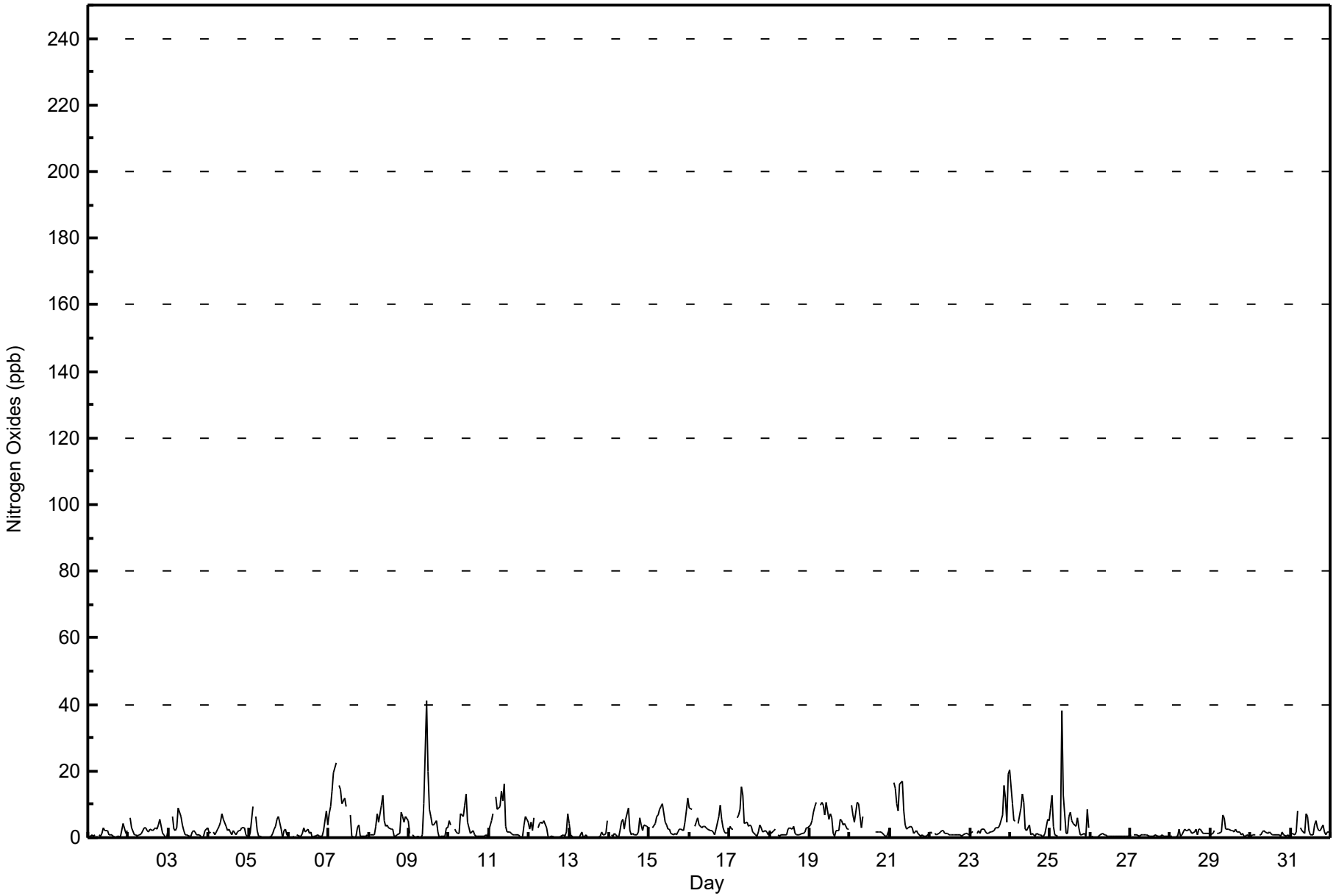
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Wapasu - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb

## Wapasu - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 702 | 99.57 | 99.57 |
| 21 - 40 | 2 | 0.28 | 99.86 |
| 11 - 80 | 1 | 0.14 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Wapasu - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 89 | 43 | 28 | 10 | 10 | 30 | 34 | 109 | 67 | 37 | 38 | 52 | 20 | 16 | 33 | 86 | 702 |
| 21 - 40 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 89 | 44 | 28 | 10 | 10 | 30 | 34 | 109 | 67 | 37 | 38 | 52 | 21 | 16 | 33 | 87 | 705 |

Total Number of Valid Hours: 705

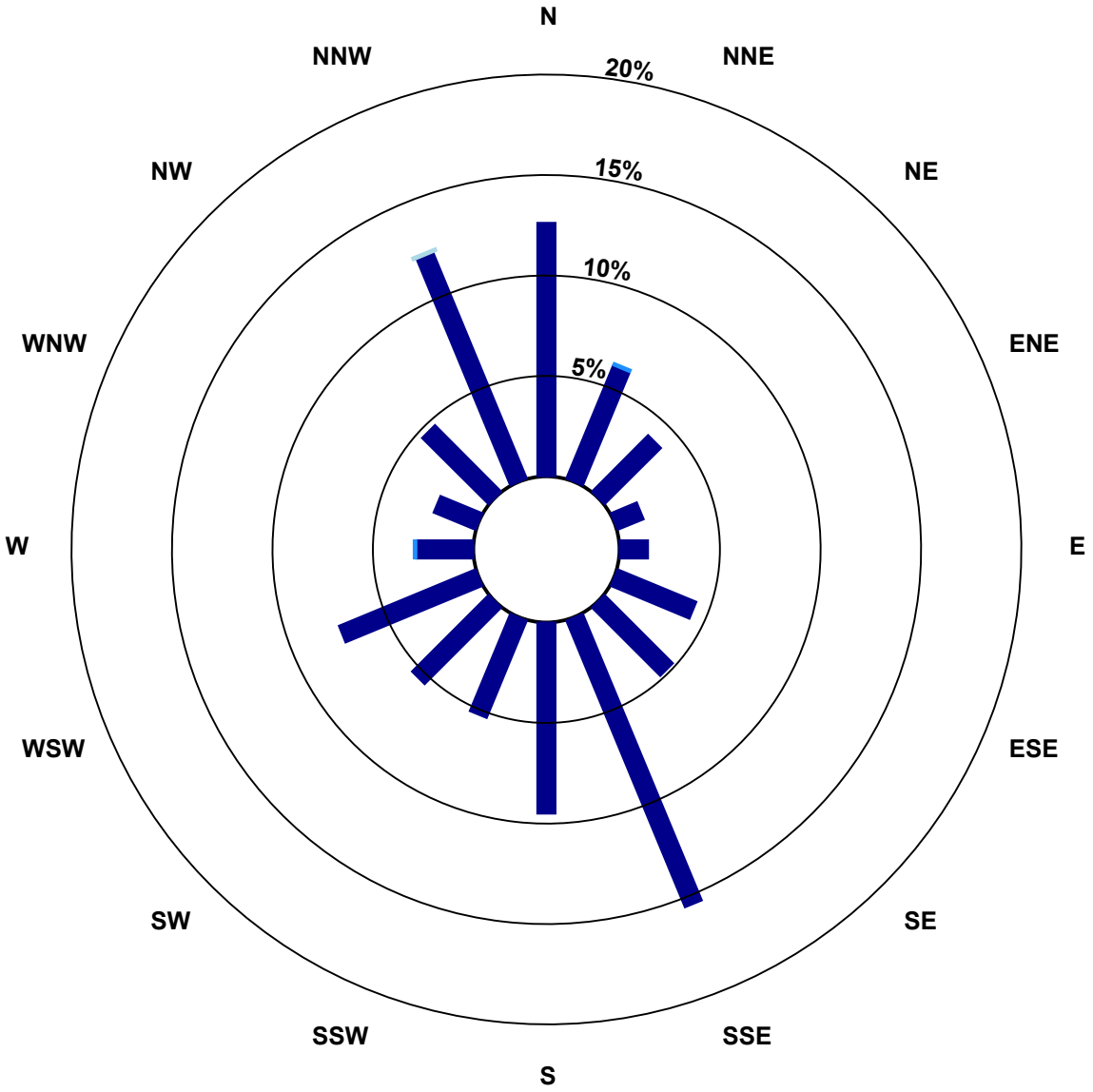
Total Number of Hours: 744

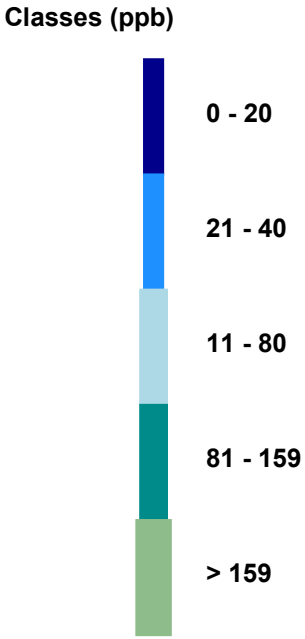
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Wapasu



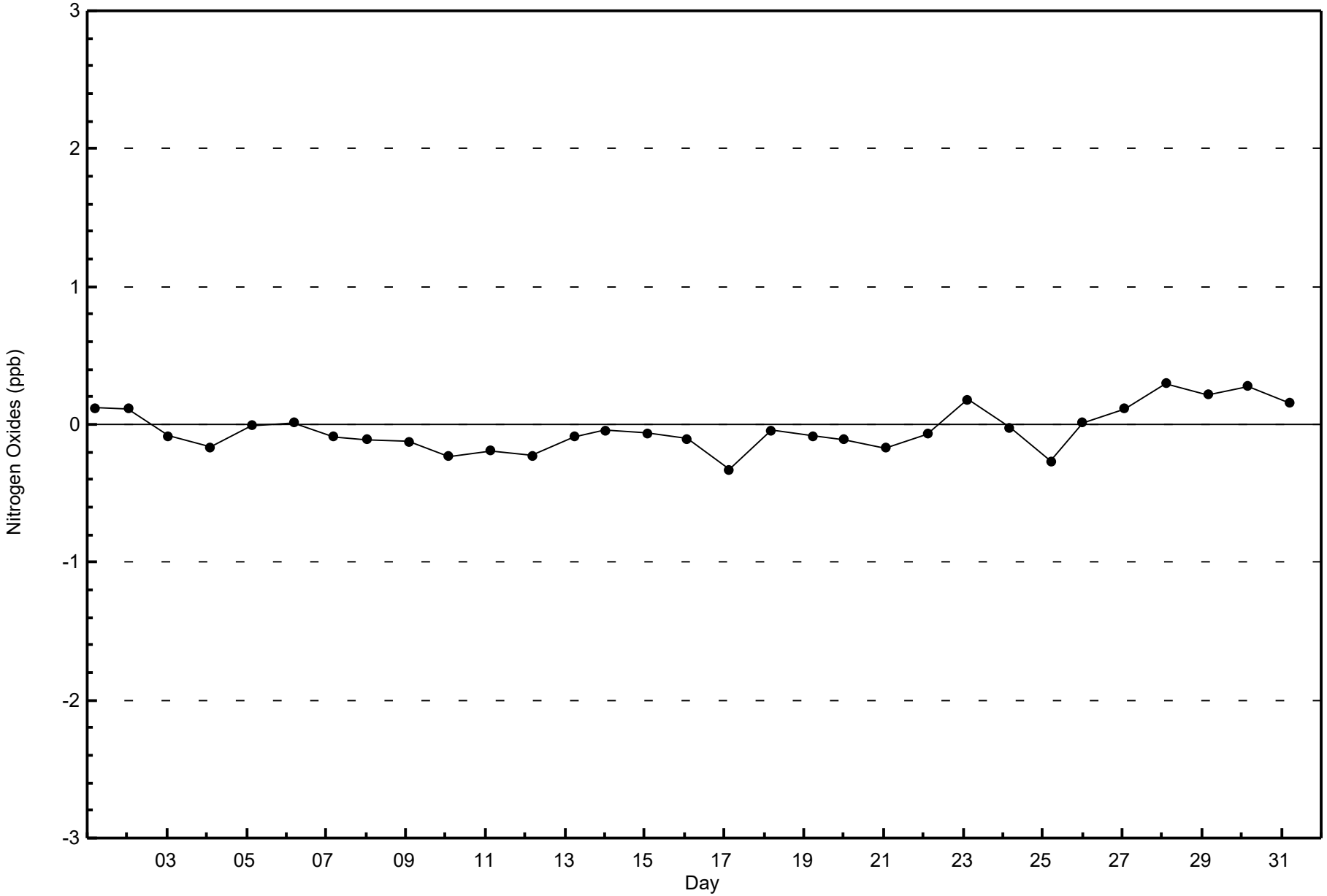

Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Wapasu - August 2026**

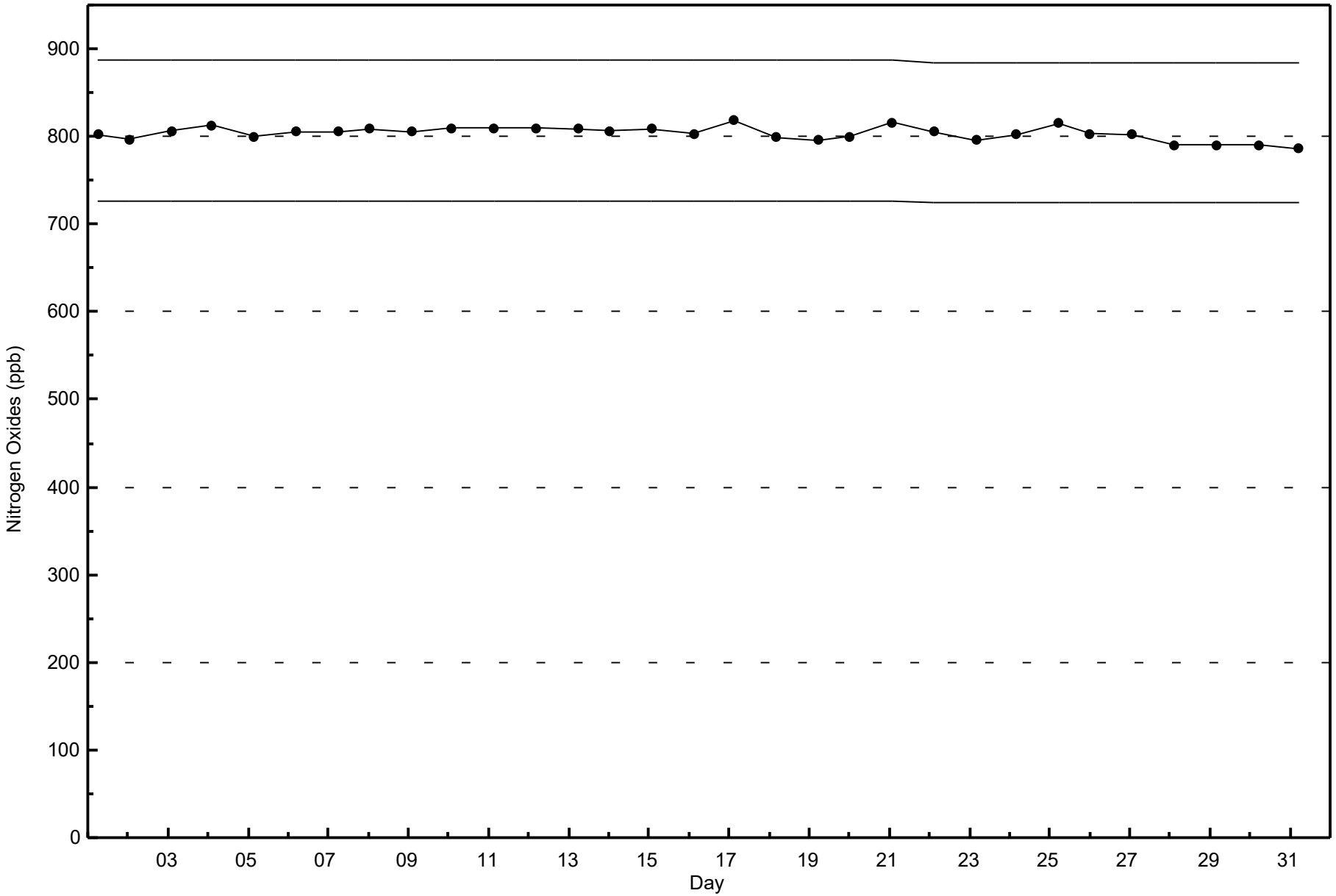


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Wapasu - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Wapasu - August 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 1

Maximum Value: 80.5 $\mu g/m^3$ on Aug 19 22:00

Maximum Daily Average: 29.2 $\mu g/m^3$ on Aug 25

Minimum Value: 0.4 $\mu g/m^3$ on Aug 6 07:00

Minimum Daily Average: 1.5 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 12.6 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 8.1 $\mu g/m^3$ at hour 14

Monthly Average: 10.42 $\mu g/m^3$

Percentiles: $P_1$ = 0.8 $P_{10}$ = 2.5 $Q_1$ = 3.6 Median = 7.3 $Q_3$ = 13.0 $P_{90}$ = 22.2 $P_{99}$ = 60.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 741 |
| Hours of Missing Data: | 3 |
| Hours of Calibration: | 2 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 4.5 | 4.8 | 5.2 | 5.9 | 6.9 | 8.4 | 8.7 | 10.0 | 12.3 | 16.3 | 19.8 | 17.0 | 16.5 | 13.4 | 11.9 | 12.1 | 11.4 | 10.3 | 9.3 | 9.3 | 12.2 | 19.5 | 15.1 | 14.0 | 11.4 | 19.8 |
| 2-Aug | 13.3 | 10.3 | 8.6 | 10.3 | 12.4 | 12.8 | 13.8 | 10.8 | 7.5 | 5.9 | 4.8 | 4.3 | 3.4 | 3.2 | 3.5 | 3.4 | 3.0 | 3.1 | 3.7 | 4.3 | 3.2 | 2.0 | 2.4 | 2.1 | 6.3 | 13.8 |
| 3-Aug | 2.2 | 2.3 | 2.5 | 2.2 | 2.1 | 2.2 | 2.4 | 2.5 | 2.4 | 2.4 | 3.1 | 3.9 | 3.4 | 2.9 | 3.7 | 5.4 | 5.2 | 4.3 | 3.7 | 2.5 | 2.6 | 5.5 | 7.0 | 8.3 | 3.5 | 8.3 |
| 4-Aug | 5.6 | 4.3 | 4.1 | 3.8 | 3.9 | 4.2 | 8.5 | 15.1 | 23.9 | 19.3 | 16.3 | 15.7 | 17.3 | 14.3 | 11.4 | 10.4 | 7.2 | 6.1 | 5.1 | 5.1 | 5.8 | 8.1 | 9.3 | 10.6 | 9.8 | 23.9 |
| 5-Aug | 12.6 | 13.4 | 15.7 | 15.8 | 14.2 | 9.4 | 4.9 | 3.1 | 2.2 | 1.6 | 2.6 | 3.9 | 5.0 | 3.2 | 2.9 | 3.0 | 2.3 | 2.5 | 1.7 | 1.6 | 1.6 | 1.9 | 2.2 | 0.9 | 5.3 | 15.8 |
| 6-Aug | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 0.7 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 1.8 | 1.6 | 1.6 | 1.7 | 2.1 | 2.3 | 2.4 | 2.5 | 2.3 | 2.4 | 2.7 | 2.8 | 1.5 | 2.8 |
| 7-Aug | 3.0 | 2.9 | 2.9 | 2.9 | 3.0 | 3.0 | 3.0 | 3.2 | 3.5 | 4.1 | 4.4 | 4.5 | 4.7 | 5.0 | 5.0 | 5.1 | 4.7 | 2.9 | 2.3 | 2.0 | 2.4 | 2.6 | 3.6 | 3.2 | 3.5 | 5.1 |
| 8-Aug | 3.9 | 3.4 | 3.6 | 3.0 | 2.8 | 2.8 | 2.6 | 2.9 | 2.9 | 2.5 | 1.9 | 2.1 | 2.3 | 2.4 | 2.3 | 1.6 | 1.7 | 2.7 | 3.3 | 4.8 | 4.4 | 4.9 | 5.8 | 5.6 | 3.2 | 5.8 |
| 9-Aug | 3.8 | 3.3 | 3.0 | 2.5 | 2.1 | 1.9 | 1.9 | 1.9 | 2.7 | 3.1 | 6.3 | 6.9 | 5.5 | 5.4 | 5.3 | 4.6 | 5.3 | 4.0 | 2.7 | 2.5 | 2.9 | 3.3 | 3.4 | 3.4 | 3.7 | 6.9 |
| 10-Aug | 3.5 | 3.5 | 3.1 | 3.0 | 3.1 | 2.8 | 2.6 | 3.6 | 4.7 | 4.9 | 6.0 | 4.7 | 4.6 | 3.7 | 4.1 | 3.6 | 3.4 | 3.1 | 3.1 | 3.2 | 3.5 | 4.2 | 4.7 | 4.0 | 3.8 | 6.0 |
| 11-Aug | 3.8 | 3.6 | 3.7 | 3.6 | 4.3 | 6.0 | 5.4 | 6.1 | 5.6 | 7.3 | 6.1 | 5.2 | 4.9 | 5.3 | 5.5 | 4.6 | 5.0 | 4.2 | 3.8 | 2.9 | 3.0 | 4.4 | 5.3 | 5.1 | 4.8 | 7.3 |
| 12-Aug | 4.0 | 4.0 | 3.3 | 3.2 | 3.6 | 3.6 | 2.3 | 1.2 | 1.1 | 1.2 | 1.1 | 0.9 | 1.1 | 1.2 | 1.2 | 1.1 | 1.3 | 1.5 | 1.7 | 1.7 | 2.0 | 2.0 | 2.4 | 2.5 | 2.1 | 4.0 |
| 13-Aug | 2.7 | 2.8 | 2.8 | 2.8 | 2.9 | 2.8 | 2.6 | 2.6 | 2.5 | 2.5 | 2.6 | 2.4 | 2.5 | 2.5 | 2.4 | 2.6 | 2.8 | 2.8 | 3.0 | 3.8 | 3.9 | 4.5 | 4.4 | 5.0 | 3.0 | 5.0 |
| 14-Aug | 4.5 | 3.8 | 3.7 | 3.5 | 3.4 | 3.4 | 3.5 | 3.8 | 4.6 | 3.7 | 4.3 | 4.9 | 4.0 | 3.4 | 3.9 | 4.0 | 3.8 | 4.3 | 5.9 | 7.3 | 7.8 | 9.3 | 10.7 | 9.6 | 5.1 | 10.7 |
| 15-Aug | 9.0 | 7.9 | 8.3 | 8.5 | 9.0 | 8.2 | 6.9 | 7.0 | 7.7 | 5.4 | 5.5 | 5.7 | 8.1 | 5.8 | 6.0 | 7.1 | 6.0 | 7.3 | 7.2 | 9.3 | 7.8 | 6.7 | 7.1 | 8.8 | 7.4 | 9.3 |
| 16-Aug | 6.2 | 5.9 | 5.2 | 4.9 | 5.6 | 6.2 | 7.9 | 10.2 | 19.7 | 21.5 | 20.2 | 18.2 | 11.7 | 13.0 | 27.3 | 35.7 | 35.8 | 28.4 | 26.9 | 29.8 | 33.8 | 31.8 | 32.6 | 31.8 | 19.6 | 35.8 |
| 17-Aug | 28.1 | 32.2 | 30.3 | 26.5 | 27.8 | 26.1 | 30.0 | 32.1 | 31.0 | 30.4 | 25.4 | 22.0 | C | C | 21.0 | 20.8 | 18.6 | 20.5 | 23.4 | 21.1 | 20.9 | 19.5 | 18.9 | 16.2 | 24.7 | 32.2 |
| 18-Aug | 15.2 | 14.3 | 12.9 | 13.2 | 10.5 | 11.1 | 9.9 | 8.8 | 7.8 | 7.1 | 7.4 | 7.8 | 9.9 | 11.3 | 11.8 | 7.5 | 9.4 | 8.8 | 6.4 | 6.3 | 7.3 | 7.2 | 9.7 | 9.6 | 9.6 | 15.2 |
| 19-Aug | 9.3 | 9.4 | 9.5 | 8.9 | 9.7 | 10.2 | 11.9 | 17.9 | 10.6 | 13.0 | 10.9 | 7.9 | 5.9 | 5.7 | 4.1 | 3.4 | 5.4 | 18.7 | 32.9 | 62.0 | 75.6 | 80.5 | 75.5 | 72.1 | 23.8 | 80.5 |
| 20-Aug | 74.8 | 73.0 | 68.4 | 57.1 | 46.2 | 36.8 | 28.0 | 21.8 | 20.3 | 22.4 | 22.1 | 15.2 | 14.8 | 15.8 | 15.3 | 9.0 | 7.1 | 7.6 | 7.0 | 8.1 | 11.9 | 11.9 | 12.1 | 14.4 | 25.9 | 74.8 |
| 21-Aug | 15.2 | 18.5 | 17.3 | DF | 17.1 | 18.1 | 16.8 | 26.1 | 13.6 | 11.3 | 10.0 | 11.2 | 9.0 | 10.6 | 9.1 | 12.3 | 12.6 | 12.2 | 12.0 | 11.6 | 11.4 | 12.3 | 10.6 | 12.0 | 13.5 | 26.1 |
| 22-Aug | 12.2 | 11.0 | 11.5 | 10.9 | 9.8 | 9.1 | 12.2 | 16.7 | 13.4 | 9.3 | 8.6 | 8.7 | 8.1 | 8.7 | 8.2 | 8.6 | 9.4 | 10.5 | 12.5 | 12.5 | 14.6 | 14.6 | 13.7 | 11.9 | 11.1 | 16.7 |
| 23-Aug | 11.8 | 11.4 | 11.7 | 11.8 | 12.2 | 13.1 | 13.9 | 14.8 | 15.0 | 15.9 | 15.3 | 17.9 | 18.3 | 18.6 | 20.9 | 21.1 | 23.8 | 25.6 | 25.5 | 19.2 | 14.5 | 10.5 | 8.9 | 8.9 | 15.9 | 25.6 |
| 24-Aug | 7.9 | 5.4 | 4.9 | 4.7 | 3.7 | 3.7 | 4.1 | 4.4 | 4.3 | 4.0 | 3.9 | 4.4 | 2.9 | 3.3 | 3.0 | 3.0 | 4.8 | 10.8 | 36.9 | 32.2 | 29.6 | 29.4 | 27.8 | 25.0 | 11.0 | 36.9 |
| 25-Aug | 22.8 | 28.0 | 29.3 | 23.0 | 24.3 | 21.2 | 23.9 | 33.8 | 29.1 | 24.4 | 30.4 | 39.2 | 39.5 | 37.6 | 37.8 | 33.3 | 36.6 | 32.9 | 25.7 | 23.7 | 25.5 | 26.5 | 27.0 | 25.8 | 29.2 | 39.5 |
| 26-Aug | 23.0 | 22.1 | 21.5 | 22.2 | 20.5 | 19.1 | 18.2 | 17.2 | 12.0 | 8.4 | 6.5 | 5.2 | 5.0 | 4.7 | 5.6 | 5.5 | 5.1 | 5.6 | 7.8 | 7.3 | 5.3 | 5.8 | 5.6 | 5.8 | 11.0 | 23.0 |
| 27-Aug | 7.2 | 9.6 | 10.9 | 11.8 | 11.3 | 12.4 | 14.2 | 15.5 | 13.6 | 13.1 | 13.9 | 15.4 | 15.5 | 14.1 | 12.6 | 12.7 | 12.4 | 15.0 | 15.3 | 17.1 | 18.4 | 18.3 | 18.9 | 20.2 | 14.1 | 20.2 |
| 28-Aug | 20.0 | 18.5 | 16.9 | 16.3 | 16.7 | 15.8 | 15.5 | 15.5 | 13.2 | 13.2 | 17.4 | 14.3 | 7.8 | 6.0 | 8.2 | 11.9 | 12.6 | 16.5 | 48.1 | 40.3 | 23.0 | 15.9 | 11.5 | 3.6 | 16.6 | 48.1 |
| 29-Aug | 3.2 | 2.9 | 3.9 | 3.3 | 3.5 | 4.3 | 5.9 | 7.4 | 8.0 | 8.3 | 11.0 | 10.6 | 9.4 | 8.8 | 9.1 | 13.3 | 10.8 | 10.8 | 12.3 | 12.9 | 8.3 | 10.4 | 8.1 | 8.7 | 8.1 | 13.3 |
| 30-Aug | 9.9 | 10.7 | 11.9 | 11.9 | 10.5 | 9.1 | 8.4 | 10.8 | 6.5 | 6.5 | 6.5 | 6.5 | 6.7 | 7.2 | 7.3 | 8.0 | 8.9 | 8.5 | 7.6 | 8.1 | 9.2 | 9.8 | 8.1 | 7.7 | 8.6 | 11.9 |
| 31-Aug | 7.8 | 7.6 | 7.5 | 7.3 | 7.8 | 7.0 | 5.8 | 5.6 | 4.8 | 8.0 | 8.0 | 6.5 | 4.8 | 4.8 | 7.6 | 8.8 | 9.1 | 9.3 | 10.8 | 9.5 | 5.9 | 4.9 | 5.5 | 5.7 | 7.1 | 10.8 |
| | 11.4 | 11.3 | 11.1 | 10.2 | 10.1 | 9.5 | 9.6 | 10.7 | 9.9 | 9.6 | 9.8 | 9.5 | 8.5 | 8.1 | 9.0 | 9.2 | 9.3 | 9.8 | 11.9 | 12.4 | 12.3 | 12.6 | 12.3 | 11.8 | Diurnal Average | |
| | 74.8 | 73.0 | 68.4 | 57.1 | 46.2 | 36.8 | 30.0 | 33.8 | 31.0 | 30.4 | 30.4 | 39.2 | 39.5 | 37.6 | 37.8 | 35.7 | 36.6 | 32.9 | 48.1 | 62.0 | 75.6 | 80.5 | 75.5 | 72.1 | Diurnal Maximum | |

C - Calibration DF - DAS Failure

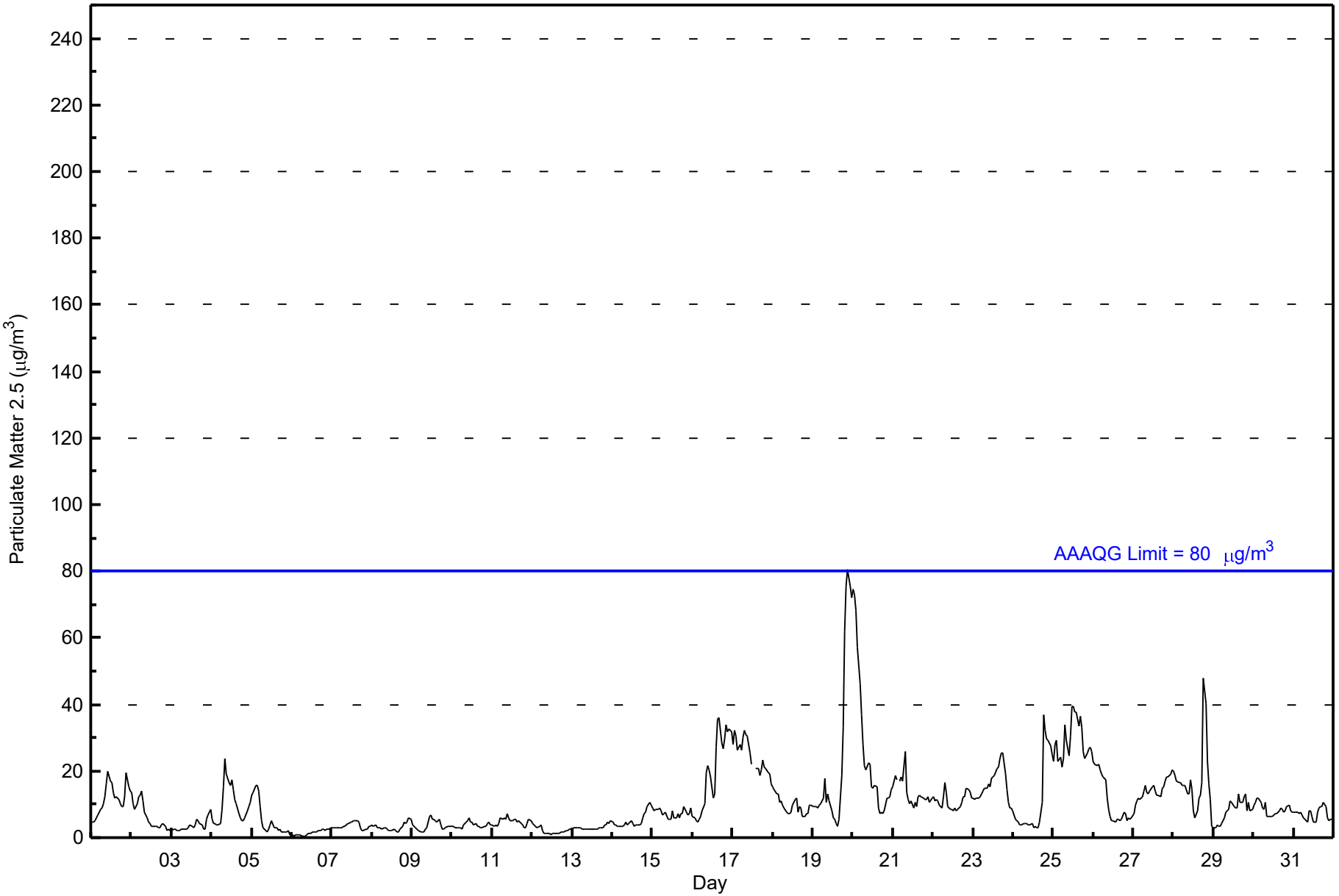
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Wapasu - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Wapasu - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 304 | 41.03 | 41.03 |
| 6 - 15 | 295 | 39.81 | 80.84 |
| 16 - 25 | 82 | 11.07 | 91.90 |
| 26 - 80 | 59 | 7.96 | 99.87 |
| > 81.0 | 1 | 0.13 | 100.00 |

Total Number of Valid Hours: 741

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Wapasu - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 57 | 31 | 20 | 9 | 4 | 14 | 13 | 21 | 6 | 6 | 2 | 12 | 9 | 7 | 24 | 69 | 304 |
| 6 - 15 | 23 | 8 | 4 | 1 | 1 | 9 | 11 | 63 | 49 | 25 | 32 | 32 | 8 | 5 | 8 | 14 | 293 |
| 16 - 25 | 6 | 2 | 1 | 1 | 1 | 6 | 6 | 19 | 14 | 5 | 2 | 9 | 2 | 3 | 2 | 2 | 81 |
| 26 - 80 | 9 | 4 | 4 | 0 | 4 | 3 | 7 | 15 | 1 | 2 | 2 | 2 | 2 | 0 | 0 | 4 | 59 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 95 | 45 | 29 | 11 | 10 | 32 | 37 | 119 | 70 | 38 | 38 | 55 | 21 | 15 | 34 | 89 | 738 |

Total Number of Valid Hours: 738

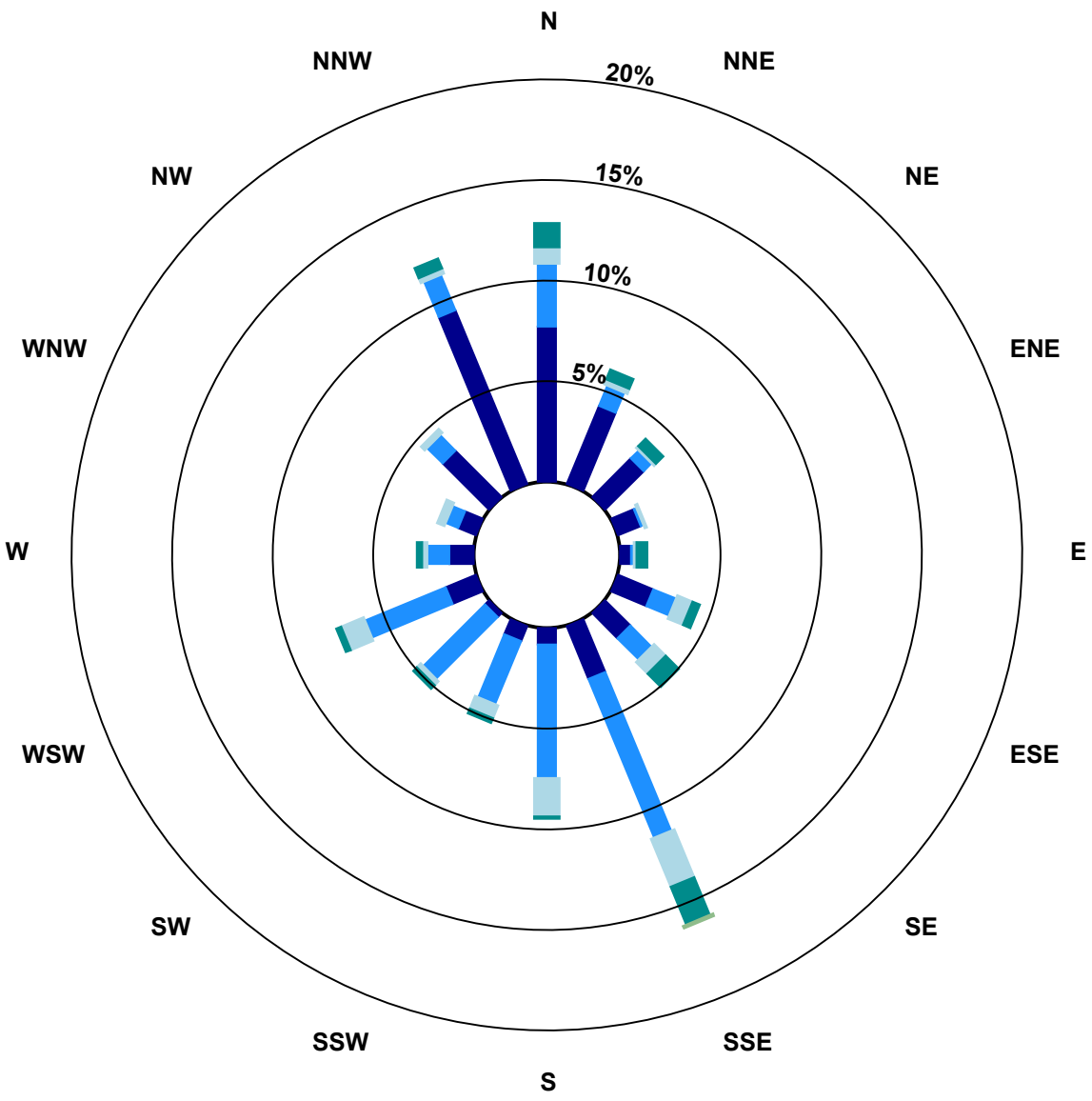
Total Number of Hours: 744

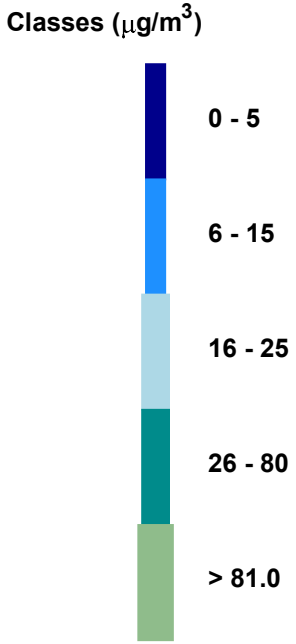
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Wapasu




Total Number of Valid Hours: 738

Maximum Value: 27.7 C on Aug 26 16:00 — Maximum Daily Average: 22.3 C on Aug 27

Minimum Value: 2.8 C on Aug 17 06:00 — Minimum Daily Average: 11.1 C on Aug 12

Maximum Diurnal Average: 20.4 C at hour 15 — Minimum Diurnal Average: 11.3 C at hour 4

Monthly Average: 15.63 C — Percentiles: $P_1$ = 4.9 $P_{10}$ = 9.2 $Q_1$ = 12.0 Median = 15.5 $Q_3$ = 19.3 $P_{90}$ = 22.3 $P_{99}$ = 26.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 722 |
| Hours of Missing Data: | 22 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 97.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.0 | 16.7 | 16.2 | 15.3 | 14.8 | 15.5 | 16.9 | 17.3 | 16.9 | 17.8 | 20.2 | 21.8 | 23.5 | 24.6 | 26.1 | 26.6 | 26.9 | 26.4 | 25.0 | 23.7 | 21.8 | 16.0 | 15.3 | 15.0 | 19.9 | 26.9 |
| 2-Aug | 15.0 | 14.8 | 14.8 | 14.5 | 14.5 | 14.5 | 14.3 | 14.4 | 14.3 | 14.3 | 13.7 | 12.8 | 13.5 | 14.2 | 15.0 | 14.8 | 14.3 | 14.7 | 14.5 | 13.4 | 12.3 | 11.0 | 10.2 | 9.4 | 13.7 | 15.0 |
| 3-Aug | 9.5 | 9.7 | 9.6 | 9.1 | 9.0 | 9.2 | 9.5 | 10.4 | 11.5 | 12.6 | 13.4 | 13.5 | 14.1 | 14.8 | 15.3 | 15.9 | 16.2 | 16.4 | 16.4 | 15.5 | 10.4 | 7.3 | 6.4 | 7.4 | 11.8 | 16.4 |
| 4-Aug | 7.5 | 7.3 | 8.0 | 8.9 | 9.8 | 10.7 | 12.6 | 15.0 | 16.6 | 18.1 | 19.4 | 20.4 | 21.2 | 22.0 | 21.6 | 16.7 | 15.3 | 14.6 | 14.6 | 15.0 | 14.5 | 13.8 | 13.6 | 13.4 | 14.6 | 22.0 |
| 5-Aug | 13.2 | 12.9 | 12.8 | 12.6 | 12.3 | 12.2 | 12.4 | 13.0 | 13.8 | 15.0 | 16.0 | 16.9 | 16.7 | 17.3 | 16.9 | 15.8 | 13.9 | 12.2 | 11.2 | 10.2 | 9.8 | 9.7 | 9.5 | 9.2 | 13.1 | 17.3 |
| 6-Aug | 8.9 | 8.7 | 8.6 | 9.1 | 9.2 | 9.1 | 9.1 | 9.6 | 10.4 | 11.3 | 12.0 | 13.7 | 14.3 | 13.3 | 15.0 | 16.2 | 15.7 | 15.2 | 14.2 | 13.4 | 13.1 | 12.5 | 12.7 | 12.5 | 12.0 | 16.2 |
| 7-Aug | 12.3 | 11.8 | 11.2 | 11.0 | 10.8 | 10.8 | 11.5 | 12.2 | 14.0 | 15.2 | 14.9 | 13.3 | 14.1 | 15.0 | 15.3 | 15.0 | 14.9 | 14.6 | 13.8 | 12.7 | 11.7 | 9.6 | 8.0 | 7.3 | 12.5 | 15.3 |
| 8-Aug | 7.0 | 6.6 | 5.5 | 6.8 | 9.2 | 10.3 | 10.8 | 11.5 | 12.8 | 14.0 | 15.3 | 16.6 | 16.7 | 18.0 | 18.1 | 17.9 | 17.9 | 17.8 | 17.0 | 15.8 | 13.5 | 12.5 | 11.4 | 10.8 | 13.1 | 18.1 |
| 9-Aug | 10.4 | 10.3 | 9.8 | 9.9 | 10.3 | 12.1 | 14.3 | 16.1 | 16.9 | 18.0 | 18.1 | 18.8 | 18.5 | 19.4 | 19.6 | 20.1 | 19.5 | 20.1 | 19.5 | 17.3 | 12.2 | 9.5 | 8.0 | 7.7 | 14.8 | 20.1 |
| 10-Aug | 7.2 | 6.9 | 8.7 | 10.0 | 10.0 | 10.5 | 11.9 | 15.6 | 17.3 | 17.6 | 18.6 | 19.3 | 19.4 | 20.4 | 20.5 | 21.0 | 20.8 | 20.5 | 19.7 | 17.6 | 12.3 | 9.7 | 7.9 | 6.7 | 14.6 | 21.0 |
| 11-Aug | 7.0 | 6.6 | 7.1 | 8.0 | 8.5 | 7.6 | 9.9 | 15.5 | 16.4 | 17.1 | 18.2 | 18.9 | 18.9 | 19.5 | 18.8 | 19.5 | 19.2 | 18.8 | 16.5 | 15.3 | 13.4 | 12.2 | 11.7 | 8.8 | 13.9 | 19.5 |
| 12-Aug | 6.6 | 5.5 | 6.6 | 7.9 | 9.2 | 9.8 | 10.6 | 11.2 | 11.8 | 11.9 | 12.1 | 13.1 | 14.7 | 14.2 | 14.0 | 13.5 | 14.1 | 15.0 | 14.3 | 12.1 | 11.2 | 10.3 | 8.8 | 8.2 | 11.1 | 15.0 |
| 13-Aug | 9.3 | 9.6 | 9.7 | 9.7 | 9.6 | 9.6 | 10.7 | 12.2 | 14.2 | 15.0 | 16.5 | 16.5 | 16.8 | 17.0 | 16.5 | 17.4 | 17.3 | 16.8 | 16.6 | 15.4 | 13.7 | 12.8 | 12.1 | 12.0 | 13.6 | 17.4 |
| 14-Aug | 11.8 | 11.2 | 11.1 | 10.9 | 10.6 | 10.7 | 11.7 | 13.4 | 15.0 | 16.1 | 17.1 | 18.6 | 14.3 | 17.5 | 20.3 | 17.4 | 17.7 | 18.7 | 17.5 | 15.6 | 11.5 | 10.2 | 10.3 | 9.8 | 14.1 | 20.3 |
| 15-Aug | 9.3 | 9.1 | 8.6 | 8.6 | 8.2 | 8.7 | 11.4 | 14.0 | 16.5 | 18.5 | 19.7 | 20.5 | 21.3 | 21.4 | 21.6 | 21.5 | 22.1 | 21.5 | 20.7 | 19.5 | 17.7 | 17.1 | 16.8 | 16.6 | 16.3 | 22.1 |
| 16-Aug | 15.6 | 15.1 | 14.5 | 12.1 | 12.0 | 12.2 | 12.6 | 12.3 | 11.7 | 12.0 | 13.4 | 14.3 | 15.6 | 16.3 | 16.4 | 17.3 | 15.5 | 14.3 | 15.2 | 13.5 | 11.3 | 8.4 | 6.2 | 4.8 | 13.0 | 17.3 |
| 17-Aug | 4.0 | 4.3 | 4.7 | 3.6 | 3.0 | 2.8 | 7.0 | 10.7 | 13.8 | 15.8 | 16.6 | 17.6 | 18.0 | 18.7 | 19.4 | 19.8 | 19.8 | 20.6 | 19.8 | 17.3 | 15.0 | 14.4 | 13.8 | 13.1 | 13.1 | 20.6 |
| 18-Aug | 12.6 | 12.6 | 12.2 | 12.0 | 12.0 | 13.0 | 14.8 | 17.0 | 18.6 | 20.0 | 21.6 | 22.2 | 22.9 | 23.6 | 24.5 | 25.0 | 24.3 | 23.7 | 23.5 | 21.3 | 20.4 | 19.4 | 17.9 | 16.6 | 18.8 | 25.0 |
| 19-Aug | 15.2 | 13.1 | 12.3 | 12.1 | 12.4 | 12.9 | 14.2 | 15.5 | 16.7 | 17.0 | 16.7 | 18.8 | 21.1 | 22.0 | 23.0 | 22.7 | 21.7 | 20.9 | 19.6 | 17.7 | 14.9 | 12.9 | 11.4 | 11.0 | 16.5 | 23.0 |
| 20-Aug | 12.6 | 11.1 | 9.3 | 7.7 | 6.5 | 6.6 | 9.5 | 14.0 | 16.3 | 16.6 | 17.3 | 18.7 | 19.7 | M | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 19.7 |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 21.7 | 22.4 | 23.1 | 23.8 | 24.1 | 24.3 | 24.1 | 23.1 | 20.1 | 18.2 | 18.2 | 17.7 | 17.4 | -- | 24.3 |
| 22-Aug | 17.2 | 17.0 | 16.4 | 16.2 | 15.6 | 15.3 | 16.7 | 17.9 | 18.8 | 20.4 | 20.3 | 21.6 | 23.7 | 25.0 | 26.3 | 27.1 | 27.3 | 27.0 | 25.8 | 23.1 | 21.8 | 21.6 | 20.7 | 19.3 | 20.9 | 27.3 |
| 23-Aug | 18.5 | 17.6 | 16.7 | 16.6 | 16.3 | 16.1 | 16.8 | 18.7 | 19.9 | 22.1 | 22.0 | 21.0 | 24.1 | 25.2 | 24.7 | 25.0 | 24.6 | 24.8 | 23.6 | 22.3 | 21.0 | 20.3 | 19.9 | 19.4 | 20.7 | 25.2 |
| 24-Aug | 18.8 | 18.1 | 17.6 | 16.7 | 16.3 | 15.8 | 16.2 | 17.1 | 17.5 | 17.9 | 18.6 | 20.4 | 21.3 | 21.8 | 22.4 | 22.8 | 22.8 | 23.1 | 21.7 | 17.2 | 12.0 | 10.0 | 8.6 | 7.7 | 17.6 | 23.1 |
| 25-Aug | 6.8 | 6.6 | 6.8 | 5.6 | 4.9 | 4.9 | 7.7 | 13.3 | 15.7 | 17.4 | 18.5 | 19.0 | 20.0 | 21.0 | 21.7 | 22.0 | 22.2 | 22.1 | 21.0 | 17.4 | 14.4 | 14.0 | 13.9 | 14.6 | 14.6 | 22.2 |
| 26-Aug | 14.5 | 13.9 | 13.9 | 13.9 | 14.1 | 14.8 | 16.4 | 18.6 | 20.9 | 23.4 | 24.6 | 25.8 | 26.7 | 27.2 | 27.0 | 27.7 | 27.4 | 26.8 | 25.5 | 22.7 | 21.7 | 21.3 | 20.7 | 19.9 | 21.2 | 27.7 |
| 27-Aug | 19.3 | 19.1 | 18.4 | 18.0 | 17.4 | 16.9 | 17.4 | 19.2 | 20.6 | 23.0 | 24.7 | 26.6 | 26.9 | 26.3 | 26.8 | 26.5 | 25.8 | 24.9 | 24.6 | 24.0 | 23.0 | 22.9 | 22.2 | 21.1 | 22.3 | 26.9 |
| 28-Aug | 20.3 | 19.4 | 18.9 | 18.5 | 17.6 | 16.8 | 16.7 | 16.7 | 15.2 | 15.4 | 16.7 | 17.9 | 19.5 | 19.6 | 19.1 | 18.1 | 17.6 | 16.4 | 15.6 | 14.0 | 12.4 | 12.0 | 11.4 | 10.7 | 16.5 | 20.3 |
| 29-Aug | 10.3 | 10.1 | 10.0 | 9.8 | 9.8 | 9.7 | 9.6 | 9.6 | 9.9 | 11.0 | 13.7 | 15.3 | 16.9 | 18.4 | 19.6 | 20.1 | 20.2 | 19.9 | 19.4 | 16.7 | 14.1 | 13.0 | 13.8 | 14.0 | 14.0 | 20.2 |
| 30-Aug | 13.4 | 13.3 | 13.3 | 13.1 | 13.7 | 13.9 | 14.3 | 16.0 | 17.3 | 18.2 | 20.3 | 21.5 | 22.1 | 22.3 | 22.3 | 23.5 | 23.9 | 23.4 | 21.7 | 18.2 | 16.2 | 15.6 | 16.2 | 14.0 | 17.8 | 23.9 |
| 31-Aug | 12.9 | 11.6 | 11.1 | 11.4 | 12.5 | 11.1 | 11.2 | 13.4 | 15.6 | 15.9 | 16.6 | 18.2 | 19.6 | 19.9 | 20.9 | 21.5 | 21.7 | 21.5 | 19.7 | 17.2 | 15.1 | 12.6 | 9.3 | 7.6 | 15.3 | 21.7 |
| | 12.1 | 11.7 | 11.5 | 11.3 | 11.3 | 11.5 | 12.6 | 14.4 | 15.6 | 16.6 | 17.6 | 18.6 | 19.3 | 20.0 | 20.4 | 20.4 | 20.2 | 19.9 | 19.0 | 17.2 | 15.0 | 13.7 | 12.9 | 12.2 | Diurnal Average | |
| | 20.3 | 19.4 | 18.9 | 18.5 | 17.6 | 16.9 | 17.4 | 19.2 | 20.9 | 23.4 | 24.7 | 26.6 | 26.9 | 27.2 | 27.0 | 27.7 | 27.4 | 27.0 | 25.8 | 24.0 | 23.0 | 22.9 | 22.2 | 21.1 | Diurnal Maximum | |

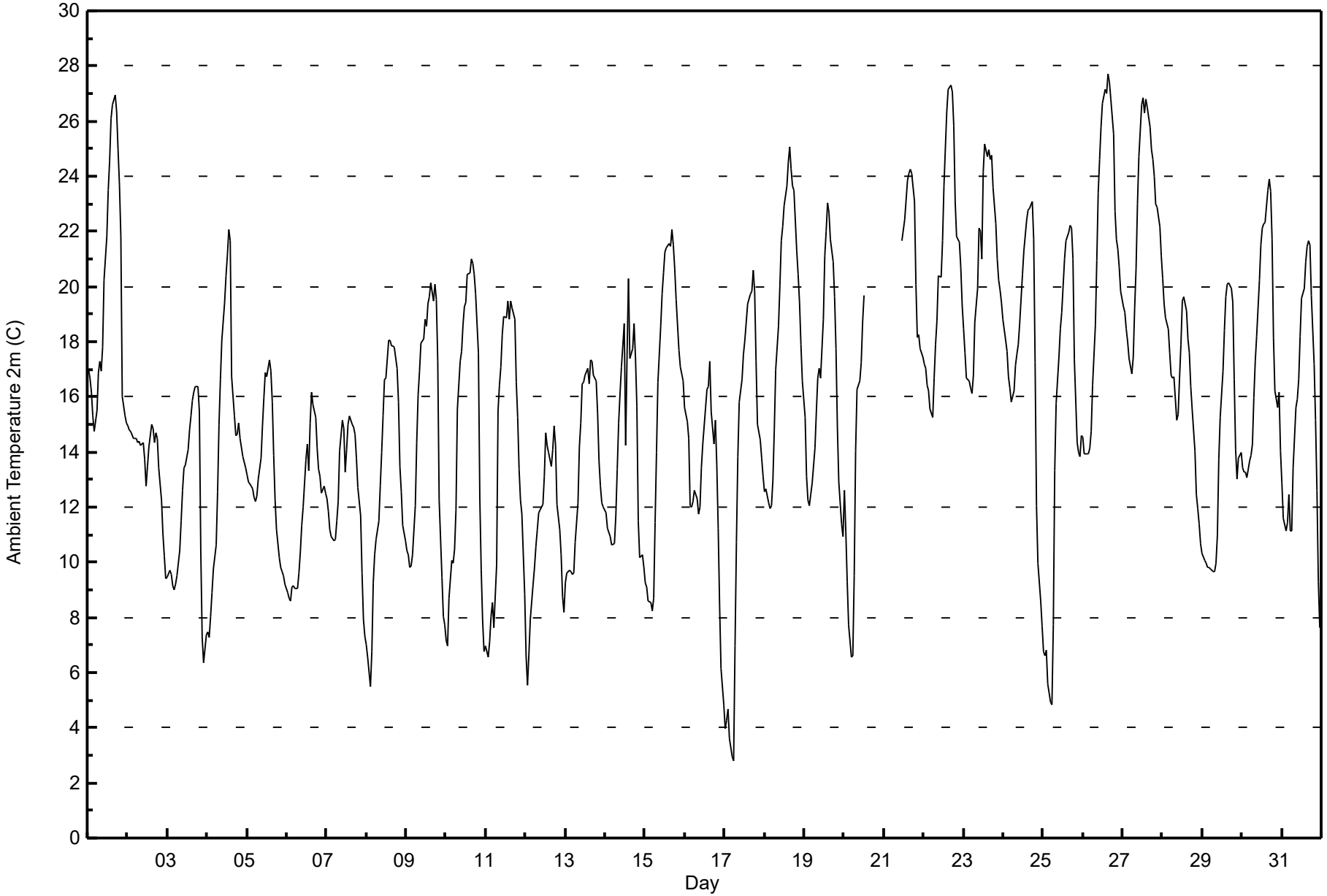
M - Maintenance — UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Wapasu - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 111 | 15.37 | 15.37 |
| 10 - 20 | 463 | 64.13 | 79.50 |
| > 20 | 148 | 20.50 | 100.00 |

Total Number of Valid Hours: 722

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Wapasu - August 2026

Maximum Value: 100.0 % on Aug 2 02:00

Maximum Daily Average: 93.3 % on Aug 12

Minimum Value: 33.2 % on Aug 24 16:00

Minimum Daily Average: 52.9 % on Aug 26

Maximum Diurnal Average: 88.4 % at hour 6

Minimum Diurnal Average: 52.7 % at hour 15

Monthly Average: 73.09 %

Percentiles: $P_1$ = 35.8 $P_{10}$ = 47.4 $Q_1$ = 57.5 Median = 73.8 $Q_3$ = 90.7 $P_{90}$ = 98.4 $P_{99}$ = 100.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 711 |
| Hours of Missing Data: | 33 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 95.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 72.1 | 76.0 | 81.0 | 86.5 | 89.8 | 88.4 | 85.3 | 86.2 | 88.2 | 87.4 | 77.8 | 69.1 | 62.2 | 62.3 | 57.5 | 53.1 | 52.9 | 57.2 | 61.6 | 64.9 | 69.5 | 93.0 | 98.0 | 97.8 | 75.7 | 98.0 |
| 2-Aug | 99.3 | 100.0 | OR | OR | OR | 100.0 | 100.0 | OR | OR | 100.0 | 100.0 | 98.6 | 90.7 | 85.4 | 76.3 | 71.0 | 65.8 | 58.8 | 59.1 | 64.8 | 68.6 | 72.1 | 75.3 | 79.2 | 82.4 | 100.0 |
| 3-Aug | 80.2 | 79.7 | 80.5 | 82.5 | 84.5 | 84.4 | 84.4 | 81.9 | 77.9 | 71.6 | 62.5 | 58.9 | 54.1 | 50.6 | 50.4 | 49.8 | 47.4 | 48.4 | 49.6 | 56.6 | 83.7 | 92.8 | 96.2 | 90.0 | 70.8 | 96.2 |
| 4-Aug | 86.9 | 87.7 | 84.0 | 80.3 | 77.6 | 74.8 | 69.0 | 60.8 | 54.7 | 53.5 | 53.0 | 52.4 | 52.7 | 50.0 | 51.3 | 82.8 | 93.9 | 97.5 | 96.9 | 95.5 | 98.9 | 99.6 | 100.0 | 100.0 | 77.2 | 100.0 |
| 5-Aug | 100.0 | 99.3 | 98.1 | 98.9 | 99.7 | 97.8 | 90.7 | 84.7 | 76.7 | 65.5 | 59.4 | 53.7 | 51.4 | 49.4 | 54.0 | 59.0 | 67.1 | 84.5 | 94.1 | 98.7 | 100.0 | 100.0 | 100.0 | 99.6 | 82.6 | 100.0 |
| 6-Aug | 100.0 | 100.0 | 100.0 | OR | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 97.3 | 93.9 | 84.2 | 78.6 | 87.0 | 80.3 | 74.7 | 74.5 | 75.2 | 81.3 | 86.6 | 86.7 | 91.6 | 90.5 | 90.2 | 90.1 | 100.0 |
| 7-Aug | 92.4 | 92.9 | 93.8 | 95.0 | 95.2 | 95.5 | 92.2 | 88.1 | 78.3 | 74.1 | 75.6 | 89.6 | 82.9 | 76.7 | 73.3 | 75.2 | 77.9 | 82.9 | 87.4 | 93.2 | 96.8 | 99.1 | 99.8 | 100.0 | 87.8 | 100.0 |
| 8-Aug | 100.0 | 100.0 | 100.0 | OR | OR | OR | 100.0 | 99.8 | 92.9 | 84.0 | 72.7 | 64.6 | 64.1 | 56.8 | 56.9 | 60.5 | 59.8 | 59.4 | 65.5 | 67.5 | 79.6 | 84.7 | 88.9 | 91.8 | 78.5 | 100.0 |
| 9-Aug | 93.5 | 95.6 | 95.8 | 95.9 | 94.0 | 88.7 | 80.3 | 70.8 | 68.3 | 61.2 | 59.9 | 55.0 | 54.5 | 50.4 | 50.9 | 47.4 | 50.9 | 46.2 | 48.7 | 60.1 | 82.8 | 91.3 | 95.6 | 98.2 | 72.3 | 98.2 |
| 10-Aug | 98.8 | 99.3 | 97.6 | 91.1 | 95.4 | 92.8 | 90.2 | 74.8 | 63.6 | 63.0 | 56.9 | 54.1 | 52.6 | 44.8 | 42.4 | 38.6 | 40.3 | 41.3 | 44.8 | 57.7 | 79.1 | 89.2 | 92.3 | 94.2 | 70.6 | 99.3 |
| 11-Aug | 97.3 | 98.0 | 99.2 | 98.8 | 97.3 | 98.6 | 92.8 | 67.4 | 64.5 | 65.9 | 53.2 | 49.0 | 49.7 | 46.0 | 47.6 | 46.0 | 46.3 | 48.2 | 58.5 | 69.1 | 77.5 | 80.0 | 82.2 | 91.5 | 71.9 | 99.2 |
| 12-Aug | 94.8 | 97.9 | 98.7 | 97.5 | 96.0 | 97.9 | 100.0 | 100.0 | 100.0 | 99.1 | 97.3 | 91.2 | 76.9 | 79.0 | 85.9 | 90.4 | 89.0 | 81.5 | 80.7 | 91.4 | 97.2 | 97.2 | 99.5 | 100.0 | 93.3 | 100.0 |
| 13-Aug | 100.0 | 99.3 | 99.0 | 98.5 | 99.2 | 99.9 | 97.8 | 93.6 | 82.6 | 77.2 | 68.4 | 66.7 | 67.2 | 63.7 | 66.5 | 60.9 | 63.1 | 66.5 | 69.1 | 79.1 | 89.9 | 93.0 | 93.8 | 94.1 | 82.9 | 100.0 |
| 14-Aug | 95.9 | 95.5 | 96.1 | 96.0 | 95.2 | 96.3 | 95.2 | 90.5 | 82.5 | 69.8 | 68.6 | 61.0 | 85.1 | 67.3 | 44.2 | 56.4 | 57.9 | 51.3 | 61.2 | 73.4 | 90.5 | 95.0 | 93.3 | 95.8 | 79.7 | 96.3 |
| 15-Aug | 97.7 | 96.8 | 97.2 | 96.9 | 98.2 | 97.0 | 87.5 | 78.7 | 68.5 | 55.3 | 51.5 | 48.5 | 44.8 | 44.0 | 41.9 | 44.4 | 40.1 | 43.1 | 49.4 | 51.1 | 61.1 | 62.1 | 63.0 | 64.5 | 66.0 | 98.2 |
| 16-Aug | 66.4 | 67.7 | 69.7 | 80.9 | 91.1 | 98.7 | 99.8 | 100.0 | 99.2 | 94.5 | 82.0 | 72.1 | 58.7 | 54.6 | 50.9 | 48.1 | 57.2 | 65.5 | 61.0 | 68.5 | 81.8 | 93.0 | 96.6 | 98.3 | 77.3 | 100.0 |
| 17-Aug | 99.4 | 100.0 | 100.0 | 100.0 | 100.0 | OR | OR | 87.3 | 72.5 | 63.2 | 61.5 | 58.0 | 56.3 | 54.9 | 51.0 | 50.2 | 49.1 | 47.8 | 51.7 | 62.9 | 69.5 | 69.6 | 70.0 | 70.6 | 70.2 | 100.0 |
| 18-Aug | 72.0 | 71.7 | 75.0 | 78.4 | 79.9 | 79.3 | 75.7 | 71.1 | 67.9 | 65.6 | 61.6 | 58.5 | 54.0 | 49.0 | 42.5 | 39.8 | 42.8 | 47.0 | 45.9 | 55.8 | 59.7 | 62.6 | 68.2 | 74.0 | 62.4 | 79.9 |
| 19-Aug | 79.6 | 87.5 | 91.2 | 92.1 | 90.4 | 87.7 | 83.0 | 80.2 | 77.3 | 79.3 | 80.7 | 68.9 | 53.9 | 50.9 | 45.3 | 47.0 | 57.8 | 64.1 | 69.5 | 77.9 | 88.8 | 95.9 | 97.5 | 98.7 | 76.9 | 98.7 |
| 20-Aug | 96.3 | 98.4 | 99.6 | 99.9 | 100.0 | 100.0 | 100.0 | 90.2 | 76.5 | 71.4 | 70.0 | 62.0 | 56.7 | M | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 100.0 |
| 21-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 43.8 | 40.0 | 37.5 | 34.2 | 35.1 | 35.8 | 37.3 | 42.7 | 53.3 | 58.8 | 58.2 | 61.5 | 63.2 | -- | 63.2 |
| 22-Aug | 65.6 | 67.0 | 69.7 | 69.2 | 69.5 | 68.2 | 64.0 | 62.3 | 60.9 | 56.5 | 59.1 | 57.0 | 53.5 | 51.4 | 47.0 | 44.5 | 44.2 | 45.5 | 52.7 | 61.8 | 65.9 | 66.4 | 70.4 | 75.8 | 60.3 | 75.8 |
| 23-Aug | 79.4 | 83.2 | 86.6 | 87.6 | 89.3 | 90.7 | 89.8 | 84.2 | 81.4 | 74.6 | 74.9 | 79.9 | 68.6 | 66.0 | 68.2 | 65.5 | 70.2 | 70.8 | 77.8 | 78.0 | 81.8 | 80.2 | 81.7 | 83.2 | 78.9 | 90.7 |
| 24-Aug | 79.3 | 69.7 | 68.7 | 70.8 | 66.2 | 65.3 | 62.7 | 58.6 | 55.4 | 55.0 | 51.4 | 42.6 | 37.3 | 37.3 | 35.6 | 33.2 | 33.3 | 34.2 | 38.4 | 57.0 | 79.6 | 86.7 | 91.1 | 94.5 | 58.5 | 94.5 |
| 25-Aug | 93.3 | 95.9 | 97.4 | 98.4 | 98.6 | 99.3 | 94.9 | 83.5 | 73.0 | 62.9 | 58.9 | 57.4 | 54.4 | 51.4 | 49.7 | 48.4 | 49.3 | 49.9 | 55.4 | 71.4 | 80.6 | 77.8 | 75.2 | 70.1 | 72.8 | 99.3 |
| 26-Aug | 66.6 | 69.0 | 68.3 | 68.8 | 68.2 | 66.4 | 64.6 | 62.3 | 58.7 | 52.7 | 44.2 | 39.6 | 36.6 | 34.4 | 36.5 | 36.2 | 37.5 | 40.2 | 43.6 | 51.3 | 52.5 | 53.2 | 57.4 | 60.3 | 52.9 | 69.0 |
| 27-Aug | 61.9 | 63.0 | 65.0 | 67.6 | 70.1 | 72.2 | 70.2 | 63.8 | 59.2 | 51.7 | 44.6 | 37.5 | 37.7 | 40.6 | 40.1 | 40.9 | 46.4 | 51.1 | 48.1 | 47.1 | 49.5 | 50.8 | 53.8 | 56.4 | 53.7 | 72.2 |
| 28-Aug | 58.6 | 62.8 | 66.2 | 68.7 | 74.0 | 81.4 | 82.3 | 82.8 | 95.9 | 94.6 | 88.5 | 79.5 | 60.0 | 56.3 | 55.7 | 59.5 | 63.7 | 72.6 | 76.3 | 79.8 | 81.3 | 80.0 | 79.9 | 78.2 | 74.1 | 95.9 |
| 29-Aug | 78.4 | 79.7 | 79.6 | 78.7 | 79.2 | 81.6 | 82.0 | 81.7 | 79.9 | 76.3 | 65.7 | 60.6 | 54.2 | 48.2 | 44.4 | 42.9 | 44.0 | 46.6 | 49.8 | 62.4 | 72.3 | 75.0 | 73.0 | 73.8 | 67.1 | 82.0 |
| 30-Aug | 77.5 | 79.6 | 80.7 | 82.0 | 79.7 | 78.8 | 78.7 | 74.6 | 68.4 | 67.6 | 59.3 | 55.4 | 54.0 | 51.2 | 49.6 | 44.2 | 40.6 | 40.0 | 55.6 | 73.1 | 77.4 | 80.4 | 81.1 | 90.6 | 67.5 | 90.6 |
| 31-Aug | 93.2 | 96.0 | 95.8 | 95.2 | 91.0 | 94.3 | 94.2 | 85.2 | 74.2 | 73.0 | 70.4 | 61.8 | 56.7 | 55.5 | 51.5 | 47.4 | 46.1 | 46.5 | 54.6 | 63.3 | 81.8 | 90.1 | 95.2 | 97.3 | 75.4 | 97.3 |
| | 85.9 | 87.0 | 87.4 | 87.3 | 88.2 | 88.4 | 86.5 | 80.9 | 75.8 | 72.1 | 67.5 | 62.3 | 58.1 | 55.1 | 52.7 | 53.1 | 54.8 | 56.7 | 61.0 | 69.1 | 78.1 | 82.0 | 84.0 | 85.7 | Diurnal Average | |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 98.6 | 90.7 | 87.0 | 85.9 | 90.4 | 93.9 | 97.5 | 96.9 | 98.7 | 100.0 | 100.0 | 100.0 | 100.0 | Diurnal Maximum | |

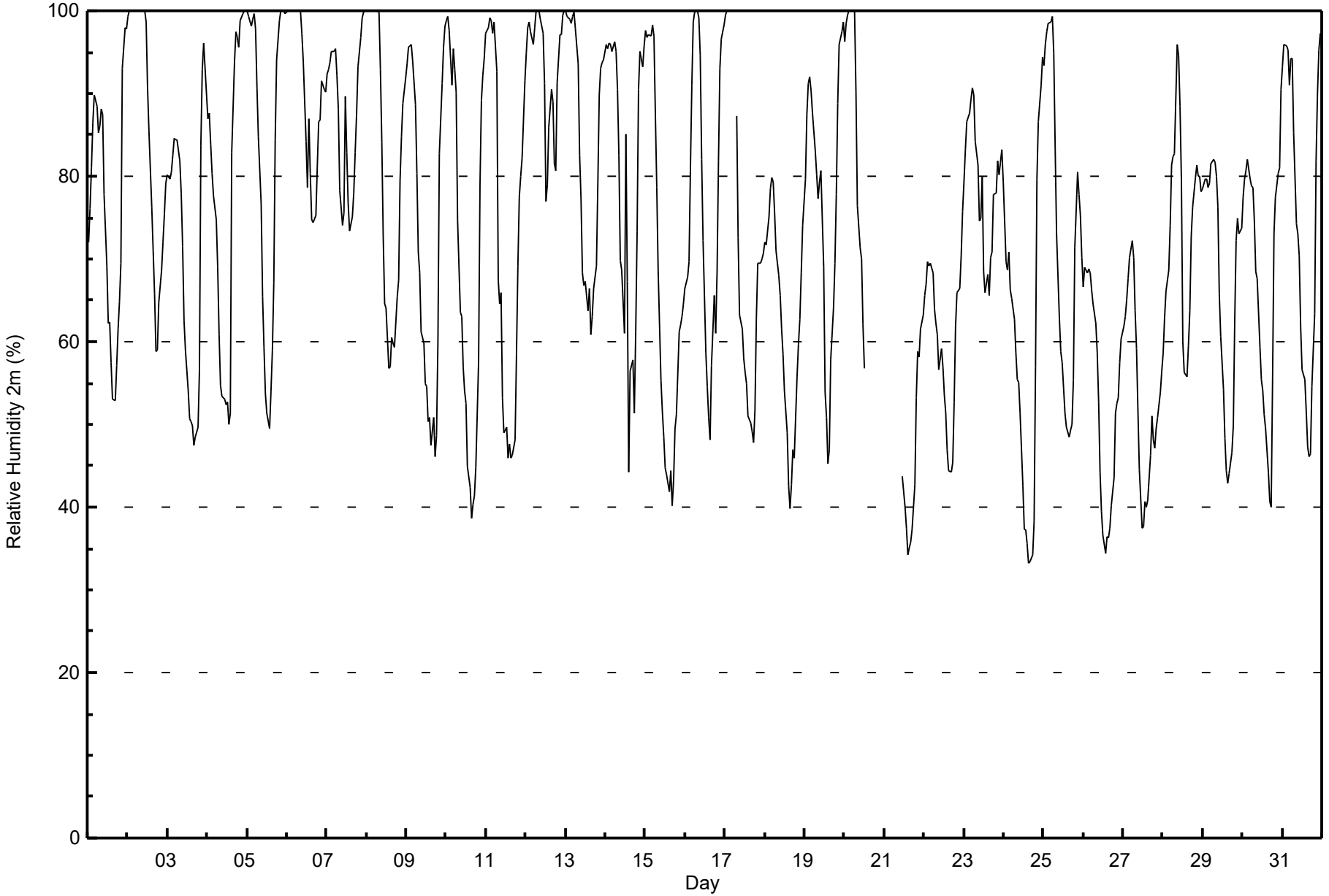
M - Maintenance UO - Unstable Operation OR - Out of Range

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Wapasu - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 23 | 3.23 | 3.23 |
| 40 - 60 | 182 | 25.60 | 28.83 |
| 60 - 80 | 226 | 31.79 | 60.62 |
| 80 - 100 | 243 | 34.18 | 94.80 |

Total Number of Valid Hours: 711

Total Number of Hours: 744

Maximum Value: 9.6 mm on Aug 4 21:00

Maximum Daily Total: 16.1 mm on Aug 4

Minimum Value: 0.0 mm on Aug 1 01:00

Minimum Daily Total: 0.0 mm on Aug 3

Maximum Diurnal Total: 12.2 mm at hour 21

Minimum Diurnal Total: 0.0 mm at hour 14

Monthly Total: 57.92 mm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 1.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

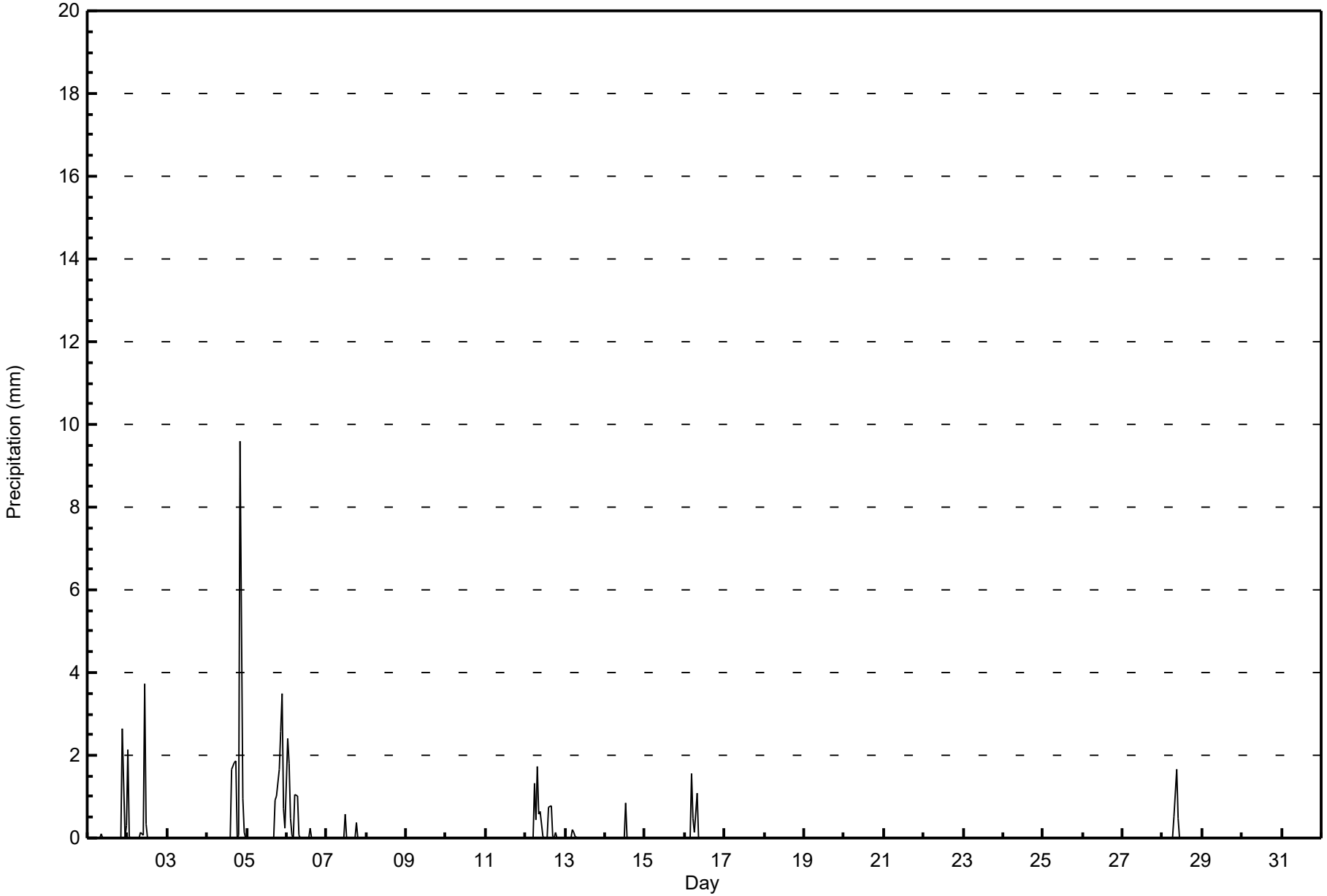
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 0.3 | 3.1 | 2.7 |
| 2-Aug | 2.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 3.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 | 3.7 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 1.8 | 1.9 | 0.0 | 0.1 | 9.6 | 1.0 | 0.1 | 0.0 | 16.1 | 9.6 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.0 | 1.7 | 2.6 | 3.5 | 0.7 | 0.3 | 10.7 | 3.5 |
| 6-Aug | 2.4 | 1.8 | 0.5 | 0.1 | 0.0 | 1.0 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 | 2.4 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.6 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.4 | 1.7 | 0.6 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.8 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.4 | 1.7 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.9 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.5 | 0.2 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 1.6 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.7 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 1.7 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4.6 | 1.9 | 0.5 | 0.1 | 1.8 | 3.0 | 1.7 | 3.4 | 2.5 | 1.2 | 3.8 | 0.9 | 0.9 | 0.0 | 1.0 | 2.4 | 1.9 | 2.8 | 1.5 | 1.7 | 12.2 | 7.1 | 0.9 | 0.6 | Diurnal Average | |
| | 2.4 | 1.8 | 0.5 | 0.1 | 1.6 | 1.3 | 1.0 | 1.7 | 1.7 | 0.7 | 3.7 | 0.6 | 0.9 | 0.0 | 0.7 | 1.7 | 1.8 | 1.9 | 1.0 | 1.7 | 9.6 | 3.5 | 0.7 | 0.3 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Precipitation (PC) - mm**

**Wapasu - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Wapasu - August 2026

Maximum Speed: 27 km/h on Aug 2 17:00

Maximum Daily Speed Average: 16.3 km/h on Aug 2

Minimum Speed Value: 1 km/h on Aug 14 07:00

Minimum Daily Speed Average: 1.6 km/h on Aug 19

Maximum Diurnal Speed Average: 4.8 km/h at hour 13

Minimum Diurnal Speed Average: 0.5 km/h at hour 21

Monthly Average Velocity: 1.1 km/h 275.5 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 3 $Q_1$ = 5 Median = 8 $Q_3$ = 11 $P_{90}$ = 14 $P_{99}$ = 21

Hours in Service: 744

Hours of Data: 741

Hours of Missing Data: 3

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSE9 | SSE8 | S7 | SSE6 | SSE7 | SSE6 | SSE6 | S5 | S4 | ESE5 | SE6 | SE10 | ESE12 | ESE12 | ESE13 | SE13 | SE13 | SE13 | SE12 | SE12 | NNE7 | NE11 | NE9 | ESE7 | SE7.3 | SE13 |
| 2-Aug | NNW2 | NNW7 | N11 | N14 | N13 | NNE11 | N10 | N11 | N14 | N14 | N21 | N22 | N18 | N21 | N22 | N26 | N27 | N24 | N23 | N25 | NNW21 | NNW15 | NNW12 | NNW10 | N16.3 | N27 |
| 3-Aug | NNW12 | N13 | N12 | NNW11 | NNW10 | NNW12 | NNW10 | NNW11 | NNW14 | NNW16 | NNW16 | NNW16 | NNW16 | NNW15 | N12 | N14 | N12 | NNE9 | NNE6 | NE3 | SSE2 | SSE6 | SSE6 | SSE7 | N9.0 | NNW16 |
| 4-Aug | SSE7 | SSE6 | SSE7 | S8 | S8 | S9 | S8 | SSW8 | SW10 | WSW10 | WSW10 | WSW10 | WSW14 | WSW14 | W10 | W2 | SW3 | SE4 | S4 | W3 | NNW7 | N14 | NNW14 | NNW12 | SW4.3 | N14 |
| 5-Aug | NW7 | WNW5 | WNW6 | WNW7 | W4 | NW8 | NNW12 | NNW13 | NNW14 | NNW15 | NNW16 | NW15 | NW18 | NW16 | N13 | N13 | N11 | N7 | N10 | NNW10 | NNW9 | NW10 | NW11 | NNW17 | NNW10.6 | NW18 |
| 6-Aug | NNW15 | NW14 | NW13 | NNW18 | NNW15 | NW10 | NW12 | NNW13 | NNW18 | NNW18 | N15 | N15 | NNW14 | NNW13 | NW11 | WNW11 | NNW10 | NNW9 | NW7 | NW6 | NW6 | W5 | NW5 | NW4 | NNW11.1 | NNW18 |
| 7-Aug | WNW5 | WNW5 | W4 | W4 | W5 | WSW5 | W6 | W6 | NW10 | NW11 | WNW7 | N5 | N5 | NNW6 | NW7 | NNW7 | N7 | NNE7 | N9 | N4 | NNW3 | NW2 | SSE2 | SSW3 | NW4.3 | NW11 |
| 8-Aug | SSW2 | SSE3 | SE1 | SSW2 | W3 | WNW2 | NNW5 | N7 | N8 | N9 | N9 | N8 | NNW10 | NNW8 | NNW10 | NW8 | NW8 | NNW8 | NNW7 | NNW4 | N4 | N2 | ENE3 | ESE3 | NNW4.4 | NNW10 |
| 9-Aug | SE2 | SE3 | SE3 | ESE3 | ESE4 | ESE3 | ESE3 | N3 | NW7 | NNW8 | NNW10 | NNW9 | NNW9 | NNW8 | N7 | NNW10 | N7 | NNE7 | NE6 | ENE3 | ESE2 | SE3 | SSE4 | SSE6 | N2.7 | NNW10 |
| 10-Aug | SSE5 | SSE6 | SSE7 | SSE5 | SSE5 | SSE4 | ESE2 | N1 | N6 | N8 | N9 | NNW10 | NNW10 | NNW10 | N11 | N12 | NNE11 | NNE9 | NNE7 | NNE3 | NE3 | ESE2 | ESE3 | ESE3 | NNE3.1 | N12 |
| 11-Aug | SE3 | SE4 | SE2 | SE4 | SE3 | SE3 | SSE4 | NW5 | N9 | NNW10 | N12 | N15 | N16 | N14 | N15 | N14 | NNE12 | NNE13 | NNE10 | NE5 | N4 | N6 | N5 | N2 | N6.1 | N16 |
| 12-Aug | NE3 | ENE3 | N2 | NNW5 | NW3 | NNW5 | NNW6 | NNW7 | N8 | N9 | N9 | NNE9 | NNE10 | NNE9 | N10 | NNE8 | NE8 | NE8 | NE9 | ENE4 | NNE3 | NE3 | NE3 | NE3 | NNE5.4 | NNE10 |
| 13-Aug | NNE5 | NE4 | NE3 | NE4 | NE4 | ENE4 | NNE5 | NE5 | NE7 | NE9 | NNE7 | NNE7 | NNE8 | NE9 | ENE8 | NNE6 | NE6 | NNE5 | NNE3 | NNE3 | SE2 | ESE1 | E3 | ENE3 | NE4.6 | NE9 |
| 14-Aug | ESE2 | ESE3 | SE2 | ESE3 | ENE2 | ESE1 | ENE1 | E1 | SSE3 | SW4 | W6 | NNE3 | E5 | SE5 | SSE4 | ENE7 | S5 | WSW4 | WNW3 | SW3 | S4 | SSE5 | SSE6 | SSE6 | SSE1.8 | ENE7 |
| 15-Aug | SSE6 | SSE6 | SSE6 | SSE7 | SSE6 | SSE7 | S6 | SSW6 | SW6 | WSW6 | WSW9 | WSW11 | W12 | WSW10 | W10 | WSW6 | WSW10 | WSW12 | SW8 | SW6 | SSW6 | SSW6 | SW6 | SW7 | SW6.2 | WSW12 |
| 16-Aug | SW7 | SW7 | WSW5 | WSW1 | N4 | NNE6 | NNW11 | N13 | NNW14 | N15 | N13 | N14 | N12 | NNW13 | NNW14 | NNW11 | N12 | N7 | N8 | N4 | E1 | SSE4 | SE3 | SSE5 | N6.2 | N15 |
| 17-Aug | SSE5 | SSE5 | SSE5 | SSE5 | SSE5 | SSE5 | SSE6 | SSW5 | SSW5 | W7 | W8 | WNW8 | WNW8 | WNW7 | NW7 | NW6 | WSW3 | S5 | SSW5 | S6 | S7 | S9 | S9 | S8 | SSW3.3 | S9 |
| 18-Aug | S8 | S8 | S8 | S9 | S10 | S9 | S9 | SSW11 | SSW10 | SSW12 | SSW13 | SW13 | WSW13 | WSW11 | WSW12 | WSW12 | WSW9 | WSW7 | WSW11 | SW6 | SW7 | SW7 | SSW4 | S5 | SSW8.3 | SW13 |
| 19-Aug | SSE5 | SSE5 | SSE7 | SSE7 | S6 | S6 | SSE6 | S4 | SSW6 | SW6 | SW8 | W8 | NW10 | NW9 | NNW9 | NNW11 | NNW13 | NNW11 | N11 | N9 | ESE3 | SSE2 | SSE3 | SW2 | W1.6 | NNW13 |
| 20-Aug | SSE3 | SSE4 | SE4 | SSE4 | SE5 | SE5 | SSE5 | SSE4 | NNE4 | N10 | N13 | C | C | C | N13 | N13 | N13 | N13 | N10 | NNE3 | NE3 | E3 | ESE3 | SSE5 | NNE3.1 | N13 |
| 21-Aug | SSE6 | SSE6 | SSE5 | SSE5 | SSE5 | SSE7 | SSE5 | S5 | SSW7 | WSW8 | WSW9 | WSW9 | WSW8 | SW10 | SW9 | SSW10 | SSW9 | SW9 | S7 | SSE8 | SSE10 | SSE12 | SSE11 | S11 | S6.5 | SSE12 |
| 22-Aug | S11 | S10 | S11 | S12 | SSE12 | SSE11 | S11 | S9 | S9 | SSW10 | SSW9 | S10 | S10 | SSW10 | SSW9 | SSW11 | S9 | SSW9 | S8 | SSE8 | SSE11 | S11 | S9 | S9 | S9.7 | S12 |
| 23-Aug | S9 | S8 | SSE8 | SSE10 | S8 | S10 | SSE8 | S8 | S7 | S8 | SSW10 | S9 | SSW8 | SW9 | SSW7 | W5 | WSW3 | WSW5 | W5 | N11 | NNW9 | NNE6 | NNE5 | N6 | SSW3.9 | N11 |
| 24-Aug | N6 | NNE5 | N8 | NNE6 | NNE6 | N6 | N5 | N5 | NNW5 | WNW4 | NW7 | NNW10 | NNW14 | NNW14 | NNW14 | NNW14 | NNW13 | N11 | NNE6 | NE4 | ESE3 | SSE4 | SE4 | SE4 | N5.8 | NNW14 |
| 25-Aug | ESE3 | E5 | E4 | ESE3 | E3 | ESE2 | ESE2 | NNE5 | NNE5 | NNE7 | N6 | NNW7 | N6 | N6 | NNE6 | NNW7 | NE6 | NE6 | NE6 | ENE4 | E5 | ESE6 | SE6 | SE8 | NE3.3 | SE8 |
| 26-Aug | SE8 | SE9 | SSE10 | SSE10 | SSE11 | SSE11 | S9 | S9 | S8 | S8 | SSW11 | SSW12 | SSW13 | SSW13 | SSW10 | S11 | S13 | S11 | SSE10 | SSE9 | SSE12 | SSE13 | SSE12 | SSE12 | S10.0 | SSE13 |
| 27-Aug | SSE13 | SSE13 | SSE13 | SSE13 | SSE12 | SSE11 | SSE11 | SSE11 | S8 | SSE9 | SSE13 | SSE15 | SSE17 | S15 | S15 | S12 | SSE10 | SE11 | SE14 | SE16 | SE15 | SSE15 | SSE18 | SSE16 | SSE12.9 | SSE18 |
| 28-Aug | SSE16 | SSE14 | SSE16 | SSE17 | S14 | S8 | S12 | S12 | SSW12 | SSW14 | SSW15 | SW12 | WSW18 | SW19 | WSW20 | WSW20 | WSW18 | SW16 | SW20 | WSW13 | WSW14 | WSW14 | WSW13 | WSW17 | SW12.4 | WSW20 |
| 29-Aug | WSW15 | WSW15 | SW16 | WSW16 | WSW14 | SW13 | SW15 | SW18 | SW18 | WSW16 | WSW16 | WSW17 | SW18 | WSW19 | WSW18 | SW17 | WSW15 | WSW11 | SW8 | S5 | SSE6 | SSE7 | S8 | S8 | SW13.0 | WSW19 |
| 30-Aug | SSE8 | SSE8 | SSE8 | SSE8 | SSE9 | SSE8 | SSE6 | S5 | SW9 | SSW8 | SW7 | WSW6 | W6 | WNW4 | WNW5 | NW1 | WNW5 | NW4 | ESE5 | SE4 | SSE6 | S6 | SW3 | SSE3 | SSW3.9 | SW9 |
| 31-Aug | SE3 | ESE1 | ESE2 | NNE2 | NE3 | NE2 | NNE2 | N6 | NNE8 | NNW10 | NNW8 | NNW8 | NNW7 | WNW8 | NW5 | WSW7 | SW6 | WSW6 | SW4 | SW6 | W5 | N3 | E4 | ESE5 | NW2.1 | NNW10 |
| | S2.9 | S2.8 | S2.6 | SSE2.5 | SSE2.5 | SSE2.2 | S1.5 | WSW1.2 | WNW2.5 | NW3.7 | WNW4.3 | NW4.1 | NW4.8 | WNW4.7 | NW4.5 | NW4.4 | NW3.5 | NNW2.5 | NNW1.5 | NNE0.6 | SSE0.5 | SSE1.6 | SSE2.0 | SSE2.6 | Diurnal Average | |
| | SSE16 | WSW15 | WSW16 | NNW18 | NNW15 | SW13 | SW15 | SW18 | SW18 | NNW18 | N21 | N22 | N18 | N21 | N22 | N26 | N27 | N24 | NNW23 | N25 | NNW21 | SSE15 | SSE18 | NNW17 | Diurnal Maximum | |

C - Calibration

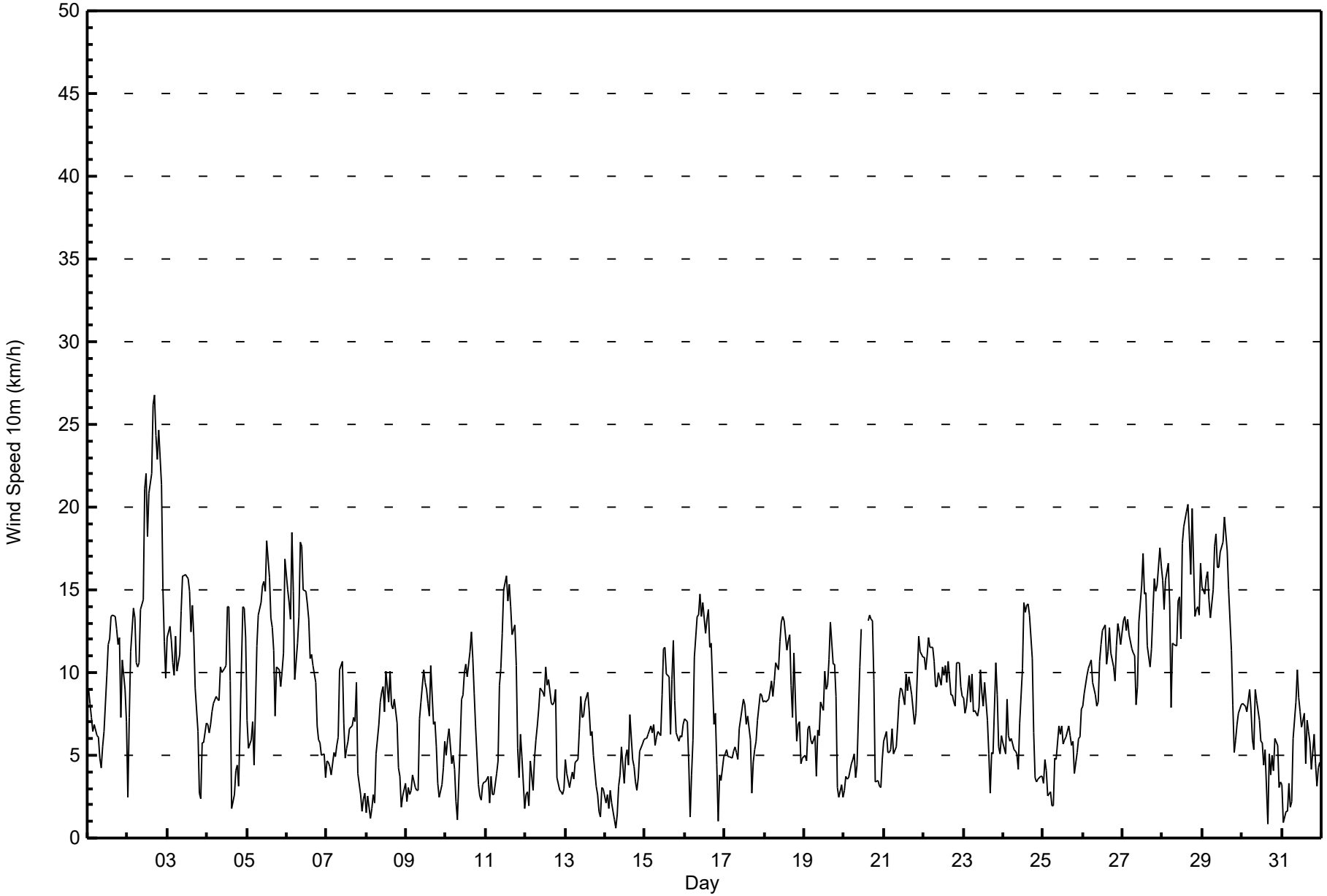
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Wapasu - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 219 | 29.55 | 29.55 |
| 6 - 11 | 350 | 47.23 | 76.79 |
| 12 - 19 | 159 | 21.46 | 98.25 |
| 20 - 28 | 13 | 1.75 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 741

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Wapasu - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 16 | 16 | 16 | 9 | 10 | 27 | 22 | 37 | 11 | 7 | 6 | 7 | 11 | 9 | 8 | 7 | 219 |
| 6 - 11 | 40 | 26 | 13 | 2 | 0 | 2 | 7 | 62 | 51 | 23 | 21 | 22 | 9 | 8 | 20 | 44 | 350 |
| 12 - 19 | 31 | 3 | 0 | 0 | 0 | 3 | 8 | 21 | 8 | 8 | 10 | 24 | 1 | 0 | 6 | 36 | 159 |
| 20 - 28 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 13 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 95 | 45 | 29 | 11 | 10 | 32 | 37 | 120 | 70 | 38 | 38 | 55 | 21 | 17 | 34 | 89 | 741 |

Total Number of Valid Hours: 741

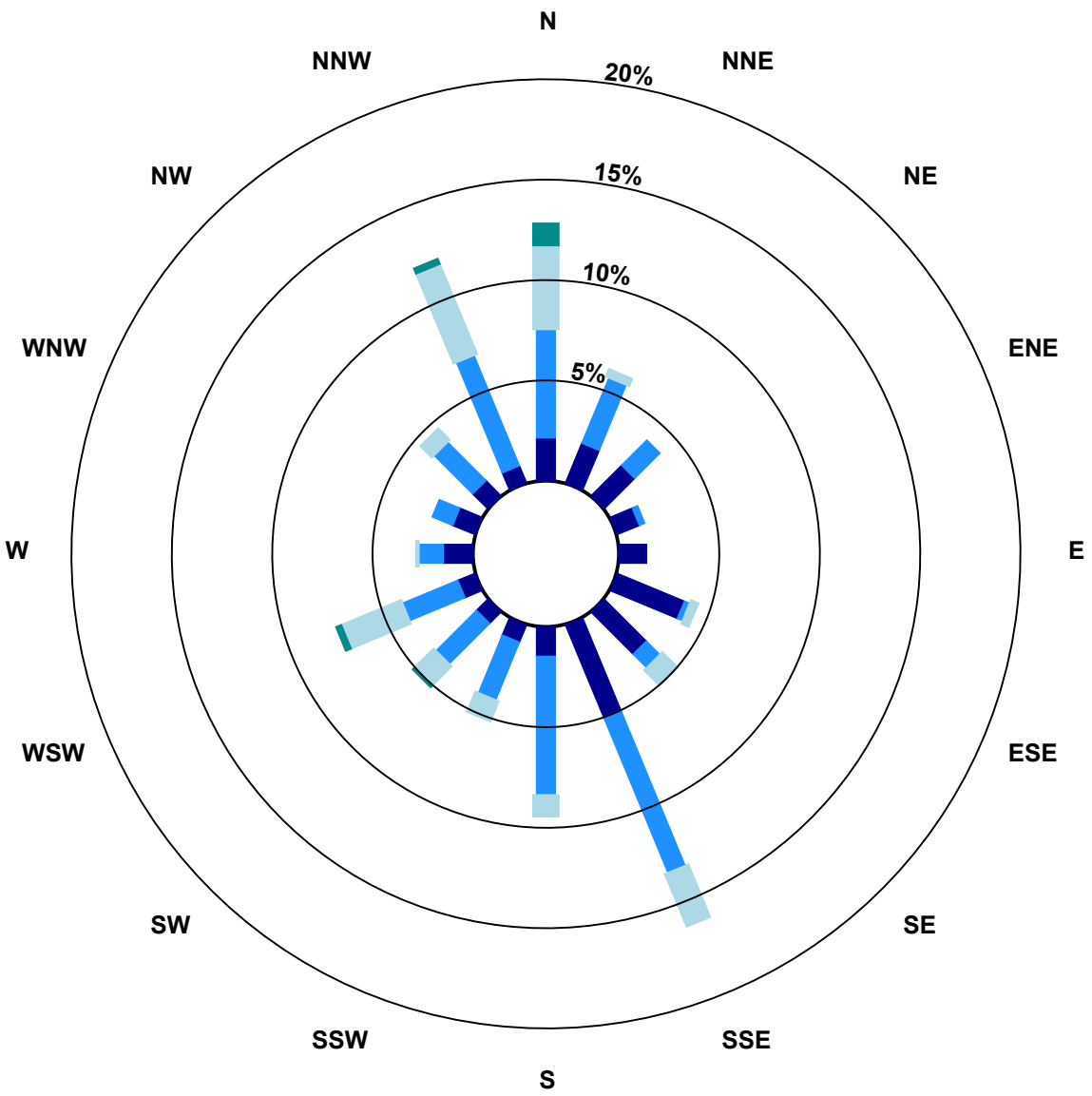
Total Number of Hours: 744

Wood Buffalo Environmental Association

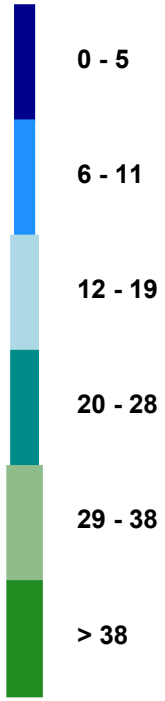
Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Wapasu




Classes (km/h)




Total Number of Valid Hours: 741

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Wapasu - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11 km/h on Aug 1 21:00

Minimum Value: 0 km/h on Aug 10 22:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 741 |
| Hours of Missing Data: | 3 |
| Hours of Calibration: | 3 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 11 | 7 | 4 | 2 | 11 |
| 2-Aug | 4 | 2 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 5 | 3 | 3 | 7 |
| 3-Aug | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 5 |
| 4-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 2 | 3 | 2 | 1 | 1 | 5 | 4 | 3 | 3 | 5 |
| 5-Aug | 3 | 2 | 2 | 2 | 1 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 6 | 5 | 4 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 4 | 5 | 6 |
| 6-Aug | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 5 |
| 7-Aug | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 4 |
| 8-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 0 | 1 | 3 |
| 9-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 1 | 1 | 0 | 1 | 1 | 4 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 2 | 1 | 3 | 2 | 1 | 5 |
| 12-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 1 | 1 | 1 | 1 | 1 | 4 |
| 13-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 3 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 4 |
| 16-Aug | 2 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 5 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 |
| 18-Aug | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 4 |
| 19-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 4 |
| 20-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 4 | 3 | 4 | C | C | C | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 0 | 1 | 1 | 4 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 3 | 3 | 3 | 4 |
| 22-Aug | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 1 | 2 | 3 | 3 | 3 | 4 |
| 23-Aug | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 4 |
| 24-Aug | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 4 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 26-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 |
| 27-Aug | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 5 | 6 | 5 | 3 | 3 | 5 | 4 | 4 | 4 | 5 | 4 | 6 |
| 28-Aug | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 6 |
| 29-Aug | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 6 | 5 | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 6 |
| 30-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 3 |
| 31-Aug | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 3 |
| | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 11 | 7 | 5 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Wapasu - August 2026

Direction of Maximum Speed: 352 deg on Aug 2 17:00
Direction of Maximum Daily Speed Average: 355.3 deg on Aug 2

Direction of Minimum Speed: 58 deg on Aug 14 07:00
Direction of Minimum Daily Speed Average: 1.6 deg on Aug 19

Monthly Average Direction: 275.5 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 741 |
| Hours of Missing Data: | 3 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 157 | 167 | 169 | 164 | 165 | 160 | 157 | 171 | 171 | 122 | 138 | 125 | 119 | 116 | 122 | 139 | 136 | 142 | 139 | 136 | 18 | 41 | 50 | 116 | 132.1 |
| 2-Aug | 345 | 344 | 359 | 10 | 11 | 12 | 10 | 8 | 5 | 3 | 355 | 359 | 3 | 355 | 356 | 353 | 352 | 352 | 349 | 350 | 346 | 343 | 338 | 338 | 355.3 |
| 3-Aug | 346 | 350 | 349 | 342 | 342 | 347 | 348 | 348 | 339 | 346 | 345 | 341 | 342 | 345 | 349 | 354 | 355 | 15 | 22 | 37 | 154 | 152 | 159 | 158 | 350.1 |
| 4-Aug | 161 | 165 | 168 | 173 | 179 | 172 | 191 | 198 | 236 | 249 | 245 | 246 | 241 | 244 | 260 | 273 | 227 | 135 | 178 | 268 | 331 | 350 | 343 | 339 | 236.2 |
| 5-Aug | 314 | 296 | 285 | 284 | 277 | 324 | 327 | 334 | 332 | 337 | 333 | 316 | 320 | 324 | 349 | 355 | 358 | 349 | 352 | 338 | 327 | 313 | 318 | 341 | 329.3 |
| 6-Aug | 330 | 325 | 324 | 343 | 337 | 307 | 321 | 340 | 347 | 348 | 350 | 350 | 348 | 348 | 326 | 303 | 331 | 330 | 311 | 314 | 311 | 273 | 314 | 306 | 332.3 |
| 7-Aug | 288 | 289 | 267 | 268 | 261 | 257 | 268 | 278 | 312 | 307 | 295 | 1 | 353 | 334 | 314 | 337 | 353 | 12 | 349 | 353 | 331 | 319 | 152 | 192 | 312.9 |
| 8-Aug | 193 | 150 | 134 | 194 | 263 | 288 | 340 | 3 | 1 | 360 | 1 | 5 | 344 | 347 | 342 | 322 | 319 | 331 | 333 | 341 | 349 | 10 | 65 | 120 | 346.0 |
| 9-Aug | 128 | 143 | 133 | 110 | 104 | 113 | 103 | 350 | 322 | 332 | 334 | 342 | 341 | 334 | 10 | 340 | 3 | 19 | 43 | 59 | 104 | 131 | 151 | 155 | 9.7 |
| 10-Aug | 157 | 159 | 158 | 155 | 158 | 149 | 108 | 349 | 351 | 350 | 1 | 347 | 331 | 342 | 353 | 5 | 13 | 12 | 12 | 19 | 50 | 103 | 121 | 114 | 13.8 |
| 11-Aug | 144 | 139 | 135 | 144 | 140 | 143 | 153 | 321 | 352 | 348 | 353 | 356 | 352 | 358 | 358 | 11 | 13 | 13 | 19 | 36 | 9 | 357 | 358 | 1 | 6.1 |
| 12-Aug | 38 | 68 | 357 | 347 | 315 | 332 | 339 | 345 | 354 | 350 | 360 | 17 | 19 | 18 | 9 | 25 | 36 | 43 | 55 | 62 | 23 | 50 | 38 | 40 | 15.1 |
| 13-Aug | 31 | 41 | 34 | 36 | 49 | 58 | 26 | 52 | 37 | 35 | 21 | 24 | 21 | 41 | 71 | 18 | 43 | 19 | 18 | 19 | 143 | 123 | 100 | 78 | 38.7 |
| 14-Aug | 118 | 111 | 133 | 111 | 70 | 112 | 58 | 94 | 159 | 217 | 281 | 25 | 97 | 125 | 150 | 64 | 181 | 242 | 295 | 228 | 170 | 165 | 159 | 160 | 147.6 |
| 15-Aug | 164 | 161 | 160 | 164 | 163 | 163 | 175 | 197 | 219 | 239 | 241 | 246 | 259 | 256 | 263 | 255 | 254 | 239 | 227 | 218 | 199 | 208 | 217 | 219 | 220.4 |
| 16-Aug | 221 | 214 | 256 | 249 | 358 | 20 | 348 | 352 | 348 | 353 | 359 | 354 | 1 | 346 | 348 | 341 | 353 | 3 | 352 | 10 | 90 | 158 | 145 | 152 | 349.4 |
| 17-Aug | 153 | 161 | 165 | 159 | 147 | 148 | 168 | 203 | 213 | 281 | 276 | 287 | 302 | 297 | 306 | 309 | 258 | 191 | 204 | 180 | 171 | 171 | 174 | 177 | 208.9 |
| 18-Aug | 171 | 175 | 173 | 171 | 172 | 181 | 178 | 201 | 193 | 200 | 206 | 232 | 237 | 238 | 240 | 247 | 240 | 250 | 249 | 234 | 235 | 227 | 193 | 178 | 211.8 |
| 19-Aug | 167 | 164 | 160 | 159 | 176 | 170 | 165 | 176 | 192 | 230 | 232 | 270 | 311 | 317 | 332 | 332 | 347 | 346 | 352 | 356 | 120 | 155 | 150 | 234 | 279.5 |
| 20-Aug | 158 | 156 | 142 | 148 | 146 | 141 | 152 | 153 | 17 | 2 | 0 | C | C | C | 349 | 356 | 356 | 355 | 354 | 20 | 56 | 94 | 113 | 152 | 21.1 |
| 21-Aug | 155 | 152 | 151 | 147 | 150 | 154 | 154 | 174 | 203 | 242 | 250 | 244 | 246 | 229 | 229 | 211 | 209 | 216 | 189 | 162 | 157 | 160 | 162 | 171 | 190.8 |
| 22-Aug | 174 | 175 | 174 | 169 | 162 | 160 | 171 | 176 | 175 | 194 | 199 | 183 | 191 | 196 | 199 | 201 | 191 | 193 | 172 | 153 | 163 | 177 | 185 | 187 | 179.6 |
| 23-Aug | 179 | 173 | 168 | 168 | 170 | 169 | 168 | 177 | 178 | 191 | 206 | 174 | 210 | 215 | 212 | 260 | 244 | 244 | 263 | 349 | 348 | 31 | 12 | 356 | 195.7 |
| 24-Aug | 5 | 14 | 9 | 25 | 27 | 6 | 8 | 8 | 331 | 284 | 314 | 348 | 337 | 331 | 338 | 340 | 348 | 8 | 20 | 53 | 118 | 148 | 142 | 146 | 354.9 |
| 25-Aug | 113 | 85 | 79 | 118 | 93 | 103 | 103 | 25 | 16 | 19 | 354 | 338 | 350 | 3 | 29 | 335 | 36 | 36 | 50 | 73 | 96 | 110 | 124 | 137 | 49.0 |
| 26-Aug | 141 | 144 | 148 | 149 | 152 | 159 | 170 | 184 | 190 | 190 | 209 | 199 | 198 | 204 | 197 | 179 | 177 | 175 | 165 | 153 | 157 | 162 | 164 | 167 | 172.8 |
| 27-Aug | 168 | 164 | 161 | 164 | 160 | 155 | 155 | 158 | 178 | 159 | 149 | 165 | 167 | 181 | 172 | 176 | 158 | 143 | 131 | 132 | 138 | 150 | 154 | 148 | 157.3 |
| 28-Aug | 147 | 149 | 150 | 161 | 174 | 184 | 178 | 191 | 200 | 211 | 209 | 225 | 239 | 234 | 240 | 240 | 239 | 234 | 234 | 258 | 246 | 246 | 249 | 245 | 216.0 |
| 29-Aug | 238 | 239 | 236 | 241 | 238 | 234 | 235 | 229 | 229 | 237 | 237 | 239 | 234 | 240 | 239 | 233 | 244 | 241 | 229 | 187 | 162 | 160 | 171 | 171 | 230.9 |
| 30-Aug | 167 | 168 | 165 | 163 | 159 | 166 | 167 | 189 | 231 | 210 | 219 | 240 | 259 | 291 | 286 | 315 | 298 | 305 | 108 | 141 | 152 | 169 | 228 | 154 | 192.2 |
| 31-Aug | 137 | 103 | 103 | 24 | 40 | 55 | 30 | 1 | 19 | 342 | 340 | 346 | 331 | 302 | 314 | 255 | 236 | 248 | 215 | 219 | 280 | 0 | 100 | 118 | 325.8 |
| | 171.0 | 168.9 | 169.4 | 166.0 | 165.5 | 168.1 | 185.9 | 254.3 | 295.9 | 305.4 | 302.4 | 307.0 | 305.0 | 300.5 | 312.6 | 316.7 | 324.6 | 328.3 | 335.0 | 18.7 | 157.4 | 161.5 | 161.3 | 167.9 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

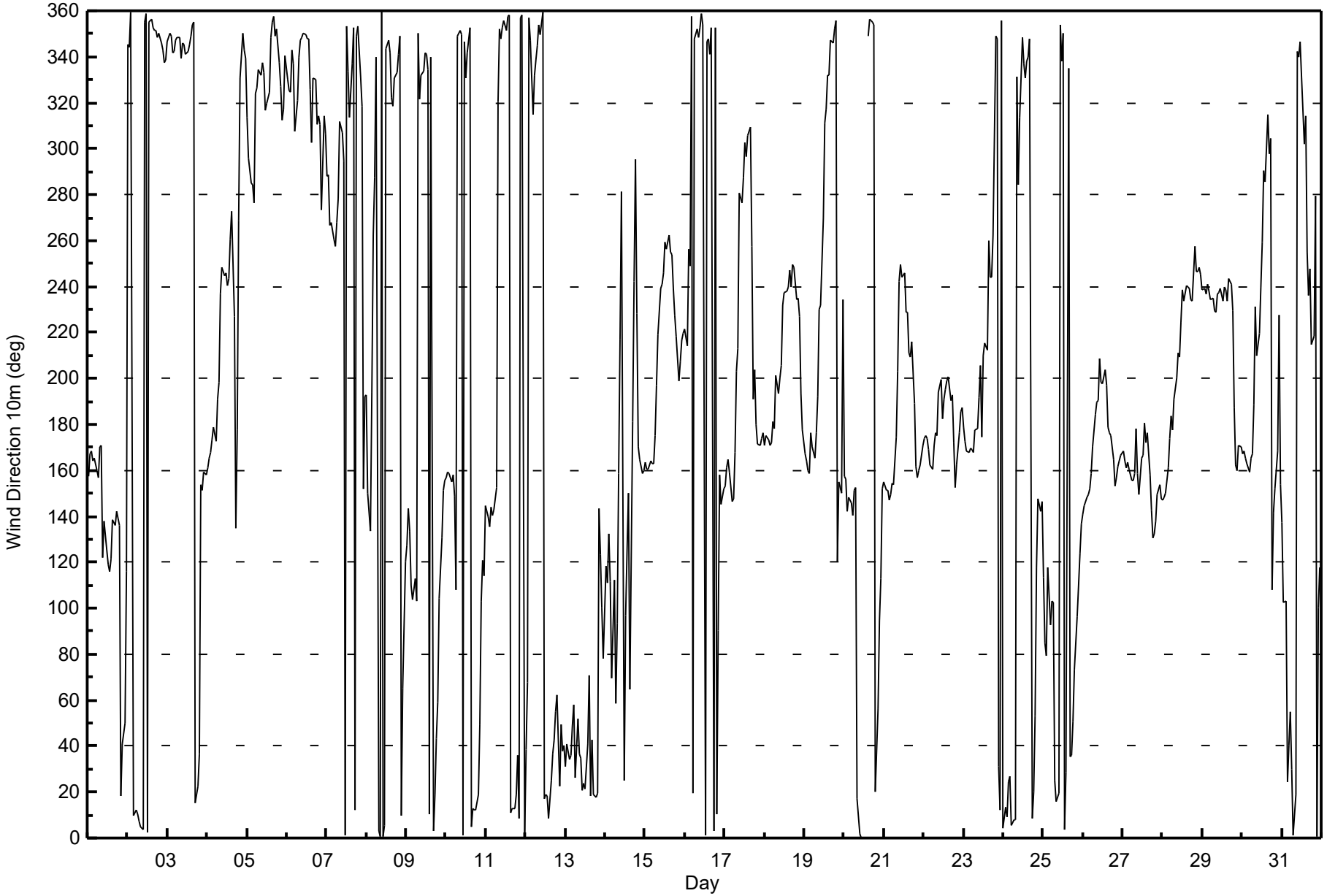
C - Calibration
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Wapasu - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Wapasu - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 104 deg on Aug 30 16:00

Minimum Value: 3 deg on Aug 10 02:00

Percentiles: $P_1$ = 5 $P_{10}$ = 14 $Q_1$ = 20 Median = 25 $Q_3$ = 31 $P_{90}$ = 41 $P_{99}$ = 77

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 741 |
| Hours of Missing Data: | 3 |
| Hours of Calibration: | 3 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 17 | 20 | 18 | 13 | 13 | 16 | 17 | 23 | 52 | 27 | 20 | 23 | 25 | 25 | 26 | 25 | 23 | 20 | 19 | 21 | 75 | 52 | 41 | 33 | 75 |
| 2-Aug | 75 | 25 | 23 | 28 | 29 | 30 | 29 | 28 | 27 | 25 | 23 | 24 | 26 | 21 | 23 | 24 | 22 | 22 | 22 | 21 | 21 | 19 | 20 | 20 | 75 |
| 3-Aug | 19 | 19 | 19 | 19 | 18 | 19 | 19 | 24 | 23 | 23 | 23 | 24 | 21 | 24 | 27 | 27 | 30 | 34 | 36 | 34 | 43 | 5 | 8 | 6 | 43 |
| 4-Aug | 7 | 10 | 14 | 18 | 23 | 20 | 27 | 29 | 20 | 25 | 23 | 26 | 23 | 24 | 47 | 87 | 83 | 61 | 37 | 38 | 51 | 20 | 21 | 20 | 87 |
| 5-Aug | 27 | 32 | 30 | 28 | 34 | 25 | 21 | 20 | 24 | 22 | 24 | 29 | 26 | 28 | 23 | 23 | 23 | 21 | 18 | 23 | 23 | 26 | 27 | 22 | 34 |
| 6-Aug | 22 | 24 | 25 | 21 | 22 | 28 | 23 | 22 | 21 | 18 | 21 | 25 | 22 | 23 | 29 | 30 | 23 | 24 | 28 | 27 | 34 | 30 | 30 | 35 | 35 |
| 7-Aug | 34 | 31 | 31 | 35 | 25 | 24 | 26 | 30 | 29 | 31 | 33 | 59 | 29 | 29 | 25 | 21 | 30 | 30 | 20 | 25 | 26 | 31 | 15 | 17 | 59 |
| 8-Aug | 71 | 32 | 56 | 60 | 24 | 34 | 19 | 29 | 29 | 35 | 31 | 41 | 28 | 45 | 28 | 35 | 29 | 25 | 20 | 18 | 19 | 15 | 40 | 34 | 71 |
| 9-Aug | 32 | 19 | 23 | 32 | 15 | 18 | 24 | 60 | 31 | 37 | 29 | 37 | 26 | 39 | 46 | 30 | 34 | 35 | 30 | 14 | 24 | 15 | 16 | 4 | 60 |
| 10-Aug | 7 | 3 | 5 | 6 | 6 | 17 | 68 | 93 | 31 | 28 | 35 | 35 | 34 | 42 | 34 | 32 | 34 | 30 | 35 | 20 | 26 | 33 | 7 | 11 | 93 |
| 11-Aug | 18 | 19 | 40 | 10 | 13 | 17 | 14 | 53 | 27 | 30 | 28 | 25 | 27 | 33 | 28 | 33 | 34 | 31 | 33 | 29 | 27 | 23 | 21 | 20 | 53 |
| 12-Aug | 29 | 38 | 33 | 17 | 27 | 17 | 19 | 18 | 22 | 21 | 25 | 32 | 33 | 35 | 31 | 32 | 31 | 31 | 25 | 21 | 21 | 30 | 42 | 26 | 42 |
| 13-Aug | 21 | 21 | 27 | 27 | 30 | 23 | 27 | 24 | 33 | 32 | 37 | 32 | 29 | 34 | 27 | 37 | 35 | 28 | 28 | 24 | 60 | 17 | 10 | 30 | 60 |
| 14-Aug | 21 | 13 | 23 | 43 | 34 | 84 | 79 | 23 | 30 | 32 | 37 | 86 | 33 | 25 | 67 | 53 | 42 | 41 | 44 | 31 | 26 | 10 | 7 | 10 | 86 |
| 15-Aug | 8 | 7 | 7 | 9 | 9 | 10 | 20 | 26 | 26 | 37 | 31 | 28 | 30 | 34 | 35 | 37 | 28 | 20 | 22 | 21 | 22 | 25 | 21 | 23 | 37 |
| 16-Aug | 22 | 25 | 39 | 49 | 56 | 39 | 19 | 21 | 20 | 22 | 28 | 25 | 34 | 26 | 25 | 28 | 31 | 25 | 22 | 30 | 68 | 8 | 14 | 5 | 68 |
| 17-Aug | 7 | 8 | 7 | 13 | 7 | 10 | 13 | 28 | 40 | 31 | 39 | 37 | 34 | 50 | 47 | 46 | 57 | 48 | 28 | 15 | 13 | 18 | 18 | 18 | 57 |
| 18-Aug | 16 | 20 | 20 | 18 | 20 | 25 | 25 | 30 | 30 | 29 | 28 | 26 | 22 | 22 | 25 | 26 | 21 | 23 | 21 | 18 | 16 | 19 | 29 | 19 | 30 |
| 19-Aug | 10 | 9 | 9 | 9 | 18 | 31 | 15 | 45 | 38 | 39 | 26 | 39 | 35 | 37 | 37 | 26 | 24 | 25 | 19 | 20 | 45 | 51 | 19 | 67 | 67 |
| 20-Aug | 38 | 23 | 26 | 17 | 8 | 23 | 8 | 14 | 80 | 25 | 27 | C | C | C | 27 | 29 | 27 | 26 | 24 | 23 | 21 | 7 | 20 | 9 | 80 |
| 21-Aug | 3 | 5 | 5 | 6 | 10 | 4 | 10 | 25 | 30 | 27 | 28 | 31 | 33 | 33 | 38 | 35 | 34 | 30 | 27 | 14 | 15 | 16 | 18 | 23 | 38 |
| 22-Aug | 25 | 25 | 24 | 24 | 19 | 18 | 25 | 27 | 28 | 30 | 29 | 29 | 34 | 34 | 35 | 30 | 30 | 27 | 22 | 13 | 17 | 24 | 29 | 27 | 35 |
| 23-Aug | 26 | 24 | 18 | 22 | 23 | 22 | 20 | 24 | 26 | 32 | 29 | 30 | 35 | 30 | 27 | 33 | 40 | 22 | 35 | 21 | 16 | 28 | 29 | 21 | 40 |
| 24-Aug | 29 | 28 | 30 | 31 | 30 | 29 | 30 | 27 | 32 | 44 | 28 | 30 | 22 | 23 | 23 | 22 | 23 | 29 | 30 | 24 | 19 | 13 | 10 | 17 | 44 |
| 25-Aug | 12 | 7 | 8 | 26 | 19 | 40 | 33 | 28 | 37 | 34 | 45 | 50 | 67 | 60 | 54 | 46 | 43 | 33 | 17 | 27 | 19 | 13 | 15 | 15 | 67 |
| 26-Aug | 14 | 13 | 14 | 14 | 16 | 18 | 24 | 26 | 29 | 33 | 29 | 31 | 31 | 31 | 30 | 30 | 29 | 28 | 19 | 15 | 16 | 18 | 20 | 21 | 33 |
| 27-Aug | 22 | 22 | 18 | 19 | 18 | 18 | 18 | 20 | 32 | 28 | 23 | 25 | 26 | 30 | 28 | 28 | 21 | 17 | 20 | 18 | 19 | 21 | 20 | 19 | 32 |
| 28-Aug | 19 | 20 | 19 | 22 | 26 | 57 | 29 | 33 | 32 | 26 | 26 | 26 | 22 | 19 | 20 | 19 | 18 | 19 | 18 | 25 | 22 | 20 | 22 | 20 | 57 |
| 29-Aug | 19 | 19 | 19 | 18 | 18 | 19 | 19 | 18 | 20 | 22 | 22 | 20 | 23 | 21 | 22 | 20 | 23 | 18 | 19 | 25 | 12 | 11 | 15 | 19 | 25 |
| 30-Aug | 17 | 18 | 14 | 17 | 20 | 19 | 22 | 31 | 17 | 24 | 36 | 51 | 48 | 56 | 34 | 104 | 53 | 58 | 19 | 15 | 11 | 41 | 59 | 62 | 104 |
| 31-Aug | 26 | 67 | 54 | 59 | 45 | 58 | 49 | 30 | 32 | 22 | 29 | 39 | 50 | 43 | 67 | 44 | 33 | 32 | 25 | 27 | 31 | 51 | 7 | 16 | 67 |
| | 75 | 67 | 56 | 60 | 56 | 84 | 79 | 93 | 80 | 44 | 45 | 86 | 67 | 60 | 67 | 104 | 83 | 61 | 44 | 38 | 75 | 52 | 59 | 67 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS18
## STONY MOUNTAIN
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
AUGUST 2026

MONTHLY SUMMARY for
AMD SECTION III.B.1(c)

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 709 | 34 | 35 | 99.87 | - | - | 2.6 | 0 | 0.5 | 0 |
| TRS(ppb) Average | 708 | 36 | 36 | 100 | 0.4 | 0 | 0.3 | - | 0.3 | - |
| THC(ppm) Average | 709 | 35 | 35 | 100 | - | - | 2.5 | - | 2.3 | - |
| NMHC(ppm) Average | 709 | 35 | 35 | 100 | - | - | 0.004 | - | 0 | - |
| CH4(ppm) Average | 709 | 35 | 35 | 100 | - | - | 2.5 | - | 2.3 | - |
| O3 (ppb) Average | 709 | 35 | 35 | 100 | - | - | 46.4 | 0 | 35.2 | - |
| NO2 (ppb) Average | 675 | 36 | 69 | 95.56 | - | - | 2.9 | 0 | 1.1 | - |
| NO (ppb) Average | 675 | 36 | 69 | 95.56 | - | - | 1.5 | - | 0.2 | - |
| NOX (ppb) Average | 675 | 36 | 69 | 95.56 | - | - | 4.4 | - | 1.2 | - |
| PM2.5 (ug/m3) Average | 674 | 1 | 70 | 90.73 | - | - | 30.5 | 0 | 12.9 | 0 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 28.5 | - | 21.6 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 100 | - | 93.5 | - |
| Wind Speed 20 m (km/h) Average | 744 | 0 | 0 | 100 | - | - | 20 | - | 14 | - |
| Wind Direction 20 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - | - | - |
| Precipitation (mm) Total | 744 | 0 | 0 | 100 | - | - | 8.8 | - | 52.3 | - |
| Leaf Wetness (% of range) Average | 744 | 0 | 0 | 100 | - | - | 52.1 | - | 20.4 | - |
| Global Solar Radiation (W/m2) Average | 744 | 0 | 0 | 100 | - | - | 859.5 | - | 254.7 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 709 | 0.16 | 0.3 | - | 0 | 0 | 0 | 0.1 | 0.2 | 0.5 | 2.6 |
| TRS (ppb) Average | 708 | 0.2 | 0.1 | - | 0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| THC (ppm) Average | 709 | 2.11 | 0.1 | - | 2 | 2 | 2 | 2.1 | 2.2 | 2.2 | 2.5 |
| NMHC(ppm) Average | 709 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.004 |
| CH4(ppm) Average | 709 | 2.11 | 0.1 | - | 2 | 2 | 2 | 2.1 | 2.2 | 2.2 | 2.5 |
| O3 (ppb) Average | 709 | 24.27 | 7.5 | - | 6.3 | 14.9 | 18.9 | 24 | 28.3 | 34.2 | 46.4 |
| NO2 (ppb) Average | 675 | 0.57 | 0.4 | - | 0 | 0.2 | 0.3 | 0.4 | 0.7 | 1.1 | 2.9 |
| NO (ppb) Average | 675 | 0.06 | 0.1 | - | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 1.5 |
| NOX (ppb) Average | 675 | 0.63 | 0.5 | - | 0.1 | 0.2 | 0.3 | 0.5 | 0.8 | 1.2 | 4.4 |
| PM2.5 (ug/m3) Average | 674 | 5.72 | 4.6 | - | 0.4 | 1.6 | 2.8 | 3.8 | 7.9 | 11.6 | 30.5 |
| Temperature 2 m (C) Average | 744 | 15.6 | 4.4 | - | 5.6 | 10.3 | 12.3 | 15.2 | 18.4 | 21.5 | 28.5 |
| Relative Humidity (%) Average | 744 | 75.26 | 16.6 | - | 34.1 | 50.8 | 63.7 | 77.8 | 88.9 | 96.2 | 100 |
| Wind Speed 20 m (km/h) Average | 744 | 9.4 | 4 | - | 1 | 5 | 6 | 9 | 12 | 14 | 20 |
| Wind Direction 20 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |
| Precipitation (mm) Total | 744 | - | - | 102.57 | - | - | - | - | - | - | - |
| Surface Wetness (% of range) Average | 744 | 4.43 | 8 | - | 0 | 0.4 | 0.8 | 1.2 | 2 | 16.3 | 52.1 |
| Global Solar Radiation (W/m2) Average | 744 | 189.79 | 238.2 | - | 0 | 0 | 0.2 | 44.5 | 365.2 | 581.3 | 859.5 |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| SO2 | 13 Aug 2026 12:00 | 13 Aug 2026 12:00 | 1 | Flatline in analyzer output signal |
| NO2 | 19 Aug 2026 03:00 | 20 Aug 2026 12:00 | 33 | Unstable Operation - span outside AMD criteria |
| PM2.5 | 05 Aug 2026 13:00 | 20 Aug 2026 08:00 | 35 | Unstable Operation - flatline in analyzer output signal |
| PM2.5 | 12 Aug 2026 16:00 | 27 Aug 2026 07:00 | 34 | DAS Failure - data not recorded |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Stony Mountain - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.6 ppb on Aug 10 09:00 Maximum Daily Average: 0.5 ppb on Aug 10

Minimum Value: 0.0 ppb on Aug 1 23:00
Maximum Diurnal Average: 0.3 ppb at hour 9
Monthly Average: 0.16 ppb

Minimum Daily Average: 0.0 ppb on Aug 7
Minimum Diurnal Average: 0.1 ppb at hour 15
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.5 $P_{99}$ = 1.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.2 | 0.1 | 0.0 | Z | 0.0 | 0.1 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.0 | 0.3 |
| 3-Aug | Z | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 4-Aug | 0.0 | Z | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 |
| 5-Aug | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | Z | 0.1 | 0.7 | 0.9 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 |
| 9-Aug | Z | 0.5 | 0.4 | 0.5 | 0.2 | 0.3 | 0.4 | 0.8 | 1.3 | 1.0 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.7 | 0.5 | 1.3 |
| 10-Aug | 0.9 | Z | 0.7 | 0.9 | 0.2 | 0.2 | 0.1 | 0.6 | 2.6 | 2.2 | 1.6 | 0.6 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.5 | 2.6 |
| 11-Aug | 0.1 | 0.4 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.5 |
| 12-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.7 | 1.0 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 |
| 13-Aug | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | DF | C | C | C | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 |
| 15-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 16-Aug | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 |
| 17-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20-Aug | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.8 | 0.5 | 0.6 | 1.1 | 1.3 | 1.3 | 1.2 | 0.3 | 1.3 |
| 21-Aug | Z | 0.8 | 0.8 | 0.8 | 1.1 | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 | 0.5 | 0.3 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.4 | 1.1 |
| 22-Aug | 0.4 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.6 | 0.5 | 0.2 | 0.3 | 0.3 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.6 |
| 23-Aug | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 24-Aug | 0.3 | 0.4 | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 1.0 | 1.4 | 0.6 | 0.1 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.3 | 1.4 |
| 25-Aug | 0.0 | 0.0 | 0.2 | 0.3 | Z | 0.8 | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.6 | 0.5 | 0.1 | 0.2 | 0.8 |
| 26-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.3 | 0.4 | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.5 |
| 27-Aug | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.6 | 0.4 | 0.4 | 1.5 | 2.2 | 0.8 | 0.3 | 0.5 | 2.2 |
| 28-Aug | 0.3 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 29-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 30-Aug | 0.1 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.7 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 31-Aug | 0.3 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | Diurnal Average | |
| | 0.9 | 0.8 | 0.8 | 0.9 | 1.1 | 1.1 | 0.7 | 0.8 | 2.6 | 2.2 | 1.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.8 | 0.6 | 1.5 | 2.2 | 1.3 | 1.2 | Diurnal Maximum | |

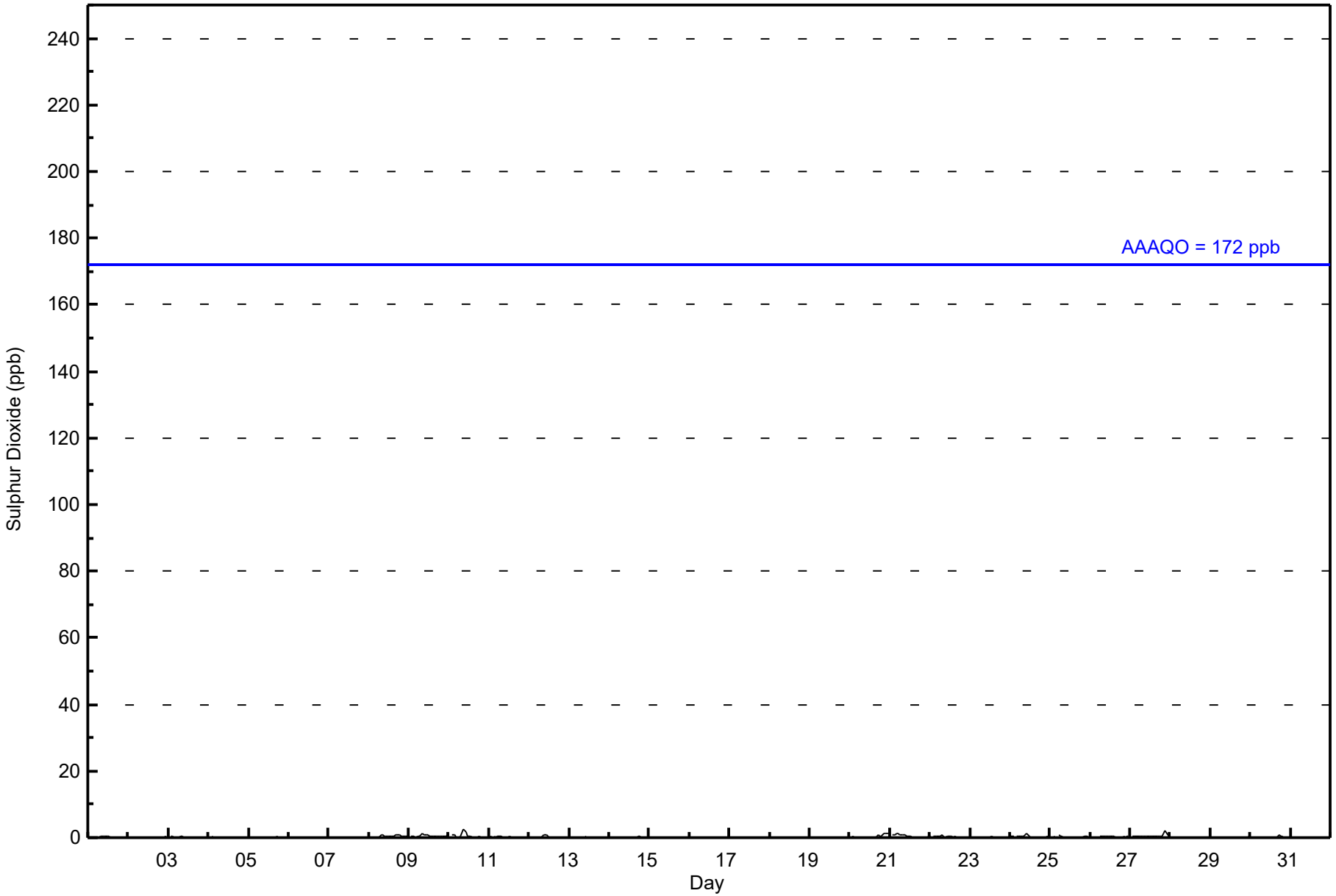
Z - zerospan C - Calibration DF - DAS Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Stony Mountain - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Stony Mountain - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 709 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Stony Mountain - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 31 | 20 | 19 | 15 | 14 | 8 | 17 | 31 | 35 | 53 | 49 | 52 | 74 | 115 | 113 | 63 | 709 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 20 | 19 | 15 | 14 | 8 | 17 | 31 | 35 | 53 | 49 | 52 | 74 | 115 | 113 | 63 | 709 |

Total Number of Valid Hours: 709

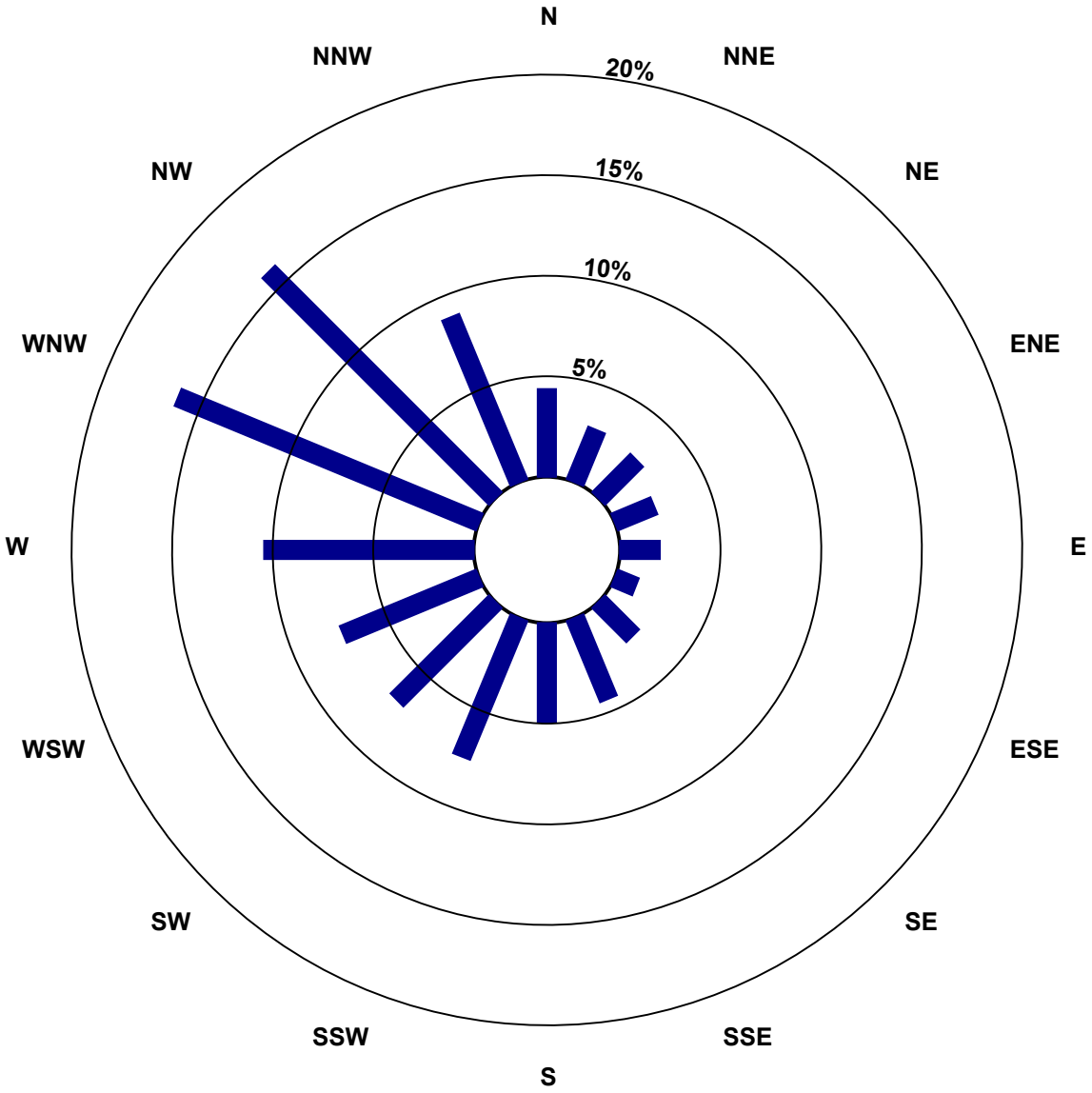
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Stony Mountain




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

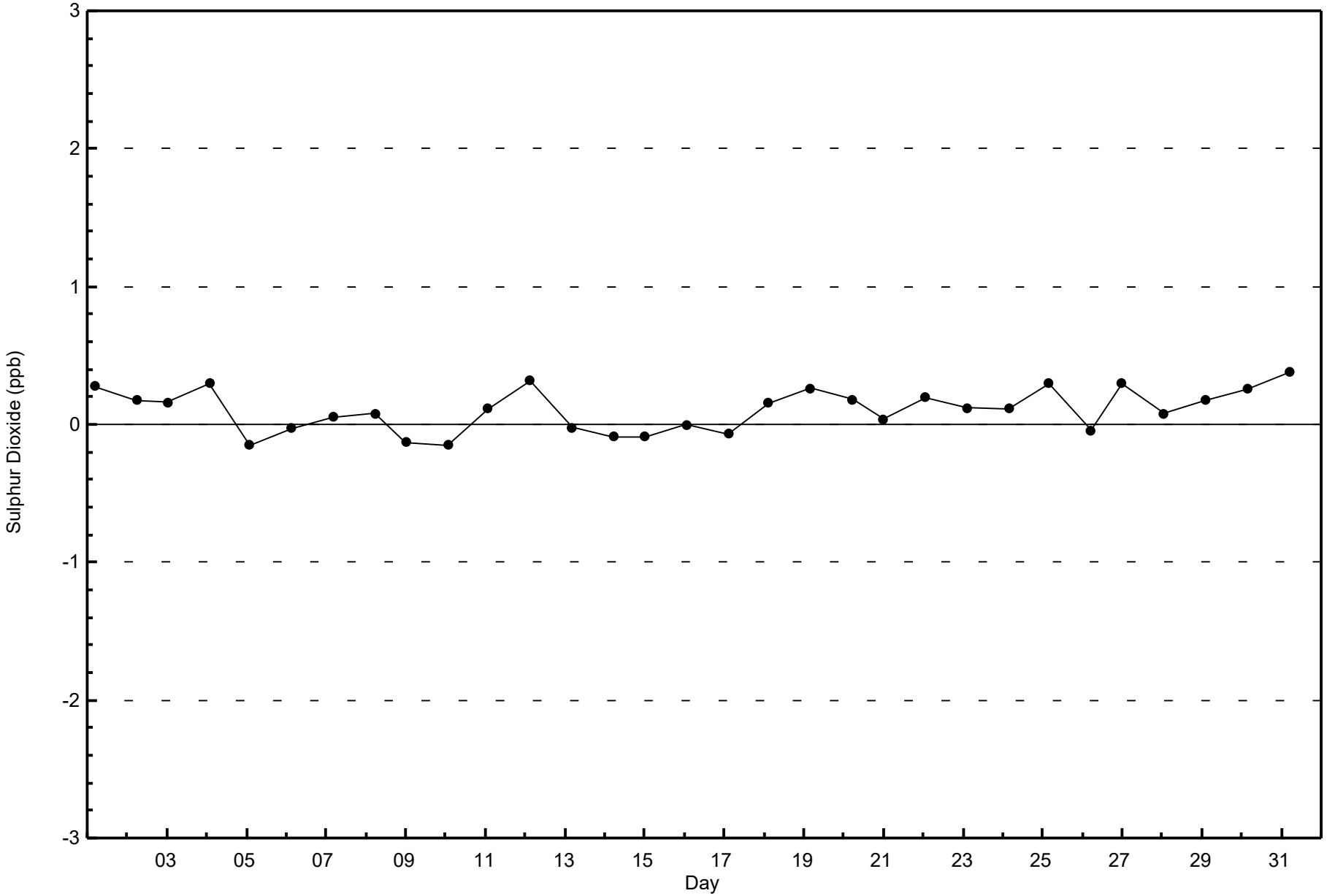
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Stony Mountain - August 2026**

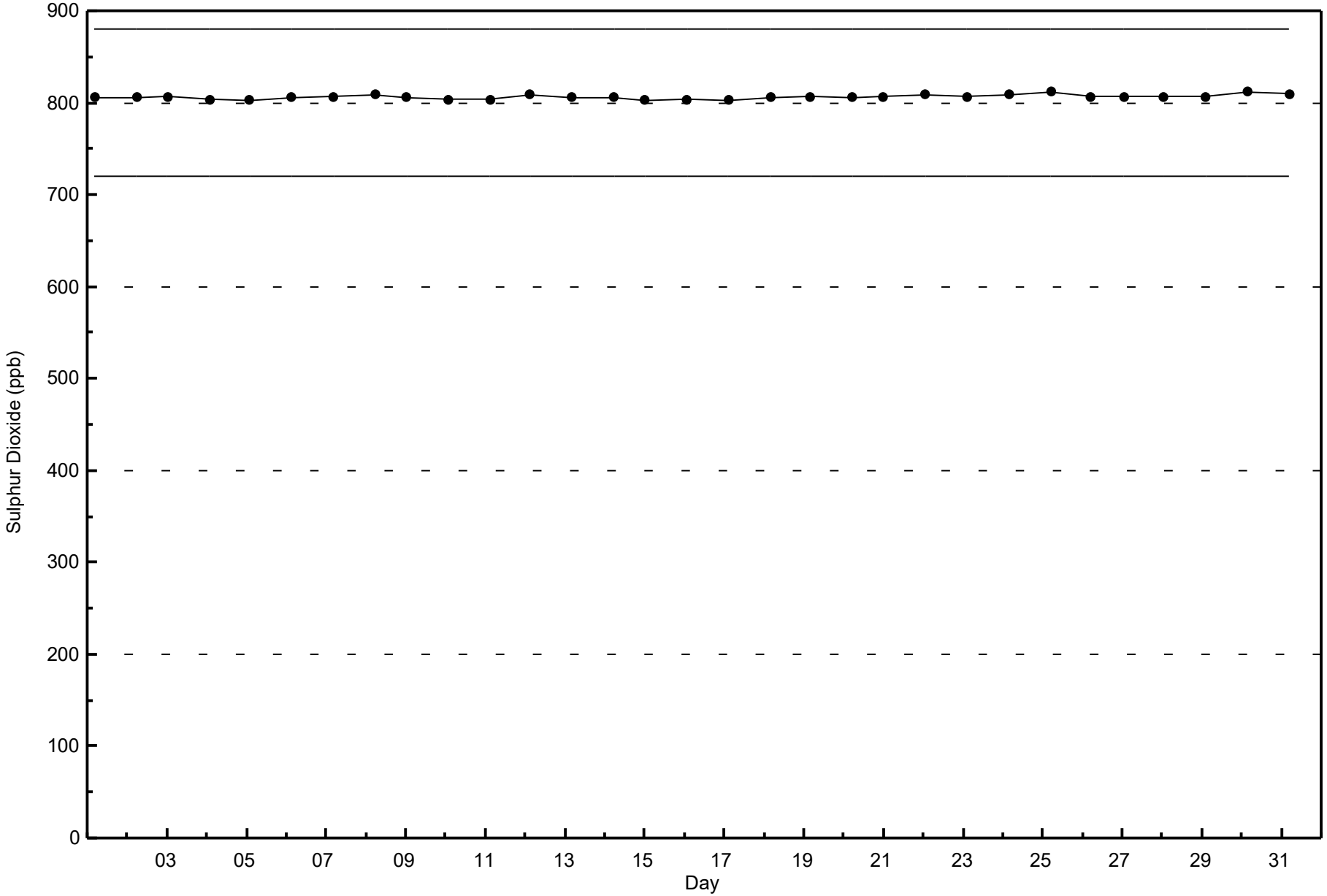


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Stony Mountain - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Stony Mountain - August 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.4 ppb on Aug 12 08:00 Maximum Daily Average: 0.3 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 1 18:30 Minimum Daily Average: 0.1 ppb on Aug 23

Maximum Diurnal Average: 0.2 ppb at hour 8 Minimum Diurnal Average: 0.2 ppb at hour 19

Monthly Average: 0.20 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.2 Median = 0.2 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.3

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1414 |
| Periods of Invalid Data: | 74 |
| Periods of Calibration: | 72 |
| Percent Operational Time: | 99.9 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 2-Aug | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | SP | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | | |
| 3-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.1 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 4-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | DF | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 5-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 6-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 7-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 8-Aug | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 9-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 10-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | DF | | |
| 11-Aug | 0.2 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.3 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 12-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.4 |
| | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | | |
| 13-Aug | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 14-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 15-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Stony Mountain - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 17-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 18-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 20-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 21-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 22-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 23-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| | 0.3 | 0.3 | 0.3 | SP | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.0 | 0.0 | 0.0 | 0.0 | SP | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | | |
| 25-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | | |
| 26-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | | |
| 27-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 28-Aug | 0.3 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| | 0.3 | 0.3 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | | |
| 29-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 |
| | 0.3 | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | | |
| 30-Aug | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.3 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | C | C | C | C | C | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | C | C | C | C | C | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Diurnal Maximum | |

Z - zerospan C - Calibration DF - DAS Failure SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Reduced Sulphur (TRS) - ppb

## Stony Mountain - August 2026

Maximum Value: 0.3 ppb on Aug 29 02:00

Maximum Daily Average: 0.3 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 23 11:00

Minimum Daily Average: 0.1 ppb on Aug 23

Maximum Diurnal Average: 0.2 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 19

Monthly Average: 0.20 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.2 Median = 0.2 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 2-Aug | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 |
| 3-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 4-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 5-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 6-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 7-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 8-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 9-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 10-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 11-Aug | 0.2 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 12-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| 13-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 14-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 15-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 16-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 17-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 18-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 20-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 21-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 22-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 23-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 25-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 |
| 26-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| 27-Aug | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 28-Aug | 0.3 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 29-Aug | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| 30-Aug | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | C | C | C | C | C | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Diurnal Maximum | |

Z - zerospan C - Calibration

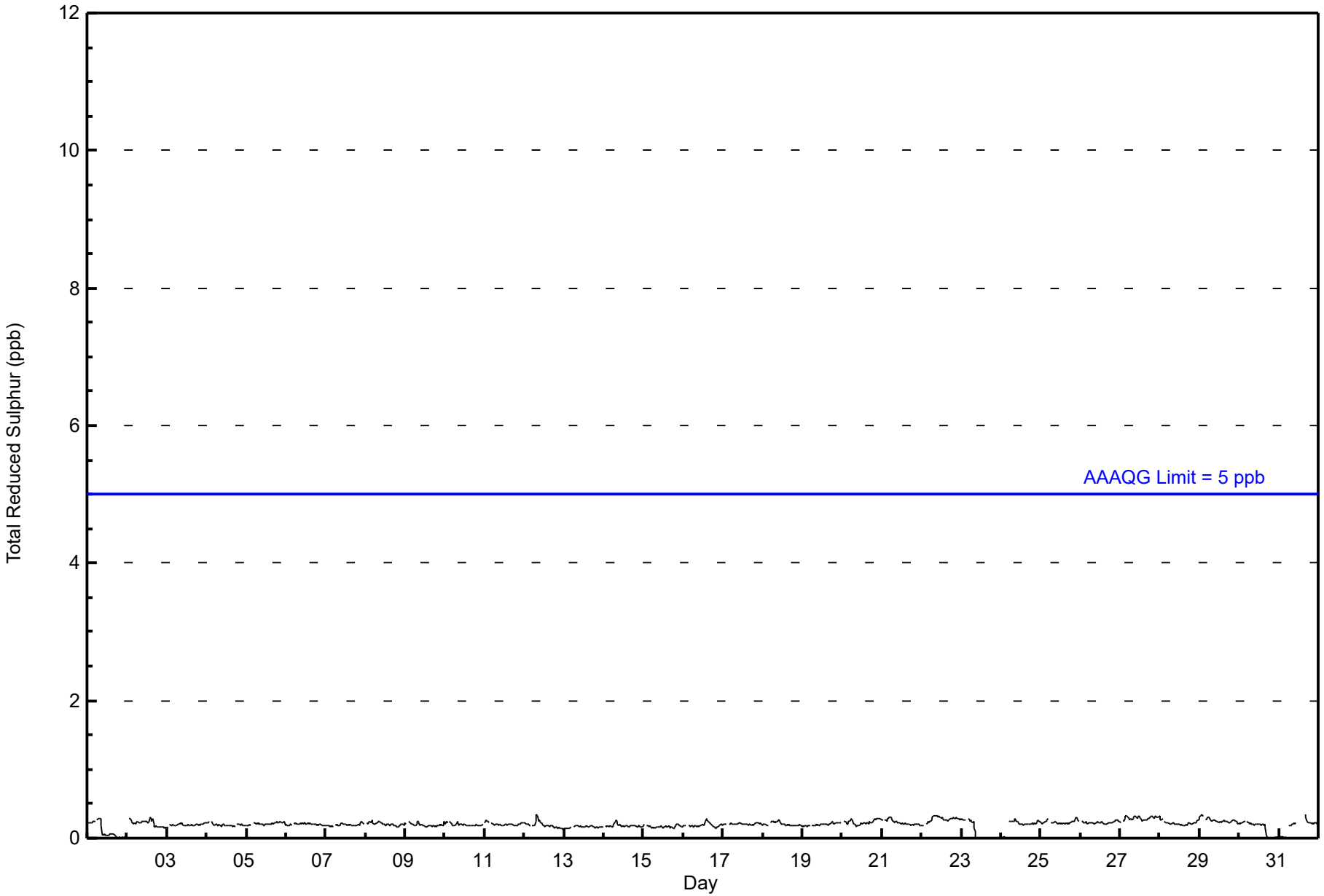
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Stony Mountain - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 708 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Stony Mountain - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 31 | 21 | 20 | 17 | 16 | 7 | 17 | 31 | 35 | 51 | 52 | 54 | 72 | 110 | 108 | 66 | 708 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 21 | 20 | 17 | 16 | 7 | 17 | 31 | 35 | 51 | 52 | 54 | 72 | 110 | 108 | 66 | 708 |

Total Number of Valid Hours: 708

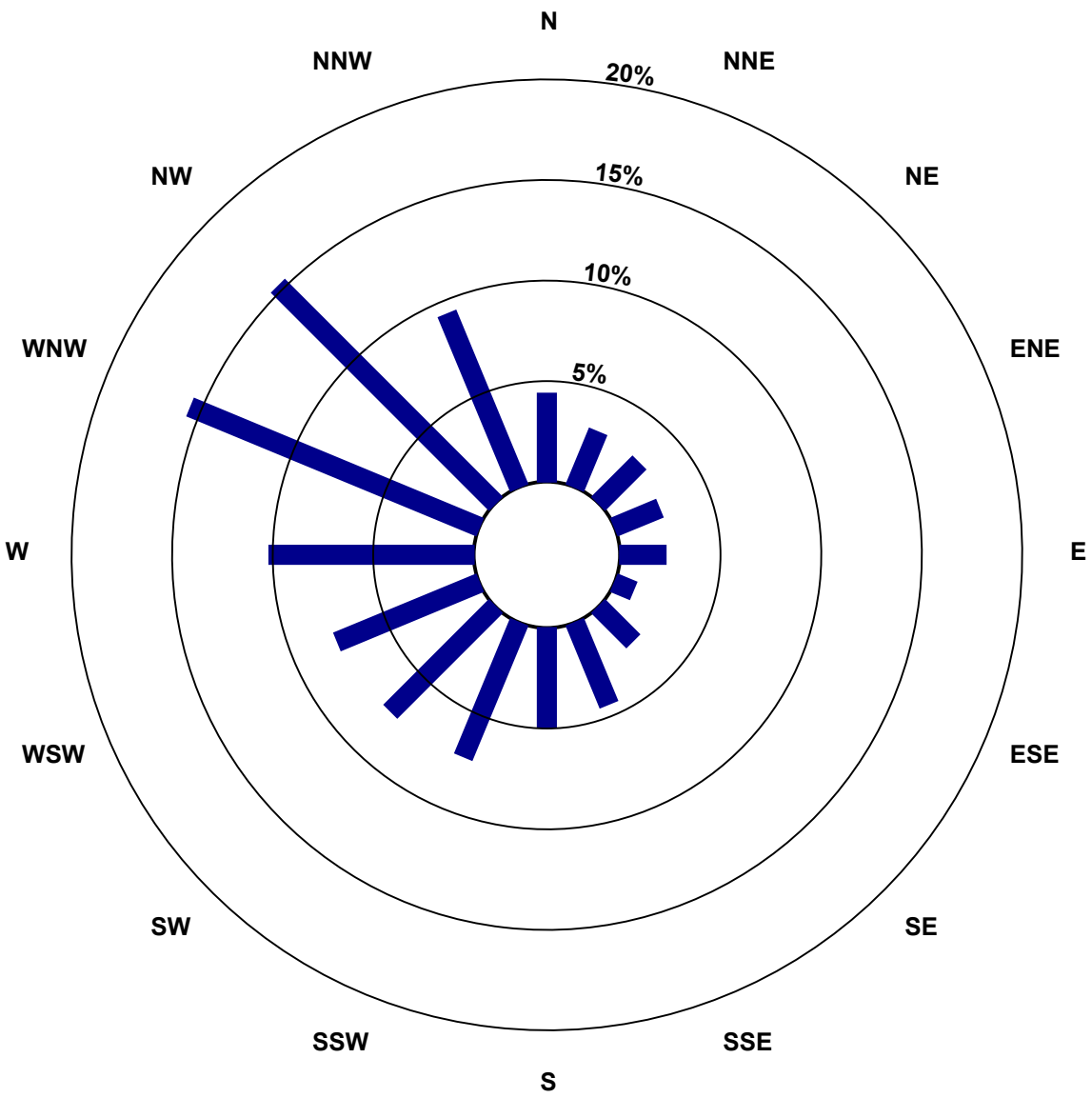
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Reduced Sulphur (TRS) - ppb**

**Stony Mountain**




**Classes (ppb)**

- 0 - 2
- 3 - 4
- 5 - 7
- 8 - 11
- > 11

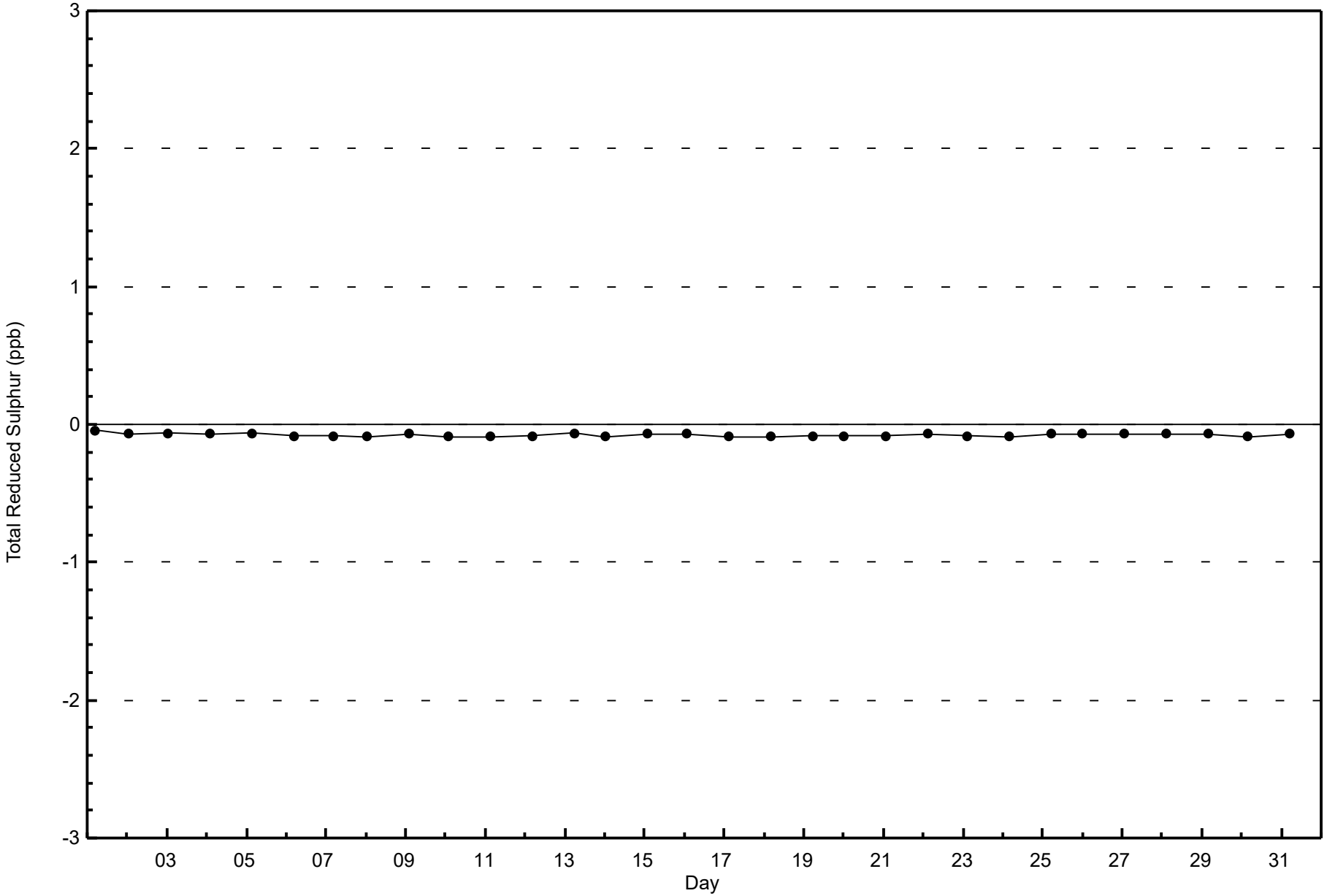
**Total Number of Valid Hours: 708**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Stony Mountain - August 2026**

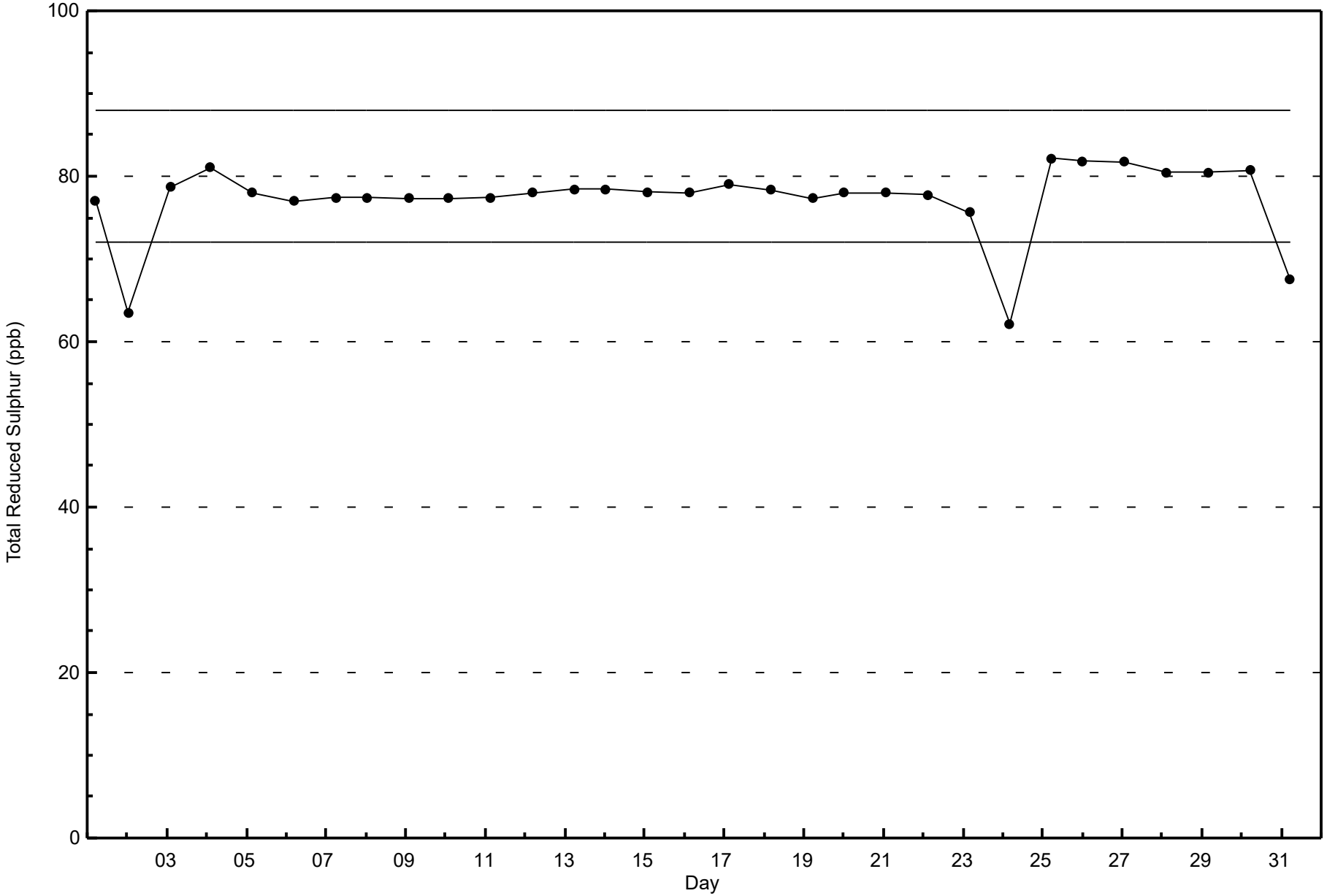


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Stony Mountain - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Stony Mountain - August 2026

Maximum Value: 2.5 ppm on Aug 30 07:00

Maximum Daily Average: 2.3 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 3 17:00

Minimum Daily Average: 2.0 ppm on Aug 5

Maximum Diurnal Average: 2.2 ppm at hour 8

Minimum Diurnal Average: 2.1 ppm at hour 18

Monthly Average: 2.11 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.2 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 2-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 3-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 |
| 4-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 5-Aug | 2.0 | 2.0 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 7-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 8-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 9-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 10-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 |
| 11-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 12-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 13-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 14-Aug | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 15-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 16-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 |
| 17-Aug | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 18-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 19-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 20-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 21-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 22-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 |
| 23-Aug | 2.3 | 2.3 | Z | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.3 | 2.4 |
| 24-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 25-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 26-Aug | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 |
| 27-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 |
| 28-Aug | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 29-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 30-Aug | 2.1 | 2.1 | 2.1 | Z | 2.3 | 2.3 | 2.5 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.5 |
| 31-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Diurnal Average | |
| | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | Diurnal Maximum | |

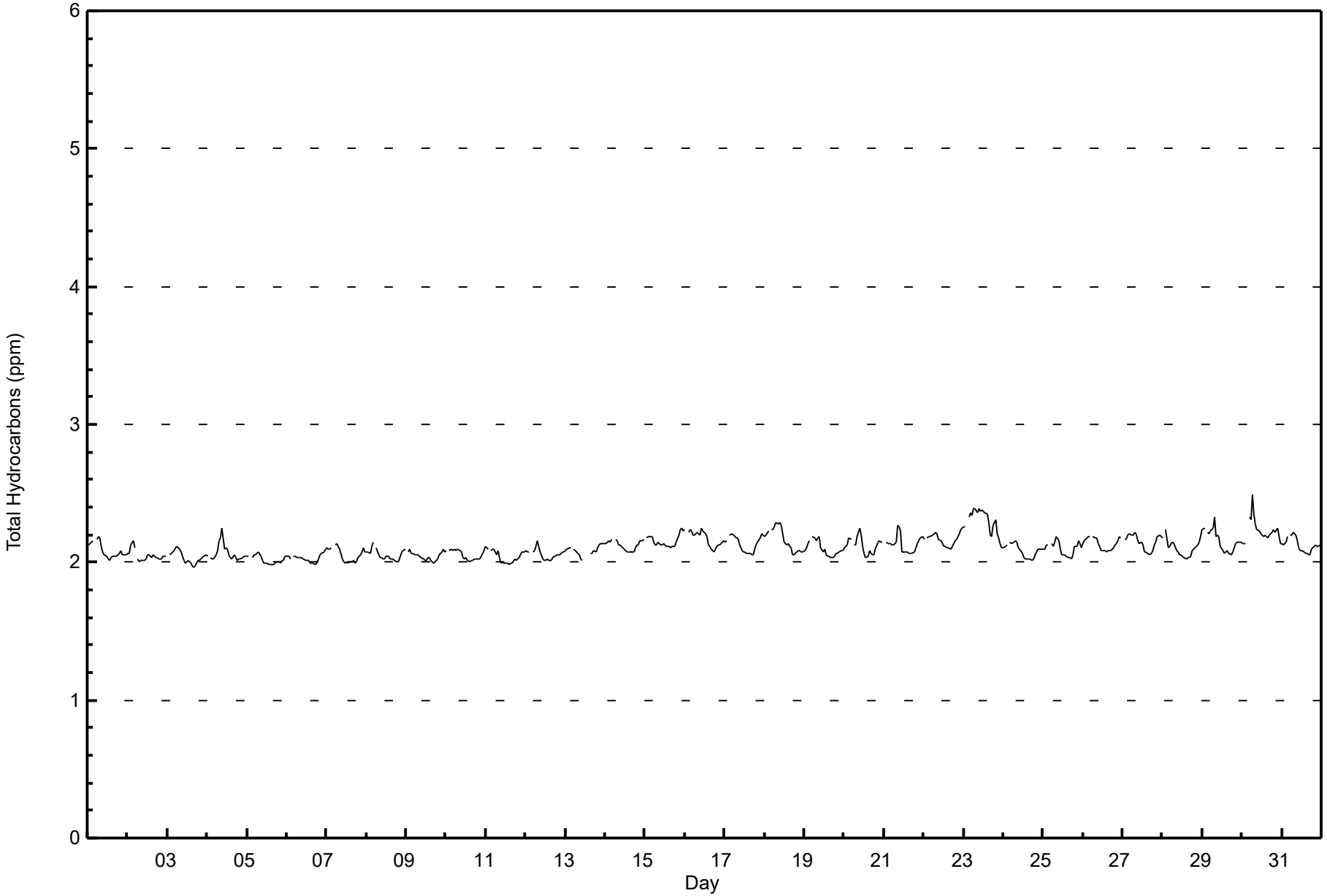
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Stony Mountain - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Stony Mountain - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 187 | 26.38 | 26.38 |
| 2.1 - 3.0 | 522 | 73.62 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Stony Mountain - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 12 | 6 | 8 | 4 | 3 | 1 | 4 | 3 | 1 | 1 | 1 | 12 | 15 | 36 | 52 | 28 | 187 |
| 2.1 - 3.0 | 19 | 14 | 11 | 11 | 11 | 7 | 13 | 28 | 34 | 52 | 48 | 40 | 59 | 79 | 61 | 35 | 522 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 20 | 19 | 15 | 14 | 8 | 17 | 31 | 35 | 53 | 49 | 52 | 74 | 115 | 113 | 63 | 709 |

Total Number of Valid Hours: 709

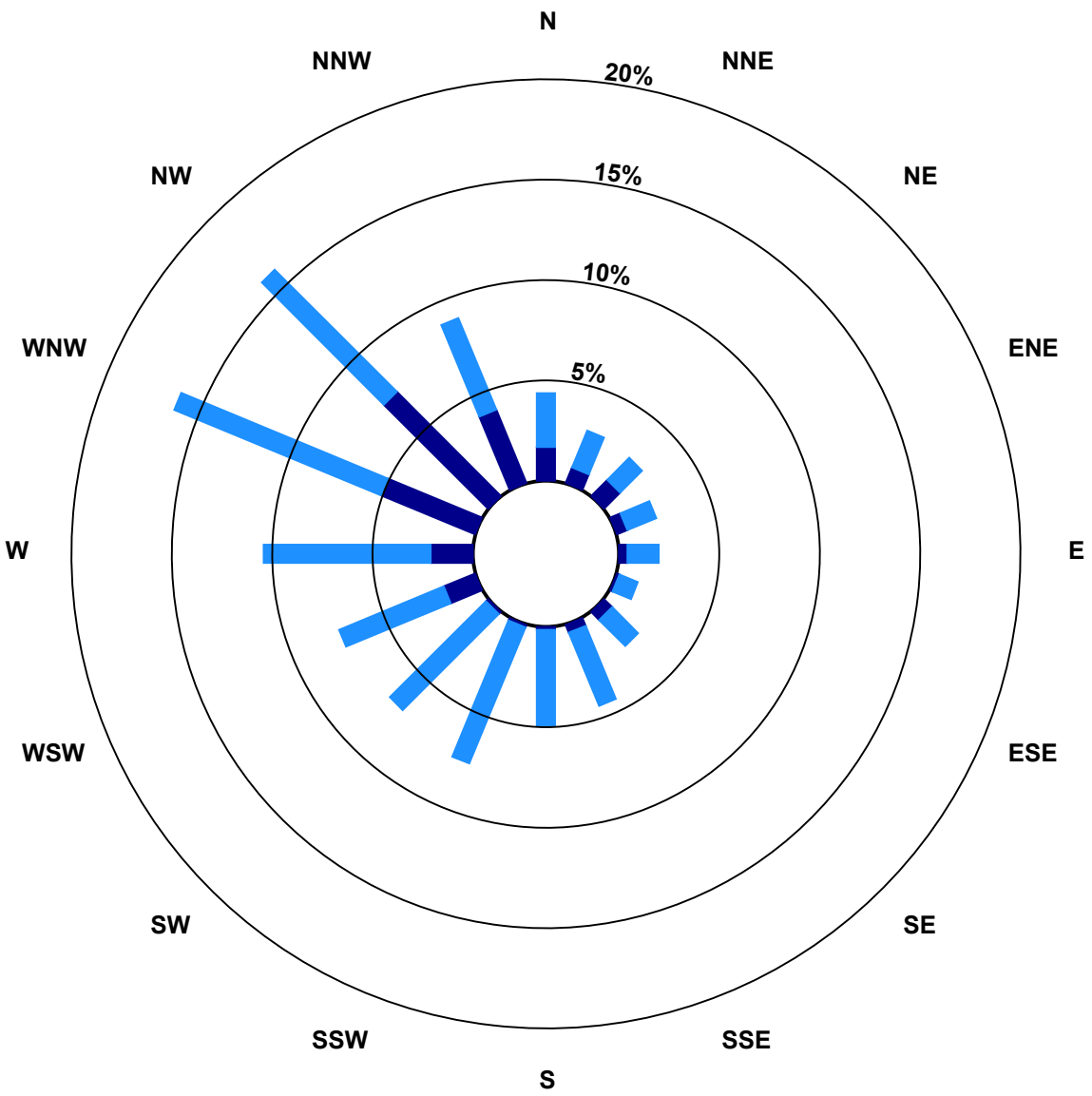
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Hydrocarbons (THC) - ppm**

**Stony Mountain**




**Classes (ppm)**

- 0 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

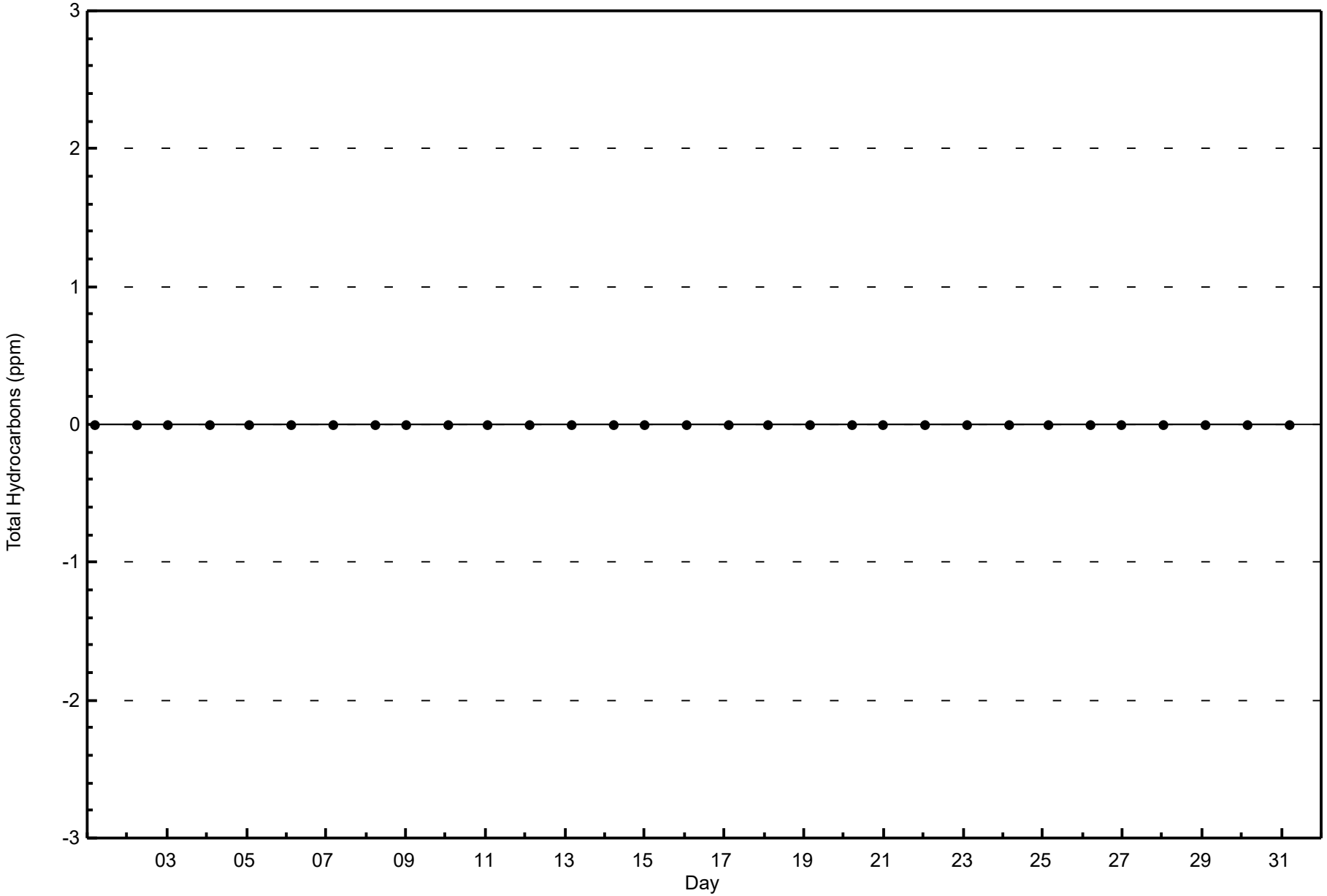
**Total Number of Valid Hours: 709**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Stony Mountain - August 2026**

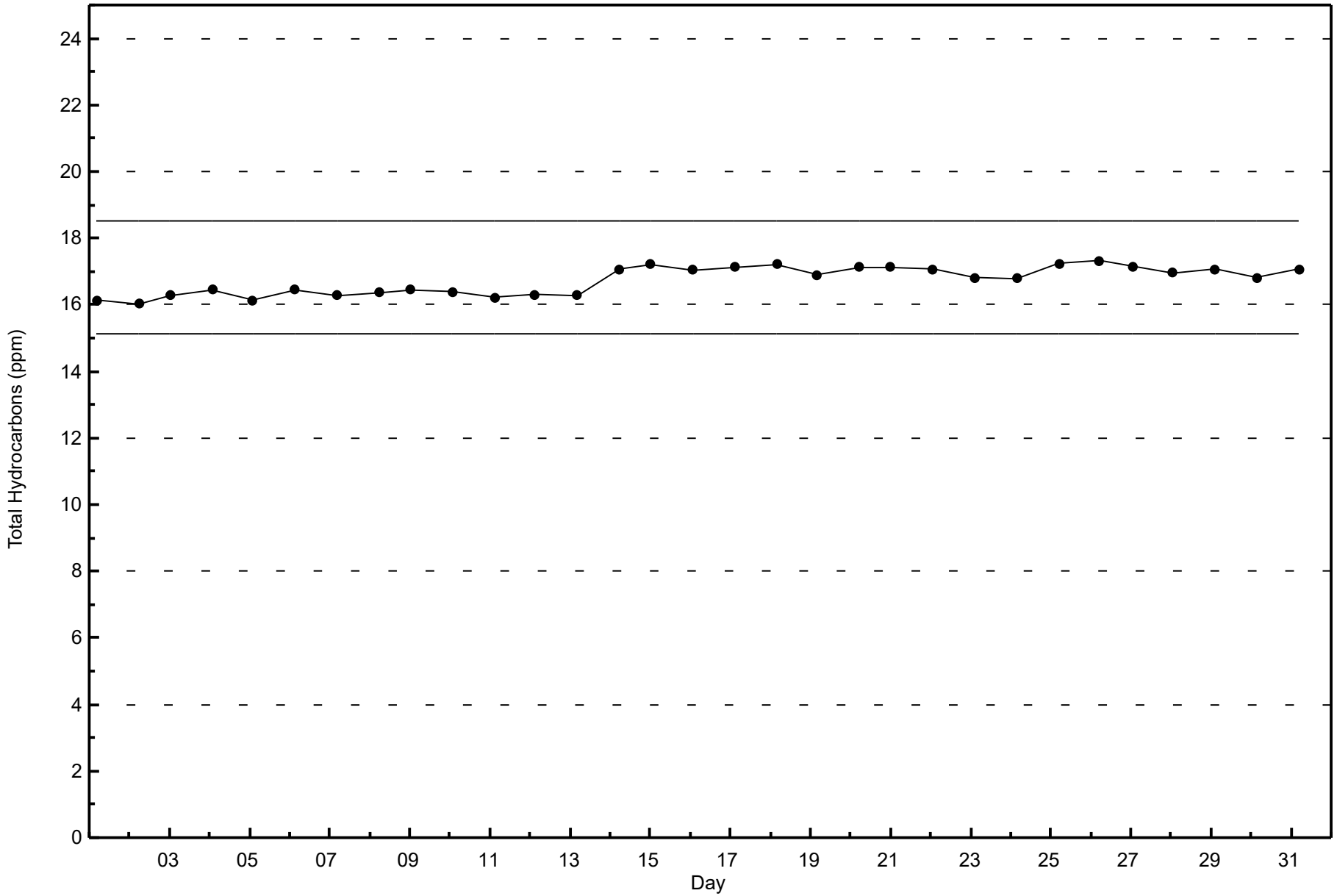


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Stony Mountain - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Non Methane Hydrocarbons (NMHC) - ppm

## Stony Mountain - August 2026

Maximum Value: 0.004 ppm on Aug 25 13:00

Maximum Daily Average: 0.000 ppm on Aug 25

Minimum Value: 0.000 ppm on Aug 1 01:00

Minimum Daily Average: 0.000 ppm on Aug 1

Maximum Diurnal Average: 0.000 ppm at hour 13

Minimum Diurnal Average: 0.000 ppm at hour 1

Monthly Average: 0.000 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 11-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 18-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 21-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 22-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 23-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 24-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 25-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 |
| 26-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 28-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 29-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Diurnal Average | |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Diurnal Maximum | |

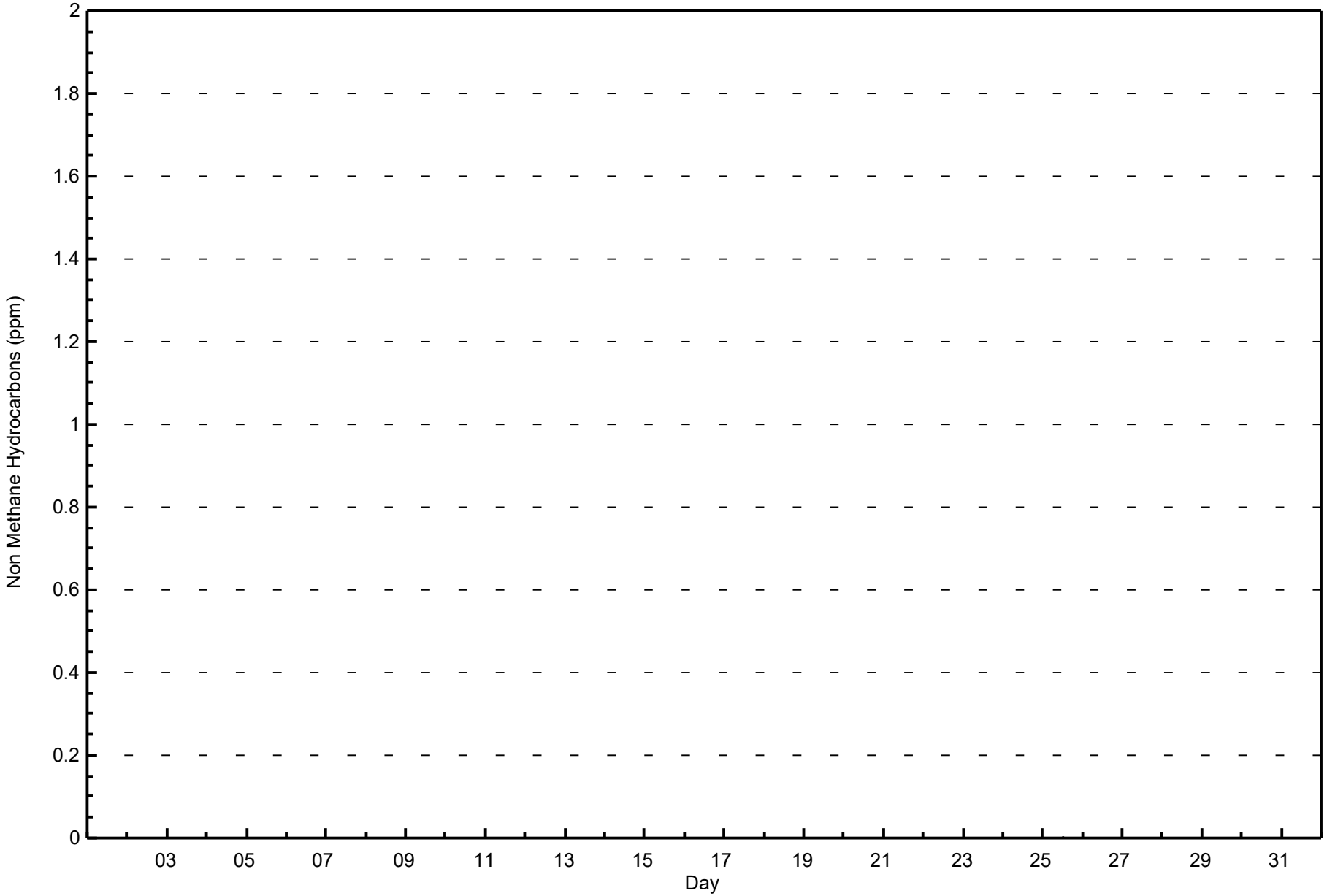
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Stony Mountain - August 2026**



# Non Methane Hydrocarbons (NMHC) - ppm
## Stony Mountain - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 709 | 100.00 | 100.00 |
| 0.006 - 0.05 | 0 | 0.00 | 100.00 |
| 0.06 - 0.1 | 0 | 0.00 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Stony Mountain - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 31 | 20 | 19 | 15 | 14 | 8 | 17 | 31 | 35 | 53 | 49 | 52 | 74 | 115 | 113 | 63 | 709 |
| 0.006 - 0.05 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 20 | 19 | 15 | 14 | 8 | 17 | 31 | 35 | 53 | 49 | 52 | 74 | 115 | 113 | 63 | 709 |

Total Number of Valid Hours: 709

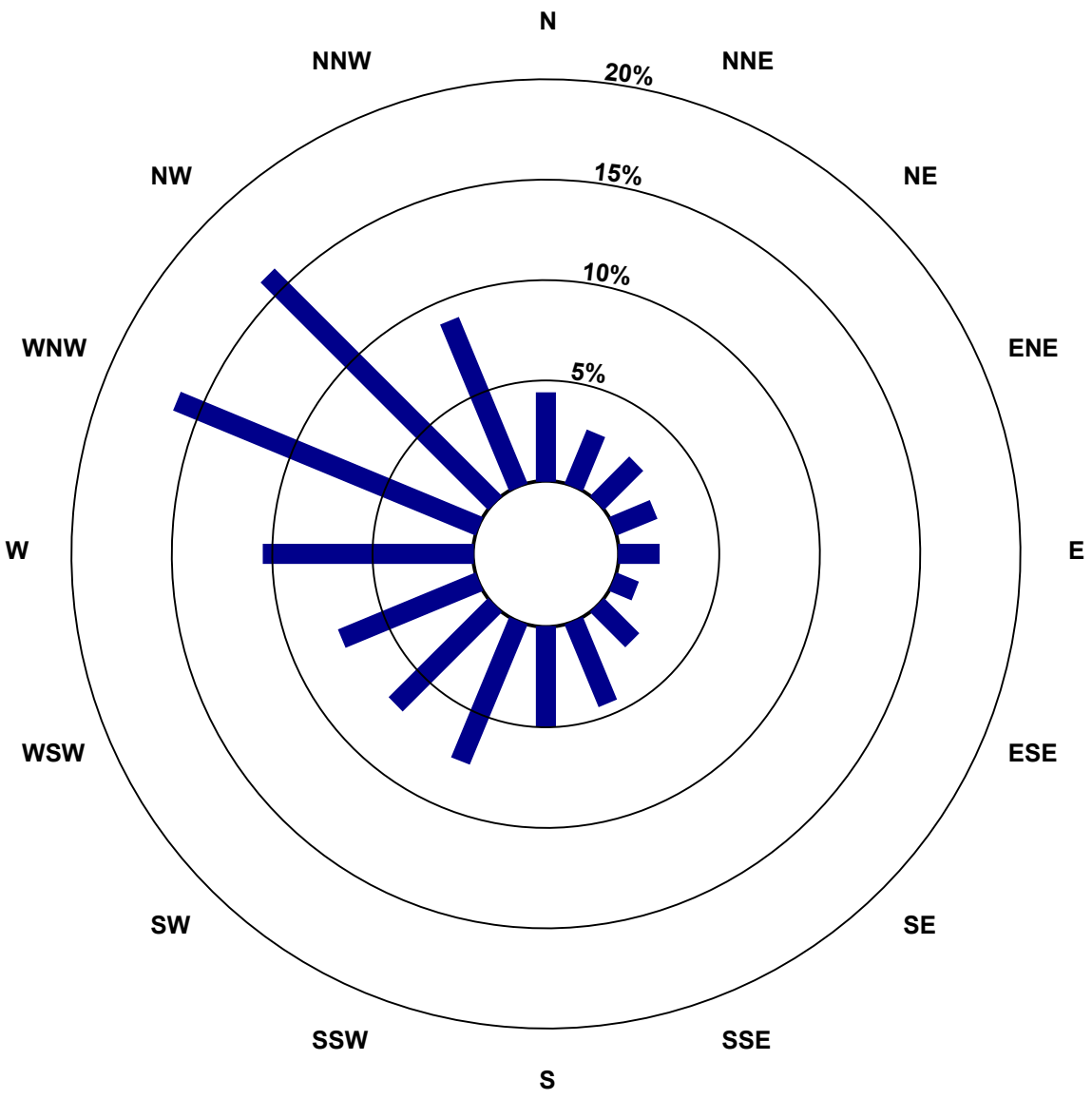
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

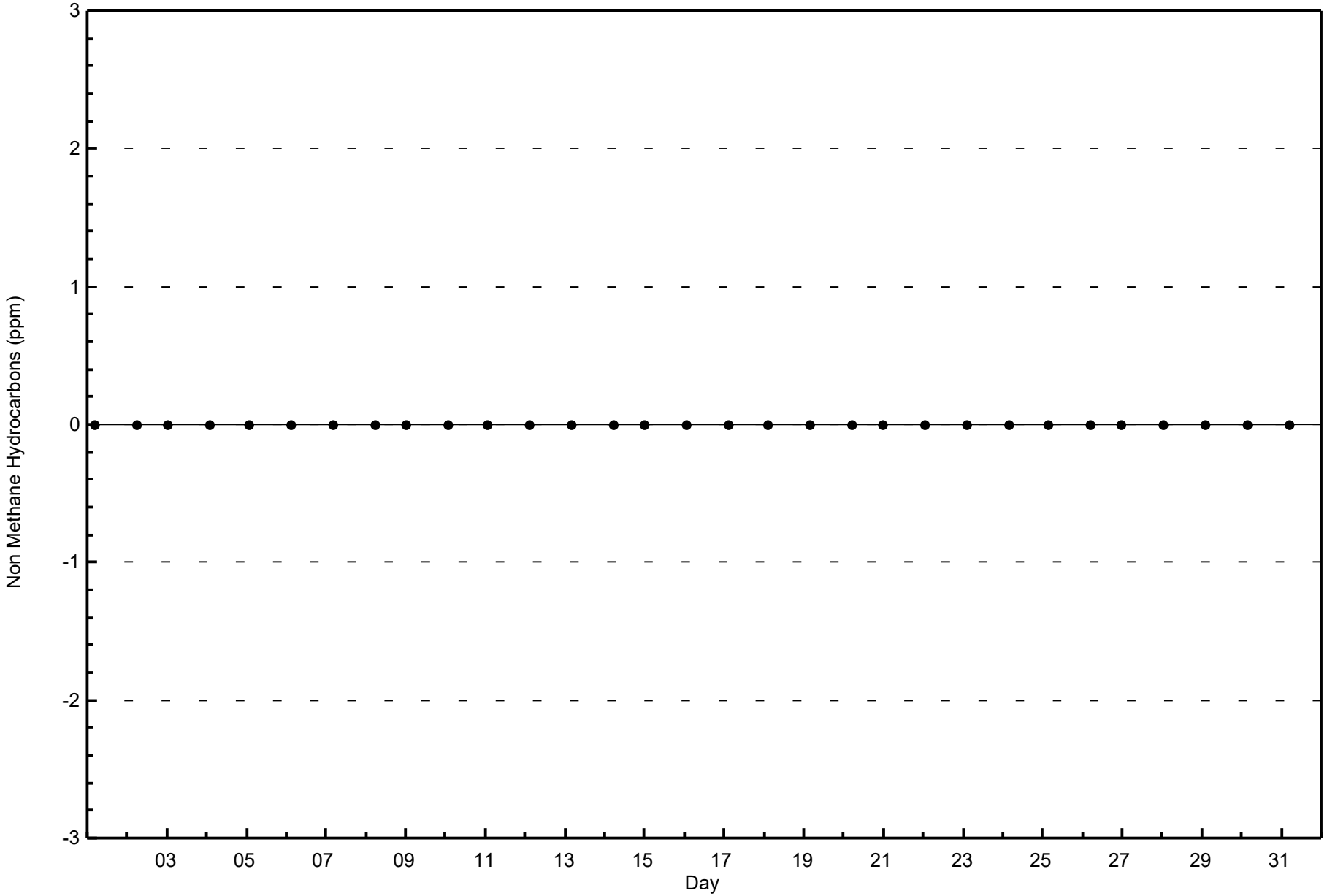
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Stony Mountain - August 2026**

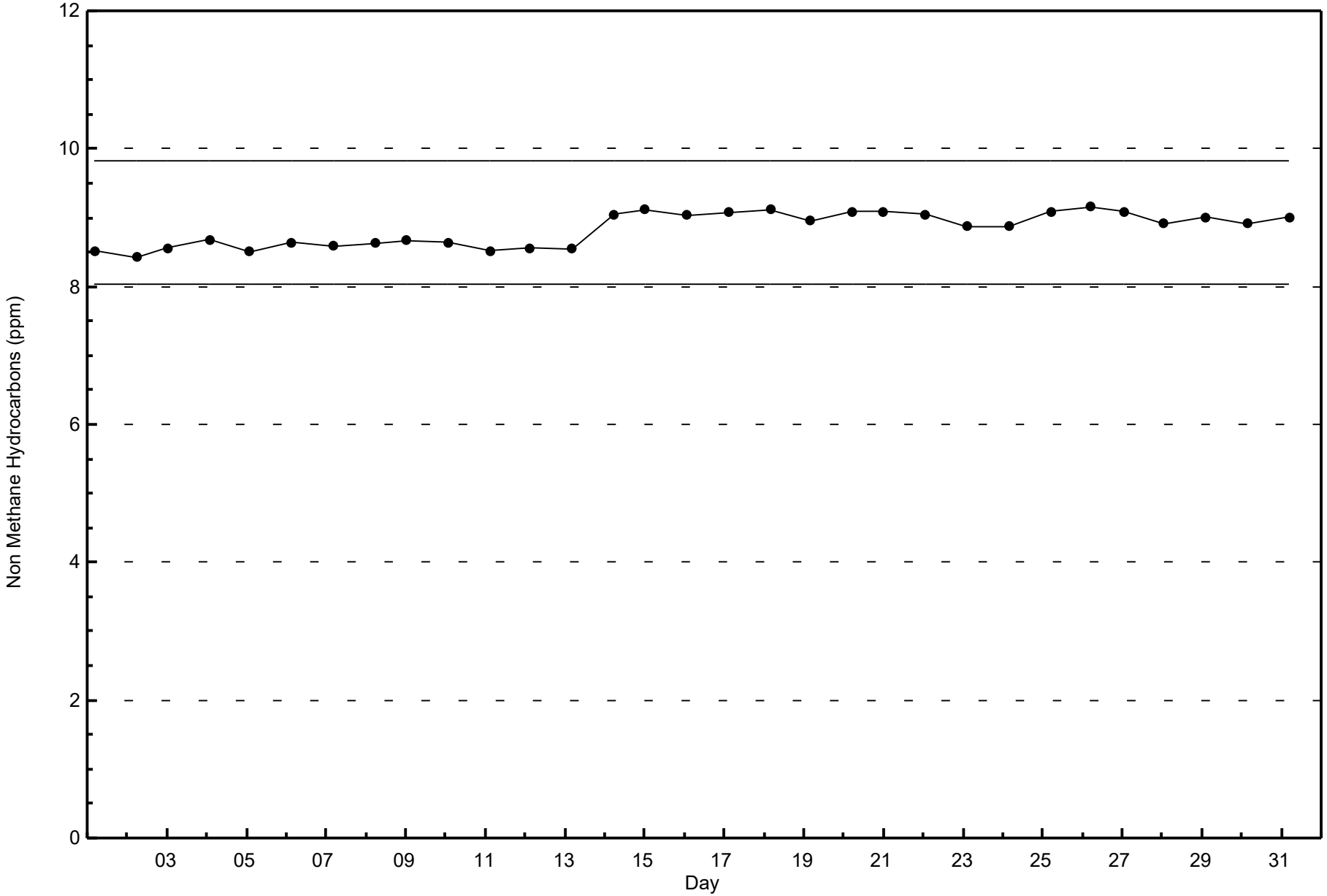


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Stony Mountain - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Stony Mountain - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.5 ppm on Aug 30 07:00
Maximum Daily Average: 2.3 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 3 17:00
Minimum Daily Average: 2.0 ppm on Aug 5
Maximum Diurnal Average: 2.2 ppm at hour 8
Minimum Diurnal Average: 2.1 ppm at hour 18
Monthly Average: 2.11 ppm
Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.2 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 2-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 3-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 |
| 4-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 5-Aug | 2.0 | 2.0 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 7-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 8-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 9-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 10-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 |
| 11-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 12-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 13-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | C | C | C | C | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 14-Aug | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 15-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 16-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 |
| 17-Aug | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 18-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 19-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 20-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 21-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 22-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 |
| 23-Aug | 2.3 | 2.3 | Z | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.3 | 2.4 |
| 24-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 25-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 |
| 26-Aug | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 27-Aug | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |
| 28-Aug | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 29-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 30-Aug | 2.1 | 2.1 | 2.1 | Z | 2.3 | 2.3 | 2.5 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.5 |
| 31-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Diurnal Average | |
| | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | Diurnal Maximum | |

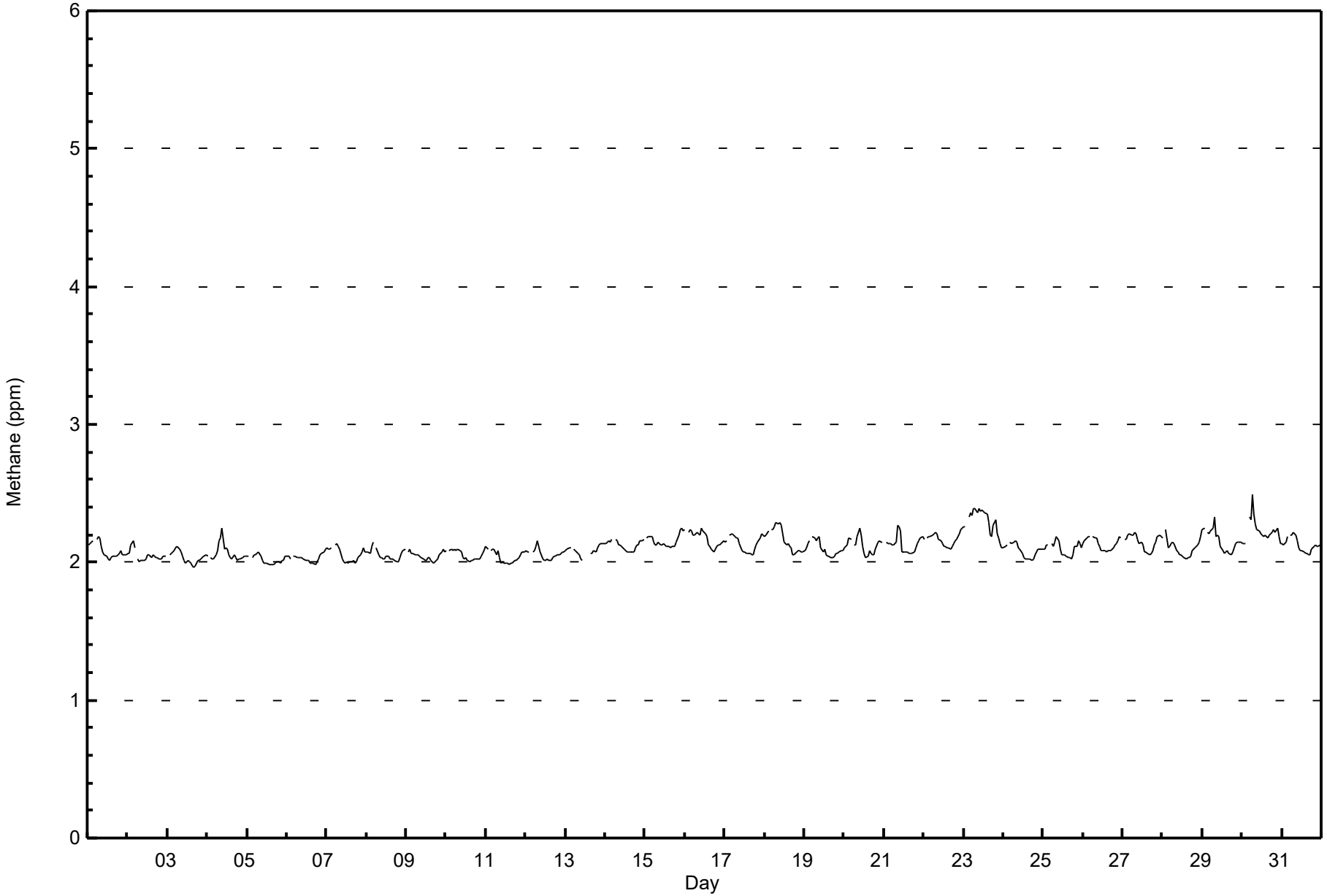
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Stony Mountain - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 187 | 26.38 | 26.38 |
| 2.1 - 3.0 | 522 | 73.62 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Stony Mountain - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 12 | 6 | 8 | 4 | 3 | 1 | 4 | 3 | 1 | 1 | 1 | 12 | 15 | 36 | 52 | 28 | 187 |
| 2.1 - 3.0 | 19 | 14 | 11 | 11 | 11 | 7 | 13 | 28 | 34 | 52 | 48 | 40 | 59 | 79 | 61 | 35 | 522 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 20 | 19 | 15 | 14 | 8 | 17 | 31 | 35 | 53 | 49 | 52 | 74 | 115 | 113 | 63 | 709 |

Total Number of Valid Hours: 709

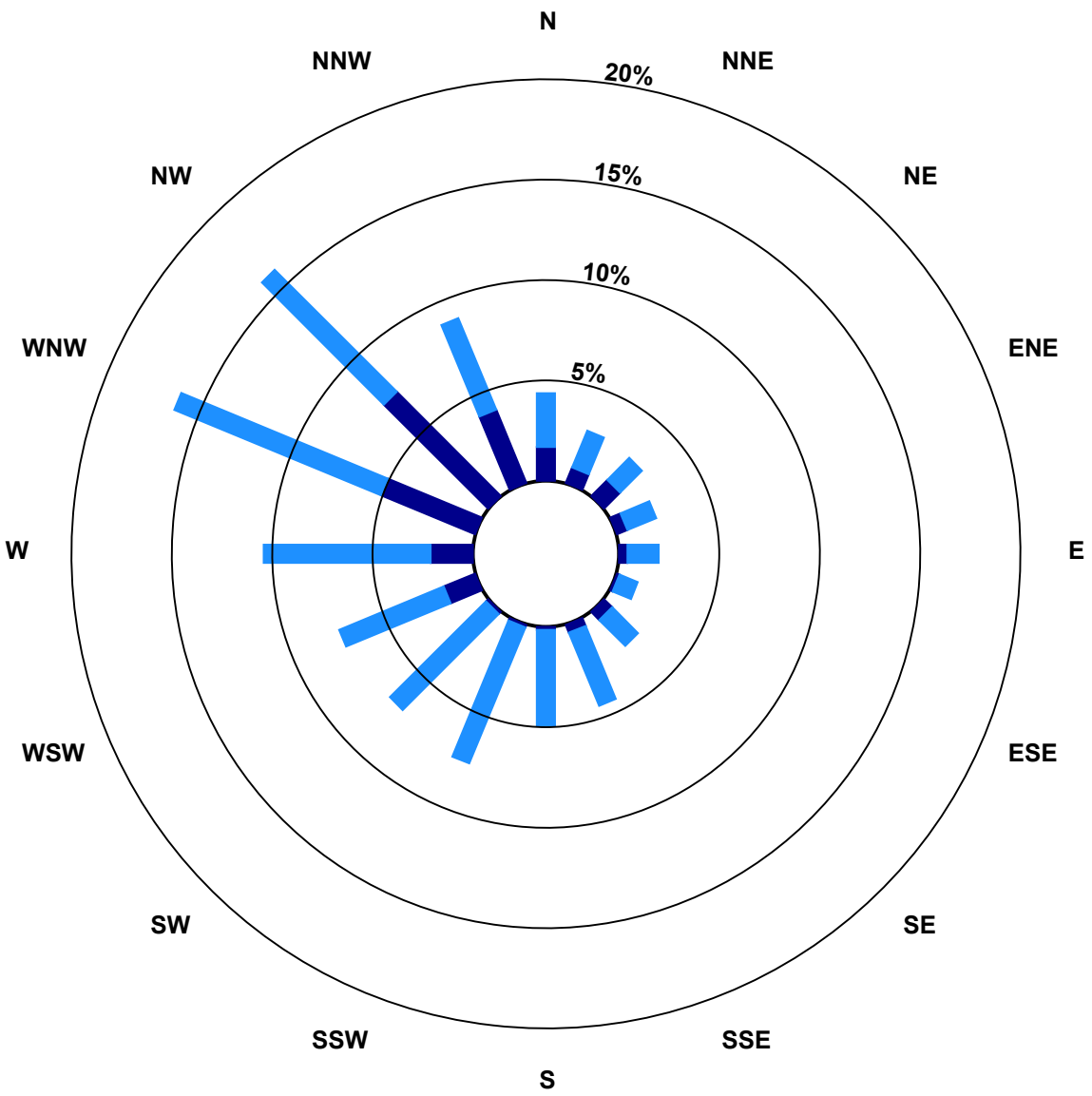
Total Number of Hours: 744

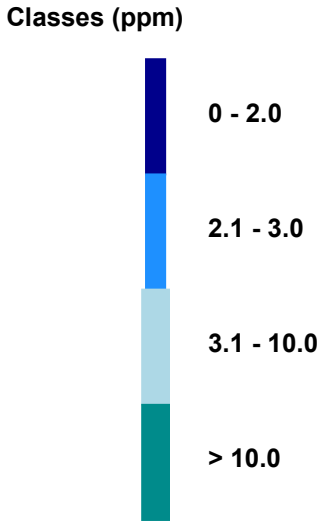
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Stony Mountain



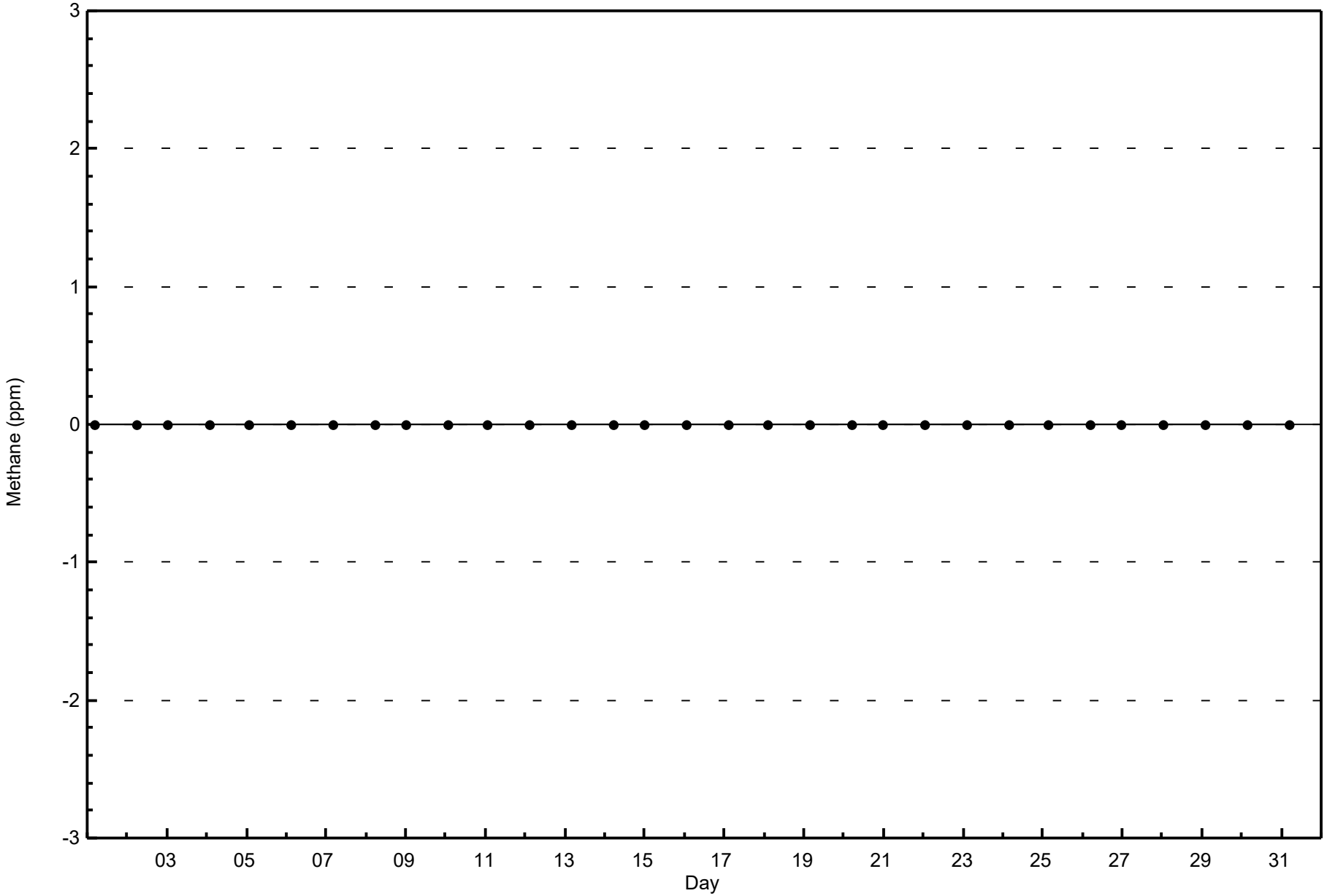

Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Stony Mountain - August 2026**

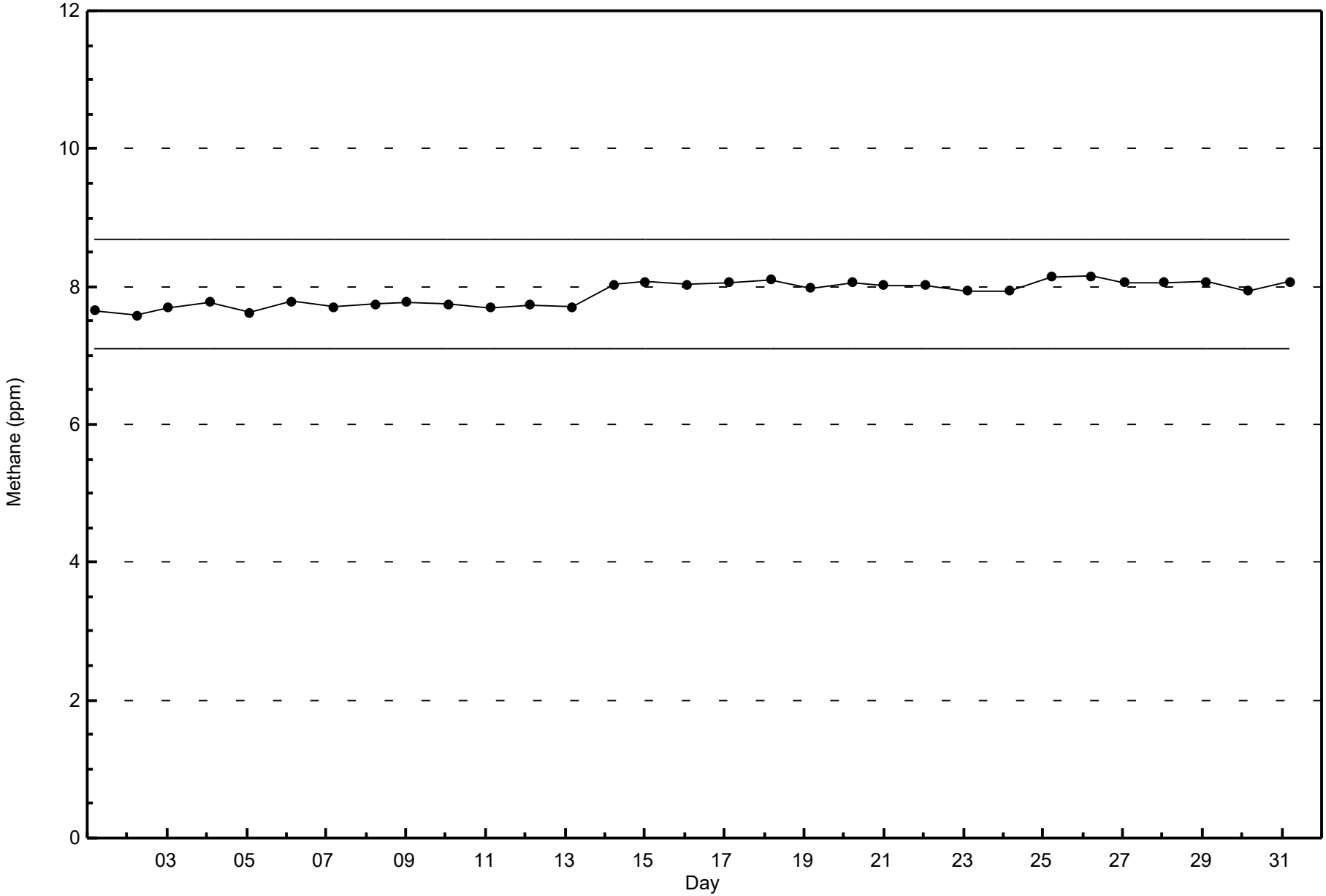


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Stony Mountain - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Stony Mountain - August 2026

Maximum Value: 1.5 ppb on Aug 10 09:00

Maximum Daily Average: 0.2 ppb on Aug 10

Minimum Value: 0.0 ppb on Aug 11 02:00

Minimum Daily Average: 0.0 ppb on Aug 28

Maximum Diurnal Average: 0.2 ppb at hour 9

Minimum Diurnal Average: 0.0 ppb at hour 1

Monthly Average: 0.06 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.1 $P_{99}$ = 0.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 675 |
| Hours of Missing Data: | 69 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 95.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 2-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 4-Aug | 0.0 | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 6-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 7-Aug | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| 8-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 | 0.6 | 0.4 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.4 | 1.5 | 0.9 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.5 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.7 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.7 |
| 13-Aug | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| 15-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 18-Aug | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 19-Aug | 0.0 | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 0.0 |
| 20-Aug | UO | UO | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 24-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 25-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 26-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 27-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 30-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 31-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 1.5 | 0.9 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Maximum | |

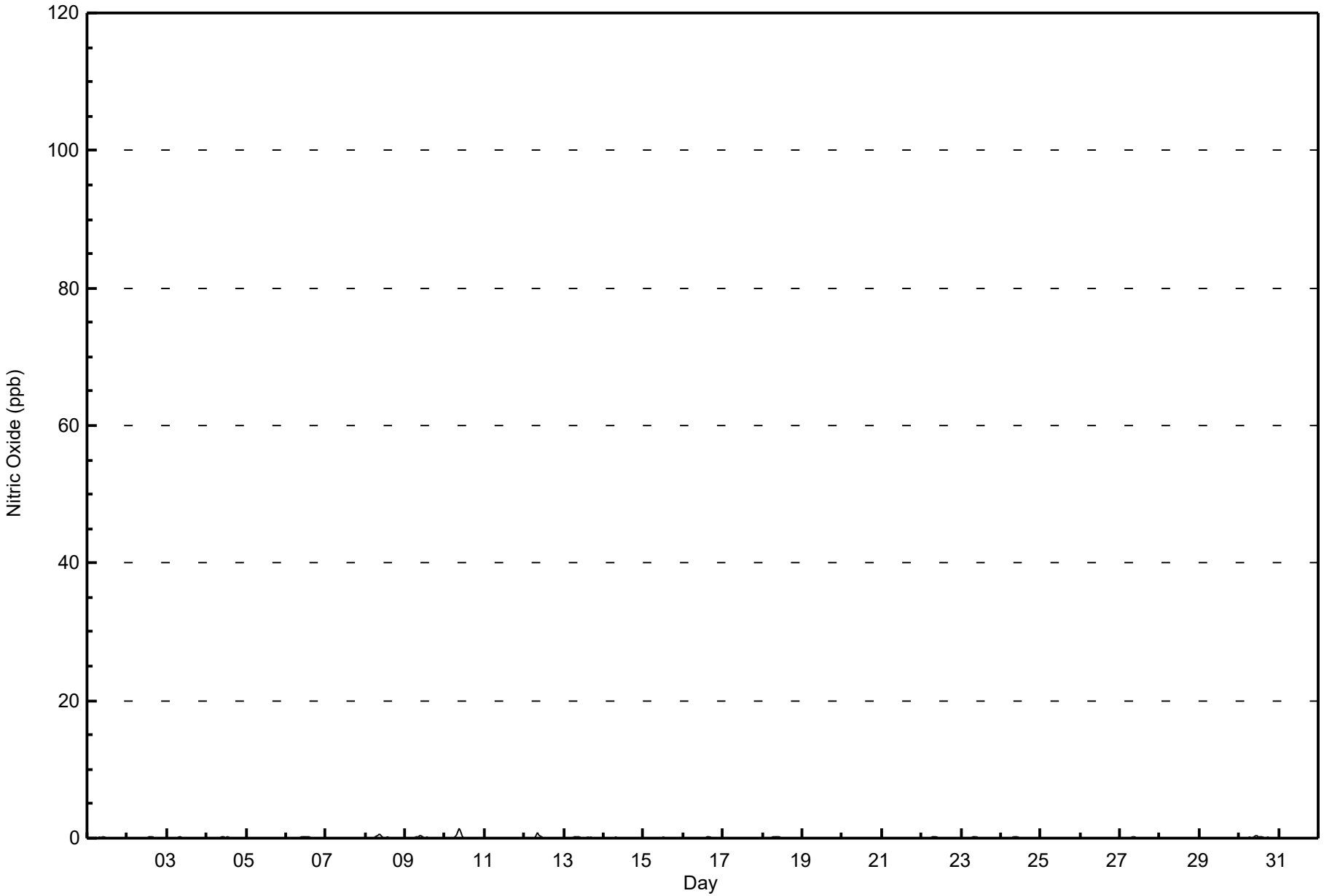
Z - zerospan C - Calibration UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Stony Mountain - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 675 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 675

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Stony Mountain - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 31 | 20 | 20 | 17 | 15 | 8 | 18 | 30 | 33 | 51 | 50 | 52 | 70 | 95 | 104 | 61 | 675 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 20 | 20 | 17 | 15 | 8 | 18 | 30 | 33 | 51 | 50 | 52 | 70 | 95 | 104 | 61 | 675 |

Total Number of Valid Hours: 675

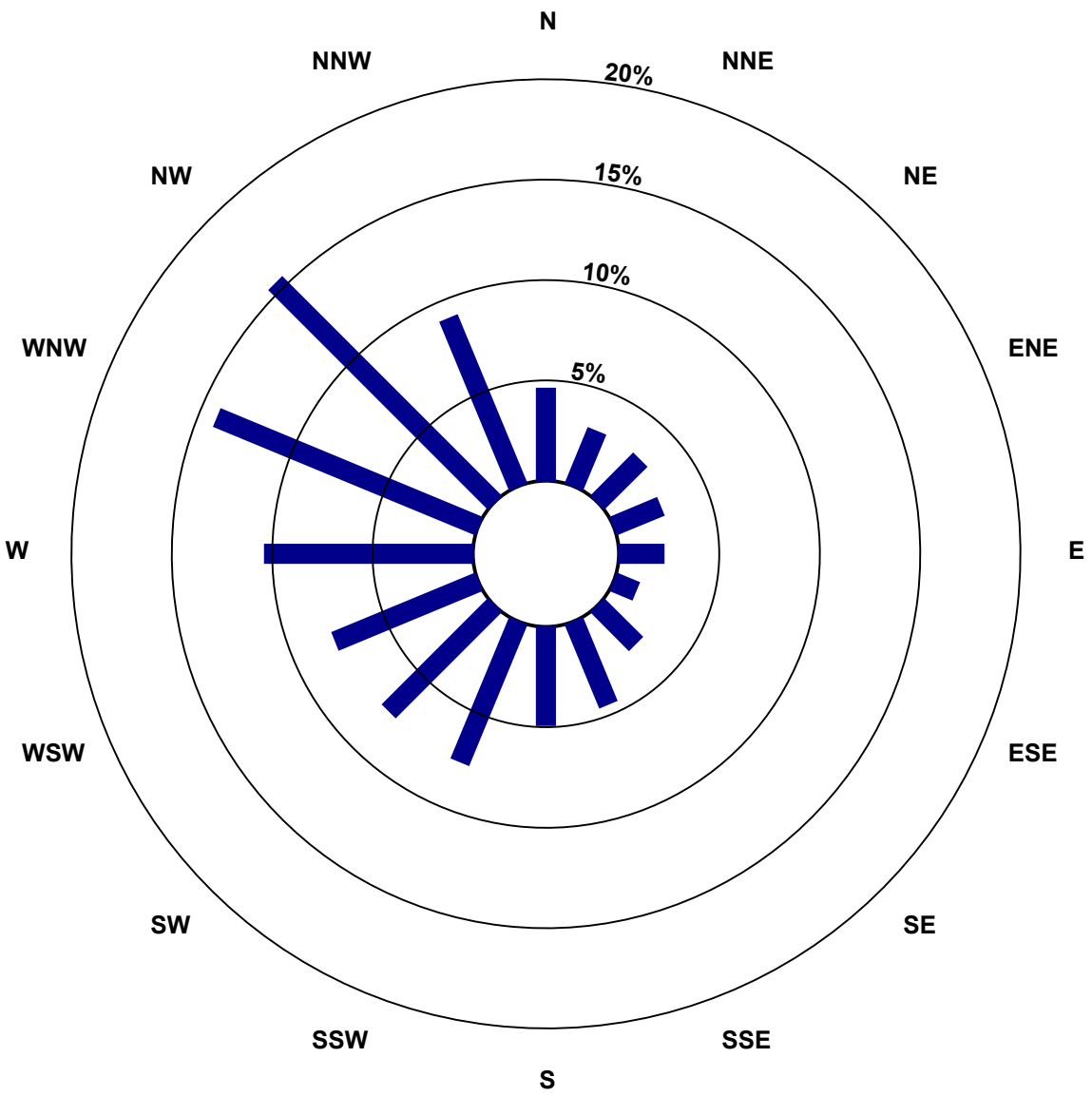
Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Nitric Oxide (NO) - ppb

## Stony Mountain




Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

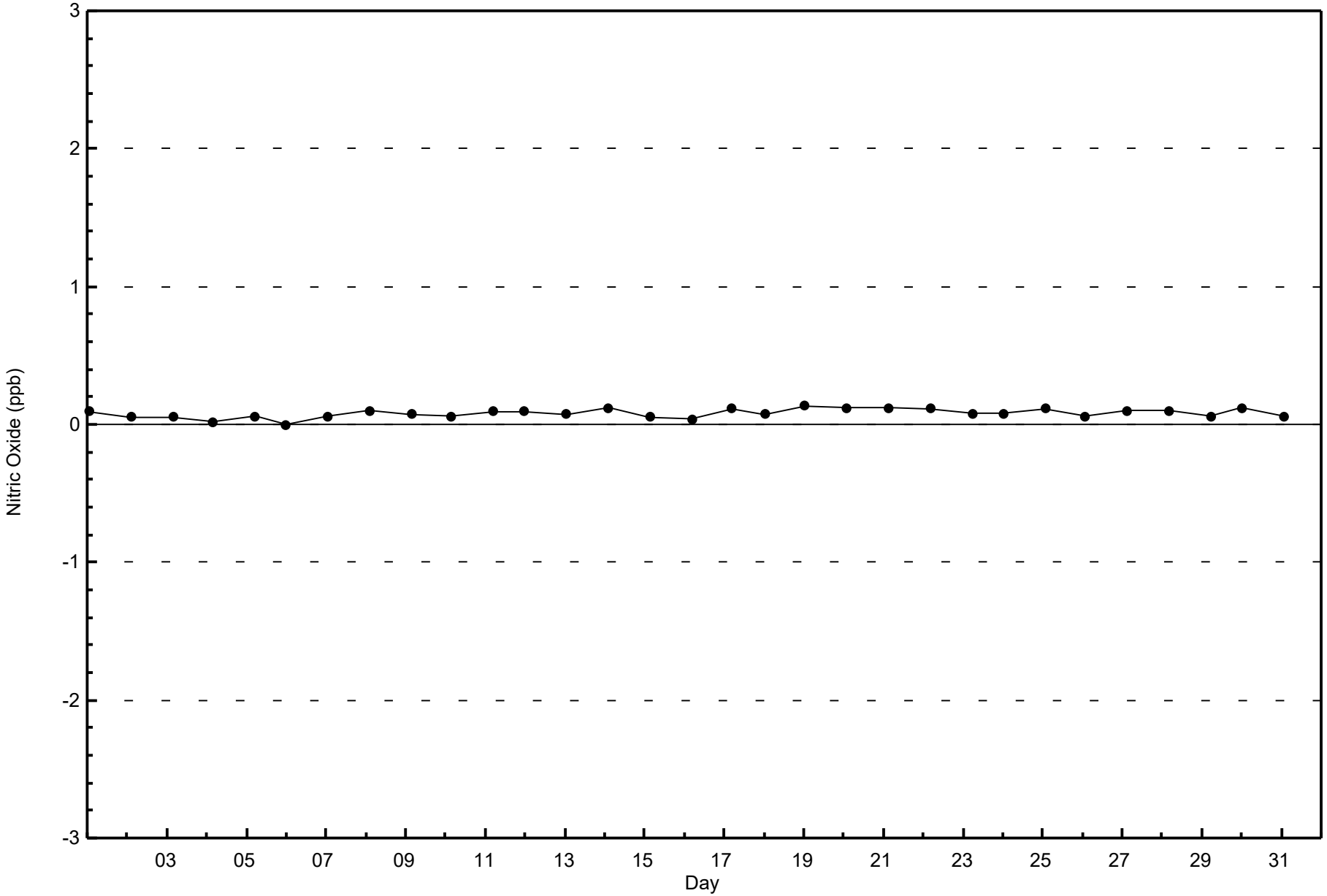
Total Number of Valid Hours: 675

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Stony Mountain - August 2026**

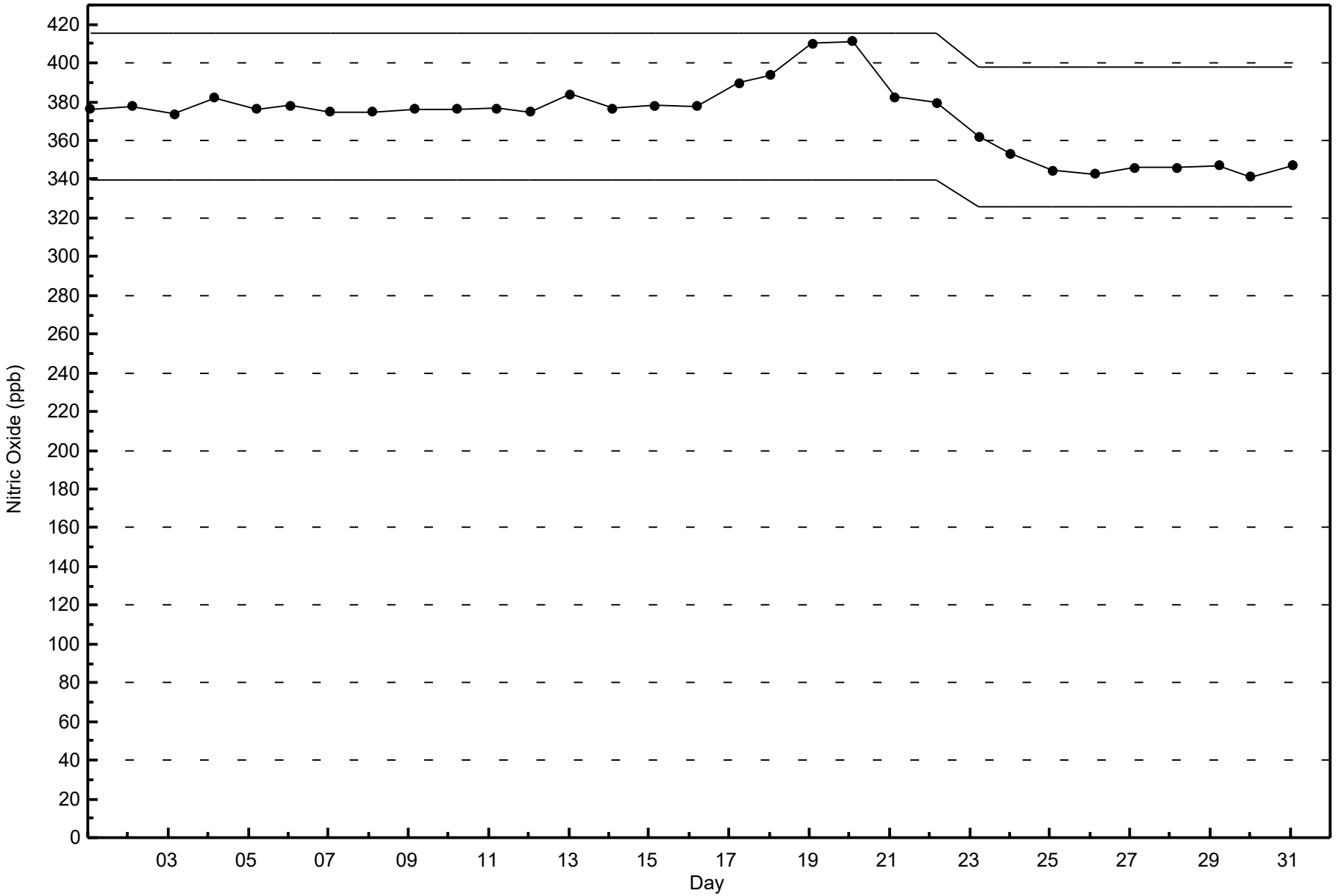


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Stony Mountain - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Stony Mountain - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.9 ppb on Aug 10 09:00 Maximum Daily Average: 1.1 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 3 18:00 Minimum Daily Average: 0.2 ppb on Aug 3
Maximum Diurnal Average: 0.7 ppb at hour 9 Minimum Diurnal Average: 0.4 ppb at hour 17
Monthly Average: 0.57 ppb Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.7$ $P_{90} = 1.1$ $P_{99} = 2.1$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 675 |
| Hours of Missing Data: | 69 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 95.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.0 | Z | 1.8 | 1.5 | 1.3 | 1.1 | 1.1 | 0.9 | 0.7 | 0.9 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 1.8 | 1.6 | 0.9 | 0.9 | 1.8 |
| 2-Aug | 0.9 | 0.7 | Z | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 1.2 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.5 | 0.4 | 0.2 | 0.5 | 1.2 |
| 3-Aug | 0.4 | 0.4 | 0.5 | Z | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 |
| 4-Aug | 0.1 | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.4 | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.6 |
| 5-Aug | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.7 | 0.7 | 0.3 | 0.7 |
| 6-Aug | Z | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 7-Aug | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 |
| 8-Aug | 0.3 | 0.5 | Z | 0.8 | 1.1 | 0.7 | 0.7 | 1.1 | 1.3 | 1.0 | 0.8 | 0.5 | 0.5 | 0.9 | 0.7 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 2.2 | 0.8 | 2.2 |
| 9-Aug | 1.4 | 1.3 | 1.2 | Z | 1.1 | 1.0 | 0.8 | 1.0 | 1.3 | 1.4 | 1.2 | 0.7 | 0.7 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.7 | 0.5 | 0.5 | 1.0 | 0.8 | 1.4 |
| 10-Aug | 1.0 | 0.9 | 0.7 | 0.6 | Z | 0.7 | 0.9 | 1.2 | 2.9 | 2.6 | 1.8 | 0.8 | 0.6 | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 2.9 |
| 11-Aug | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | Z | 0.6 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.6 | 0.9 |
| 12-Aug | Z | 0.8 | 0.6 | 0.5 | 0.4 | 0.6 | 0.8 | 1.5 | 1.7 | 1.3 | 1.0 | 0.6 | 0.3 | 0.4 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 1.7 |
| 13-Aug | 0.6 | Z | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.4 | 0.4 | 0.7 |
| 14-Aug | 0.3 | 0.4 | Z | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.1 | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.7 |
| 15-Aug | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.5 |
| 16-Aug | 0.5 | 0.4 | 0.5 | 0.4 | Z | 0.5 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 1.0 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 1.0 |
| 17-Aug | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | Z | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.3 | 0.6 |
| 18-Aug | Z | 0.7 | 0.4 | 0.6 | 0.7 | 0.8 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 | 0.8 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 1.2 |
| 19-Aug | 0.4 | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 0.4 |
| 20-Aug | UO | UO | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | C | C | C | C | C | 0.7 | 0.7 | 1.3 | 2.6 | 2.5 | 2.2 | 2.0 | -- | 2.6 |
| 21-Aug | 2.1 | 2.0 | 1.4 | Z | 1.8 | 1.7 | 1.3 | 1.2 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 0.9 | 2.1 |
| 22-Aug | 1.1 | 1.2 | 1.2 | 2.9 | Z | 1.6 | 1.2 | 1.4 | 1.1 | 0.9 | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.8 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 | 1.2 | 1.3 | 1.1 | 2.9 |
| 23-Aug | 1.1 | 1.0 | 1.0 | 1.1 | 1.1 | Z | 1.0 | 1.1 | 1.5 | 1.0 | 1.0 | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 1.5 |
| 24-Aug | Z | 0.7 | 0.6 | 0.6 | 0.5 | 0.7 | 0.8 | 1.0 | 1.4 | 1.3 | 0.8 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.5 | 0.5 | 1.4 |
| 25-Aug | 0.5 | Z | 0.7 | 0.8 | 1.4 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.3 | 0.1 | 0.3 | 0.2 | 0.1 | 0.5 | 0.6 | 0.6 | 1.0 | 0.7 | 0.4 | 0.5 | 1.4 |
| 26-Aug | 0.4 | 0.7 | Z | 0.5 | 0.4 | 0.5 | 0.4 | 0.3 | 0.2 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.8 | 1.8 | 0.5 | 1.8 |
| 27-Aug | 1.2 | 1.1 | 1.7 | Z | 1.3 | 1.4 | 1.6 | 1.2 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.8 | 0.6 | 0.6 | 1.4 | 1.5 | 0.7 | 0.6 | 1.0 | 1.7 |
| 28-Aug | 0.8 | 0.9 | 0.7 | 0.6 | Z | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.9 |
| 29-Aug | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | Z | 0.7 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 | 0.7 | 1.6 | 0.5 | 1.6 |
| 30-Aug | Z | 0.6 | 0.7 | 1.6 | 0.8 | 1.0 | 1.1 | 0.8 | 0.7 | 0.7 | 1.2 | 0.9 | 1.0 | 1.3 | 1.1 | 0.8 | 1.1 | 1.4 | 1.8 | 1.5 | 0.9 | 1.4 | 0.6 | 0.4 | 1.0 | 1.8 |
| 31-Aug | 1.0 | Z | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.0 |
| | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | Diurnal Average | |
| | 2.1 | 2.0 | 1.8 | 2.9 | 1.8 | 1.7 | 1.6 | 1.5 | 2.9 | 2.6 | 1.8 | 0.9 | 1.0 | 1.3 | 1.1 | 1.2 | 1.1 | 1.4 | 1.8 | 1.5 | 2.6 | 2.5 | 2.2 | 2.2 | Diurnal Maximum | |

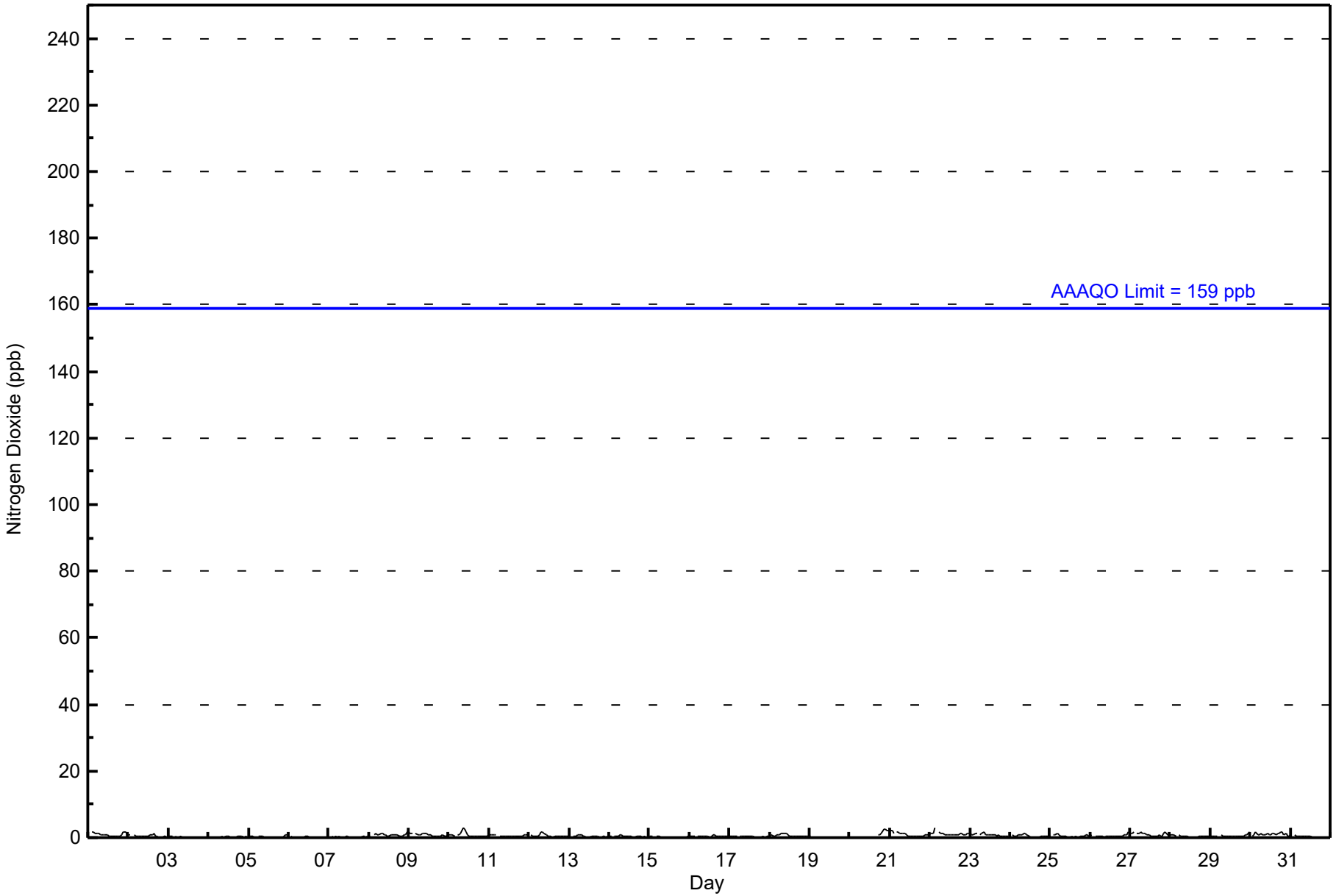
Z - zerospan C - Calibration UO - Unstable Operation
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Stony Mountain - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Stony Mountain - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 675 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 675

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Stony Mountain - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 31 | 20 | 20 | 17 | 15 | 8 | 18 | 30 | 33 | 51 | 50 | 52 | 70 | 95 | 104 | 61 | 675 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 20 | 20 | 17 | 15 | 8 | 18 | 30 | 33 | 51 | 50 | 52 | 70 | 95 | 104 | 61 | 675 |

Total Number of Valid Hours: 675

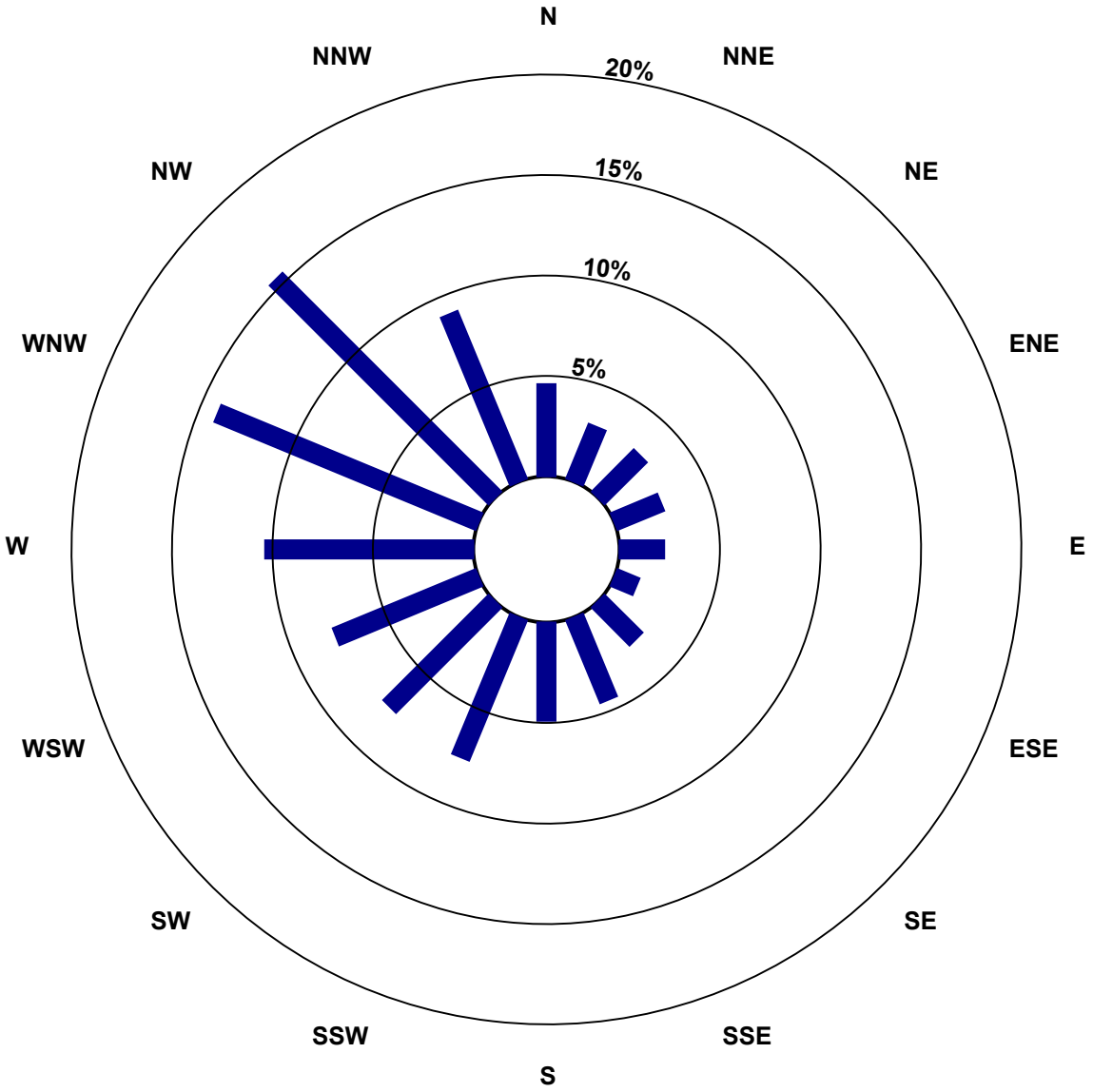
Total Number of Hours: 744

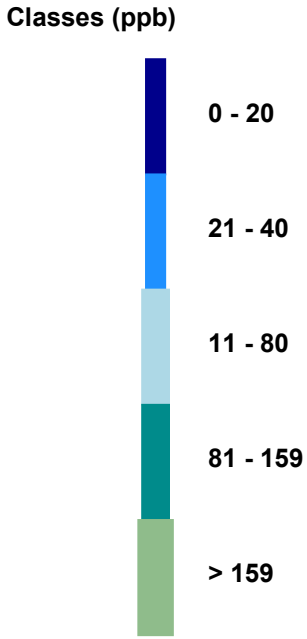
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Stony Mountain



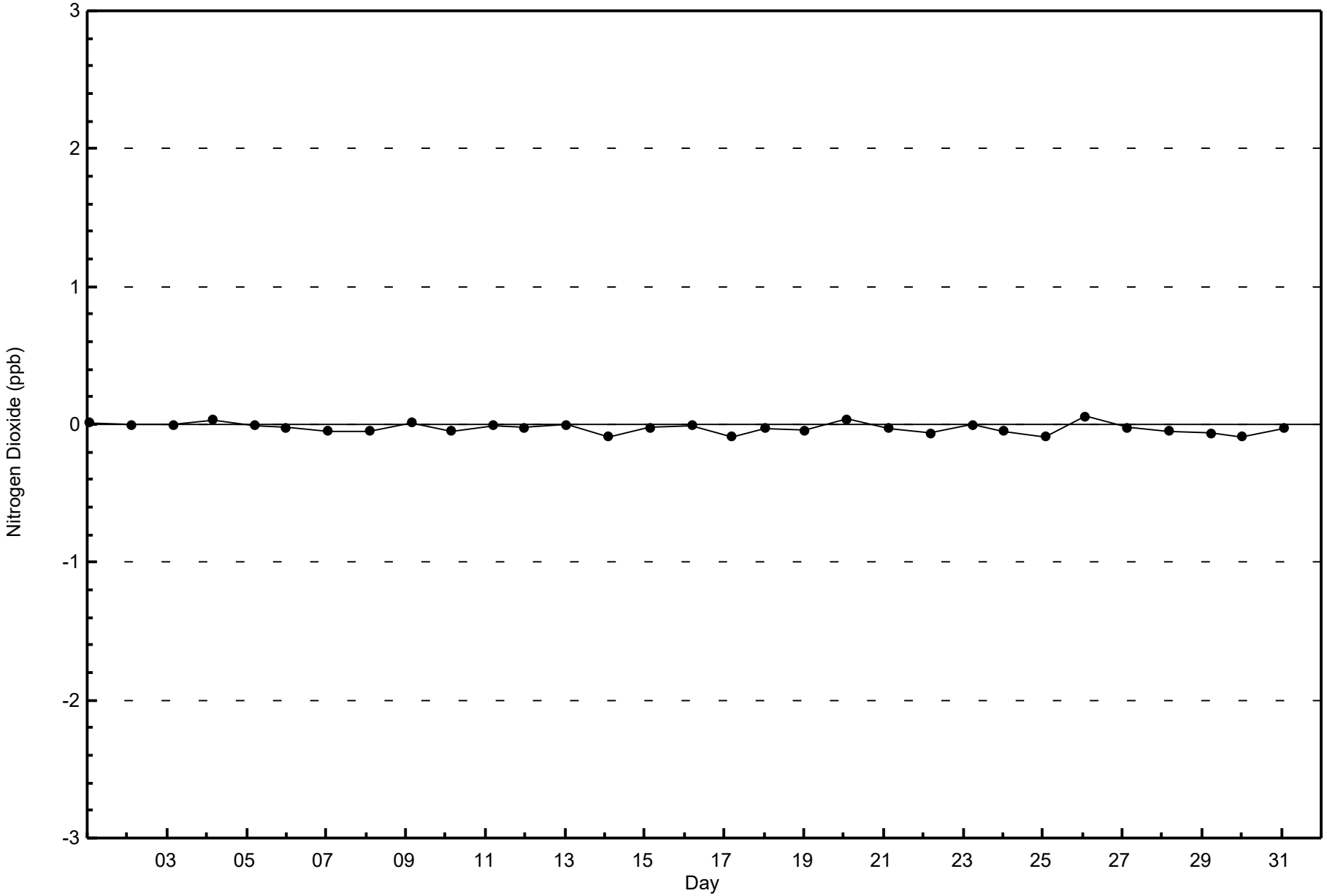

Total Number of Valid Hours: 675

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Stony Mountain - August 2026**

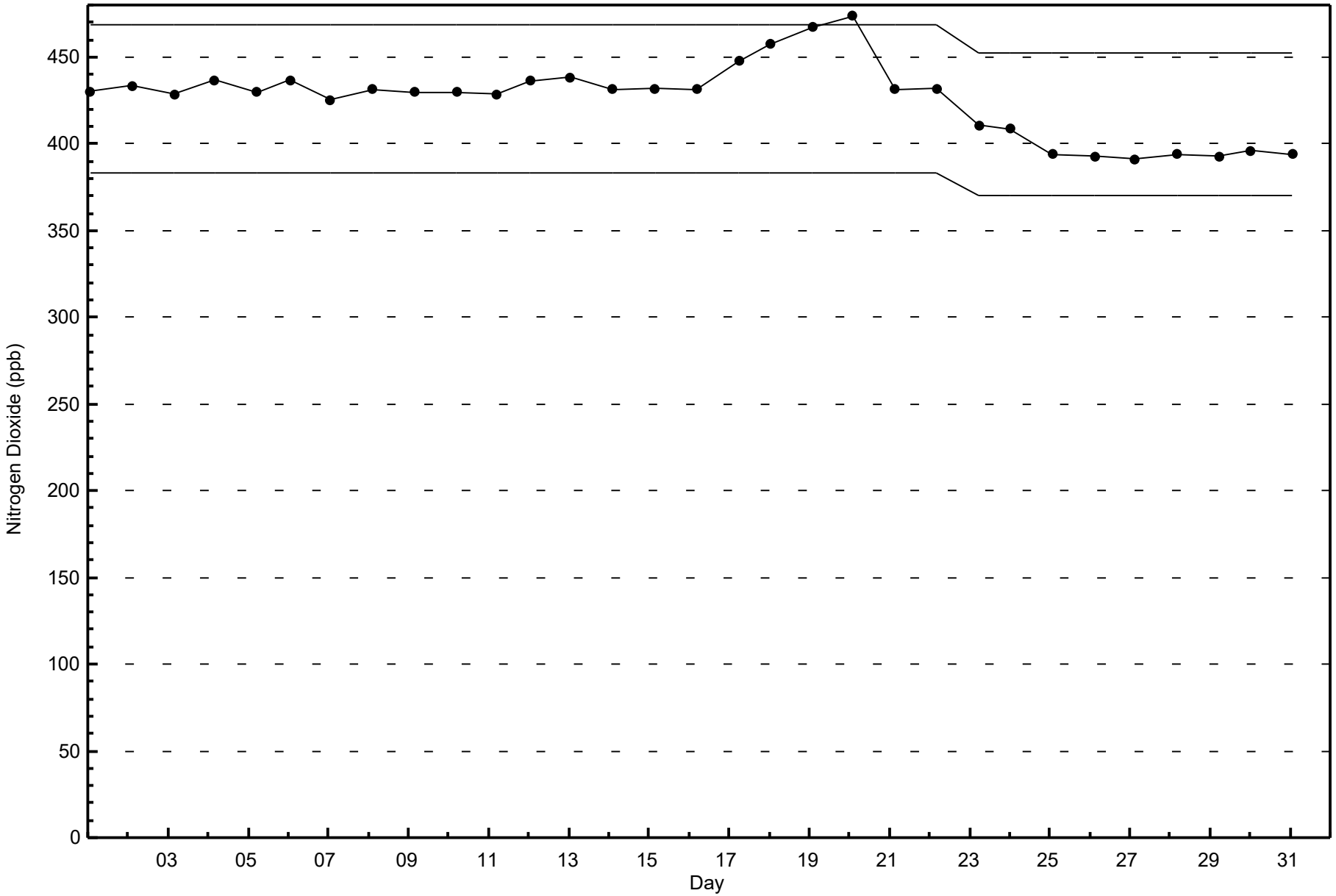


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Stony Mountain - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Stony Mountain - August 2026

Maximum Value: 4.4 ppb on Aug 10 09:00

Maximum Daily Average: 1.2 ppb on Aug 22

Minimum Value: 0.1 ppb on Aug 3 20:00

Minimum Daily Average: 0.2 ppb on Aug 3

Maximum Diurnal Average: 0.9 ppb at hour 9

Minimum Diurnal Average: 0.4 ppb at hour 17

Monthly Average: 0.63 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.5 $Q_3 = 0.8$ $P_{90} = 1.2$ $P_{99} = 2.2$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 675 |
| Hours of Missing Data: | 69 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 95.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.0 | Z | 1.9 | 1.5 | 1.4 | 1.1 | 1.2 | 1.0 | 0.8 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 1.9 | 1.7 | 1.0 | 1.0 | 1.9 |
| 2-Aug | 1.0 | 0.8 | Z | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.9 | 0.9 | 1.3 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.5 | 0.4 | 0.2 | 0.5 | 1.3 |
| 3-Aug | 0.4 | 0.4 | 0.5 | Z | 0.4 | 0.3 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 4-Aug | 0.1 | 0.2 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.5 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 |
| 5-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.8 | 0.8 | 0.4 | 0.8 |
| 6-Aug | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 |
| 7-Aug | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| 8-Aug | 0.3 | 0.5 | Z | 0.8 | 1.1 | 0.8 | 0.8 | 1.6 | 1.9 | 1.4 | 0.9 | 0.6 | 0.5 | 1.1 | 0.8 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 2.2 | 0.9 | 2.2 |
| 9-Aug | 1.4 | 1.3 | 1.2 | Z | 1.1 | 1.1 | 0.9 | 1.2 | 1.5 | 1.7 | 1.5 | 0.8 | 0.8 | 1.0 | 0.7 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.7 | 0.5 | 0.5 | 1.1 | 0.9 | 1.7 |
| 10-Aug | 1.0 | 0.9 | 0.7 | 0.6 | Z | 0.8 | 1.0 | 1.6 | 4.4 | 3.5 | 2.2 | 0.9 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 1.0 | 4.4 |
| 11-Aug | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | Z | 0.7 | 0.7 | 0.4 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.6 | 0.9 |
| 12-Aug | Z | 0.8 | 0.6 | 0.5 | 0.4 | 0.6 | 0.8 | 2.0 | 2.4 | 1.8 | 1.2 | 0.7 | 0.3 | 0.5 | 0.3 | 0.3 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 2.4 |
| 13-Aug | 0.6 | Z | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 0.4 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.4 | 0.5 | 0.8 |
| 14-Aug | 0.3 | 0.4 | Z | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.8 |
| 15-Aug | 0.4 | 0.4 | 0.4 | Z | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 |
| 16-Aug | 0.6 | 0.5 | 0.6 | 0.5 | Z | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 1.2 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 1.2 |
| 17-Aug | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | Z | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.6 |
| 18-Aug | Z | 0.7 | 0.5 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | 1.4 | 1.3 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 1.4 |
| 19-Aug | 0.4 | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 0.4 |
| 20-Aug | UO | UO | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | C | C | C | C | C | 0.7 | 0.7 | 1.3 | 2.6 | 2.5 | 2.2 | 2.0 | -- | 2.6 |
| 21-Aug | 2.1 | 2.0 | 1.4 | Z | 1.8 | 1.7 | 1.3 | 1.3 | 1.2 | 1.2 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 2.1 |
| 22-Aug | 1.1 | 1.2 | 1.2 | 2.9 | Z | 1.6 | 1.3 | 1.7 | 1.4 | 1.0 | 0.9 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 | 1.2 | 1.3 | 1.2 | 2.9 |
| 23-Aug | 1.1 | 1.0 | 1.0 | 1.1 | 1.1 | Z | 1.1 | 1.2 | 1.7 | 1.1 | 1.1 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.9 | 1.7 |
| 24-Aug | Z | 0.7 | 0.6 | 0.6 | 0.5 | 0.7 | 0.8 | 1.1 | 1.6 | 1.4 | 1.0 | 0.5 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.5 | 0.6 | 1.6 |
| 25-Aug | 0.5 | Z | 0.7 | 0.8 | 1.4 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.4 | 0.1 | 0.4 | 0.2 | 0.1 | 0.5 | 0.6 | 0.6 | 1.0 | 0.7 | 0.4 | 0.5 | 1.4 |
| 26-Aug | 0.4 | 0.7 | Z | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.8 | 1.8 | 0.6 | 1.8 |
| 27-Aug | 1.2 | 1.1 | 1.7 | Z | 1.3 | 1.4 | 1.6 | 1.3 | 1.2 | 1.2 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.8 | 0.6 | 0.6 | 1.4 | 1.5 | 0.7 | 0.6 | 1.0 | 1.7 |
| 28-Aug | 0.8 | 0.9 | 0.7 | 0.6 | Z | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.9 |
| 29-Aug | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | Z | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 | 0.7 | 1.6 | 0.5 | 1.6 |
| 30-Aug | Z | 0.6 | 0.7 | 1.6 | 0.8 | 1.0 | 1.2 | 0.8 | 0.7 | 0.8 | 1.6 | 1.2 | 1.3 | 1.5 | 1.2 | 0.9 | 1.2 | 1.5 | 1.9 | 1.5 | 0.9 | 1.4 | 0.6 | 0.4 | 1.1 | 1.9 |
| 31-Aug | 1.0 | Z | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.0 |
| | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.8 | 0.7 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | Diurnal Average | |
| | 2.1 | 2.0 | 1.9 | 2.9 | 1.8 | 1.7 | 1.6 | 2.0 | 4.4 | 3.5 | 2.2 | 1.2 | 1.3 | 1.5 | 1.2 | 1.3 | 1.2 | 1.5 | 1.9 | 1.5 | 2.6 | 2.5 | 2.2 | 2.2 | Diurnal Maximum | |

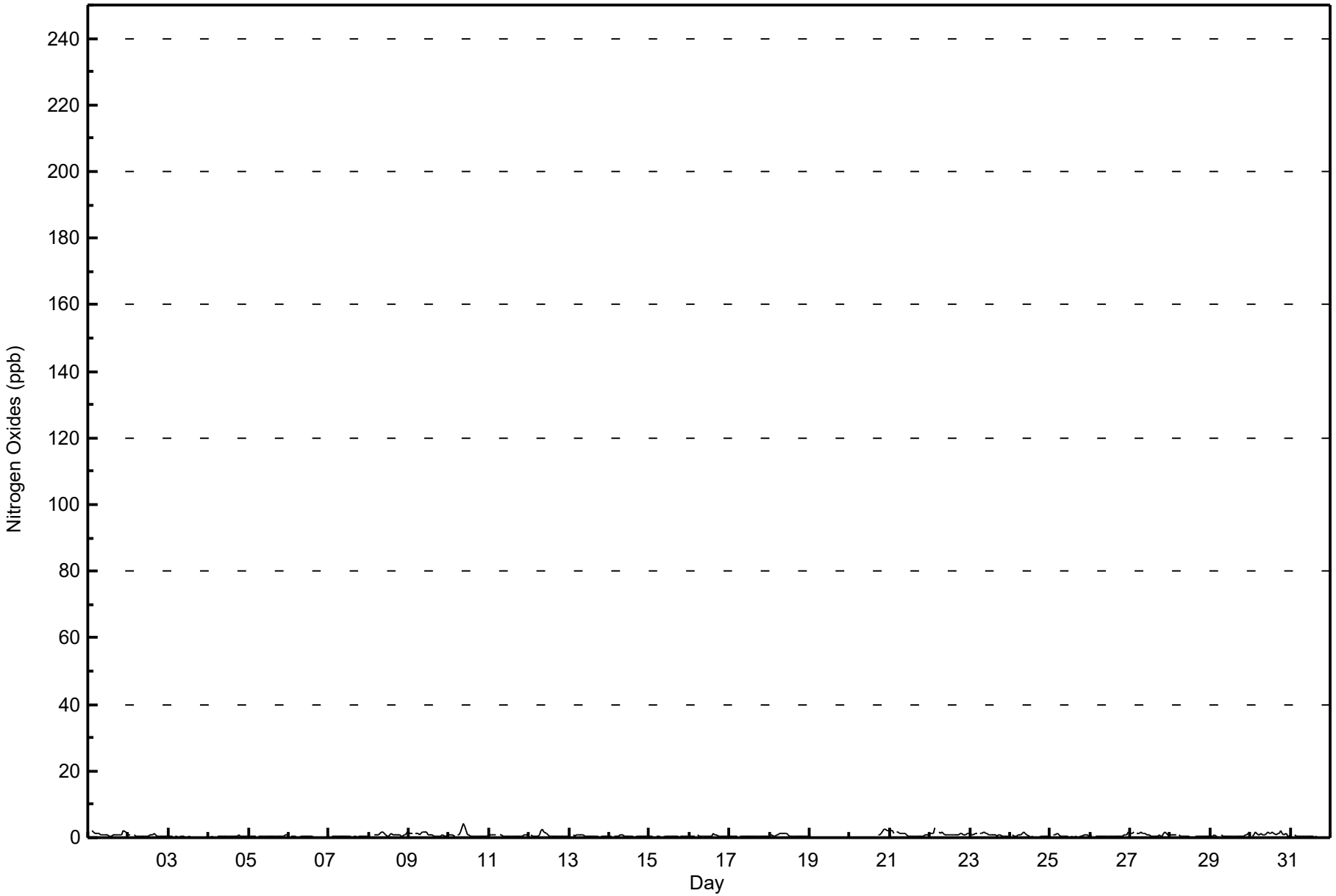
Z - zerospan C - Calibration UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Stony Mountain - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Stony Mountain - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 675 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 675

Total Number of Hours: 744

# Nitrogen Oxides ($NO_X$) - ppb
## Stony Mountain - August 2026

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 31 | 20 | 20 | 17 | 15 | 8 | 18 | 30 | 33 | 51 | 50 | 52 | 70 | 95 | 104 | 61 | 675 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 20 | 20 | 17 | 15 | 8 | 18 | 30 | 33 | 51 | 50 | 52 | 70 | 95 | 104 | 61 | 675 |

Total Number of Valid Hours: 675

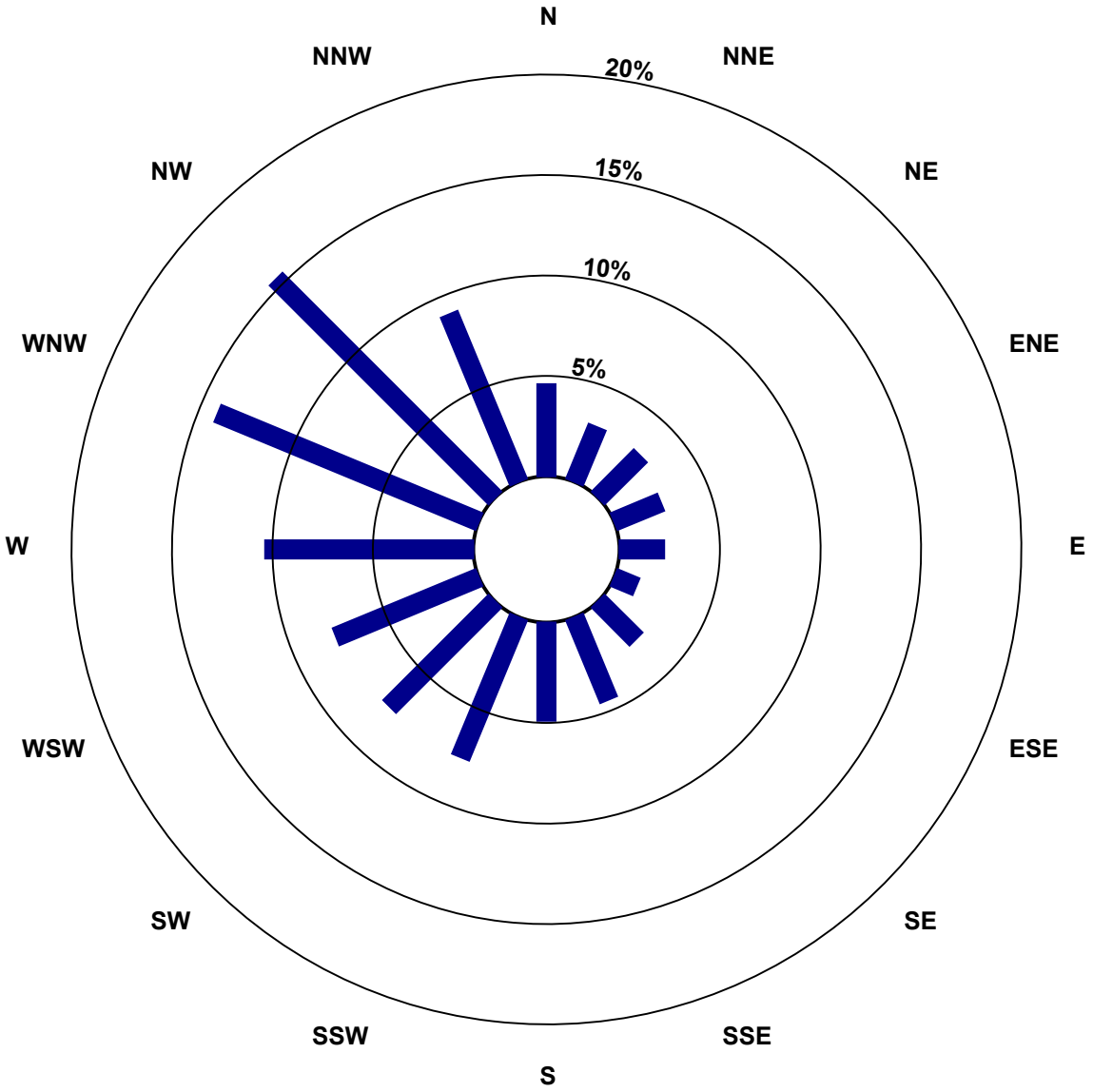
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Stony Mountain




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

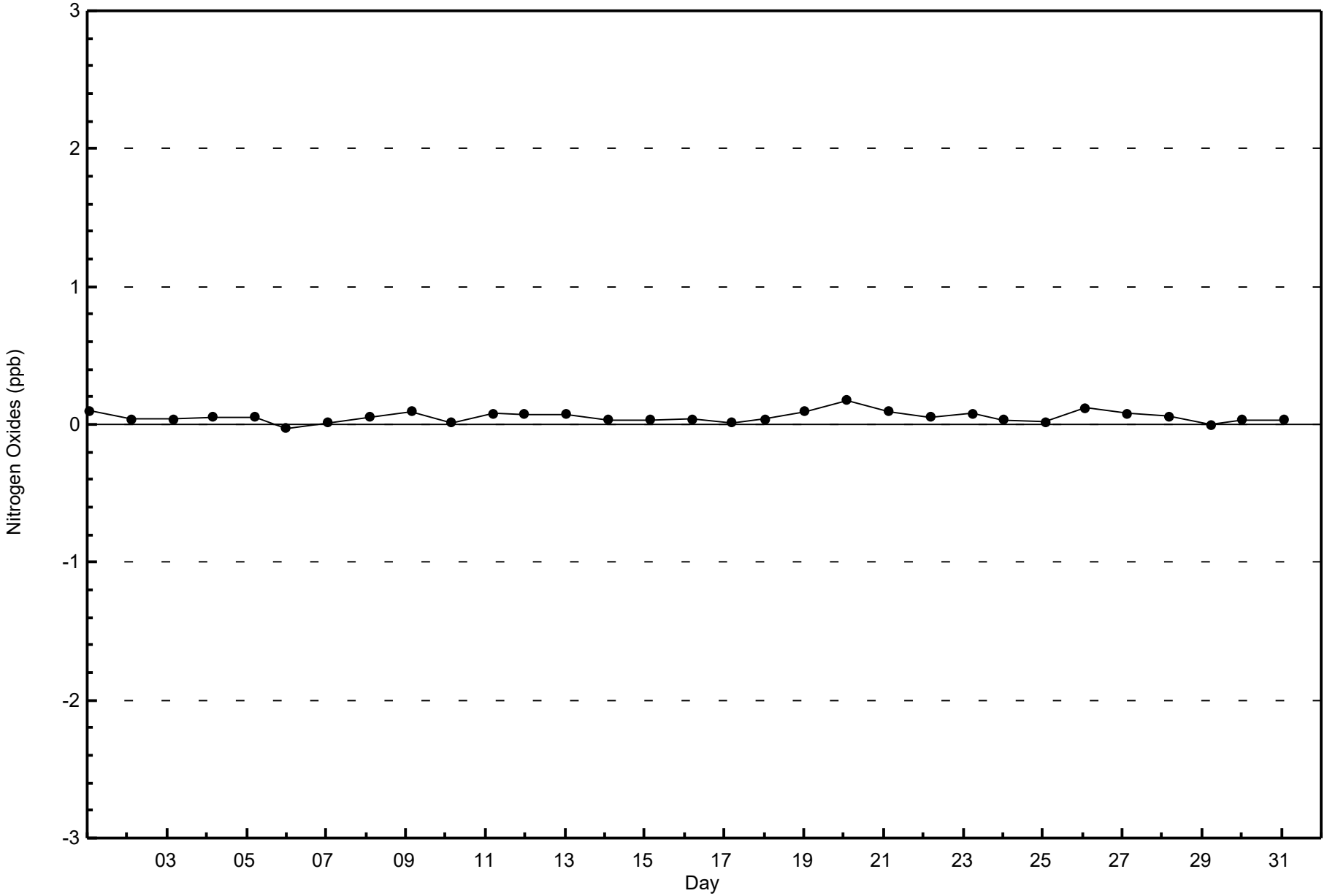
Total Number of Valid Hours: 675

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Stony Mountain - August 2026**

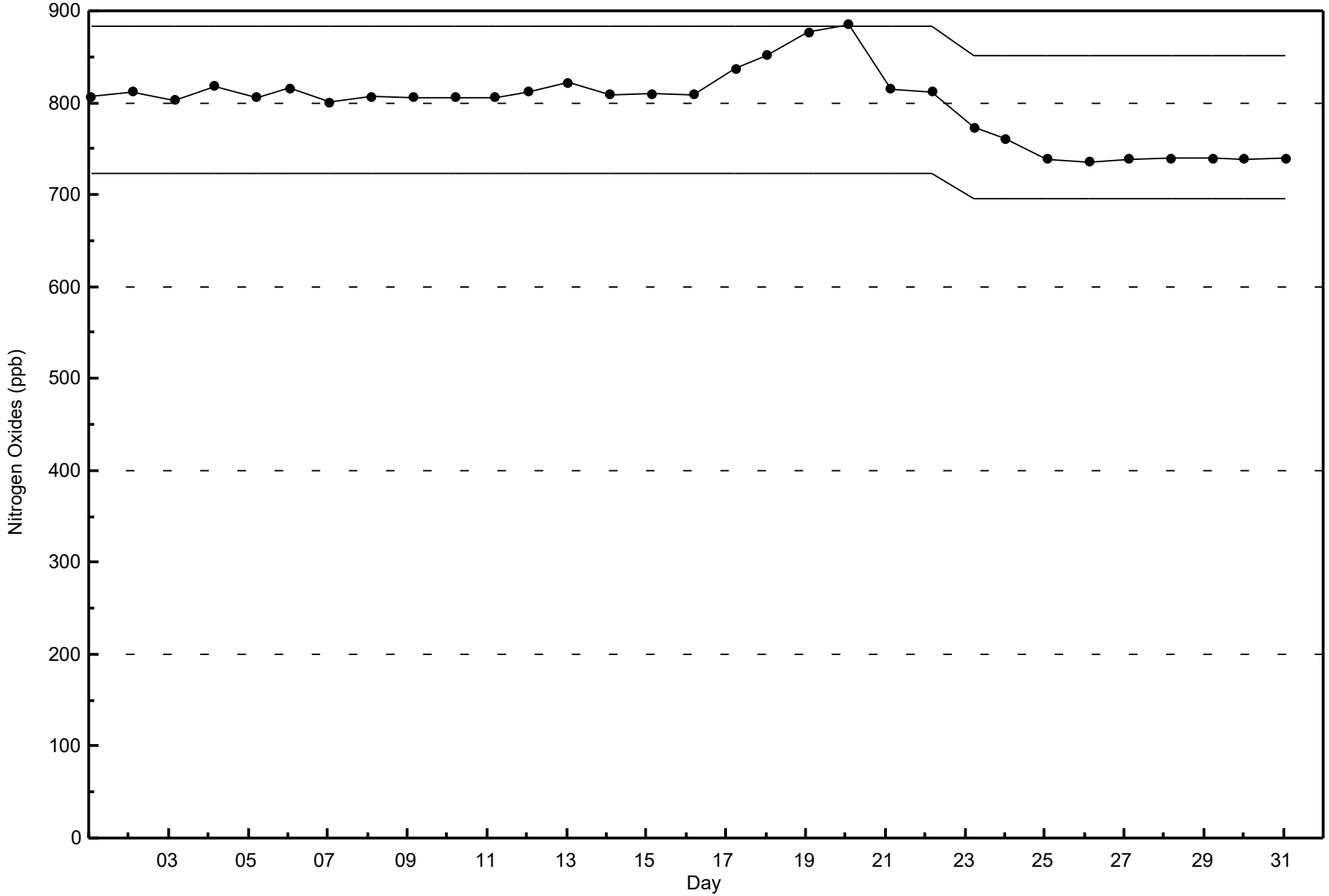


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Stony Mountain - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Ozone ($O_3$) - ppb

## Stony Mountain - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.4 ppb on Aug 26 16:00 Maximum Daily Average: 35.2 ppb on Aug 26

Minimum Value: 6.3 ppb on Aug 30 07:00 Minimum Daily Average: 15.7 ppb on Aug 13
Maximum Diurnal Average: 28.3 ppb at hour 17 Minimum Diurnal Average: 18.9 ppb at hour 7
Monthly Average: 24.27 ppb Percentiles: $P_1$ = 10.5 $P_{10}$ = 14.9 $Q_1$ = 18.9 Median = 24.0 $Q_3$ = 28.3 $P_{90}$ = 34.2 $P_{99}$ = 43.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 19.6 | 17.8 | 17.3 | 16.3 | 15.5 | 16.8 | 19.9 | 28.2 | 32.7 | 37.2 | 40.0 | 42.0 | 45.0 | 44.5 | 45.0 | 43.9 | 44.5 | 41.1 | 36.3 | 33.1 | 42.5 | 41.4 | 33.7 | 32.8 | 45.0 |
| 2-Aug | 29.0 | Z | 23.0 | 20.1 | 16.3 | 16.9 | 15.9 | 16.2 | 16.5 | 16.5 | 15.8 | 14.2 | 14.6 | 16.9 | 16.1 | 18.1 | 18.9 | 18.8 | 18.1 | 20.6 | 21.3 | 20.6 | 20.7 | 20.4 | 18.5 | 29.0 |
| 3-Aug | 19.7 | 18.6 | Z | 16.8 | 16.8 | 16.1 | 15.8 | 15.7 | 16.3 | 19.8 | 22.0 | 24.5 | 25.7 | 26.7 | 27.2 | 27.7 | 28.0 | 26.3 | 25.4 | 22.4 | 22.1 | 22.1 | 22.6 | 23.6 | 21.8 | 28.0 |
| 4-Aug | 23.5 | 25.4 | 26.5 | Z | 20.5 | 17.9 | 17.1 | 15.3 | 17.3 | 15.3 | 19.7 | 17.3 | 16.6 | 19.9 | 25.1 | 22.7 | 18.3 | 24.0 | 28.5 | 28.9 | 27.0 | 25.7 | 23.7 | 23.8 | 21.7 | 28.9 |
| 5-Aug | 22.7 | 21.9 | 21.4 | 21.1 | Z | 18.4 | 18.2 | 18.1 | 18.7 | 21.5 | 24.6 | 25.8 | 27.5 | 28.1 | 26.8 | 27.3 | 27.2 | 27.0 | 26.4 | 26.2 | 26.5 | 38.4 | 43.5 | 43.7 | 26.1 | 43.7 |
| 6-Aug | 37.3 | 26.3 | 24.6 | 22.9 | 21.6 | Z | 18.0 | 16.1 | 15.3 | 14.2 | 13.5 | 12.9 | 13.3 | 13.9 | 15.0 | 16.6 | 17.3 | 17.7 | 19.3 | 18.0 | 14.6 | 14.7 | 14.0 | 12.9 | 17.8 | 37.3 |
| 7-Aug | Z | 12.8 | 12.3 | 10.7 | 9.7 | 9.2 | 10.5 | 12.1 | 14.4 | 18.5 | 21.9 | 24.4 | 25.6 | 28.2 | 28.7 | 27.1 | 25.4 | 25.9 | 24.6 | 24.5 | 25.4 | 23.7 | 18.9 | 19.2 | 19.7 | 28.7 |
| 8-Aug | 17.7 | Z | 14.3 | 12.5 | 12.4 | 10.4 | 15.1 | 18.4 | 20.7 | 22.8 | 25.8 | 23.7 | 21.8 | 23.6 | 24.3 | 24.3 | 27.8 | 26.5 | 24.0 | 20.8 | 22.5 | 22.1 | 24.7 | 24.7 | 20.9 | 27.8 |
| 9-Aug | 25.2 | 24.2 | Z | 23.2 | 20.1 | 18.8 | 13.8 | 20.9 | 24.4 | 25.6 | 29.9 | 27.1 | 22.8 | 19.1 | 26.0 | 28.7 | 25.5 | 22.1 | 23.0 | 22.3 | 27.5 | 28.3 | 26.1 | 25.3 | 23.9 | 29.9 |
| 10-Aug | 25.8 | 25.2 | 24.5 | Z | 20.6 | 17.4 | 18.3 | 19.0 | 20.4 | 25.7 | 30.3 | 36.1 | 37.0 | 39.4 | 29.7 | 26.2 | 24.4 | 24.6 | 21.6 | 23.7 | 25.5 | 24.1 | 20.1 | 20.5 | 25.2 | 39.4 |
| 11-Aug | 22.0 | 24.9 | 21.0 | 20.9 | Z | 19.7 | 20.6 | 24.1 | 28.9 | 33.1 | 35.2 | 36.0 | 32.7 | 35.6 | 33.9 | 33.7 | 36.4 | 36.2 | 27.7 | 26.4 | 28.3 | 28.0 | 26.6 | 24.9 | 28.6 | 36.4 |
| 12-Aug | 23.2 | 22.0 | 21.2 | 20.2 | 19.4 | Z | 16.5 | 16.7 | 20.5 | 21.6 | 23.3 | 24.4 | 23.2 | 19.3 | 21.7 | 19.2 | 18.9 | 17.5 | 17.6 | 15.1 | 13.7 | 12.7 | 12.3 | 12.8 | 18.8 | 24.4 |
| 13-Aug | Z | 12.0 | 11.2 | 10.4 | 10.9 | 11.6 | 12.7 | 14.3 | 13.7 | 15.9 | 18.5 | 19.5 | 20.6 | 19.7 | 22.8 | 21.8 | 18.5 | 21.8 | 20.7 | 13.4 | 11.7 | 14.2 | 13.4 | 11.0 | 15.7 | 22.8 |
| 14-Aug | 12.4 | Z | 11.7 | 13.7 | 13.7 | 10.7 | 12.2 | 16.1 | 16.9 | 17.2 | 19.3 | 23.6 | 25.4 | 26.2 | 27.6 | 25.0 | 26.9 | 26.5 | 22.5 | 22.2 | 21.4 | 22.6 | 23.1 | 21.0 | 19.9 | 27.6 |
| 15-Aug | 23.2 | 24.9 | Z | 22.8 | 20.0 | 20.0 | 19.7 | 19.8 | 21.9 | 23.3 | 24.9 | 25.5 | 20.7 | 23.4 | 23.5 | 20.9 | 24.0 | 26.3 | 25.8 | 24.7 | 23.5 | 20.6 | 23.3 | 29.4 | 23.1 | 29.4 |
| 16-Aug | 29.8 | 27.1 | 27.6 | Z | 29.0 | 30.0 | 27.8 | 26.3 | 22.7 | 21.3 | 19.7 | 16.9 | 16.2 | 18.9 | 25.4 | 27.3 | 28.3 | 27.4 | 19.2 | 14.0 | 17.2 | 23.1 | 27.9 | 28.1 | 24.0 | 30.0 |
| 17-Aug | 28.2 | 29.0 | 28.8 | 26.0 | Z | 23.9 | 24.2 | 24.1 | 25.9 | 28.0 | 31.6 | 34.2 | 33.9 | 32.9 | 33.6 | 34.7 | 34.6 | 28.5 | 28.1 | 26.7 | 27.6 | 25.3 | 26.7 | 27.6 | 28.9 | 34.7 |
| 18-Aug | 27.4 | 25.8 | 24.6 | 25.1 | 25.5 | Z | 24.6 | 23.0 | 25.6 | 29.1 | 31.9 | 30.6 | 30.3 | 30.0 | 29.0 | 29.4 | 31.1 | 32.6 | 31.7 | 30.0 | 28.8 | 26.9 | 26.4 | 26.4 | 28.1 | 32.6 |
| 19-Aug | Z | 24.5 | 23.3 | 22.8 | 21.9 | 21.1 | 20.8 | 20.5 | 19.0 | 18.5 | 21.4 | 22.4 | 23.1 | 25.7 | 24.2 | 23.3 | 25.3 | 25.9 | 26.4 | 27.2 | 26.7 | 25.9 | 26.8 | 26.0 | 23.6 | 27.2 |
| 20-Aug | 26.1 | Z | 24.2 | 18.5 | 18.7 | 21.3 | 21.8 | 22.6 | 20.2 | 20.7 | 18.3 | 24.0 | 25.5 | 28.1 | 24.3 | 26.2 | 28.4 | 31.7 | 29.4 | 31.5 | 37.8 | 40.7 | 40.3 | 39.0 | 26.9 | 40.7 |
| 21-Aug | 35.4 | 36.7 | Z | 33.6 | 35.3 | 33.8 | 32.7 | 28.8 | 26.2 | 31.7 | 31.5 | 33.3 | 32.8 | 31.7 | 32.1 | 32.8 | 32.7 | 34.1 | 31.9 | 28.5 | 26.6 | 29.6 | 29.4 | 25.9 | 31.6 | 36.7 |
| 22-Aug | 23.0 | 22.8 | 23.3 | Z | 23.5 | 23.1 | 22.7 | 22.7 | 25.2 | 28.5 | 30.8 | 33.6 | 38.3 | 38.1 | 40.4 | 41.8 | 40.9 | 40.2 | 37.7 | 32.2 | 28.4 | 26.8 | 25.1 | 25.2 | 30.2 | 41.8 |
| 23-Aug | 23.9 | 21.3 | 19.6 | 17.4 | Z | 8.8 | 10.7 | 8.6 | 12.5 | 10.5 | 18.2 | 16.9 | 17.4 | 15.6 | 15.3 | 18.2 | 25.0 | 18.7 | 13.3 | 11.9 | 13.6 | 14.6 | 16.8 | 18.5 | 16.0 | 25.0 |
| 24-Aug | 15.6 | 13.5 | 14.2 | 12.6 | 14.0 | Z | 15.1 | 14.4 | 16.1 | 16.2 | 17.5 | C | C | C | C | 30.1 | 29.9 | 26.7 | 21.7 | 19.9 | 21.4 | 24.9 | 28.4 | 28.3 | 20.0 | 30.1 |
| 25-Aug | Z | 29.4 | 31.3 | 31.6 | 31.0 | 26.9 | 27.0 | 24.8 | 23.5 | 24.4 | 25.5 | 26.7 | 28.0 | 27.6 | 27.9 | 26.7 | 26.4 | 22.6 | 21.2 | 28.6 | 31.3 | 30.0 | 29.4 | 27.2 | 27.4 | 31.6 |
| 26-Aug | 25.7 | Z | 24.9 | 26.0 | 26.0 | 27.3 | 29.1 | 29.9 | 28.9 | 33.4 | 35.9 | 38.8 | 39.4 | 40.3 | 44.1 | 46.4 | 44.2 | 43.5 | 43.6 | 41.4 | 38.6 | 36.5 | 34.0 | 31.5 | 35.2 | 46.4 |
| 27-Aug | 30.6 | 29.4 | Z | 29.3 | 27.8 | 24.9 | 21.7 | 21.6 | 26.1 | 29.3 | 32.4 | 34.5 | 35.1 | 37.6 | 40.7 | 41.9 | 40.7 | 42.8 | 39.1 | 37.1 | 31.4 | 31.5 | 36.0 | 34.3 | 32.9 | 42.8 |
| 28-Aug | 34.1 | 33.6 | 37.0 | Z | 31.9 | 33.2 | 31.9 | 32.1 | 34.3 | 36.3 | 37.6 | 34.9 | 35.3 | 34.1 | 33.2 | 32.0 | 34.0 | 34.3 | 31.1 | 29.8 | 29.7 | 29.0 | 28.1 | 24.6 | 32.7 | 37.6 |
| 29-Aug | 18.3 | 16.0 | 15.6 | 16.3 | Z | 13.9 | 13.2 | 12.1 | 20.0 | 23.5 | 24.3 | 24.2 | 25.9 | 27.1 | 27.3 | 27.5 | 29.7 | 30.8 | 27.5 | 28.4 | 25.4 | 22.4 | 23.1 | 23.0 | 22.4 | 30.8 |
| 30-Aug | 21.9 | 17.6 | 15.8 | 17.4 | 15.7 | Z | 6.3 | 10.8 | 13.4 | 14.9 | 15.3 | 18.1 | 21.3 | 23.6 | 24.1 | 22.1 | 20.3 | 22.8 | 19.1 | 14.9 | 13.6 | 11.7 | 18.1 | 22.9 | 17.5 | 24.1 |
| 31-Aug | Z | 20.1 | 17.6 | 15.8 | 15.2 | 15.5 | 15.5 | 15.2 | 16.1 | 17.8 | 19.4 | 21.5 | 22.0 | 22.7 | 21.9 | 21.3 | 24.5 | 23.4 | 19.0 | 20.6 | 22.0 | 22.8 | 22.7 | 23.9 | 19.8 | 24.5 |
| | 24.9 | 23.3 | 21.4 | 20.2 | 20.5 | 19.5 | 18.9 | 19.4 | 21.0 | 22.8 | 24.9 | 26.2 | 26.5 | 27.3 | 27.9 | 27.9 | 28.3 | 28.1 | 26.0 | 24.8 | 24.7 | 25.2 | 25.6 | 25.1 | Diurnal Average | |
| | 37.3 | 36.7 | 37.0 | 33.6 | 35.3 | 33.8 | 32.7 | 32.1 | 34.3 | 36.3 | 37.6 | 40.0 | 42.0 | 45.0 | 44.5 | 46.4 | 44.2 | 44.5 | 43.6 | 41.4 | 38.6 | 42.5 | 43.5 | 43.7 | Diurnal Maximum | |

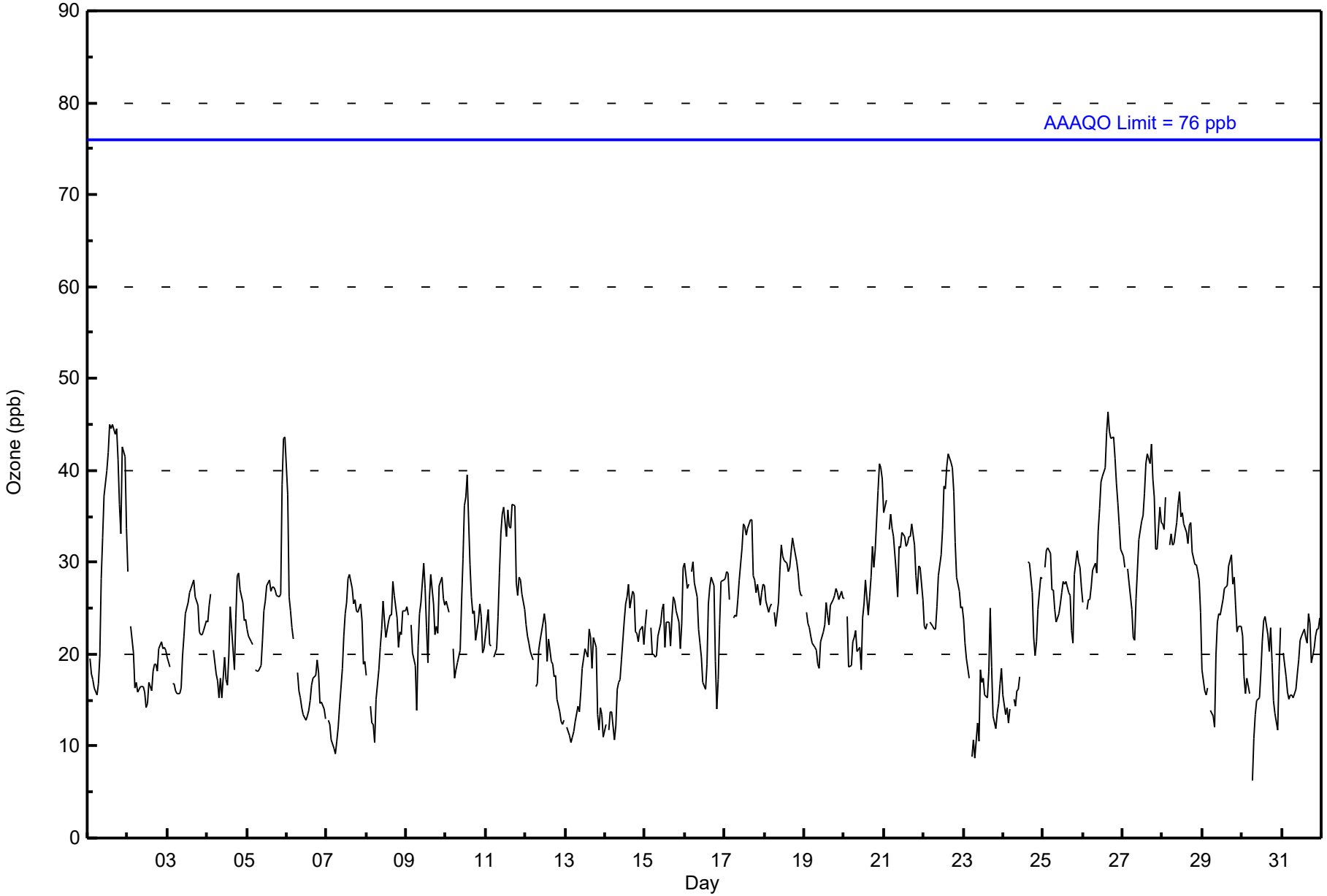
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Stony Mountain - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 220 | 31.03 | 31.03 |
| 21 - 50 | 489 | 68.97 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Stony Mountain - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 19 | 10 | 8 | 5 | 4 | 3 | 3 | 2 | 3 | 7 | 9 | 9 | 21 | 47 | 49 | 21 | 220 |
| 21 - 50 | 14 | 10 | 12 | 12 | 11 | 5 | 15 | 28 | 32 | 45 | 42 | 41 | 55 | 68 | 60 | 39 | 489 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 33 | 20 | 20 | 17 | 15 | 8 | 18 | 30 | 35 | 52 | 51 | 50 | 76 | 115 | 109 | 60 | 709 |

Total Number of Valid Hours: 709

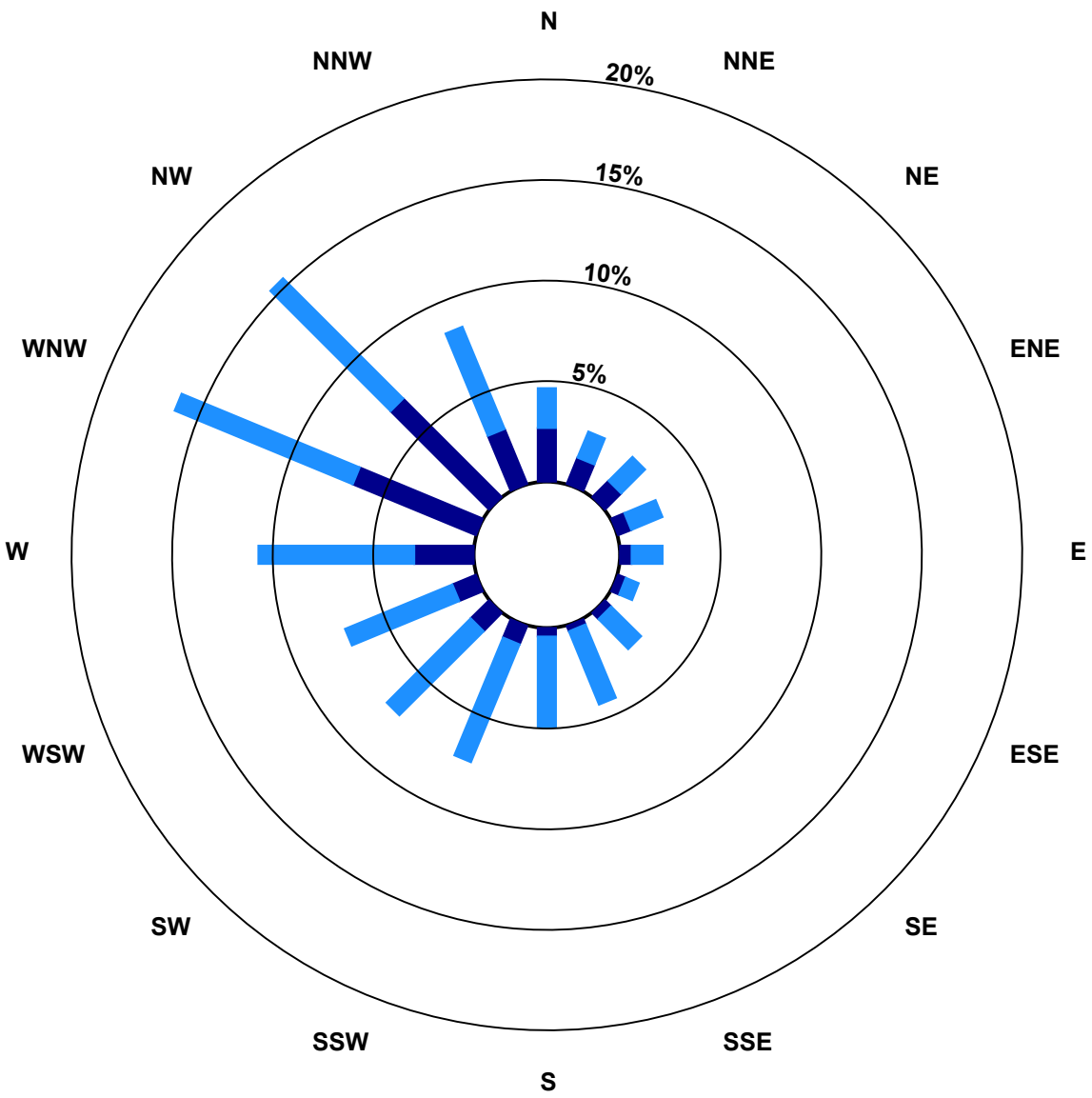
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ozone ($O_3$) - ppb

Stony Mountain




Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

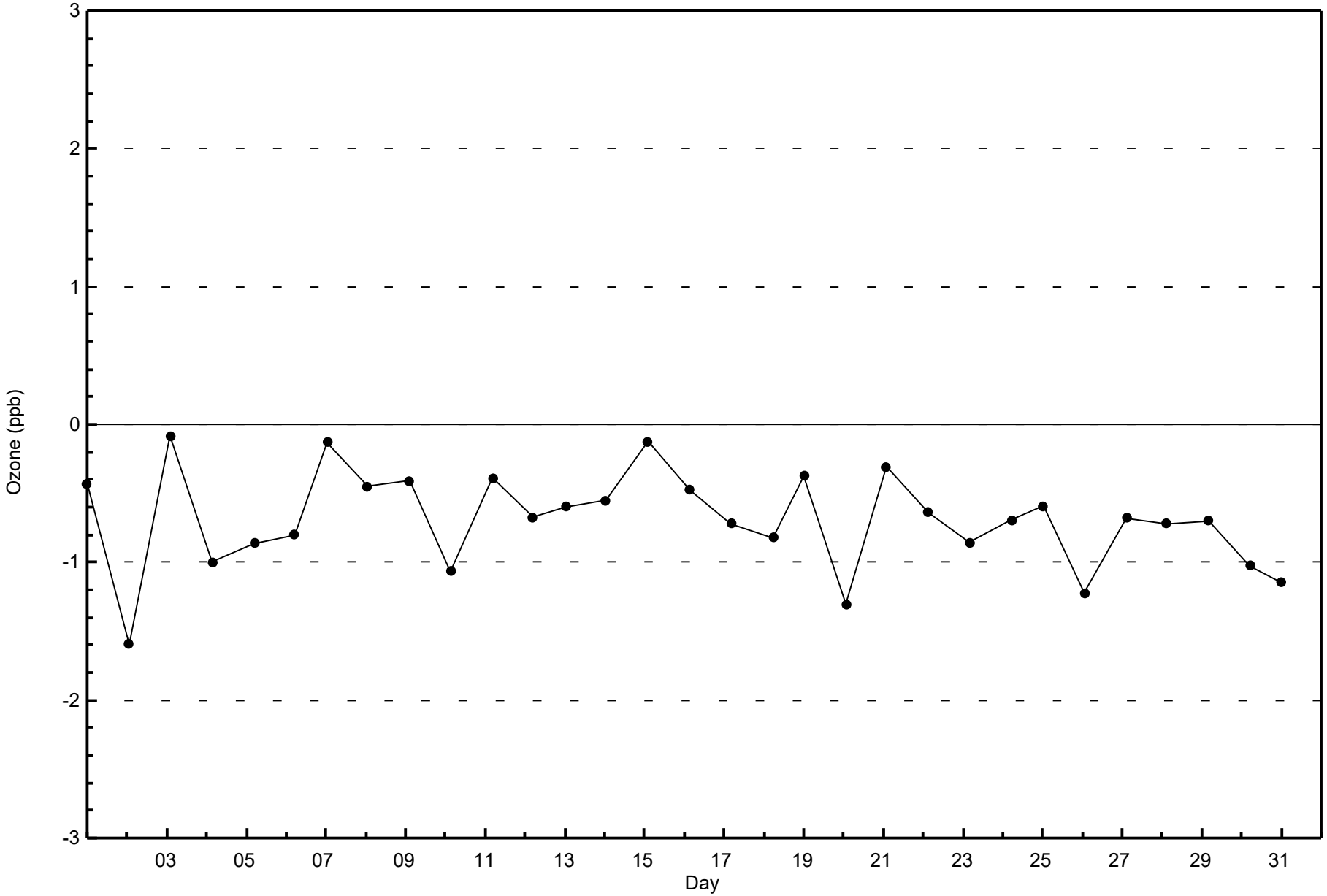
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Stony Mountain - August 2026**

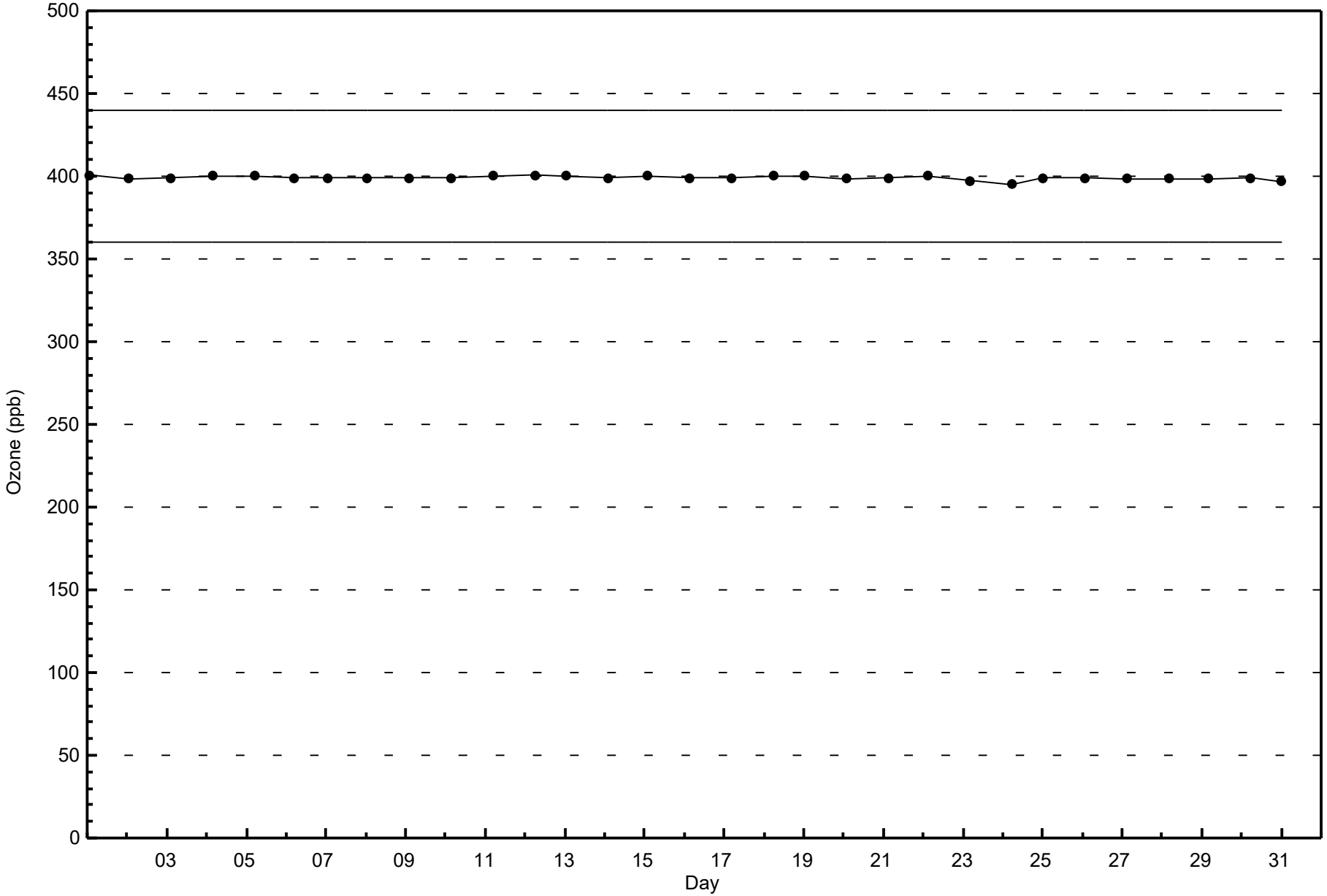


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Stony Mountain - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Stony Mountain - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 30.5 $\mu g/m^3$ on Aug 29 01:00

Maximum Daily Average: 12.9 $\mu g/m^3$ on Aug 29

Minimum Value: 0.4 $\mu g/m^3$ on Aug 2 12:00

Minimum Daily Average: 1.4 $\mu g/m^3$ on Aug 3

Maximum Diurnal Average: 7.2 $\mu g/m^3$ at hour 1

Minimum Diurnal Average: 4.5 $\mu g/m^3$ at hour 14

Monthly Average: 5.72 $\mu g/m^3$

Percentiles: $P_1$ = 0.8 $P_{10}$ = 1.6 $Q_1$ = 2.8 Median = 3.8 $Q_3$ = 7.9 $P_{90}$ = 11.6 $P_{99}$ = 22.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 674 |
| Hours of Missing Data: | 70 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 90.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 7.4 | 6.5 | 6.1 | 6.1 | 6.1 | 6.1 | 6.4 | 7.0 | 8.0 | 7.8 | 8.6 | 8.8 | 9.4 | 11.0 | 12.7 | 11.4 | 10.5 | 12.8 | 11.0 | 10.4 | 10.6 | 10.3 | 11.7 | 19.3 | 9.4 | 19.3 |
| 2-Aug | 25.3 | 24.1 | 23.2 | 21.8 | 18.4 | 14.5 | 6.4 | 3.5 | 2.5 | 1.7 | 0.6 | 0.4 | 0.8 | 2.5 | 2.4 | 3.5 | 3.0 | 2.4 | 2.4 | 2.3 | 2.0 | 1.7 | 1.3 | 1.1 | 7.0 | 25.3 |
| 3-Aug | 1.1 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.3 | 1.5 | 1.9 | 1.6 | 1.3 | 1.8 | 1.7 | 2.6 | 2.3 | 1.2 | 1.1 | 1.1 | 1.2 | 1.3 | 1.5 | 1.5 | 1.5 | 1.4 | 2.6 |
| 4-Aug | 1.6 | 1.5 | 1.3 | 1.6 | 1.8 | 2.2 | 4.4 | 5.6 | 8.4 | 6.0 | 5.7 | 5.1 | 4.8 | 4.1 | 2.9 | 3.7 | 4.1 | 4.2 | 3.4 | 3.4 | 3.5 | 3.6 | 3.7 | 3.6 | 3.8 | 8.4 |
| 5-Aug | 4.0 | 6.5 | 8.3 | 9.3 | 10.7 | 13.4 | 15.3 | 16.7 | 16.3 | 11.7 | 7.7 | 6.6 | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 16.7 |
| 6-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 | 0.9 | 1.0 | 1.3 | 1.5 | 1.6 | 1.6 | -- | 1.6 |
| 7-Aug | 1.7 | 2.1 | 2.4 | 2.6 | 2.9 | 2.9 | 2.9 | 2.7 | 2.6 | 3.6 | 7.2 | 6.2 | 3.5 | 2.9 | 3.7 | 4.5 | 5.5 | 4.9 | 4.8 | 5.5 | 6.9 | 8.8 | 8.9 | 9.1 | 4.5 | 9.1 |
| 8-Aug | 8.9 | 8.6 | 6.8 | 8.3 | 7.8 | 6.9 | 4.9 | 3.4 | 3.3 | 3.9 | 3.5 | 3.7 | 3.8 | 3.9 | 3.3 | 3.2 | 3.7 | 3.5 | 3.3 | 3.3 | 3.5 | 3.8 | 4.2 | 3.6 | 4.7 | 8.9 |
| 9-Aug | 3.3 | 3.4 | 4.0 | 3.4 | 3.7 | 3.7 | 3.6 | 3.5 | 3.4 | 3.6 | 3.8 | 3.2 | 2.9 | 2.9 | 2.8 | 3.4 | 3.5 | 3.4 | 2.6 | 2.7 | 3.0 | 2.5 | 2.4 | 2.7 | 3.2 | 4.0 |
| 10-Aug | 2.6 | 2.5 | 2.5 | 2.5 | 2.7 | 2.9 | 2.7 | 2.9 | 2.7 | 2.8 | 3.1 | 3.3 | 3.0 | 3.1 | 3.5 | 3.7 | 4.5 | 4.0 | 5.0 | 3.7 | 3.6 | 3.4 | 3.8 | 4.1 | 3.3 | 5.0 |
| 11-Aug | 4.4 | 4.0 | 3.8 | 3.5 | 3.5 | 3.5 | 2.9 | 3.1 | 2.8 | 2.9 | 3.6 | 3.6 | 3.7 | 4.0 | 4.1 | 4.1 | 3.7 | 3.8 | 4.2 | 4.3 | 4.1 | 4.4 | 5.4 | 5.2 | 3.9 | 5.4 |
| 12-Aug | 4.5 | 4.0 | 3.9 | 3.3 | 3.2 | 3.2 | 3.0 | 3.0 | 2.6 | 2.8 | 2.0 | 2.4 | 1.6 | 1.5 | 0.7 | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 4.5 |
| 13-Aug | DF | DF | DF | DF | DF | UO | UO | UO | 2.1 | 1.8 | 1.5 | 1.3 | 1.2 | 1.2 | 0.9 | 0.9 | 1.1 | 1.2 | 1.2 | 1.7 | 2.0 | 1.9 | 2.0 | 2.1 | -- | 2.1 |
| 14-Aug | 2.1 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.7 | 2.7 | 2.7 | 2.4 | 2.2 | 1.9 | 1.6 | 1.7 | 1.7 | 1.8 | 2.0 | 1.9 | 1.7 | 1.8 | 2.1 | 1.8 | 1.7 | 1.9 | 2.1 | 2.8 |
| 15-Aug | 2.8 | 3.1 | 3.0 | 2.8 | 1.8 | 1.5 | 1.5 | 1.4 | 1.5 | 1.6 | 1.8 | 2.2 | 2.1 | 2.1 | 1.9 | 1.6 | 1.6 | 1.6 | 1.5 | 1.7 | 2.1 | 2.3 | 2.4 | 2.6 | 2.0 | 3.1 |
| 16-Aug | 3.0 | 3.1 | 3.2 | 3.2 | 3.4 | 3.2 | 3.1 | 3.0 | 3.1 | 3.1 | 3.1 | 3.1 | 2.8 | 3.4 | 5.3 | 8.6 | 10.1 | 9.1 | 9.6 | 9.9 | 10.1 | 12.9 | 18.5 | 20.9 | 6.6 | 20.9 |
| 17-Aug | 16.3 | 13.8 | 10.8 | 11.4 | 11.2 | 11.1 | 11.5 | 11.2 | 11.3 | 12.7 | 12.4 | 11.1 | 10.4 | 9.8 | 9.7 | 9.0 | 8.4 | 8.7 | 8.5 | 8.1 | 7.7 | 8.0 | 7.7 | 7.6 | 10.4 | 16.3 |
| 18-Aug | 7.4 | 7.5 | 7.7 | 7.3 | 6.9 | 6.7 | 6.6 | 5.9 | 5.2 | 5.0 | 4.9 | 4.9 | 4.8 | 4.5 | 4.4 | 4.4 | 4.4 | 4.1 | 3.8 | 3.4 | 3.3 | 3.2 | 3.4 | 3.5 | 5.1 | 7.7 |
| 19-Aug | 3.5 | 3.7 | 3.8 | 3.8 | 3.9 | 3.7 | 3.6 | 3.3 | 3.1 | 3.0 | 2.8 | 2.9 | 2.9 | 2.1 | 1.9 | 3.2 | 7.8 | UO | UO | UO | UO | UO | UO | UO | -- | 7.8 |
| 20-Aug | UO | DF | DF | DF | DF | UO | UO | UO | 9.0 | 6.2 | 6.4 | 7.2 | 5.5 | 6.3 | 6.3 | 9.2 | 10.7 | 13.8 | 13.4 | 12.4 | 14.0 | 13.8 | 13.4 | 13.8 | -- | 14.0 |
| 21-Aug | 14.0 | 14.1 | 11.3 | 12.1 | 12.2 | 13.3 | 12.2 | 11.0 | 11.1 | 11.5 | 9.8 | 6.7 | 8.4 | 8.0 | 7.8 | 7.7 | 7.3 | 7.1 | 6.6 | 6.2 | 6.8 | 6.7 | 5.9 | 5.0 | 9.3 | 14.1 |
| 22-Aug | 4.2 | 4.0 | 4.2 | 4.4 | 4.3 | 4.5 | 4.9 | 5.0 | 5.7 | 6.2 | 6.7 | 7.6 | 9.0 | 8.6 | 9.0 | 9.4 | 8.9 | 8.5 | 8.7 | 7.9 | 8.5 | 8.3 | 8.5 | 8.5 | 6.9 | 9.4 |
| 23-Aug | 8.4 | 8.5 | 8.5 | 9.0 | 9.8 | 9.4 | 10.2 | 10.6 | 12.1 | 12.3 | 14.3 | 15.8 | 17.0 | 16.5 | 17.9 | 16.8 | 17.8 | 19.1 | 18.2 | 17.3 | 10.7 | 9.9 | 8.2 | 6.8 | 12.7 | 19.1 |
| 24-Aug | 5.9 | 5.5 | 5.3 | 4.9 | 4.6 | 4.1 | 3.4 | 3.1 | 3.0 | 2.9 | 2.7 | 2.4 | 1.7 | 2.4 | 2.2 | 2.3 | 2.8 | 3.9 | 3.7 | 3.1 | 2.9 | 2.9 | 3.2 | 3.1 | 3.4 | 5.9 |
| 25-Aug | 2.9 | 2.8 | 3.1 | 3.2 | 3.7 | 3.3 | 2.9 | 3.3 | 3.3 | 3.7 | 3.0 | 2.9 | 2.6 | 2.6 | 2.7 | 2.6 | 3.5 | 3.5 | 3.7 | 4.8 | 6.1 | 6.8 | 6.1 | 5.9 | 3.7 | 6.8 |
| 26-Aug | 5.7 | 5.7 | 4.6 | 3.8 | 3.6 | 3.5 | 3.3 | 3.0 | 3.2 | 3.1 | 3.0 | 3.1 | 3.1 | 3.2 | 3.0 | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | 5.7 |
| 27-Aug | DF | DF | DF | DF | DF | DF | DF | 10.7 | 12.4 | 12.1 | 10.7 | 9.6 | 9.0 | 7.6 | 7.3 | 8.0 | 7.9 | 8.7 | 9.4 | 10.0 | 10.2 | 11.0 | 13.1 | 13.8 | -- | 13.8 |
| 28-Aug | 14.6 | 14.0 | 10.1 | 10.0 | 10.8 | 10.6 | 9.8 | 8.3 | 7.9 | 7.2 | 6.2 | 4.1 | 3.1 | 2.9 | 3.1 | 2.9 | 3.3 | 8.5 | 12.7 | 7.3 | 8.4 | 13.0 | 19.7 | 25.9 | 9.4 | 25.9 |
| 29-Aug | 30.5 | 29.8 | 25.2 | 19.8 | 15.9 | 18.7 | 17.8 | 18.1 | 13.1 | 12.8 | 12.2 | 9.8 | 8.3 | 6.9 | 7.7 | 8.4 | 8.2 | 6.8 | 6.0 | 6.4 | 7.0 | 7.0 | 6.3 | 5.5 | 12.9 | 30.5 |
| 30-Aug | 5.3 | 5.1 | 4.6 | 4.4 | 4.7 | 4.3 | 4.4 | 5.4 | 5.4 | 5.0 | 5.1 | 5.2 | 5.4 | 5.8 | 5.9 | 6.2 | 6.5 | 7.0 | 6.2 | 6.2 | 5.8 | 5.9 | 5.7 | 4.6 | 5.4 | 7.0 |
| 31-Aug | 4.0 | 4.1 | 3.4 | 3.2 | 3.0 | 2.9 | 2.9 | 2.9 | 2.9 | 2.6 | 2.2 | 2.3 | 2.3 | 2.3 | C | 1.7 | 1.2 | 1.3 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.7 | 2.3 | 4.1 |
| | 7.2 | 7.1 | 6.5 | 6.3 | 6.1 | 6.1 | 5.7 | 5.8 | 5.7 | 5.3 | 5.1 | 4.8 | 4.6 | 4.5 | 4.8 | 5.2 | 5.5 | 5.8 | 5.7 | 5.5 | 5.5 | 5.9 | 6.4 | 6.8 | Diurnal Average | |
| | 30.5 | 29.8 | 25.2 | 21.8 | 18.4 | 18.7 | 17.8 | 18.1 | 16.3 | 12.8 | 14.3 | 15.8 | 17.0 | 16.5 | 17.9 | 16.8 | 17.8 | 19.1 | 18.2 | 17.3 | 14.0 | 13.8 | 19.7 | 25.9 | Diurnal Maximum | |

C - Calibration DF - DAS Failure UO - Unstable Operation

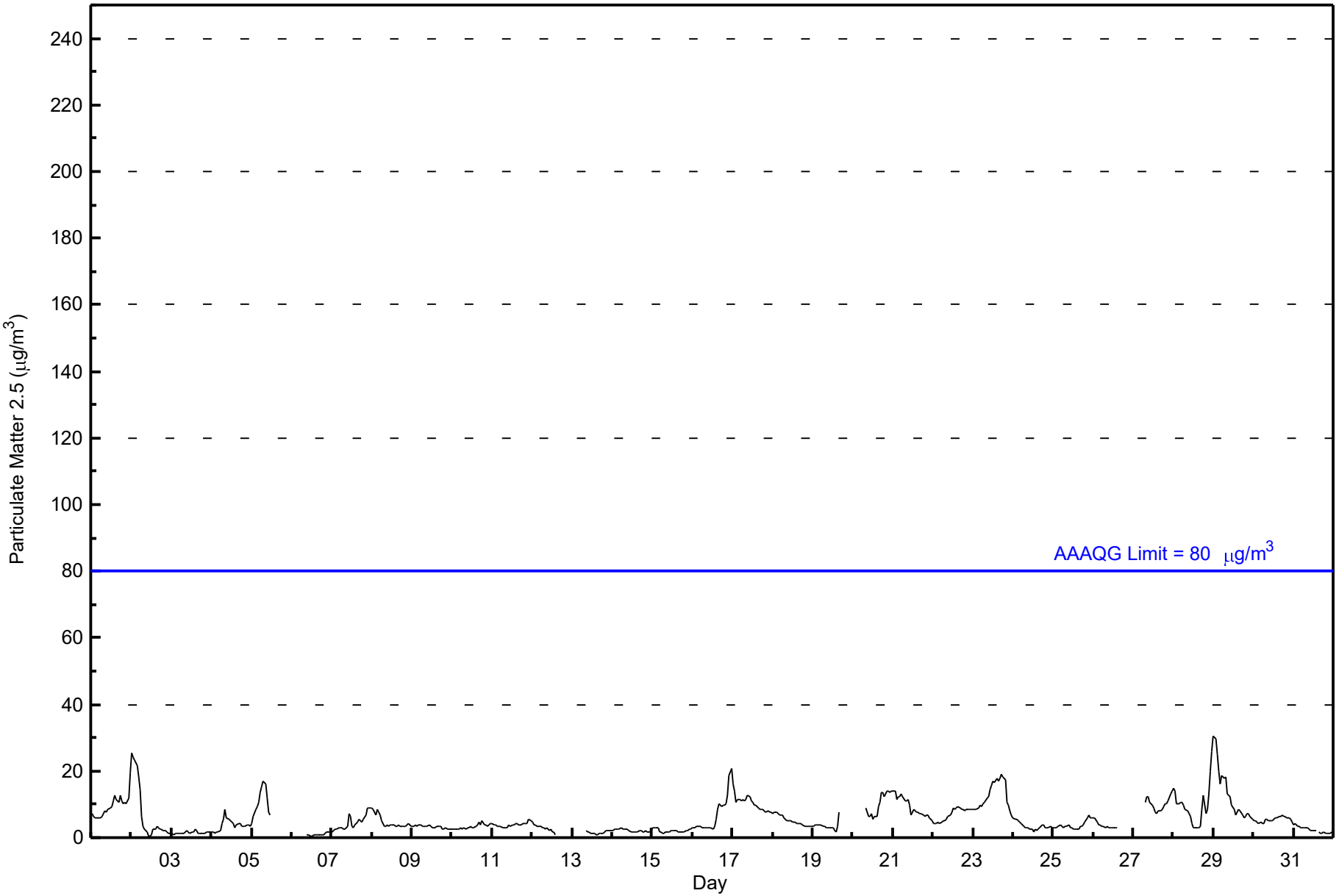
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Stony Mountain - August 2026**



| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 416 | 61.72 | 61.72 |
| 6 - 15 | 228 | 33.83 | 95.55 |
| 16 - 25 | 27 | 4.01 | 99.55 |
| 26 - 80 | 3 | 0.45 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 674

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Stony Mountain - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 23 | 17 | 15 | 15 | 11 | 6 | 8 | 4 | 12 | 13 | 22 | 29 | 50 | 73 | 73 | 45 | 416 |
| 6 - 15 | 1 | 2 | 4 | 2 | 5 | 2 | 8 | 20 | 18 | 40 | 28 | 19 | 17 | 29 | 24 | 9 | 228 |
| 16 - 25 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 5 | 6 | 5 | 3 | 1 | 27 |
| 26 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 28 | 19 | 19 | 17 | 16 | 8 | 17 | 24 | 30 | 53 | 52 | 53 | 76 | 107 | 100 | 55 | 674 |

Total Number of Valid Hours: 674

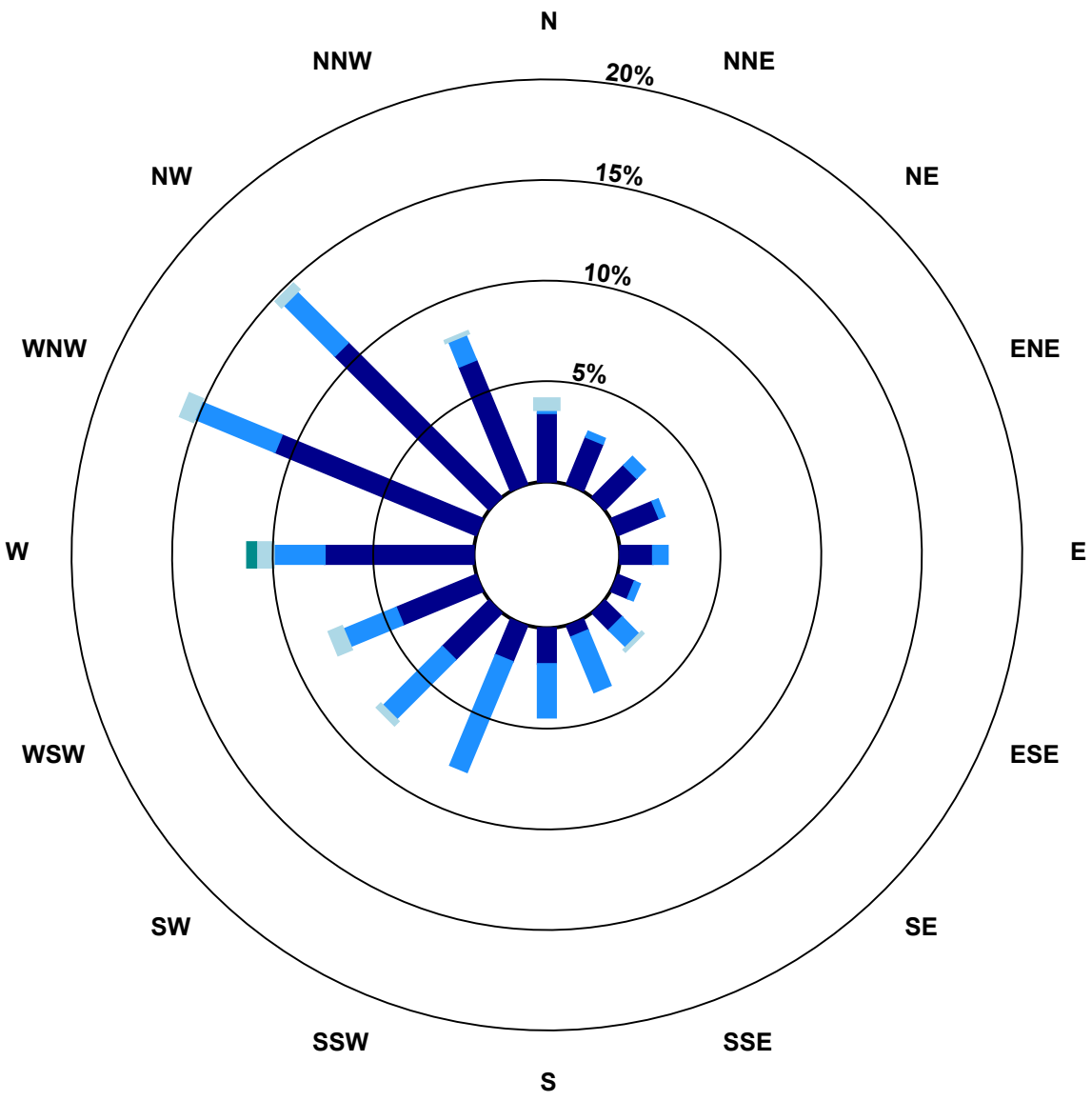
Total Number of Hours: 744

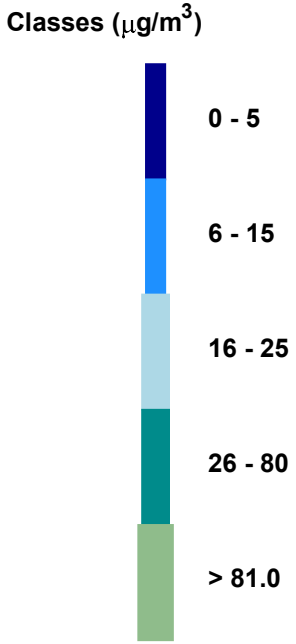
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Stony Mountain




Total Number of Valid Hours: 674

Maximum Value: 28.5 C on Aug 27 15:00

Maximum Daily Average: 21.6 C on Aug 1

Minimum Value: 5.6 C on Aug 3 04:00

Minimum Daily Average: 10.8 C on Aug 6

Maximum Diurnal Average: 20.1 C at hour 15

Minimum Diurnal Average: 11.7 C at hour 6

Monthly Average: 15.60 C

Percentiles: $P_1$ = 7.8 $P_{10}$ = 10.3 $Q_1$ = 12.3 Median = 15.2 $Q_3$ = 18.4 $P_{90}$ = 21.5 $P_{99}$ = 26.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

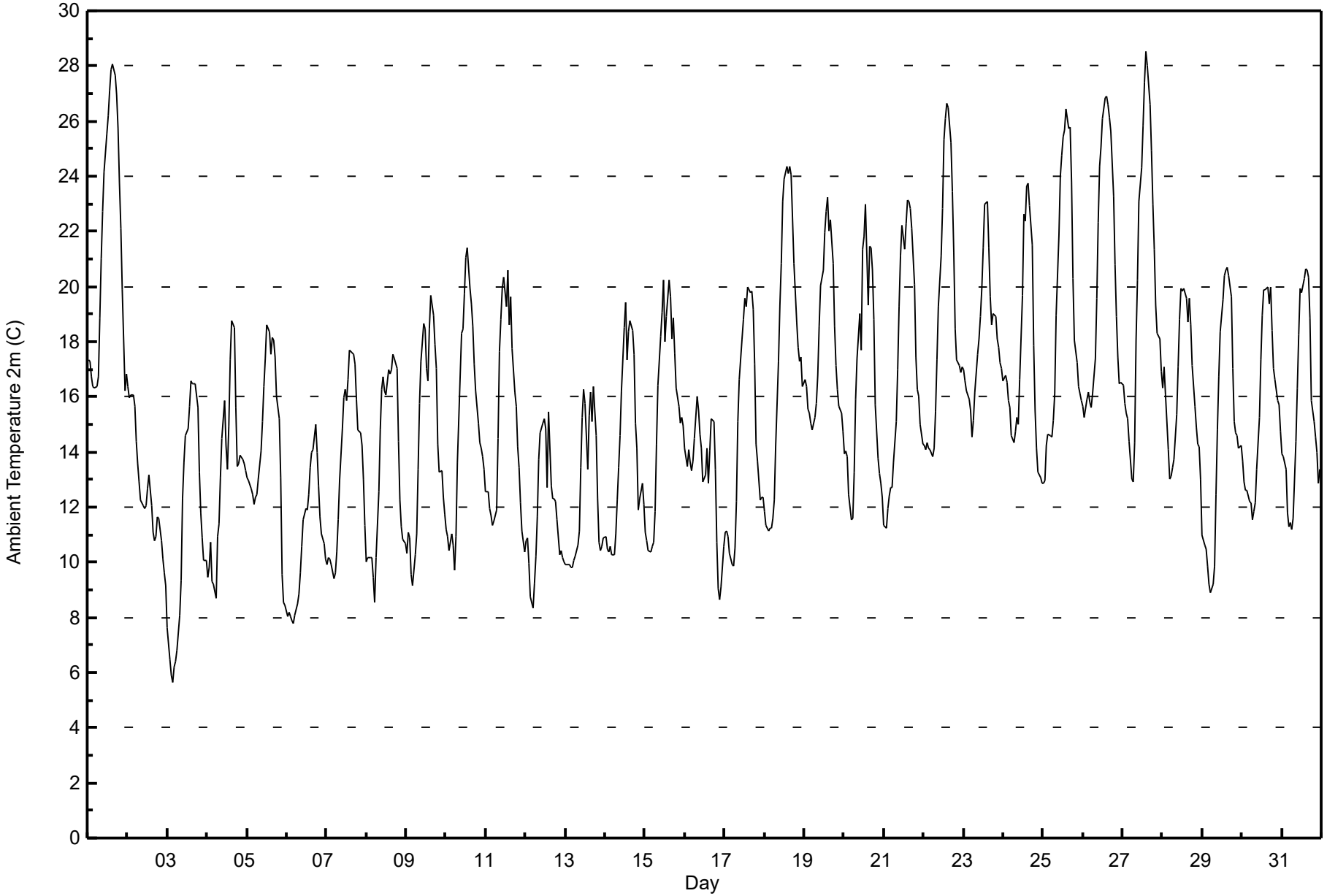
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.3 | 17.3 | 16.7 | 16.4 | 16.3 | 16.4 | 16.7 | 18.9 | 21.0 | 22.7 | 24.2 | 25.5 | 26.2 | 27.1 | 27.9 | 28.1 | 27.6 | 26.9 | 25.7 | 23.8 | 22.1 | 19.9 | 16.2 | 16.8 | 21.6 | 28.1 |
| 2-Aug | 16.4 | 16.0 | 16.1 | 16.1 | 15.7 | 14.4 | 13.6 | 12.9 | 12.3 | 12.1 | 12.0 | 12.1 | 12.7 | 13.2 | 12.0 | 11.1 | 10.8 | 10.9 | 11.7 | 11.6 | 10.8 | 10.1 | 9.6 | 9.2 | 12.6 | 16.4 |
| 3-Aug | 7.6 | 6.5 | 5.9 | 5.6 | 6.2 | 6.4 | 6.8 | 8.1 | 9.3 | 12.3 | 13.6 | 14.6 | 14.8 | 15.6 | 16.6 | 16.5 | 16.5 | 16.5 | 15.6 | 13.3 | 11.8 | 10.9 | 10.0 | 10.1 | 11.3 | 16.6 |
| 4-Aug | 9.5 | 9.8 | 10.7 | 9.3 | 9.2 | 8.7 | 10.9 | 11.4 | 13.1 | 14.5 | 15.9 | 14.2 | 13.4 | 14.9 | 17.3 | 18.7 | 18.5 | 15.6 | 13.5 | 13.6 | 13.9 | 13.7 | 13.6 | 13.3 | 13.2 | 18.7 |
| 5-Aug | 13.1 | 13.0 | 12.7 | 12.5 | 12.1 | 12.3 | 12.5 | 13.0 | 14.1 | 15.1 | 16.3 | 17.4 | 18.6 | 18.3 | 17.6 | 18.2 | 18.0 | 17.5 | 16.0 | 15.2 | 13.1 | 9.6 | 8.6 | 8.4 | 14.3 | 18.6 |
| 6-Aug | 8.0 | 8.2 | 8.0 | 7.9 | 7.8 | 8.1 | 8.5 | 8.8 | 9.6 | 10.6 | 11.5 | 12.0 | 11.9 | 12.4 | 13.4 | 14.0 | 14.1 | 15.0 | 14.0 | 12.8 | 11.6 | 11.1 | 10.7 | 10.1 | 10.8 | 15.0 |
| 7-Aug | 9.9 | 10.2 | 10.1 | 9.9 | 9.4 | 9.6 | 10.4 | 11.5 | 13.0 | 14.8 | 15.9 | 16.3 | 15.9 | 16.6 | 17.7 | 17.6 | 17.6 | 17.2 | 15.9 | 14.8 | 14.7 | 14.2 | 13.0 | 11.4 | 13.6 | 17.7 |
| 8-Aug | 10.0 | 10.2 | 10.2 | 10.2 | 9.5 | 8.5 | 10.2 | 12.6 | 14.8 | 16.3 | 16.7 | 16.2 | 16.1 | 17.0 | 16.8 | 17.0 | 17.6 | 17.4 | 17.0 | 14.4 | 12.3 | 11.3 | 10.8 | 10.7 | 13.5 | 17.6 |
| 9-Aug | 10.3 | 11.1 | 10.9 | 9.6 | 9.1 | 10.3 | 11.0 | 13.4 | 15.8 | 17.3 | 18.7 | 18.4 | 17.0 | 16.6 | 18.5 | 19.7 | 18.9 | 17.9 | 17.0 | 14.3 | 13.3 | 13.3 | 12.4 | 11.8 | 14.4 | 19.7 |
| 10-Aug | 11.2 | 10.9 | 10.4 | 11.0 | 10.6 | 9.7 | 10.9 | 13.6 | 16.8 | 18.3 | 18.5 | 19.7 | 21.0 | 21.4 | 19.9 | 19.4 | 18.6 | 17.2 | 16.2 | 15.1 | 14.4 | 14.1 | 13.8 | 13.4 | 15.3 | 21.4 |
| 11-Aug | 12.5 | 12.5 | 11.9 | 11.7 | 11.3 | 11.5 | 11.9 | 14.5 | 17.7 | 18.8 | 19.9 | 20.3 | 19.3 | 20.6 | 18.6 | 19.6 | 17.7 | 16.2 | 15.7 | 14.2 | 13.4 | 12.1 | 11.1 | 10.4 | 15.2 | 20.6 |
| 12-Aug | 10.8 | 10.9 | 10.0 | 8.7 | 8.3 | 9.3 | 10.2 | 11.6 | 13.7 | 14.7 | 15.0 | 15.2 | 14.8 | 12.7 | 15.4 | 12.8 | 12.3 | 12.3 | 12.2 | 11.6 | 10.3 | 10.4 | 10.2 | 10.0 | 11.8 | 15.4 |
| 13-Aug | 9.9 | 9.9 | 9.9 | 9.8 | 9.8 | 10.1 | 10.2 | 10.6 | 11.1 | 13.4 | 15.2 | 16.3 | 15.7 | 13.4 | 15.3 | 16.2 | 15.1 | 16.4 | 14.6 | 12.3 | 10.7 | 10.4 | 10.6 | 10.9 | 12.4 | 16.4 |
| 14-Aug | 10.9 | 10.5 | 10.4 | 10.6 | 10.3 | 10.3 | 11.0 | 12.3 | 13.4 | 14.6 | 16.2 | 18.5 | 19.4 | 17.3 | 18.4 | 18.8 | 18.4 | 17.6 | 15.1 | 14.1 | 11.9 | 12.3 | 12.9 | 12.1 | 14.0 | 19.4 |
| 15-Aug | 11.1 | 10.8 | 10.4 | 10.4 | 10.6 | 10.7 | 11.9 | 14.3 | 16.4 | 18.2 | 19.1 | 20.2 | 18.0 | 18.9 | 20.3 | 19.6 | 18.1 | 18.9 | 17.6 | 16.3 | 15.6 | 15.1 | 15.3 | 15.0 | 15.5 | 20.3 |
| 16-Aug | 14.1 | 13.5 | 14.1 | 13.6 | 13.3 | 13.7 | 14.5 | 16.0 | 15.5 | 14.6 | 14.1 | 12.9 | 13.2 | 14.1 | 12.9 | 14.0 | 15.2 | 15.1 | 13.4 | 10.7 | 9.1 | 8.6 | 9.1 | 10.6 | 13.2 | 16.0 |
| 17-Aug | 11.1 | 11.1 | 10.9 | 10.3 | 9.9 | 9.9 | 10.5 | 12.2 | 15.1 | 16.6 | 18.1 | 18.8 | 19.6 | 19.3 | 20.0 | 19.8 | 19.8 | 19.2 | 17.2 | 14.3 | 13.7 | 12.2 | 12.4 | 12.3 | 14.8 | 20.0 |
| 18-Aug | 11.9 | 11.3 | 11.1 | 11.2 | 11.2 | 11.6 | 12.3 | 14.2 | 17.3 | 19.3 | 20.9 | 23.1 | 23.9 | 24.3 | 24.1 | 24.4 | 24.0 | 22.5 | 20.8 | 18.7 | 17.8 | 17.3 | 17.4 | 16.4 | 17.8 | 24.4 |
| 19-Aug | 16.6 | 16.4 | 15.5 | 15.4 | 15.1 | 14.8 | 15.2 | 15.8 | 16.8 | 18.6 | 20.0 | 20.6 | 21.9 | 22.7 | 23.2 | 22.0 | 22.4 | 20.8 | 18.6 | 17.2 | 16.3 | 15.7 | 15.4 | 14.7 | 18.0 | 23.2 |
| 20-Aug | 13.9 | 14.0 | 13.8 | 12.4 | 11.5 | 11.6 | 13.3 | 15.9 | 17.4 | 19.0 | 17.7 | 21.4 | 21.8 | 23.0 | 19.3 | 21.4 | 21.4 | 20.6 | 18.8 | 15.7 | 13.8 | 13.2 | 12.8 | 12.3 | 16.5 | 23.0 |
| 21-Aug | 11.3 | 11.2 | 12.0 | 12.4 | 12.7 | 12.7 | 13.6 | 15.1 | 17.0 | 19.3 | 21.1 | 22.2 | 21.4 | 22.3 | 23.1 | 23.1 | 22.9 | 22.1 | 20.1 | 17.4 | 16.3 | 16.0 | 15.0 | 14.3 | 17.3 | 23.1 |
| 22-Aug | 14.3 | 14.1 | 14.3 | 14.1 | 14.1 | 13.8 | 14.1 | 15.4 | 17.3 | 19.3 | 21.1 | 22.8 | 25.3 | 26.1 | 26.7 | 26.5 | 25.2 | 23.5 | 21.2 | 18.4 | 17.4 | 17.1 | 16.9 | 17.1 | 19.0 | 26.7 |
| 23-Aug | 17.0 | 16.6 | 16.2 | 15.9 | 15.5 | 14.5 | 15.2 | 16.2 | 17.5 | 18.1 | 18.9 | 20.0 | 21.4 | 23.0 | 23.1 | 21.4 | 19.6 | 18.6 | 19.0 | 18.9 | 18.1 | 17.8 | 17.2 | 17.1 | 18.2 | 23.1 |
| 24-Aug | 16.6 | 16.8 | 16.5 | 15.9 | 15.6 | 14.6 | 14.4 | 14.7 | 15.3 | 15.0 | 16.6 | 19.7 | 22.6 | 22.4 | 23.7 | 23.7 | 22.9 | 21.5 | 17.9 | 15.5 | 14.1 | 13.3 | 13.1 | 12.9 | 17.3 | 23.7 |
| 25-Aug | 12.9 | 13.0 | 14.2 | 14.6 | 14.6 | 14.5 | 15.1 | 16.1 | 19.0 | 21.8 | 24.0 | 24.8 | 25.4 | 25.7 | 26.4 | 25.7 | 25.8 | 23.8 | 20.3 | 18.0 | 17.3 | 16.4 | 16.1 | 15.8 | 19.2 | 26.4 |
| 26-Aug | 15.7 | 15.3 | 15.9 | 16.2 | 15.8 | 15.6 | 16.1 | 17.4 | 19.6 | 22.3 | 24.4 | 25.1 | 26.1 | 26.9 | 26.9 | 26.6 | 26.1 | 25.6 | 23.3 | 20.8 | 18.9 | 17.4 | 16.5 | 16.5 | 20.5 | 26.9 |
| 27-Aug | 16.4 | 15.8 | 15.4 | 15.2 | 14.4 | 13.0 | 12.9 | 14.3 | 18.0 | 20.2 | 23.1 | 24.3 | 25.8 | 27.4 | 28.5 | 28.0 | 26.6 | 24.9 | 23.0 | 21.4 | 19.3 | 18.3 | 18.1 | 16.9 | 20.1 | 28.5 |
| 28-Aug | 16.3 | 17.1 | 16.1 | 14.1 | 13.0 | 13.1 | 13.4 | 13.8 | 15.3 | 17.1 | 18.8 | 19.9 | 19.8 | 20.0 | 19.6 | 18.7 | 19.6 | 18.6 | 17.1 | 15.7 | 14.9 | 14.3 | 14.2 | 13.0 | 16.4 | 20.0 |
| 29-Aug | 11.0 | 10.6 | 10.5 | 9.9 | 9.2 | 8.9 | 9.2 | 9.9 | 12.5 | 14.8 | 16.7 | 18.4 | 19.5 | 20.4 | 20.6 | 20.7 | 20.4 | 19.6 | 17.0 | 15.1 | 14.7 | 14.6 | 14.1 | 14.2 | 14.7 | 20.7 |
| 30-Aug | 13.7 | 12.9 | 12.6 | 12.6 | 12.2 | 12.2 | 11.5 | 11.8 | 12.2 | 13.4 | 15.2 | 17.3 | 19.0 | 19.9 | 19.9 | 20.0 | 19.4 | 20.0 | 18.4 | 17.0 | 16.6 | 15.9 | 15.7 | 14.7 | 15.6 | 20.0 |
| 31-Aug | 13.9 | 13.8 | 13.4 | 11.8 | 11.3 | 11.4 | 11.2 | 11.6 | 14.4 | 16.3 | 18.3 | 19.9 | 19.8 | 20.3 | 20.6 | 20.6 | 20.4 | 18.8 | 15.9 | 15.1 | 14.6 | 14.0 | 12.9 | 13.4 | 15.6 | 20.6 |
| | 12.8 | 12.6 | 12.5 | 12.1 | 11.8 | 11.7 | 12.2 | 13.5 | 15.2 | 16.8 | 18.0 | 19.0 | 19.4 | 19.8 | 20.1 | 20.1 | 19.7 | 19.0 | 17.4 | 15.7 | 14.6 | 13.9 | 13.4 | 13.1 | Diurnal Average | |
| | 17.3 | 17.3 | 16.7 | 16.4 | 16.3 | 16.4 | 16.7 | 18.9 | 21.0 | 22.7 | 24.4 | 25.5 | 26.2 | 27.4 | 28.5 | 28.1 | 27.6 | 26.9 | 25.7 | 23.8 | 22.1 | 19.9 | 18.1 | 17.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Stony Mountain - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 56 | 7.53 | 7.53 |
| 10 - 20 | 578 | 77.69 | 85.22 |
| > 20 | 110 | 14.78 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Stony Mountain - August 2026

Maximum Value: 100.0 % on Aug 30 05:00

Maximum Daily Average: 93.5 % on Aug 2

Minimum Value: 34.1 % on Aug 26 16:00

Minimum Daily Average: 55.3 % on Aug 25

Maximum Diurnal Average: 89.2 % at hour 6

Minimum Diurnal Average: 58.7 % at hour 15

Monthly Average: 75.26 %

Percentiles: $P_1$ = 37.4 $P_{10}$ = 50.8 $Q_1$ = 63.7 Median = 77.8 $Q_3$ = 88.9 $P_{90}$ = 96.2 $P_{99}$ = 99.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

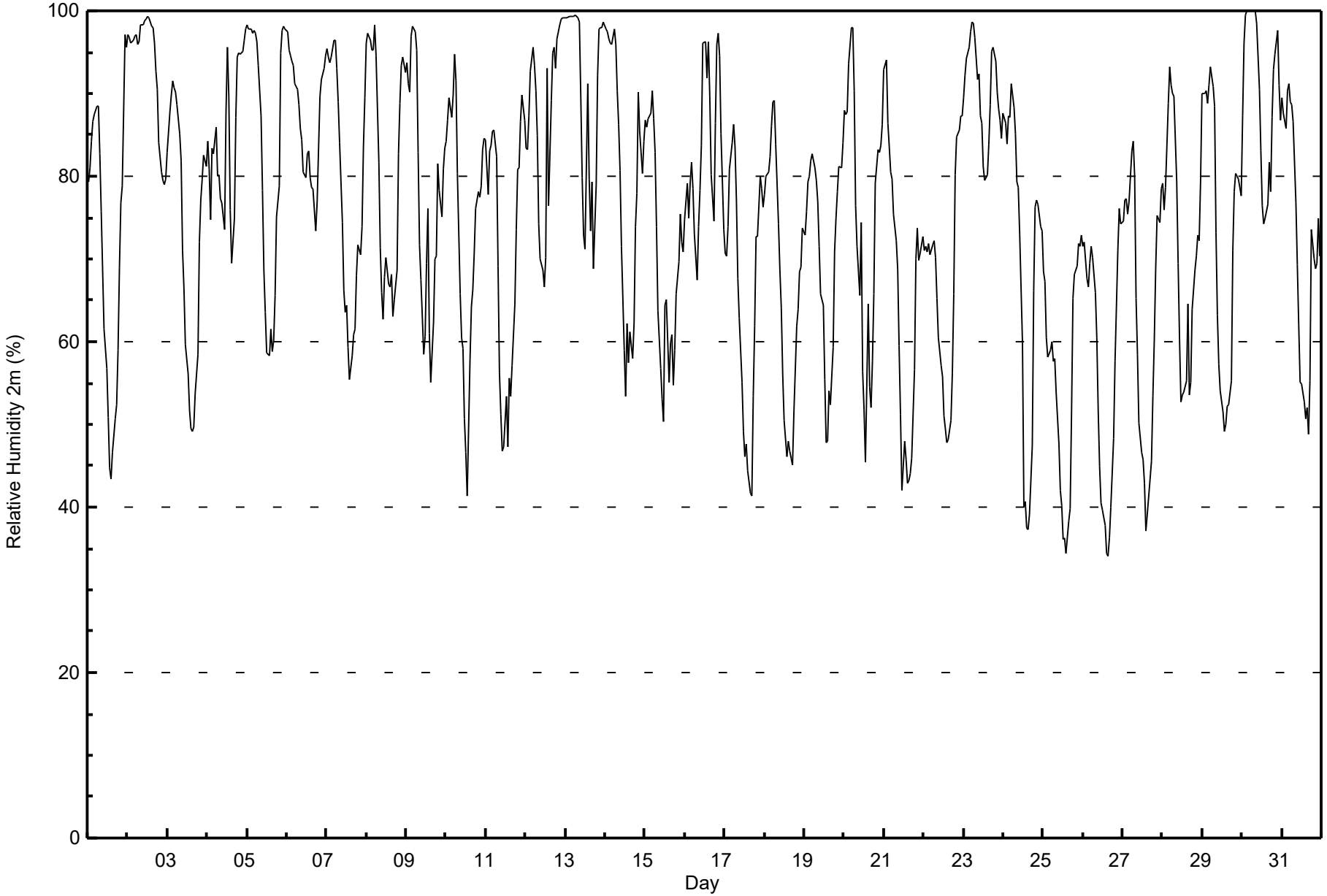
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 79.3 | 81.0 | 84.2 | 86.6 | 87.5 | 88.5 | 88.5 | 82.7 | 75.8 | 68.7 | 61.6 | 56.8 | 50.8 | 44.8 | 43.3 | 46.7 | 50.7 | 52.4 | 59.0 | 69.0 | 76.8 | 78.8 | 97.2 | 95.6 | 71.1 | 97.2 |
| 2-Aug | 97.2 | 96.7 | 96.2 | 96.4 | 96.9 | 97.1 | 95.9 | 96.3 | 98.3 | 98.4 | 98.8 | 99.0 | 99.3 | 99.2 | 98.2 | 98.0 | 96.0 | 92.8 | 90.6 | 84.1 | 80.5 | 79.5 | 79.1 | 79.7 | 93.5 | 99.3 |
| 3-Aug | 82.9 | 87.7 | 89.8 | 91.5 | 90.6 | 90.2 | 88.6 | 85.2 | 81.8 | 71.0 | 66.4 | 59.6 | 56.1 | 51.7 | 49.5 | 49.1 | 49.7 | 53.7 | 58.5 | 72.0 | 77.1 | 79.7 | 82.5 | 81.2 | 72.8 | 91.5 |
| 4-Aug | 84.3 | 80.8 | 74.7 | 83.4 | 82.7 | 85.9 | 80.0 | 80.2 | 77.3 | 76.8 | 73.6 | 87.8 | 95.6 | 89.7 | 75.9 | 69.5 | 74.9 | 87.1 | 94.4 | 94.9 | 94.8 | 95.1 | 96.4 | 97.8 | 84.7 | 97.8 |
| 5-Aug | 98.3 | 97.8 | 97.8 | 97.2 | 97.7 | 97.3 | 96.3 | 93.5 | 87.3 | 78.2 | 68.6 | 63.6 | 58.6 | 58.3 | 61.6 | 58.8 | 60.1 | 65.6 | 75.1 | 78.8 | 95.0 | 97.6 | 98.2 | 97.8 | 82.5 | 98.3 |
| 6-Aug | 97.4 | 95.2 | 94.6 | 93.9 | 93.3 | 91.2 | 90.6 | 88.7 | 85.8 | 84.4 | 80.5 | 79.8 | 82.7 | 83.0 | 79.8 | 78.6 | 78.5 | 73.5 | 76.9 | 83.4 | 89.7 | 91.7 | 93.1 | 94.6 | 86.7 | 97.4 |
| 7-Aug | 95.4 | 94.4 | 93.7 | 94.4 | 96.5 | 96.4 | 93.1 | 89.0 | 84.1 | 74.4 | 66.3 | 63.5 | 64.4 | 59.3 | 55.4 | 58.3 | 60.8 | 61.6 | 68.0 | 71.6 | 70.4 | 74.0 | 83.6 | 89.4 | 77.4 | 96.5 |
| 8-Aug | 96.1 | 97.3 | 96.4 | 95.3 | 95.3 | 98.3 | 94.6 | 81.6 | 71.4 | 65.9 | 62.7 | 67.7 | 70.1 | 67.0 | 66.6 | 68.1 | 63.1 | 65.1 | 68.7 | 82.8 | 88.8 | 93.4 | 94.4 | 92.5 | 81.0 | 98.3 |
| 9-Aug | 93.7 | 91.2 | 90.1 | 96.9 | 98.2 | 97.5 | 95.3 | 82.9 | 71.7 | 67.5 | 58.4 | 60.7 | 69.4 | 76.1 | 61.0 | 55.0 | 62.4 | 70.0 | 70.4 | 81.5 | 78.2 | 75.0 | 80.8 | 83.3 | 77.8 | 98.2 |
| 10-Aug | 84.3 | 86.8 | 89.5 | 87.1 | 89.9 | 94.7 | 91.6 | 80.4 | 65.7 | 60.5 | 59.2 | 50.7 | 46.5 | 41.4 | 57.8 | 64.2 | 66.3 | 70.7 | 76.0 | 78.2 | 77.5 | 78.8 | 83.3 | 84.5 | 73.6 | 94.7 |
| 11-Aug | 84.4 | 77.8 | 83.0 | 83.7 | 85.4 | 85.7 | 82.4 | 69.1 | 56.3 | 51.2 | 46.7 | 47.4 | 53.4 | 47.2 | 55.7 | 53.4 | 57.1 | 64.5 | 73.6 | 80.8 | 81.0 | 86.7 | 89.9 | 86.8 | 70.1 | 89.9 |
| 12-Aug | 83.4 | 83.3 | 87.2 | 92.7 | 95.5 | 93.4 | 90.3 | 84.9 | 74.2 | 70.0 | 68.7 | 66.7 | 70.2 | 93.0 | 76.4 | 89.1 | 94.9 | 95.6 | 93.0 | 96.7 | 98.4 | 99.1 | 99.1 | 99.1 | 87.3 | 99.1 |
| 13-Aug | 99.1 | 99.2 | 99.3 | 99.4 | 99.4 | 99.4 | 99.4 | 99.2 | 98.7 | 89.6 | 79.8 | 72.8 | 71.2 | 91.1 | 79.6 | 73.4 | 79.3 | 68.9 | 79.0 | 92.2 | 97.8 | 97.9 | 98.0 | 98.7 | 90.1 | 99.4 |
| 14-Aug | 97.8 | 97.5 | 96.6 | 96.1 | 96.0 | 97.9 | 95.9 | 90.3 | 86.2 | 80.7 | 71.6 | 58.9 | 53.4 | 62.2 | 57.5 | 61.2 | 57.9 | 62.1 | 73.9 | 77.9 | 90.2 | 85.4 | 80.4 | 84.2 | 79.7 | 97.9 |
| 15-Aug | 86.8 | 86.0 | 87.0 | 87.6 | 90.3 | 87.0 | 82.8 | 73.9 | 63.7 | 56.7 | 53.1 | 50.4 | 64.3 | 65.1 | 55.1 | 59.9 | 60.8 | 54.8 | 59.0 | 65.7 | 69.6 | 75.4 | 72.1 | 70.8 | 69.9 | 90.3 |
| 16-Aug | 74.8 | 79.1 | 74.9 | 79.1 | 81.7 | 78.4 | 73.0 | 67.5 | 73.9 | 78.3 | 83.7 | 96.2 | 96.2 | 91.9 | 96.3 | 89.7 | 80.2 | 74.5 | 86.5 | 96.0 | 97.4 | 94.5 | 85.1 | 73.6 | 83.4 | 97.4 |
| 17-Aug | 70.7 | 70.4 | 73.9 | 80.8 | 84.1 | 86.2 | 83.5 | 77.2 | 67.6 | 62.8 | 55.1 | 49.1 | 46.1 | 47.6 | 44.5 | 41.7 | 41.3 | 53.4 | 61.8 | 72.7 | 72.7 | 80.1 | 78.5 | 76.3 | 65.8 | 86.2 |
| 18-Aug | 77.8 | 80.0 | 80.5 | 82.4 | 86.2 | 89.0 | 89.2 | 83.9 | 74.3 | 68.6 | 64.1 | 56.1 | 50.5 | 46.1 | 47.9 | 46.8 | 46.0 | 45.1 | 51.6 | 61.8 | 63.9 | 68.5 | 69.1 | 73.8 | 66.8 | 89.2 |
| 19-Aug | 72.9 | 75.7 | 79.2 | 80.0 | 81.9 | 82.6 | 81.0 | 79.5 | 76.9 | 71.6 | 65.8 | 64.4 | 55.3 | 47.7 | 47.9 | 54.0 | 52.3 | 59.3 | 70.8 | 75.0 | 78.2 | 81.2 | 81.0 | 84.0 | 70.8 | 84.0 |
| 20-Aug | 88.0 | 87.4 | 87.7 | 93.5 | 98.0 | 98.0 | 90.3 | 76.5 | 71.5 | 65.6 | 74.5 | 56.4 | 51.8 | 45.5 | 64.6 | 54.6 | 52.0 | 57.6 | 65.7 | 79.2 | 83.2 | 82.9 | 83.8 | 86.3 | 74.8 | 98.0 |
| 21-Aug | 92.9 | 94.1 | 86.4 | 83.6 | 80.5 | 79.7 | 75.4 | 72.2 | 68.8 | 59.6 | 51.2 | 42.0 | 47.9 | 45.8 | 42.9 | 43.2 | 44.0 | 45.9 | 56.6 | 70.0 | 73.7 | 69.8 | 70.7 | 72.7 | 65.4 | 94.1 |
| 22-Aug | 71.1 | 71.5 | 70.9 | 71.8 | 70.5 | 71.7 | 72.2 | 70.1 | 65.3 | 60.6 | 57.2 | 55.8 | 51.0 | 49.6 | 47.8 | 48.1 | 50.4 | 56.3 | 65.8 | 80.1 | 84.8 | 85.5 | 87.3 | 87.2 | 66.8 | 87.3 |
| 23-Aug | 89.5 | 92.1 | 94.3 | 95.6 | 97.4 | 98.7 | 98.5 | 96.7 | 91.8 | 92.4 | 87.3 | 86.4 | 81.2 | 79.4 | 80.2 | 83.8 | 88.6 | 95.2 | 95.7 | 93.8 | 90.2 | 88.2 | 86.7 | 84.5 | 90.3 | 98.7 |
| 24-Aug | 87.6 | 86.5 | 83.9 | 87.3 | 87.1 | 91.2 | 88.3 | 85.1 | 79.4 | 78.6 | 73.0 | 59.8 | 40.1 | 40.8 | 37.5 | 37.3 | 39.1 | 47.5 | 66.1 | 76.3 | 77.1 | 76.7 | 73.9 | 73.4 | 69.7 | 91.2 |
| 25-Aug | 68.4 | 67.2 | 60.5 | 58.2 | 59.1 | 60.0 | 57.5 | 58.0 | 54.0 | 47.6 | 42.0 | 40.2 | 36.1 | 36.3 | 34.5 | 38.4 | 39.8 | 51.5 | 65.3 | 68.2 | 69.1 | 71.9 | 71.6 | 72.8 | 55.3 | 72.8 |
| 26-Aug | 71.5 | 72.0 | 67.6 | 66.6 | 69.5 | 71.6 | 70.1 | 65.9 | 60.5 | 51.6 | 44.9 | 40.5 | 39.6 | 37.8 | 34.4 | 34.1 | 36.2 | 40.1 | 48.3 | 57.6 | 64.3 | 71.1 | 76.1 | 74.3 | 56.9 | 76.1 |
| 27-Aug | 74.6 | 77.1 | 77.3 | 75.4 | 76.9 | 83.1 | 84.2 | 80.1 | 65.2 | 58.5 | 50.2 | 46.6 | 45.7 | 42.9 | 37.1 | 39.1 | 43.3 | 45.7 | 53.4 | 60.2 | 68.8 | 75.2 | 74.4 | 78.6 | 63.1 | 84.2 |
| 28-Aug | 79.2 | 75.9 | 78.7 | 88.7 | 93.2 | 91.0 | 90.0 | 89.6 | 79.3 | 69.5 | 60.3 | 52.8 | 53.5 | 53.9 | 55.2 | 64.6 | 53.6 | 55.1 | 63.8 | 68.7 | 70.4 | 73.0 | 72.3 | 79.4 | 71.3 | 93.2 |
| 29-Aug | 90.0 | 90.0 | 90.3 | 88.9 | 91.0 | 93.3 | 90.9 | 88.4 | 73.2 | 63.3 | 57.3 | 54.1 | 51.6 | 49.1 | 50.0 | 52.1 | 52.4 | 55.3 | 70.9 | 78.1 | 80.4 | 80.0 | 79.6 | 77.7 | 72.8 | 93.3 |
| 30-Aug | 87.3 | 96.1 | 99.6 | 99.9 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 98.4 | 90.5 | 83.0 | 76.5 | 74.2 | 74.9 | 76.6 | 81.7 | 78.2 | 87.2 | 92.8 | 94.8 | 97.6 | 91.1 | 86.7 | 90.3 | 100.0 |
| 31-Aug | 89.5 | 87.7 | 85.8 | 90.4 | 91.3 | 89.0 | 88.6 | 86.5 | 76.8 | 69.3 | 62.0 | 55.1 | 54.9 | 52.6 | 50.7 | 52.1 | 48.8 | 55.3 | 73.6 | 70.0 | 68.8 | 69.5 | 74.9 | 70.4 | 71.4 | 91.3 |
| | 85.4 | 85.7 | 85.5 | 87.2 | 88.5 | 89.2 | 87.0 | 82.4 | 76.0 | 70.7 | 65.6 | 62.1 | 60.8 | 60.3 | 58.7 | 59.3 | 60.1 | 63.0 | 70.9 | 77.7 | 80.8 | 82.4 | 83.4 | 83.5 | Diurnal Average | |
| | 99.1 | 99.2 | 99.6 | 99.9 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 98.4 | 98.8 | 99.0 | 99.3 | 99.2 | 98.2 | 98.0 | 96.0 | 95.6 | 95.7 | 96.7 | 98.4 | 99.1 | 99.1 | 99.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Stony Mountain - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Precipitation (PC) - mm

## Stony Mountain - August 2026

Maximum Value: 8.8 mm on Aug 5 21:00

Maximum Daily Total: 52.3 mm on Aug 2

Minimum Value: 0.0 mm on Aug 1 01:00

Minimum Daily Total: 0.0 mm on Aug 3

Maximum Diurnal Total: 11.1 mm at hour 12

Minimum Diurnal Total: 0.2 mm at hour 4

Monthly Total: 102.57 mm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 4.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

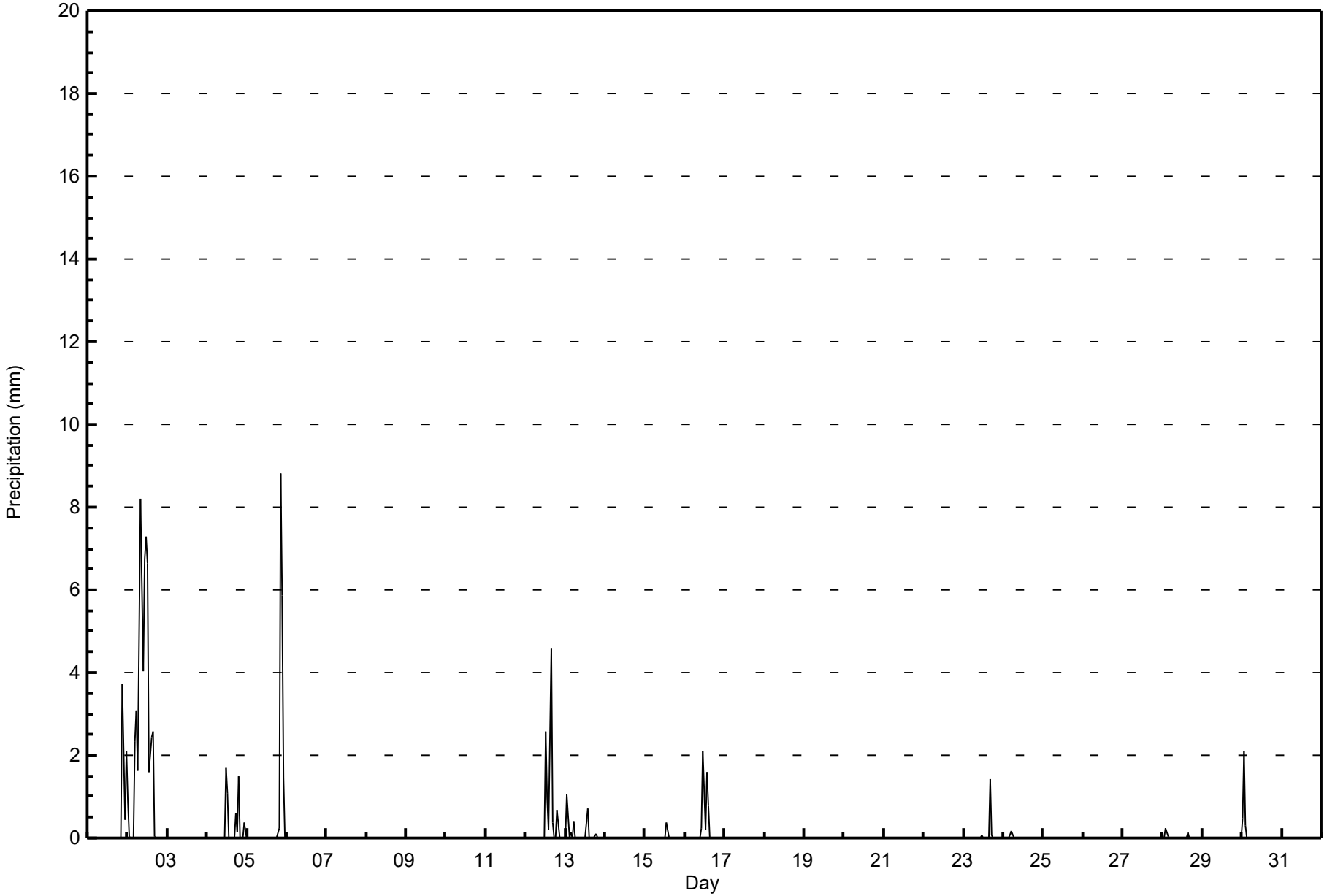
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 0.5 | 2.1 | 6.3 | 3.7 |
| 2-Aug | 0.9 | 0.1 | 0.0 | 0.0 | 2.3 | 3.1 | 1.6 | 4.8 | 8.2 | 4.0 | 6.8 | 7.3 | 6.6 | 1.6 | 2.4 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.3 | 8.2 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.1 | 1.5 | 0.0 | 0.0 | 0.4 | 0.1 | 5.5 | 1.7 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 8.8 | 5.9 | 1.5 | 0.0 | 16.4 | 8.8 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 1.0 | 0.2 | 4.6 | 0.4 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 9.4 | 4.6 |
| 13-Aug | 0.0 | 1.1 | 0.0 | 0.1 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 1.1 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.1 | 0.2 | 1.6 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9 | 2.1 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 1.4 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.5 | 2.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 2.1 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 1.4 | 3.2 | 0.5 | 0.2 | 2.4 | 3.6 | 1.6 | 4.8 | 8.2 | 4.0 | 7.0 | 11.1 | 10.5 | 5.2 | 3.4 | 7.3 | 1.8 | 0.7 | 0.2 | 2.4 | 8.8 | 9.6 | 2.3 | 2.2 | Diurnal Average | |
| | 0.9 | 2.1 | 0.3 | 0.1 | 2.3 | 3.1 | 1.6 | 4.8 | 8.2 | 4.0 | 6.8 | 7.3 | 6.6 | 1.6 | 2.4 | 4.6 | 1.4 | 0.6 | 0.1 | 1.5 | 8.8 | 5.9 | 1.5 | 2.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Precipitation (PC) - mm**

**Stony Mountain - August 2026**



| Concentration Ranges (mm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 705 | 94.76 | 94.76 |
| 0.4 - 0.5 | 6 | 0.81 | 95.56 |
| 0.6 - 0.7 | 3 | 0.40 | 95.97 |
| 0.8 - 1.4 | 6 | 0.81 | 96.77 |
| 1.5 - 10 | 22 | 2.96 | 99.73 |
| > 10 | 0 | 0.00 | 99.73 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 52.1 % on Aug 9 06:00

Maximum Daily Average: 20.4 % on Aug 2

Minimum Value: 0.0 % on Aug 25 15:00

Minimum Daily Average: 0.7 % on Aug 25

Maximum Diurnal Average: 8.0 % at hour 6

Minimum Diurnal Average: 2.2 % at hour 17

Monthly Average: 4.43 %

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.4 $Q_1$ = 0.8 Median = 1.2 $Q_3$ = 2.0 $P_{90}$ = 16.3 $P_{99}$ = 38.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

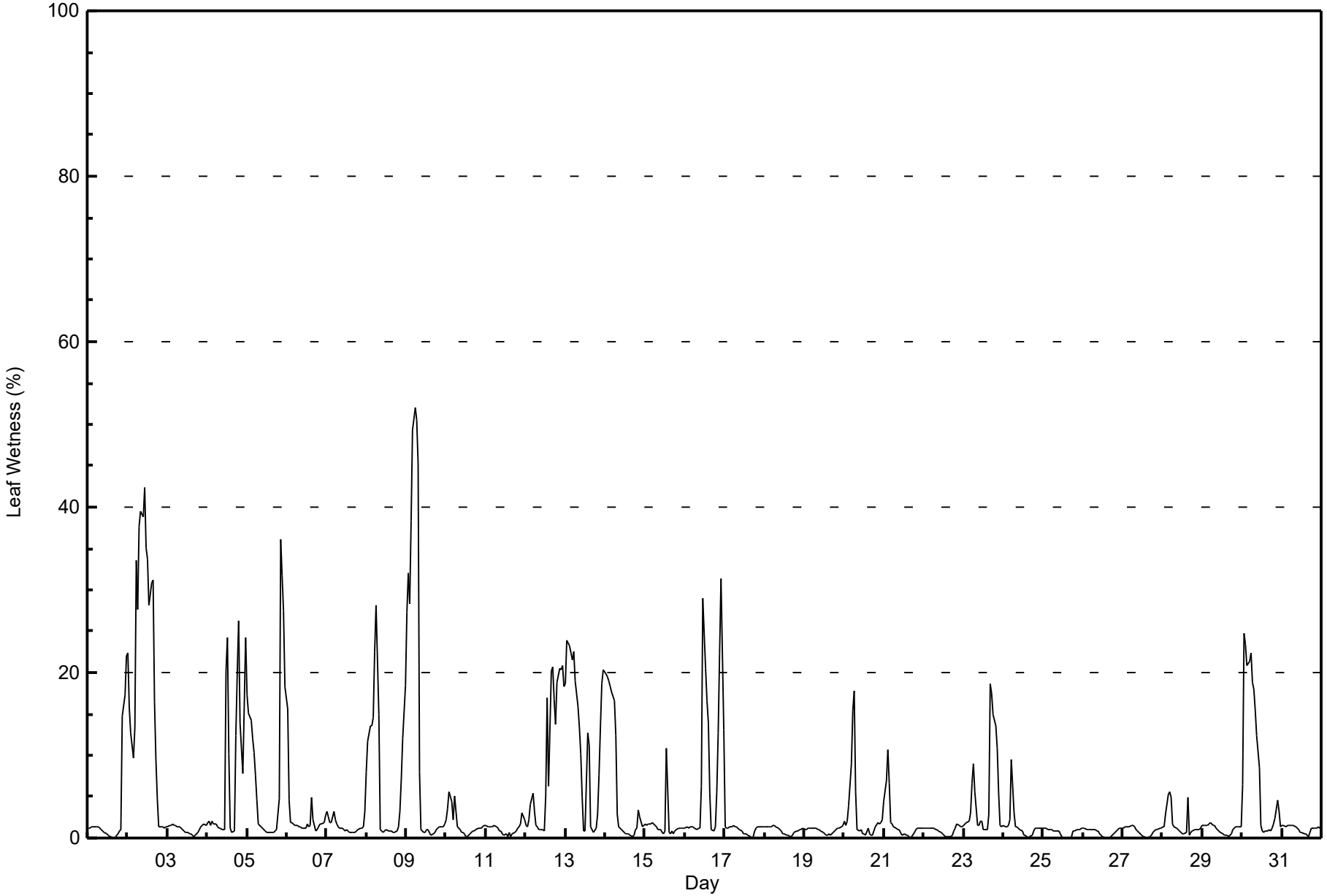
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.2 | 1.2 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.2 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.2 | 0.1 | 0.0 | 0.1 | 0.3 | 0.5 | 0.8 | 1.0 | 14.7 | 17.4 | 22.0 | 2.9 | 22.0 |
| 2-Aug | 22.4 | 15.7 | 12.7 | 9.7 | 13.4 | 33.6 | 27.6 | 37.6 | 39.5 | 38.8 | 42.3 | 35.1 | 33.7 | 28.2 | 30.8 | 31.2 | 16.4 | 9.5 | 4.8 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | 20.4 | 42.3 |
| 3-Aug | 1.3 | 1.5 | 1.6 | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 1.2 | 1.0 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.2 | 0.4 | 0.6 | 1.0 | 1.3 | 1.5 | 1.8 | 1.5 | 1.1 | 1.8 |
| 4-Aug | 1.9 | 2.0 | 1.6 | 2.1 | 1.8 | 1.7 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 20.2 | 24.2 | 10.2 | 1.3 | 0.6 | 0.8 | 12.4 | 19.9 | 26.3 | 13.8 | 7.8 | 15.9 | 24.2 | 8.1 | 26.3 |
| 5-Aug | 17.3 | 15.0 | 14.3 | 12.0 | 10.3 | 7.6 | 4.5 | 1.7 | 1.4 | 1.2 | 1.0 | 0.9 | 0.7 | 0.7 | 0.8 | 0.7 | 0.8 | 0.8 | 1.1 | 4.8 | 36.2 | 31.7 | 27.5 | 18.4 | 8.8 | 36.2 |
| 6-Aug | 15.6 | 4.5 | 1.9 | 1.8 | 1.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.1 | 1.2 | 1.8 | 1.4 | 1.5 | 4.9 | 2.2 | 0.8 | 1.1 | 1.3 | 1.7 | 1.7 | 1.9 | 2.7 | 2.4 | 15.6 |
| 7-Aug | 3.3 | 2.5 | 1.9 | 1.9 | 3.1 | 2.3 | 1.6 | 1.4 | 1.3 | 1.2 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.1 | 1.1 | 1.3 | 3.3 | 1.5 | 3.3 |
| 8-Aug | 8.0 | 11.7 | 13.6 | 13.5 | 14.6 | 22.6 | 28.2 | 15.0 | 1.0 | 0.9 | 0.8 | 0.9 | 1.0 | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 | 0.9 | 1.4 | 3.2 | 7.1 | 12.1 | 18.4 | 7.4 | 28.2 |
| 9-Aug | 27.3 | 32.1 | 28.4 | 38.3 | 49.4 | 52.1 | 50.6 | 45.3 | 7.9 | 1.0 | 0.7 | 0.7 | 0.9 | 1.1 | 0.7 | 0.3 | 0.5 | 0.7 | 0.9 | 1.2 | 1.4 | 1.3 | 1.4 | 1.8 | 14.4 | 52.1 |
| 10-Aug | 2.3 | 3.5 | 5.7 | 4.5 | 2.3 | 5.0 | 3.2 | 1.3 | 1.0 | 0.8 | 0.7 | 0.5 | 0.2 | 0.1 | 0.6 | 0.8 | 0.8 | 0.9 | 1.1 | 1.2 | 1.2 | 1.2 | 1.4 | 1.5 | 1.7 | 5.7 |
| 11-Aug | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.6 | 1.4 | 1.2 | 0.9 | 0.8 | 0.5 | 0.4 | 0.6 | 0.2 | 0.6 | 0.3 | 0.6 | 0.7 | 0.9 | 1.2 | 1.3 | 1.6 | 3.1 | 2.1 | 1.1 | 3.1 |
| 12-Aug | 1.4 | 1.4 | 2.2 | 4.1 | 5.5 | 3.1 | 1.5 | 1.4 | 1.1 | 1.0 | 1.0 | 0.9 | 5.1 | 17.0 | 6.2 | 20.1 | 20.7 | 16.8 | 13.7 | 18.8 | 20.5 | 20.4 | 20.9 | 18.3 | 9.3 | 20.9 |
| 13-Aug | 18.6 | 23.8 | 23.2 | 22.3 | 21.4 | 22.6 | 18.9 | 16.0 | 13.5 | 10.1 | 5.0 | 0.9 | 0.9 | 12.7 | 11.2 | 1.4 | 1.0 | 0.6 | 1.3 | 2.9 | 7.7 | 13.4 | 18.6 | 20.4 | 12.0 | 23.8 |
| 14-Aug | 19.9 | 19.4 | 19.0 | 18.3 | 17.7 | 16.6 | 12.4 | 2.9 | 1.3 | 1.1 | 1.0 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.1 | 0.4 | 1.0 | 1.1 | 3.4 | 2.6 | 1.4 | 1.6 | 6.0 | 19.9 |
| 15-Aug | 1.6 | 1.6 | 1.7 | 1.6 | 1.9 | 1.8 | 1.5 | 1.4 | 1.0 | 1.0 | 0.7 | 0.5 | 0.8 | 10.8 | 0.7 | 0.6 | 0.8 | 0.5 | 0.9 | 1.0 | 1.1 | 1.2 | 1.1 | 1.1 | 1.5 | 10.8 |
| 16-Aug | 1.2 | 1.3 | 1.2 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 | 1.2 | 6.2 | 29.0 | 20.4 | 16.6 | 14.0 | 5.3 | 0.9 | 0.8 | 1.4 | 5.6 | 12.7 | 22.4 | 31.4 | 13.1 | 8.0 | 31.4 |
| 17-Aug | 1.3 | 1.2 | 1.3 | 1.3 | 1.4 | 1.5 | 1.4 | 1.3 | 1.1 | 1.1 | 0.8 | 0.6 | 0.4 | 0.5 | 0.4 | 0.2 | 0.0 | 0.2 | 0.8 | 1.2 | 1.3 | 1.4 | 1.4 | 1.3 | 1.0 | 1.5 |
| 18-Aug | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.4 | 1.1 | 1.1 | 0.8 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.1 | 0.3 | 0.6 | 0.8 | 0.9 | 1.0 | 1.0 | 1.1 | 0.9 | 1.5 |
| 19-Aug | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.4 | 0.3 | 0.5 | 0.3 | 0.6 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.5 | 0.9 | 1.5 |
| 20-Aug | 2.0 | 1.6 | 2.0 | 3.9 | 9.0 | 15.4 | 17.7 | 5.5 | 1.0 | 0.9 | 1.0 | 0.5 | 0.5 | 0.4 | 1.2 | 0.4 | 0.3 | 0.4 | 0.8 | 1.3 | 1.8 | 1.7 | 1.8 | 2.2 | 3.1 | 17.7 |
| 21-Aug | 4.4 | 7.0 | 10.6 | 6.6 | 1.9 | 1.6 | 1.3 | 1.2 | 1.1 | 1.0 | 0.7 | 0.3 | 0.5 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.8 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.9 | 10.6 |
| 22-Aug | 1.2 | 1.3 | 1.2 | 1.3 | 1.2 | 1.2 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.8 | 1.2 | 1.7 | 1.6 | 1.4 | 1.4 | 0.9 | 1.7 |
| 23-Aug | 1.5 | 1.7 | 1.9 | 2.1 | 3.0 | 6.6 | 9.0 | 5.6 | 1.5 | 1.4 | 2.0 | 2.1 | 1.0 | 1.0 | 1.0 | 2.9 | 18.6 | 17.4 | 14.9 | 13.6 | 10.9 | 5.5 | 1.5 | 1.4 | 5.3 | 18.6 |
| 24-Aug | 1.5 | 1.4 | 1.4 | 1.6 | 2.3 | 9.4 | 3.0 | 1.4 | 1.3 | 1.3 | 1.1 | 0.8 | 0.4 | 0.4 | 0.2 | 0.0 | 0.1 | 0.3 | 0.8 | 1.1 | 1.3 | 1.2 | 1.2 | 1.3 | 1.4 | 9.4 |
| 25-Aug | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 0.7 | 1.2 |
| 26-Aug | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.7 | 0.9 | 1.0 | 1.2 | 1.2 | 0.7 | 1.2 |
| 27-Aug | 1.2 | 1.3 | 1.3 | 1.3 | 1.4 | 1.5 | 1.5 | 1.3 | 1.0 | 0.8 | 0.6 | 0.4 | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.4 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | 1.3 | 0.9 | 1.5 |
| 28-Aug | 1.3 | 1.4 | 2.9 | 5.2 | 5.6 | 4.9 | 1.7 | 1.3 | 1.2 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 4.9 | 0.4 | 0.6 | 0.8 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.7 | 5.6 |
| 29-Aug | 1.5 | 1.6 | 1.6 | 1.5 | 1.6 | 1.8 | 1.6 | 1.5 | 1.2 | 1.1 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.5 | 1.0 | 1.3 | 1.4 | 1.3 | 1.4 | 1.3 | 1.1 | 1.8 |
| 30-Aug | 6.4 | 24.7 | 23.4 | 20.8 | 21.4 | 22.4 | 18.8 | 18.0 | 15.5 | 12.3 | 8.4 | 1.6 | 0.8 | 0.8 | 0.8 | 0.8 | 1.0 | 0.9 | 1.2 | 1.7 | 2.4 | 4.6 | 3.2 | 1.4 | 8.9 | 24.7 |
| 31-Aug | 1.5 | 1.4 | 1.4 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 | 1.3 | 1.2 | 1.0 | 0.7 | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 | 0.6 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 | 1.2 | 1.1 | 1.6 |
| | 5.6 | 6.1 | 6.0 | 6.1 | 6.6 | 8.0 | 7.2 | 5.7 | 3.4 | 2.9 | 2.7 | 3.4 | 3.2 | 3.5 | 2.5 | 2.6 | 2.2 | 2.3 | 2.5 | 3.2 | 4.4 | 5.1 | 5.8 | 5.5 | Diurnal Average | |
| | 27.3 | 32.1 | 28.4 | 38.3 | 49.4 | 52.1 | 50.6 | 45.3 | 39.5 | 38.8 | 42.3 | 35.1 | 33.7 | 28.2 | 30.8 | 31.2 | 20.7 | 17.4 | 19.9 | 26.3 | 36.2 | 31.7 | 31.4 | 24.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Leaf Wetness (LW) - %**

**Stony Mountain - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 61 | 8.20 | 8.20 |
| 0.4 - 0.5 | 44 | 5.91 | 14.11 |
| 0.6 - 0.7 | 50 | 6.72 | 20.83 |
| 0.8 - 1.4 | 322 | 43.28 | 64.11 |
| 1.5 - 10 | 137 | 18.41 | 82.53 |
| > 10 | 113 | 15.19 | 97.72 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Global Radiation (GR) - W/m2

## Stony Mountain - August 2026

Maximum Value: 859.5 W/m2 on Aug 10 13:00

Maximum Daily Average: 254.7 W/m2 on Aug 25

Minimum Value: 0.0 W/m2 on Aug 10 23:00

Minimum Daily Average: 24.1 W/m2 on Aug 2

Maximum Diurnal Average: 537.6 W/m2 at hour 12

Minimum Diurnal Average: 0.1 W/m2 at hour 2

Monthly Average: 189.79 W/m2

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.2 Median = 44.5 $Q_3$ = 365.2 $P_{90}$ = 581.3 $P_{99}$ = 771.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

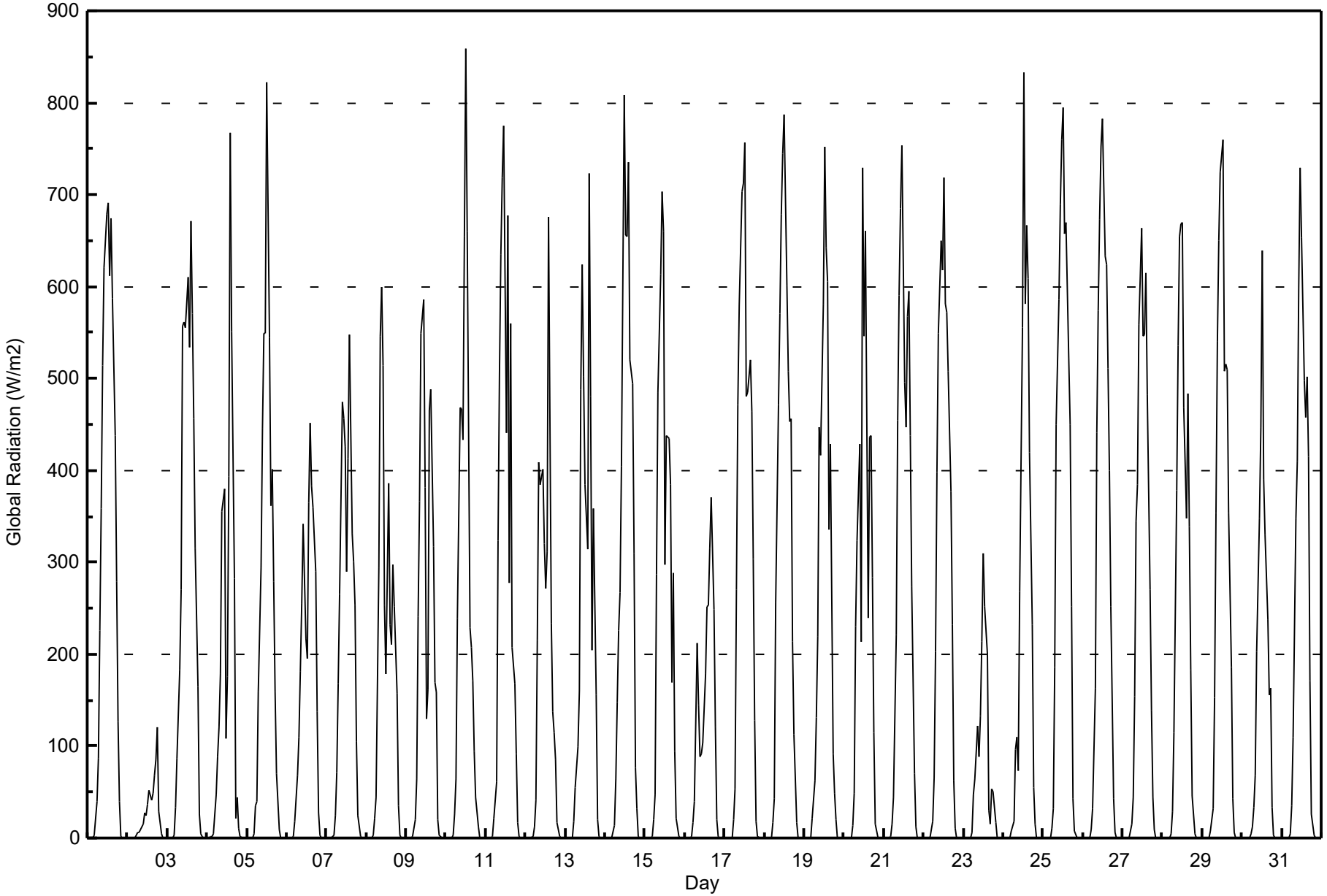
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 | 39.1 | 87.6 | 225.2 | 358.4 | 513.6 | 620.7 | 679.6 | 690.8 | 611.7 | 674.7 | 587.7 | 438.3 | 279.2 | 126.5 | 39.2 | 1.3 | 0.0 | 0.0 | 0.0 | 249.1 | 690.8 |
| 2-Aug | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 | 3.0 | 5.9 | 5.9 | 9.4 | 15.5 | 27.5 | 24.2 | 37.3 | 51.3 | 40.9 | 48.4 | 68.4 | 85.3 | 121.0 | 28.7 | 4.2 | 0.2 | 0.1 | 0.1 | 24.1 | 121.0 |
| 3-Aug | 0.1 | 0.3 | 0.2 | 0.4 | 3.2 | 33.0 | 87.7 | 183.1 | 269.3 | 556.6 | 560.7 | 555.3 | 610.2 | 534.0 | 671.9 | 570.3 | 456.3 | 315.6 | 164.1 | 26.5 | 5.2 | 0.8 | 0.6 | 0.6 | 233.6 | 671.9 |
| 4-Aug | 0.6 | 0.7 | 0.8 | 0.8 | 5.3 | 47.9 | 88.2 | 121.2 | 177.9 | 356.2 | 379.9 | 108.5 | 175.9 | 393.3 | 767.8 | 550.5 | 282.7 | 21.5 | 43.8 | 10.4 | 1.9 | 0.1 | 0.1 | 0.1 | 147.3 | 767.8 |
| 5-Aug | 0.1 | 0.2 | 0.0 | 0.2 | 4.3 | 35.4 | 39.0 | 159.4 | 294.6 | 445.9 | 549.6 | 548.6 | 821.8 | 544.1 | 362.0 | 400.8 | 279.9 | 158.0 | 70.4 | 9.5 | 0.5 | 0.0 | 0.0 | 0.1 | 196.8 | 821.8 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 18.0 | 68.2 | 109.7 | 181.7 | 254.9 | 341.3 | 217.3 | 195.0 | 365.0 | 451.4 | 383.5 | 360.0 | 290.1 | 137.6 | 27.0 | 3.5 | 0.4 | 0.3 | 0.2 | 142.0 | 451.4 |
| 7-Aug | 0.3 | 0.2 | 0.3 | 0.2 | 2.7 | 24.0 | 71.8 | 167.8 | 265.6 | 474.5 | 456.7 | 425.0 | 289.4 | 413.1 | 548.3 | 331.2 | 301.0 | 252.5 | 105.5 | 24.4 | 1.6 | 0.0 | 0.0 | 0.1 | 173.2 | 548.3 |
| 8-Aug | 0.0 | 0.2 | 0.2 | 0.2 | 2.6 | 22.0 | 44.5 | 294.2 | 545.4 | 599.9 | 513.4 | 252.9 | 178.3 | 386.2 | 232.2 | 210.3 | 297.9 | 251.1 | 156.8 | 35.7 | 3.1 | 0.1 | 0.2 | 0.5 | 167.8 | 599.9 |
| 9-Aug | 0.4 | 0.0 | 0.2 | 0.1 | 2.1 | 19.1 | 64.7 | 241.4 | 365.7 | 548.8 | 586.0 | 380.8 | 129.3 | 161.2 | 465.4 | 488.2 | 317.7 | 169.1 | 158.0 | 19.7 | 2.7 | 0.0 | 0.0 | 0.2 | 171.7 | 586.0 |
| 10-Aug | 0.3 | 0.1 | 0.1 | 0.2 | 2.7 | 25.4 | 64.5 | 239.6 | 468.8 | 467.5 | 433.8 | 653.8 | 859.5 | 660.8 | 229.1 | 207.1 | 170.4 | 94.7 | 44.4 | 11.6 | 0.6 | 0.0 | 0.0 | 0.0 | 193.1 | 859.5 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 22.0 | 61.5 | 324.0 | 503.2 | 634.1 | 719.1 | 774.3 | 440.9 | 677.1 | 278.2 | 560.3 | 207.5 | 168.3 | 92.1 | 17.0 | 1.0 | 0.0 | 0.0 | 0.0 | 228.4 | 774.3 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 12.3 | 41.8 | 215.1 | 408.8 | 383.7 | 401.4 | 320.1 | 271.5 | 310.6 | 675.4 | 233.7 | 137.8 | 115.0 | 84.9 | 16.7 | 1.1 | 0.0 | 0.0 | 0.0 | 151.3 | 675.4 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 18.6 | 54.7 | 98.5 | 159.7 | 488.6 | 624.5 | 502.5 | 383.7 | 314.6 | 723.7 | 481.2 | 203.8 | 358.2 | 155.9 | 20.6 | 1.3 | 0.0 | 0.0 | 0.0 | 191.3 | 723.7 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 14.3 | 64.4 | 147.9 | 225.2 | 267.5 | 404.6 | 808.5 | 655.8 | 653.7 | 734.9 | 519.5 | 493.8 | 310.3 | 76.6 | 32.1 | 1.4 | 0.3 | 0.1 | 0.1 | 225.5 | 808.5 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 19.2 | 46.7 | 286.4 | 484.6 | 613.9 | 703.3 | 660.0 | 298.0 | 437.6 | 434.0 | 384.5 | 169.4 | 289.1 | 94.3 | 21.6 | 1.0 | 0.0 | 0.0 | 0.1 | 206.0 | 703.3 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 | 16.8 | 39.8 | 212.6 | 144.3 | 88.9 | 92.0 | 103.5 | 178.8 | 251.7 | 253.5 | 315.7 | 370.4 | 247.9 | 120.9 | 19.9 | 0.9 | 0.3 | 0.3 | 0.8 | 102.5 | 370.4 |
| 17-Aug | 0.7 | 0.1 | 0.1 | 0.1 | 0.7 | 19.7 | 53.9 | 269.7 | 471.3 | 580.3 | 702.5 | 712.4 | 756.5 | 480.9 | 484.5 | 519.6 | 464.2 | 303.0 | 127.6 | 18.3 | 0.9 | 0.3 | 0.2 | 0.1 | 248.6 | 756.5 |
| 18-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.6 | 16.3 | 42.8 | 256.0 | 472.0 | 571.1 | 678.8 | 744.5 | 786.5 | 600.4 | 508.5 | 452.9 | 456.7 | 213.9 | 112.9 | 16.1 | 0.3 | 0.0 | 0.0 | 0.0 | 247.1 | 786.5 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 20.9 | 63.2 | 131.0 | 219.7 | 446.7 | 417.0 | 581.0 | 752.3 | 642.9 | 605.3 | 334.9 | 429.2 | 91.8 | 48.1 | 20.2 | 0.3 | 0.0 | 0.0 | 0.0 | 200.2 | 752.3 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 13.7 | 49.1 | 231.0 | 323.4 | 429.0 | 213.4 | 729.6 | 545.9 | 659.8 | 239.9 | 436.7 | 438.0 | 283.8 | 114.2 | 14.6 | 0.5 | 0.1 | 0.1 | 0.0 | 196.8 | 729.6 |
| 21-Aug | 0.0 | 0.0 | 0.2 | 0.6 | 1.1 | 14.9 | 44.3 | 221.2 | 455.0 | 590.0 | 684.6 | 753.0 | 495.5 | 447.3 | 566.7 | 594.5 | 437.9 | 273.5 | 70.3 | 12.5 | 0.2 | 0.0 | 0.0 | 0.1 | 236.0 | 753.0 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 18.2 | 66.2 | 203.1 | 397.5 | 548.6 | 649.6 | 617.4 | 718.2 | 581.5 | 572.5 | 508.0 | 377.2 | 231.8 | 63.2 | 11.0 | 0.2 | 0.2 | 0.2 | 0.3 | 231.9 | 718.2 |
| 23-Aug | 0.3 | 0.3 | 0.2 | 0.3 | 0.1 | 6.1 | 46.9 | 63.4 | 122.0 | 88.5 | 132.1 | 213.0 | 309.5 | 251.9 | 200.5 | 30.6 | 14.6 | 53.9 | 49.8 | 17.3 | 0.2 | 0.0 | 0.1 | 0.1 | 66.7 | 309.5 |
| 24-Aug | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 7.1 | 19.0 | 95.6 | 109.4 | 72.6 | 268.3 | 555.8 | 833.5 | 580.6 | 667.1 | 609.1 | 418.8 | 231.6 | 55.1 | 15.0 | 0.1 | 0.1 | 0.1 | 0.1 | 189.1 | 833.5 |
| 25-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 10.2 | 32.4 | 186.4 | 450.5 | 585.4 | 689.5 | 759.8 | 795.3 | 657.6 | 669.5 | 522.2 | 450.3 | 251.4 | 43.3 | 8.2 | 0.1 | 0.1 | 0.1 | 0.0 | 254.7 | 795.3 |
| 26-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 9.7 | 31.5 | 162.8 | 440.6 | 573.5 | 672.0 | 751.6 | 781.9 | 633.4 | 623.3 | 511.3 | 399.3 | 251.2 | 42.2 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 245.4 | 781.9 |
| 27-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 14.9 | 44.5 | 154.6 | 344.2 | 384.8 | 558.9 | 662.9 | 546.6 | 547.0 | 615.2 | 482.7 | 269.7 | 138.4 | 45.0 | 8.9 | 0.0 | 0.0 | 0.0 | 0.0 | 200.8 | 662.9 |
| 28-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 4.3 | 29.1 | 115.1 | 378.7 | 535.6 | 655.1 | 668.6 | 669.2 | 468.1 | 347.3 | 484.0 | 338.0 | 183.7 | 45.0 | 5.3 | 0.2 | 0.1 | 0.1 | 0.0 | 205.3 | 669.2 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7 | 32.4 | 152.1 | 354.5 | 539.7 | 649.6 | 724.1 | 760.2 | 508.1 | 515.9 | 509.1 | 354.6 | 185.5 | 42.5 | 5.9 | 0.1 | 0.0 | 0.0 | 0.0 | 222.6 | 760.2 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 | 12.8 | 33.8 | 67.9 | 203.6 | 348.5 | 447.6 | 638.4 | 390.1 | 329.2 | 238.2 | 155.1 | 163.1 | 33.5 | 3.0 | 0.0 | 0.0 | 0.1 | 0.0 | 127.9 | 638.4 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 5.0 | 35.2 | 109.5 | 347.3 | 409.9 | 597.5 | 728.7 | 653.3 | 496.9 | 457.0 | 501.9 | 414.2 | 170.6 | 25.8 | 3.6 | 0.1 | 0.1 | 0.1 | 0.4 | 206.5 | 728.7 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 1.3 | 17.5 | 49.5 | 174.7 | 316.7 | 428.0 | 494.6 | 537.6 | 524.5 | 474.6 | 482.1 | 419.6 | 321.7 | 207.5 | 86.2 | 17.0 | 1.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.7 | 0.7 | 0.8 | 0.8 | 5.3 | 47.9 | 88.2 | 324.0 | 545.4 | 634.1 | 719.1 | 808.5 | 859.5 | 677.1 | 767.8 | 609.1 | 493.8 | 358.2 | 164.1 | 39.2 | 5.2 | 0.8 | 0.6 | 0.8 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Global Radiation (GR) - W/m2**

**Stony Mountain - August 2026**



| Concentration Ranges (W/m2) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 330 | 44.35 | 44.35 |
| 21 - 100 | 87 | 11.69 | 56.05 |
| 101 - 300 | 112 | 15.05 | 71.10 |
| 301 - 600 | 149 | 20.03 | 91.13 |
| 601 - 900 | 66 | 8.87 | 100.00 |
| > 900 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 20m (WS20) - km/h

## Stony Mountain - August 2026

Maximum Speed: 20 km/h on Aug 28 03:00

Maximum Daily Speed Average: 14.0 km/h on Aug 6

Minimum Speed Value: 1 km/h on Aug 9 07:00

Minimum Daily Speed Average: 1.3 km/h on Aug 10

Maximum Diurnal Speed Average: 6.5 km/h at hour 3

Minimum Diurnal Speed Average: 3.0 km/h at hour 19

Monthly Average Velocity: 4.7 km/h 273.4 deg

Percentiles: $P_1$ = 2 $P_{10}$ = 5 $Q_1$ = 6 Median = 9 $Q_3$ = 12 $P_{90}$ = 14 $P_{99}$ = 18

Hours in Service: 744

Hours of Data: 744

Hours of Missing Data: 0

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSW12 | SSW12 | SSW11 | SSW10 | SSW9 | SSW10 | S10 | SSE9 | S13 | SSE15 | SE15 | SE15 | SE17 | SE17 | SSE17 | SSE18 | SSE16 | S13 | SSE11 | S7 | SSE8 | WSW10 | NW15 | NW14 | S9.4 | SSE18 |
| 2-Aug | N10 | WNW4 | W11 | WNW12 | WNW12 | W19 | W15 | WNW12 | WNW12 | WNW16 | WNW15 | NNW6 | NW9 | NNW15 | NNW18 | NNW20 | NW17 | NW19 | NW13 | NW14 | NW15 | NW14 | NW15 | NW15 | NW12.6 | NNW20 |
| 3-Aug | NW13 | NW13 | NW12 | WNW12 | NW12 | WNW11 | WNW12 | WNW11 | NW11 | NW12 | NNW14 | NNW13 | NW13 | NW14 | NW13 | NW13 | NNW12 | NW9 | WNW8 | W7 | W8 | WNW8 | WNW8 | WNW7 | NW10.6 | NNW14 |
| 4-Aug | W7 | WSW8 | W8 | WSW8 | WSW9 | WSW9 | WSW10 | WSW11 | SW8 | WSW8 | W10 | W13 | SW14 | SW13 | SW16 | WSW11 | SW10 | W7 | WSW11 | W11 | W12 | WNW14 | WNW13 | WNW12 | WSW9.6 | SSW16 |
| 5-Aug | WNW12 | NW13 | WNW12 | WNW13 | WNW13 | WNW14 | WNW12 | WNW13 | WNW14 | WNW15 | NW16 | NW16 | WNW18 | WNW18 | NW16 | WNW13 | WNW12 | W10 | WSW11 | WSW8 | WNW9 | NNW18 | NNW10 | NW17 | WNW12.8 | WNW18 |
| 6-Aug | NW16 | NW18 | NW17 | NW18 | NW19 | NW20 | NW19 | NW16 | NW17 | NW15 | NW15 | NW13 | NW13 | NW14 | WNW13 | WNW12 | W11 | WNW11 | WNW11 | WNW10 | WNW11 | W13 | WNW12 | WNW11 | WNW14.0 | NW20 |
| 7-Aug | W13 | WNW13 | W11 | W12 | WNW9 | W10 | W10 | WNW9 | WNW10 | NW12 | NW12 | WNW11 | WNW9 | WNW10 | WNW11 | NW8 | NW7 | WNW7 | W7 | W8 | W9 | W10 | WNW7 | WNW6 | WNW9.4 | W13 |
| 8-Aug | WNW6 | WNW4 | NW4 | NW6 | NNW5 | NNW6 | N5 | NNE4 | NNE4 | NNE6 | N3 | W5 | WNW4 | NE6 | N4 | NW4 | NW4 | W4 | WNW3 | NNW3 | NNW3 | NNE5 | ENE6 | ENE5 | NNW3.2 | ENE6 |
| 9-Aug | E5 | SSW5 | SW4 | NNE4 | W1 | W1 | SSW1 | SE2 | SE2 | NE3 | E3 | NE3 | NE5 | NE5 | ENE2 | NE3 | NE3 | ENE4 | ENE6 | E6 | ENE7 | ENE9 | ESE8 | ESE8 | E2.9 | ENE9 |
| 10-Aug | SE8 | SE6 | SE6 | SSE6 | E1 | ENE4 | E5 | ESE4 | SE5 | ENE4 | NNE5 | E4 | ESE4 | NNW1 | N3 | NNW4 | NNW6 | NNW5 | NNW5 | NW4 | NW6 | NW6 | NW6 | NNW7 | NNE1.3 | SE8 |
| 11-Aug | NNW7 | N7 | NNW7 | NW7 | NW7 | N5 | NW6 | NNW5 | N4 | N6 | NW5 | NW7 | N6 | N8 | NW6 | N2 | NNW13 | N6 | WNW4 | WNW6 | NW6 | NW5 | NNW6 | N7 | NNW5.6 | NNW13 |
| 12-Aug | NNW6 | WNW7 | WNW6 | NW6 | NW6 | NW6 | NW6 | NW5 | NNW5 | NW9 | NNW9 | NW9 | NNW8 | N6 | NW7 | NNE7 | N6 | N4 | N6 | N7 | NNW6 | NNW6 | NNW7 | NW7 | NNW6.2 | NW9 |
| 13-Aug | NW6 | NNW7 | NNW7 | NNW7 | N6 | N6 | NNE7 | NE8 | NNE8 | NE8 | ENE9 | ENE10 | NNE9 | ENE11 | NE11 | ENE9 | E6 | NE6 | NE7 | NNE6 | NE6 | NE8 | N6 | N6 | NNE6.4 | ENE11 |
| 14-Aug | NW7 | NNW6 | N6 | NNE6 | NNW7 | N6 | N5 | N4 | NNE3 | NNE3 | SE1 | SE5 | N6 | NNE13 | NE9 | E8 | SSE7 | S7 | SW8 | N2 | SW6 | WSW8 | W9 | W9 | NNW2.0 | NNE13 |
| 15-Aug | WNW9 | WNW9 | WNW9 | WNW10 | WNW9 | WNW9 | W8 | W5 | W6 | W5 | W6 | W7 | W4 | WNW7 | WNW6 | WSW7 | W10 | WSW9 | WSW8 | SW10 | SW10 | SW10 | SW12 | SW12 | W7.5 | SW12 |
| 16-Aug | SW12 | SW12 | WSW12 | WSW14 | WSW12 | WSW12 | W13 | W13 | WNW12 | WNW11 | WNW12 | NW10 | WNW9 | NW9 | NNW9 | NW8 | NNW9 | NNW9 | NNW6 | NW6 | WNW6 | W7 | WSW8 | W10 | W8.5 | WSW14 |
| 17-Aug | W12 | W12 | W14 | W15 | W14 | W13 | W11 | W9 | WNW8 | WNW9 | WNW10 | NW7 | WNW7 | WNW6 | WNW5 | W4 | W5 | NW3 | WSW7 | SW9 | SW10 | SW10 | SW11 | SW12 | W8.1 | W15 |
| 18-Aug | SSW12 | SSW12 | SSW14 | SSW14 | SSW14 | SSW12 | SSW13 | SSW13 | SSW11 | SSW10 | SW10 | SW7 | SW9 | WSW8 | SW8 | WSW8 | WSW9 | W12 | WNW11 | WNW9 | W11 | WNW11 | W10 | W8 | SW9.2 | SSW14 |
| 19-Aug | WSW9 | W11 | W12 | WNW13 | W12 | W13 | WNW11 | W11 | WNW10 | WNW11 | WNW12 | WNW13 | WNW12 | NW13 | WNW14 | WNW12 | WNW14 | NW10 | NNW8 | WNW8 | WNW9 | NW9 | WNW8 | WNW7 | WNW10.6 | WNW14 |
| 20-Aug | WNW7 | W7 | NW5 | NNW5 | S3 | SW6 | W6 | WNW7 | WNW6 | NW8 | WNW6 | NW7 | WNW10 | NW11 | NW8 | NW8 | NNW10 | NNW7 | N6 | ENE5 | E6 | E5 | ENE5 | NE6 | NW4.3 | NW11 |
| 21-Aug | NNW5 | WNW4 | SW7 | SW9 | SW10 | SW10 | SW10 | SW9 | SW8 | SW8 | S8 | SSW8 | WSW7 | SW7 | SSW9 | SW10 | SSW8 | SSW9 | S8 | SSW9 | SSW11 | SSW13 | S13 | S13 | SSW8.1 | S13 |
| 22-Aug | SSW15 | S14 | S15 | S15 | S17 | S17 | S17 | S16 | SSW17 | SSW14 | SSW12 | SSW12 | S8 | SSE9 | SSE11 | S12 | S14 | S13 | S9 | S7 | SSW8 | SSW12 | SSW15 | SSW15 | S12.7 | S17 |
| 23-Aug | SW11 | SW13 | SW14 | SW13 | WSW6 | S4 | SW9 | SSW4 | WSW6 | WNW8 | W9 | NNW7 | N5 | N3 | SE3 | SW9 | W13 | N6 | NW10 | NW12 | NW13 | NW13 | NW13 | NW13 | W5.7 | SW14 |
| 24-Aug | NW12 | NW11 | NW9 | W7 | W7 | NW10 | NW12 | NNW11 | NW11 | NW11 | NW10 | NNW10 | NNW16 | NNW15 | NNW17 | NNW17 | NNW17 | NW11 | NW7 | NW7 | NNW6 | NNW5 | NNW5 | NNW4 | NW9.9 | NNW17 |
| 25-Aug | NNE2 | SSW4 | SW9 | WSW10 | WSW12 | W12 | W11 | WNW10 | WNW8 | NW7 | WNW7 | NNW6 | NW8 | NW7 | NW8 | NNW6 | NNW4 | N4 | ENE7 | E9 | SE9 | SSE8 | S9 | S9 | W3.1 | W12 |
| 26-Aug | SSW10 | SSW10 | SW11 | SW12 | SW12 | SW11 | SW11 | SSW11 | SSW11 | S11 | S12 | SSW14 | S12 | SSW10 | SSW13 | SSW13 | SSW12 | SSE12 | SSE11 | SSE10 | SSE10 | SE9 | SSE10 | S12 | SSW10.4 | SSW14 |
| 27-Aug | S13 | S13 | S14 | S14 | S13 | SSE11 | SSE11 | SSE10 | SSE10 | SSE9 | S9 | WSW8 | SE7 | ESE10 | SE14 | SSE15 | SSE14 | SSE15 | SSE11 | SE10 | ESE11 | SE11 | SSE11 | SSE10 | SSE10.6 | SSE15 |
| 28-Aug | SSW7 | WSW15 | WNW20 | NW11 | SSW7 | WSW11 | SW9 | WSW10 | W13 | WSW14 | WSW14 | WSW17 | WSW17 | WSW17 | WSW15 | WSW13 | WSW14 | W11 | WSW9 | WSW11 | SW13 | WSW12 | WSW14 | W11 | WSW11.7 | WNW20 |
| 29-Aug | W9 | W10 | W10 | W12 | WSW10 | WSW11 | WSW8 | SW9 | WSW10 | WSW9 | W11 | WSW10 | SW12 | SW13 | SSW12 | SW11 | SW10 | SSW8 | SW7 | SSW8 | SSW9 | SSW9 | SSW8 | S8 | SW8.7 | SW13 |
| 30-Aug | SSE8 | SSE5 | ENE6 | E9 | ESE9 | E6 | N4 | NNW5 | N6 | NE5 | ESE1 | N4 | NNE3 | NE5 | NNE4 | E6 | E3 | E4 | NE5 | NE6 | NE6 | NNW4 | WNW10 | NW9 | NE2.9 | WNW10 |
| 31-Aug | NNW6 | WNW7 | NW10 | NW10 | WNW10 | WNW13 | WNW12 | WNW12 | NW11 | NW11 | NW9 | NW11 | NW11 | WNW10 | WNW10 | NW7 | W9 | WNW9 | W7 | W9 | W9 | W8 | WSW8 | WSW10 | WNW8.9 | WNW13 |
| | W4.9 | W6.2 | W6.5 | W6.2 | W5.9 | W6.3 | W6.1 | W5.0 | W4.9 | WNW5.1 | WNW5.1 | WNW4.8 | WNW4.7 | NW4.0 | WNW4.0 | W3.8 | W4.6 | W3.3 | W3.0 | W3.1 | W3.3 | W4.1 | W4.5 | W4.7 | Diurnal Average | |
| | NW16 | NW18 | WNW20 | NW18 | NW19 | NW20 | NW19 | S16 | SSW17 | WNW16 | NW16 | WSW17 | WNW18 | WNW18 | NNW18 | NNW20 | NW17 | NW19 | NW13 | NNW14 | NW15 | NNW18 | NW15 | NW17 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 20m (WS20) - km/h

## Stony Mountain - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11 km/h on Aug 1 22:00

Minimum Value: 0 km/h on Aug 8 21:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 3 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 7$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

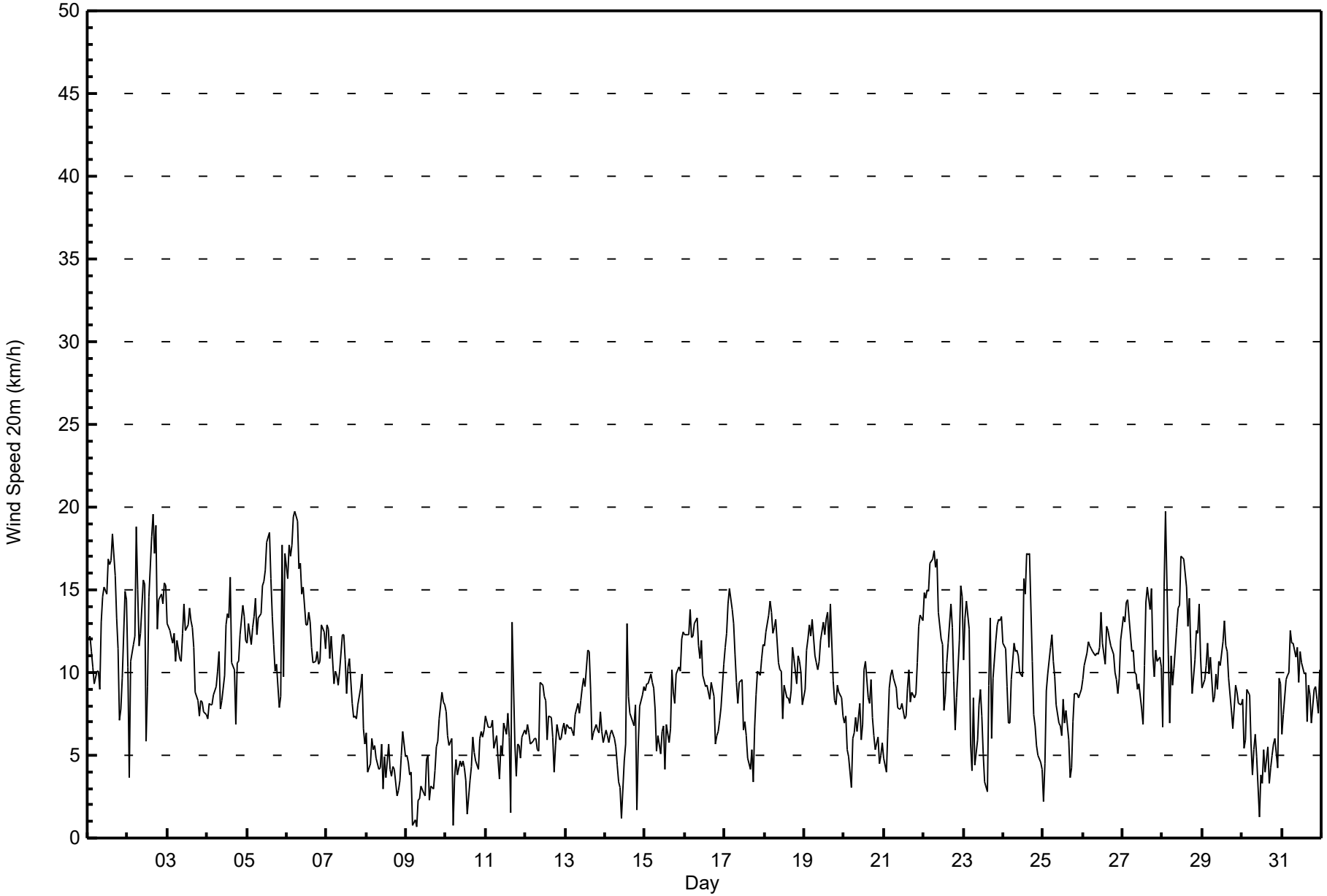
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 6 | 5 | 4 | 2 | 2 | 11 | 5 | 5 | 11 |
| 2-Aug | 5 | 3 | 4 | 3 | 4 | 7 | 5 | 4 | 5 | 5 | 6 | 4 | 3 | 6 | 7 | 7 | 6 | 6 | 4 | 5 | 5 | 4 | 5 | 5 | 7 |
| 3-Aug | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 6 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 5 | 4 | 3 | 4 | 5 | 5 | 4 | 5 |
| 5-Aug | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 5 | 5 | 4 | 3 | 3 | 6 | 6 | 4 | 6 | 7 |
| 6-Aug | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 7 |
| 7-Aug | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 4 | 2 | 1 | 5 |
| 8-Aug | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 |
| 9-Aug | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 |
| 10-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 11-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 3 | 2 | 4 | 4 | 2 | 6 | 3 | 1 | 1 | 1 | 1 | 2 | 2 | 6 |
| 12-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 2 | 4 | 5 | 3 | 2 | 2 | 3 | 1 | 1 | 2 | 1 | 5 |
| 13-Aug | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 2 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 5 |
| 15-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 4 |
| 16-Aug | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 3 | 5 |
| 17-Aug | 3 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 5 |
| 18-Aug | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 2 | 4 |
| 19-Aug | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 5 |
| 20-Aug | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 5 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 4 |
| 22-Aug | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 1 | 2 | 3 | 3 | 4 | 5 |
| 23-Aug | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 2 | 4 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | 4 |
| 24-Aug | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 6 | 7 | 7 | 6 | 4 | 2 | 1 | 2 | 1 | 1 | 1 | 7 |
| 25-Aug | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 4 |
| 26-Aug | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 5 |
| 27-Aug | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 3 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 3 | 2 | 5 |
| 28-Aug | 2 | 7 | 8 | 4 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 7 | 6 | 6 | 6 | 6 | 5 | 5 | 3 | 3 | 4 | 3 | 4 | 4 | 8 |
| 29-Aug | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 1 | 1 | 2 | 2 | 1 | 1 | 4 |
| 30-Aug | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 2 | 4 |
| 31-Aug | 2 | 2 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 4 |
| | 5 | 7 | 8 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 4 | 5 | 6 | 11 | 5 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 20m (WS20) - km/h**

**Stony Mountain - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 109 | 14.65 | 14.65 |
| 6 - 11 | 418 | 56.18 | 70.83 |
| 12 - 19 | 214 | 28.76 | 99.60 |
| 20 - 28 | 3 | 0.40 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 20m (WS20) - km/h**

**Stony Mountain - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 15 | 10 | 9 | 7 | 8 | 3 | 6 | 1 | 2 | 4 | 1 | 0 | 9 | 7 | 9 | 18 | 109 |
| 6 - 11 | 18 | 10 | 11 | 10 | 8 | 5 | 8 | 21 | 13 | 26 | 37 | 39 | 47 | 70 | 61 | 34 | 418 |
| 12 - 19 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 9 | 22 | 25 | 15 | 16 | 23 | 41 | 45 | 13 | 214 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 33 | 21 | 20 | 17 | 16 | 8 | 18 | 31 | 37 | 55 | 53 | 55 | 79 | 119 | 116 | 66 | 744 |

Total Number of Valid Hours: 744

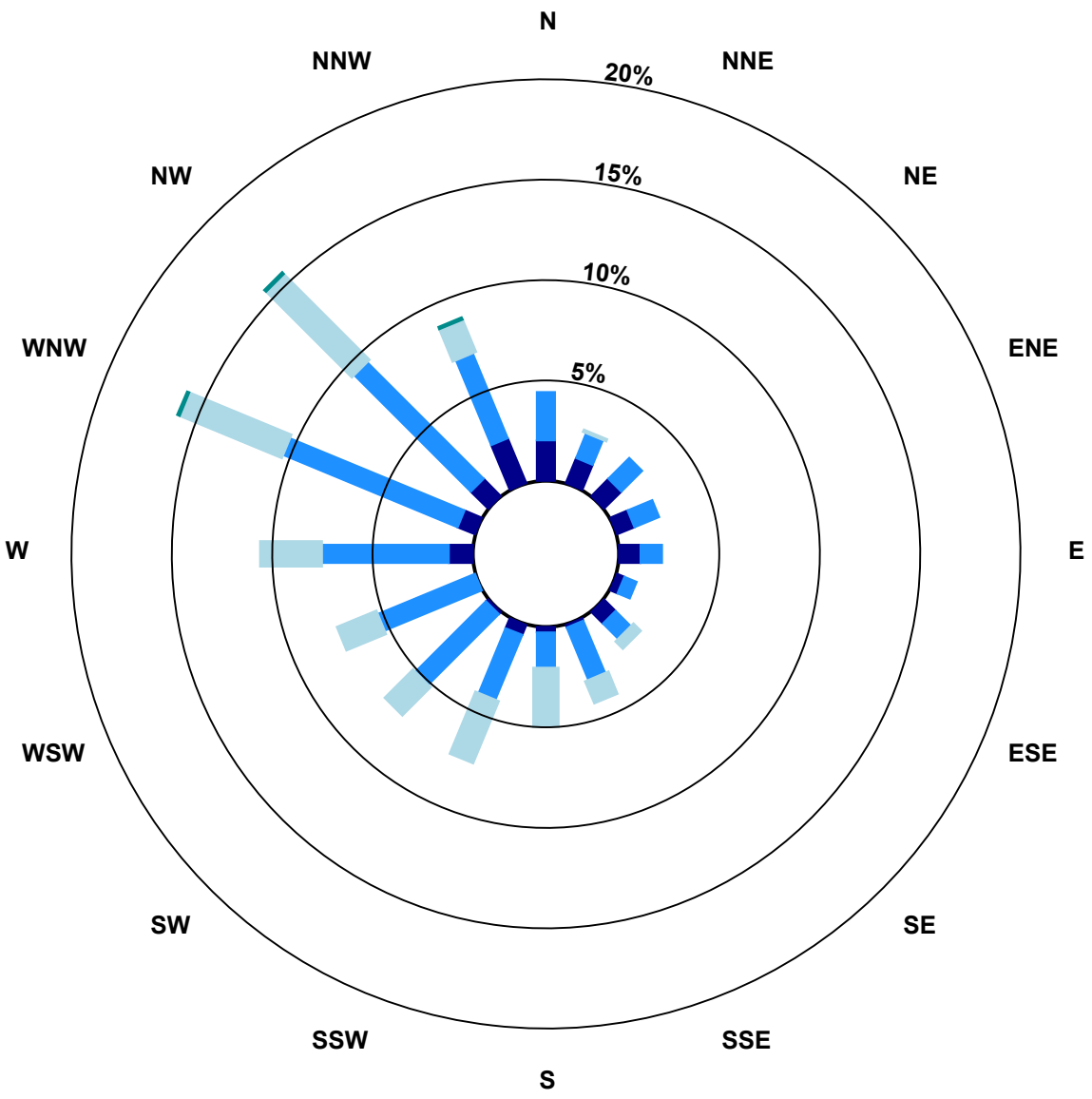
Total Number of Hours: 744

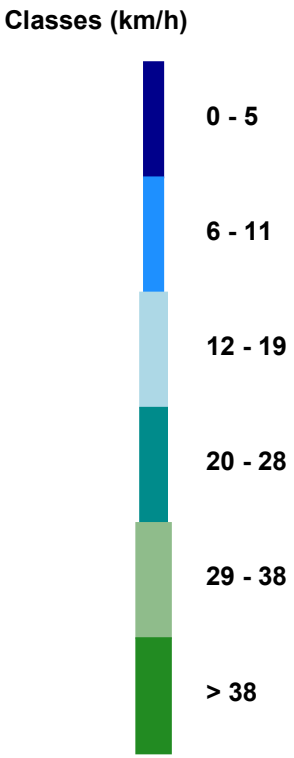
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 20m (WS20) - km/h**

**Stony Mountain**




**Total Number of Valid Hours: 744**

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 20m (WD20) - deg

## Stony Mountain - August 2026

Direction of Maximum Speed: 296 deg on Aug 28 03:00
Direction of Maximum Daily Speed Average: 303.5 deg on Aug 6

Direction of Minimum Speed: 193 deg on Aug 9 07:00

Direction of Minimum Daily Speed Average: 1.3 deg on Aug 10

Monthly Average Direction: 273.4 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 204 | 202 | 203 | 205 | 200 | 195 | 189 | 165 | 169 | 160 | 146 | 140 | 145 | 143 | 147 | 162 | 165 | 174 | 164 | 180 | 161 | 245 | 315 | 324 | 174.9 |
| 2-Aug | 351 | 295 | 273 | 287 | 299 | 280 | 269 | 285 | 292 | 287 | 295 | 329 | 324 | 341 | 337 | 332 | 323 | 322 | 323 | 326 | 326 | 319 | 324 | 323 | 311.9 |
| 3-Aug | 315 | 309 | 306 | 302 | 304 | 303 | 299 | 302 | 305 | 313 | 332 | 333 | 317 | 312 | 315 | 323 | 340 | 326 | 298 | 278 | 277 | 285 | 290 | 284 | 309.2 |
| 4-Aug | 271 | 258 | 260 | 245 | 242 | 246 | 239 | 238 | 233 | 243 | 266 | 266 | 228 | 218 | 214 | 248 | 226 | 261 | 237 | 268 | 276 | 288 | 298 | 286 | 252.1 |
| 5-Aug | 298 | 306 | 299 | 300 | 290 | 291 | 289 | 293 | 303 | 301 | 305 | 307 | 293 | 303 | 305 | 302 | 297 | 263 | 255 | 257 | 298 | 340 | 328 | 318 | 299.7 |
| 6-Aug | 316 | 312 | 312 | 312 | 311 | 310 | 308 | 309 | 312 | 313 | 314 | 312 | 315 | 310 | 299 | 298 | 281 | 290 | 290 | 282 | 284 | 281 | 282 | 285 | 303.5 |
| 7-Aug | 280 | 282 | 280 | 278 | 285 | 274 | 277 | 290 | 283 | 304 | 312 | 303 | 290 | 295 | 303 | 305 | 304 | 288 | 272 | 268 | 270 | 275 | 303 | 300 | 288.2 |
| 8-Aug | 294 | 288 | 305 | 320 | 347 | 336 | 355 | 19 | 14 | 13 | 2 | 271 | 291 | 54 | 4 | 324 | 325 | 275 | 301 | 342 | 341 | 32 | 72 | 73 | 344.5 |
| 9-Aug | 90 | 193 | 227 | 22 | 271 | 277 | 193 | 142 | 125 | 34 | 85 | 52 | 38 | 46 | 74 | 39 | 35 | 63 | 63 | 82 | 70 | 78 | 104 | 121 | 78.8 |
| 10-Aug | 133 | 141 | 145 | 166 | 85 | 65 | 93 | 108 | 127 | 65 | 27 | 81 | 116 | 347 | 358 | 335 | 337 | 338 | 344 | 325 | 311 | 306 | 321 | 334 | 31.5 |
| 11-Aug | 329 | 351 | 327 | 322 | 321 | 360 | 319 | 337 | 359 | 352 | 307 | 315 | 349 | 4 | 310 | 5 | 330 | 11 | 296 | 288 | 309 | 324 | 329 | 356 | 332.2 |
| 12-Aug | 338 | 302 | 302 | 318 | 318 | 313 | 317 | 312 | 338 | 323 | 329 | 312 | 332 | 11 | 310 | 13 | 354 | 8 | 357 | 349 | 341 | 332 | 334 | 326 | 330.7 |
| 13-Aug | 326 | 336 | 331 | 336 | 351 | 357 | 16 | 45 | 32 | 43 | 63 | 60 | 33 | 63 | 48 | 57 | 96 | 36 | 46 | 23 | 42 | 39 | 11 | 3 | 30.8 |
| 14-Aug | 324 | 331 | 359 | 31 | 344 | 357 | 352 | 6 | 31 | 32 | 134 | 128 | 349 | 27 | 35 | 90 | 155 | 181 | 221 | 349 | 214 | 256 | 266 | 273 | 344.8 |
| 15-Aug | 287 | 292 | 292 | 284 | 286 | 283 | 280 | 264 | 266 | 263 | 264 | 277 | 261 | 302 | 283 | 257 | 268 | 253 | 246 | 228 | 221 | 222 | 227 | 230 | 262.0 |
| 16-Aug | 230 | 233 | 245 | 242 | 241 | 252 | 261 | 272 | 291 | 290 | 296 | 310 | 290 | 315 | 344 | 313 | 327 | 328 | 335 | 307 | 298 | 281 | 256 | 261 | 278.5 |
| 17-Aug | 260 | 267 | 276 | 275 | 277 | 280 | 281 | 277 | 286 | 287 | 296 | 316 | 301 | 300 | 296 | 279 | 261 | 306 | 242 | 215 | 220 | 214 | 218 | 214 | 266.3 |
| 18-Aug | 209 | 204 | 207 | 209 | 208 | 206 | 201 | 201 | 207 | 209 | 224 | 228 | 234 | 246 | 221 | 258 | 253 | 269 | 289 | 285 | 277 | 283 | 276 | 261 | 232.4 |
| 19-Aug | 250 | 269 | 277 | 284 | 280 | 280 | 286 | 277 | 287 | 284 | 284 | 287 | 303 | 309 | 300 | 296 | 297 | 306 | 330 | 300 | 287 | 304 | 290 | 298 | 289.8 |
| 20-Aug | 297 | 281 | 311 | 329 | 171 | 233 | 263 | 294 | 295 | 311 | 302 | 314 | 301 | 304 | 309 | 304 | 328 | 344 | 7 | 73 | 96 | 97 | 65 | 47 | 315.1 |
| 21-Aug | 329 | 288 | 218 | 221 | 224 | 224 | 224 | 216 | 216 | 226 | 188 | 205 | 241 | 215 | 213 | 225 | 203 | 195 | 189 | 193 | 193 | 194 | 190 | 188 | 210.2 |
| 22-Aug | 193 | 190 | 189 | 185 | 187 | 184 | 188 | 189 | 193 | 200 | 200 | 193 | 179 | 153 | 161 | 170 | 175 | 170 | 173 | 174 | 193 | 196 | 207 | 213 | 187.1 |
| 23-Aug | 226 | 222 | 215 | 216 | 247 | 178 | 222 | 194 | 242 | 286 | 281 | 329 | 3 | 358 | 146 | 231 | 272 | 350 | 319 | 322 | 325 | 323 | 320 | 318 | 276.7 |
| 24-Aug | 314 | 304 | 309 | 280 | 261 | 305 | 316 | 329 | 326 | 320 | 323 | 329 | 338 | 332 | 332 | 328 | 327 | 326 | 318 | 313 | 333 | 334 | 328 | 338 | 321.4 |
| 25-Aug | 17 | 200 | 221 | 238 | 240 | 265 | 276 | 288 | 295 | 307 | 301 | 328 | 311 | 324 | 305 | 333 | 328 | 11 | 57 | 91 | 125 | 168 | 176 | 178 | 270.3 |
| 26-Aug | 199 | 211 | 215 | 218 | 217 | 218 | 214 | 206 | 202 | 189 | 178 | 193 | 176 | 196 | 208 | 201 | 197 | 168 | 166 | 164 | 159 | 144 | 151 | 177 | 191.6 |
| 27-Aug | 185 | 181 | 184 | 182 | 177 | 164 | 157 | 152 | 155 | 148 | 172 | 238 | 138 | 119 | 142 | 153 | 152 | 158 | 152 | 139 | 115 | 129 | 149 | 154 | 158.0 |
| 28-Aug | 202 | 240 | 296 | 321 | 194 | 241 | 227 | 248 | 270 | 257 | 253 | 241 | 244 | 246 | 254 | 254 | 245 | 260 | 240 | 239 | 234 | 237 | 249 | 271 | 250.7 |
| 29-Aug | 273 | 262 | 265 | 274 | 251 | 246 | 241 | 229 | 247 | 258 | 262 | 248 | 236 | 227 | 208 | 214 | 216 | 209 | 228 | 211 | 194 | 196 | 194 | 178 | 233.5 |
| 30-Aug | 164 | 155 | 65 | 89 | 104 | 81 | 360 | 345 | 351 | 39 | 106 | 3 | 28 | 51 | 33 | 100 | 85 | 87 | 50 | 34 | 44 | 343 | 300 | 312 | 46.8 |
| 31-Aug | 343 | 300 | 316 | 314 | 300 | 297 | 301 | 303 | 315 | 308 | 309 | 309 | 308 | 302 | 289 | 310 | 279 | 284 | 276 | 271 | 276 | 271 | 248 | 240 | 295.4 |
| | 267.2 | 259.3 | 265.7 | 266.8 | 260.8 | 265.2 | 265.0 | 267.4 | 274.5 | 284.7 | 283.1 | 286.1 | 289.4 | 304.9 | 288.0 | 279.4 | 275.9 | 277.2 | 271.3 | 270.7 | 264.7 | 273.0 | 272.0 | 273.0 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 20m (WD20) - deg

## Stony Mountain - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 96 deg on Aug 10 14:00

Minimum Value: 8 deg on Aug 21 03:00

Percentiles: $P_1$ = 10 $P_{10}$ = 14 $Q_1$ = 18 Median = 24 $Q_3$ = 31 $P_{90}$ = 42 $P_{99}$ = 80

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

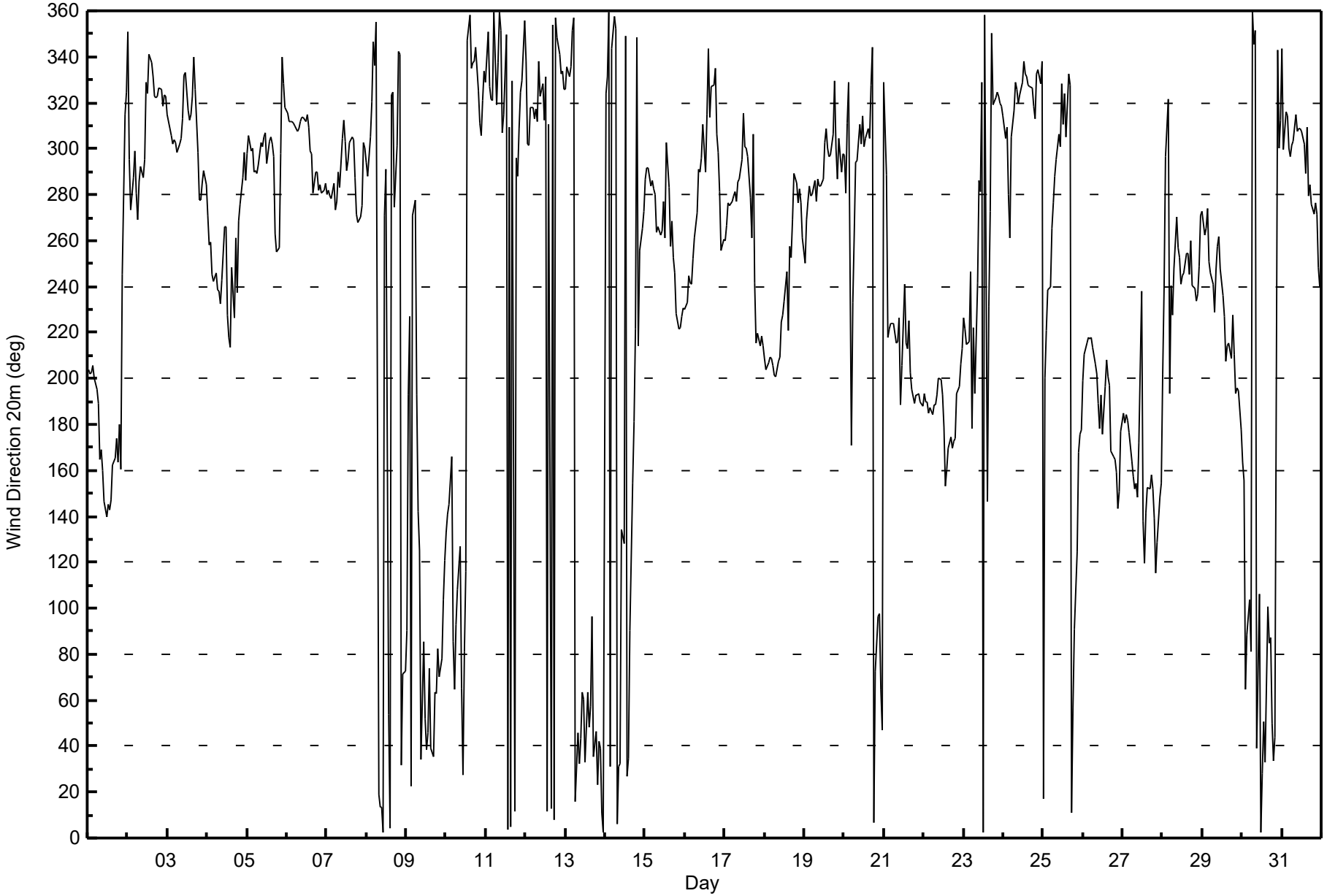
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 16 | 17 | 17 | 16 | 15 | 15 | 17 | 23 | 25 | 27 | 27 | 27 | 28 | 30 | 29 | 30 | 32 | 29 | 26 | 18 | 18 | 70 | 21 | 25 | 70 |
| 2-Aug | 30 | 77 | 25 | 23 | 22 | 25 | 27 | 31 | 26 | 26 | 28 | 59 | 30 | 30 | 27 | 25 | 24 | 22 | 26 | 23 | 22 | 22 | 22 | 21 | 77 |
| 3-Aug | 20 | 20 | 18 | 19 | 22 | 22 | 20 | 22 | 26 | 32 | 30 | 32 | 28 | 28 | 31 | 32 | 29 | 30 | 22 | 17 | 15 | 14 | 14 | 11 | 32 |
| 4-Aug | 13 | 9 | 9 | 11 | 11 | 15 | 16 | 17 | 39 | 40 | 28 | 26 | 21 | 22 | 25 | 34 | 24 | 48 | 27 | 24 | 26 | 24 | 22 | 23 | 48 |
| 5-Aug | 20 | 23 | 22 | 23 | 23 | 21 | 23 | 23 | 25 | 25 | 28 | 28 | 28 | 26 | 27 | 28 | 24 | 26 | 25 | 24 | 33 | 26 | 24 | 23 | 33 |
| 6-Aug | 25 | 24 | 24 | 24 | 24 | 24 | 22 | 25 | 25 | 24 | 25 | 25 | 25 | 25 | 26 | 29 | 27 | 26 | 24 | 22 | 20 | 20 | 21 | 20 | 29 |
| 7-Aug | 22 | 22 | 21 | 22 | 23 | 25 | 26 | 24 | 28 | 26 | 30 | 29 | 29 | 27 | 28 | 30 | 29 | 27 | 19 | 19 | 20 | 35 | 32 | 26 | 35 |
| 8-Aug | 14 | 33 | 43 | 22 | 23 | 18 | 27 | 35 | 54 | 44 | 76 | 32 | 48 | 37 | 34 | 32 | 32 | 26 | 50 | 27 | 25 | 25 | 12 | 11 | 76 |
| 9-Aug | 12 | 49 | 54 | 43 | 90 | 71 | 86 | 46 | 55 | 78 | 72 | 68 | 37 | 17 | 69 | 69 | 41 | 24 | 17 | 10 | 18 | 14 | 13 | 16 | 90 |
| 10-Aug | 12 | 24 | 31 | 15 | 78 | 40 | 24 | 29 | 33 | 42 | 33 | 51 | 78 | 96 | 30 | 25 | 22 | 17 | 20 | 19 | 18 | 15 | 16 | 14 | 96 |
| 11-Aug | 17 | 19 | 13 | 14 | 13 | 32 | 17 | 26 | 45 | 49 | 68 | 41 | 37 | 43 | 62 | 82 | 29 | 35 | 24 | 11 | 19 | 20 | 22 | 19 | 82 |
| 12-Aug | 21 | 25 | 16 | 14 | 13 | 14 | 17 | 26 | 42 | 26 | 31 | 34 | 39 | 38 | 42 | 38 | 27 | 32 | 25 | 25 | 20 | 19 | 17 | 15 | 42 |
| 13-Aug | 14 | 17 | 15 | 16 | 20 | 23 | 28 | 24 | 23 | 34 | 30 | 24 | 33 | 29 | 26 | 34 | 30 | 46 | 22 | 14 | 10 | 12 | 15 | 17 | 46 |
| 14-Aug | 11 | 11 | 22 | 16 | 16 | 16 | 16 | 27 | 38 | 40 | 95 | 47 | 45 | 33 | 36 | 38 | 39 | 41 | 21 | 83 | 38 | 16 | 17 | 16 | 95 |
| 15-Aug | 13 | 14 | 14 | 14 | 14 | 13 | 13 | 22 | 31 | 49 | 44 | 47 | 45 | 36 | 40 | 24 | 24 | 26 | 20 | 14 | 14 | 15 | 17 | 18 | 49 |
| 16-Aug | 17 | 18 | 24 | 20 | 21 | 22 | 26 | 27 | 23 | 21 | 22 | 25 | 29 | 41 | 30 | 28 | 27 | 26 | 23 | 14 | 14 | 12 | 14 | 19 | 41 |
| 17-Aug | 23 | 23 | 23 | 25 | 24 | 22 | 24 | 23 | 25 | 32 | 30 | 58 | 49 | 32 | 41 | 79 | 45 | 45 | 19 | 12 | 13 | 14 | 14 | 16 | 79 |
| 18-Aug | 15 | 14 | 16 | 17 | 17 | 16 | 17 | 19 | 24 | 27 | 31 | 42 | 34 | 36 | 32 | 32 | 29 | 24 | 21 | 19 | 19 | 18 | 21 | 18 | 42 |
| 19-Aug | 22 | 25 | 23 | 23 | 20 | 24 | 22 | 24 | 22 | 22 | 23 | 27 | 25 | 29 | 26 | 27 | 26 | 33 | 25 | 21 | 17 | 19 | 16 | 16 | 33 |
| 20-Aug | 20 | 15 | 34 | 47 | 55 | 15 | 27 | 22 | 25 | 30 | 27 | 36 | 27 | 34 | 22 | 31 | 34 | 33 | 33 | 14 | 9 | 24 | 10 | 20 | 55 |
| 21-Aug | 21 | 26 | 8 | 10 | 10 | 11 | 15 | 16 | 20 | 28 | 36 | 38 | 32 | 37 | 37 | 26 | 29 | 25 | 16 | 13 | 14 | 16 | 16 | 15 | 38 |
| 22-Aug | 16 | 14 | 16 | 16 | 16 | 17 | 18 | 21 | 22 | 26 | 27 | 24 | 42 | 35 | 29 | 28 | 28 | 28 | 26 | 16 | 16 | 17 | 18 | 20 | 42 |
| 23-Aug | 19 | 18 | 17 | 20 | 56 | 78 | 15 | 81 | 44 | 33 | 24 | 40 | 48 | 64 | 51 | 26 | 28 | 53 | 18 | 18 | 20 | 19 | 19 | 19 | 81 |
| 24-Aug | 19 | 19 | 20 | 32 | 28 | 20 | 20 | 20 | 19 | 22 | 23 | 29 | 31 | 31 | 29 | 26 | 23 | 23 | 19 | 16 | 39 | 15 | 22 | 18 | 39 |
| 25-Aug | 36 | 40 | 12 | 13 | 16 | 20 | 25 | 18 | 21 | 28 | 35 | 43 | 36 | 45 | 40 | 43 | 55 | 49 | 16 | 14 | 21 | 13 | 14 | 16 | 55 |
| 26-Aug | 12 | 13 | 15 | 16 | 15 | 16 | 16 | 19 | 20 | 26 | 31 | 29 | 39 | 38 | 28 | 29 | 25 | 27 | 23 | 22 | 18 | 15 | 16 | 17 | 39 |
| 27-Aug | 16 | 15 | 15 | 16 | 16 | 16 | 13 | 16 | 21 | 25 | 39 | 45 | 32 | 32 | 28 | 28 | 28 | 25 | 23 | 20 | 14 | 16 | 20 | 14 | 45 |
| 28-Aug | 27 | 37 | 32 | 27 | 31 | 22 | 26 | 28 | 29 | 29 | 30 | 29 | 30 | 29 | 31 | 31 | 27 | 28 | 23 | 20 | 21 | 20 | 24 | 25 | 37 |
| 29-Aug | 20 | 22 | 24 | 22 | 25 | 23 | 33 | 28 | 31 | 34 | 31 | 32 | 32 | 31 | 34 | 33 | 26 | 19 | 12 | 15 | 15 | 15 | 13 | 17 | 34 |
| 30-Aug | 22 | 46 | 18 | 14 | 12 | 44 | 55 | 21 | 23 | 41 | 90 | 59 | 64 | 34 | 48 | 23 | 24 | 30 | 16 | 13 | 13 | 40 | 21 | 19 | 90 |
| 31-Aug | 37 | 20 | 19 | 19 | 18 | 21 | 19 | 21 | 22 | 26 | 31 | 33 | 31 | 35 | 31 | 40 | 26 | 21 | 12 | 17 | 12 | 12 | 23 | 13 | 40 |
| | 37 | 77 | 54 | 47 | 90 | 78 | 86 | 81 | 55 | 78 | 95 | 68 | 78 | 96 | 69 | 82 | 55 | 53 | 50 | 83 | 39 | 70 | 32 | 26 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 20m (WD20) - deg**

**Stony Mountain - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS19
## FIREBAG
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 710 | 34 | 34 | 100 | 8.3 | 0 | 1.4 | 0 |
| H2S (ppb) Average | 709 | 35 | 35 | 100 | 2.5 | 0 | 0.6 | 0 |
| THC (ppm) Average | 710 | 34 | 34 | 100 | 3.2 | - | 2.4 | - |
| NO2 (ppb) Average | 707 | 37 | 37 | 100 | 15 | 0 | 4.8 | - |
| NO (ppb) Average | 707 | 37 | 37 | 100 | 10.4 | - | 1.4 | - |
| NOX (ppb) Average | 707 | 37 | 37 | 100 | 23.8 | - | 6.2 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 26.6 | - | 21.8 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 98.1 | - | 90.7 | - |
| Wind Speed 10 m (km/h) Average | 744 | 0 | 0 | 100 | 30 | - | 21 | - |
| Wind Direction 10 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 710 | 0.37 | 0.8 | - | 0 | 0 | 0 | 0.1 | 0.3 | 1 | 8.3 |
| H2S (ppb) Average | 709 | 0.21 | 0.2 | - | 0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 2.5 |
| THC (ppm) Average | 710 | 2.25 | 0.2 | - | 2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 3.2 |
| NO2 (ppb) Average | 707 | 2.03 | 2.4 | - | 0 | 0.2 | 0.6 | 1.2 | 2.6 | 5 | 15 |
| NO (ppb) Average | 707 | 0.43 | 1 | - | 0 | 0 | 0.1 | 0.1 | 0.3 | 0.9 | 10.4 |
| NOX (ppb) Average | 707 | 2.47 | 3 | - | 0.1 | 0.2 | 0.7 | 1.4 | 3 | 6 | 23.8 |
| Temperature 2 m (C) Average | 744 | 15.48 | 4.4 | - | 5.8 | 10 | 12.2 | 15 | 18.6 | 21.4 | 26.6 |
| Relative Humidity (%) Average | 744 | 71.66 | 16.9 | - | 34.1 | 49.4 | 57.3 | 72.3 | 86.1 | 94.2 | 98.1 |
| Wind Speed 10 m (km/h) Average | 744 | 11.6 | 6 | - | 1 | 5 | 7 | 11 | 16 | 19 | 30 |
| Wind Direction 10 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| | | | | No operational issues to report |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Firebag - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 8.3 ppb on Aug 23 09:00 Maximum Daily Average: 1.4 ppb on Aug 29

Minimum Value: 0.0 ppb on Aug 2 13:00 Minimum Daily Average: 0.0 ppb on Aug 13

Maximum Diurnal Average: 1.1 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 24

Monthly Average: 0.37 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 1.0 $P_{99}$ = 4.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.5 | 0.8 | 0.3 | 0.1 | 0.1 | 0.1 | 0.8 | 5.4 | 3.2 | 0.8 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.7 | 0.1 | 0.0 | 0.1 | 0.6 | 5.4 |
| 2-Aug | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.8 | 4.4 | 5.6 | 2.0 | 1.2 | 0.7 | 2.9 | 2.1 | 1.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 5.6 |
| 5-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 8-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 11-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 12-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 13-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 0.0 | 2.9 | 1.4 | 0.5 | 0.0 | 0.1 | 0.1 | 0.2 | 0.5 | 0.5 | 0.3 | 0.2 | 0.3 | 2.9 |
| 15-Aug | 0.1 | 0.1 | 0.1 | 0.5 | Z | 1.1 | 2.1 | 1.6 | 0.9 | 0.8 | 0.7 | 0.8 | 2.7 | 2.1 | 0.8 | 1.0 | 1.8 | 2.4 | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.9 | 2.7 |
| 16-Aug | 0.4 | 0.7 | 0.6 | 0.4 | 0.2 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 17-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 3.0 | 4.2 | 4.0 | 1.0 | 0.6 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 1.4 | 3.8 | 1.7 | 0.4 | 0.2 | 0.1 | 0.1 | 1.0 | 4.2 |
| 18-Aug | 0.1 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 1.2 | 2.4 | 4.5 | 1.3 | 1.0 | 0.8 | 3.3 | 0.9 | 0.3 | 0.5 | 0.5 | 0.5 | 0.9 | 4.5 |
| 19-Aug | 0.5 | 0.6 | Z | 0.4 | 0.3 | 0.5 | 1.2 | 2.2 | 7.7 | 3.4 | 3.9 | 1.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 1.0 | 7.7 |
| 20-Aug | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 1.0 | 1.7 | 3.5 | 3.2 | 1.5 | 1.5 | 1.2 | 0.2 | 0.4 | 0.6 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.7 | 3.5 |
| 22-Aug | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | Z | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 | 0.8 |
| 23-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 3.6 | 8.3 | 2.3 | 0.7 | 0.4 | 0.5 | 0.4 | 0.3 | 0.2 | 1.5 | 1.3 | 0.8 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 1.0 | 8.3 |
| 24-Aug | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 25-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 26-Aug | 0.1 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 |
| 27-Aug | 0.4 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.4 | 0.6 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.3 | 0.2 | 0.3 | 0.6 |
| 28-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.7 | 0.4 | 0.5 | 2.3 | 4.2 | 1.2 | 0.6 | 0.5 | 0.5 | 1.4 | 1.1 | 0.6 | 0.7 | 4.2 |
| 29-Aug | Z | 3.3 | 2.1 | 1.3 | 1.4 | 1.2 | 1.3 | 1.0 | 1.6 | 3.5 | 3.3 | 2.1 | 1.7 | 1.5 | 1.7 | 1.2 | 1.0 | 1.0 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 1.4 | 3.5 |
| 30-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.3 | 0.5 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.5 |
| 31-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 1.3 | 1.9 | 1.4 | 0.5 | 0.1 | 0.0 | 0.0 | 0.3 | 1.9 |
| | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.7 | 1.1 | 0.6 | 0.5 | 0.3 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | Diurnal Average | |
| | 0.5 | 3.3 | 2.1 | 1.3 | 1.4 | 1.2 | 3.0 | 4.4 | 8.3 | 3.5 | 3.9 | 2.1 | 5.4 | 3.2 | 4.5 | 2.3 | 4.2 | 2.4 | 3.8 | 1.7 | 0.7 | 1.4 | 1.1 | 0.6 | Diurnal Maximum | |

Z - zerospan C - Calibration

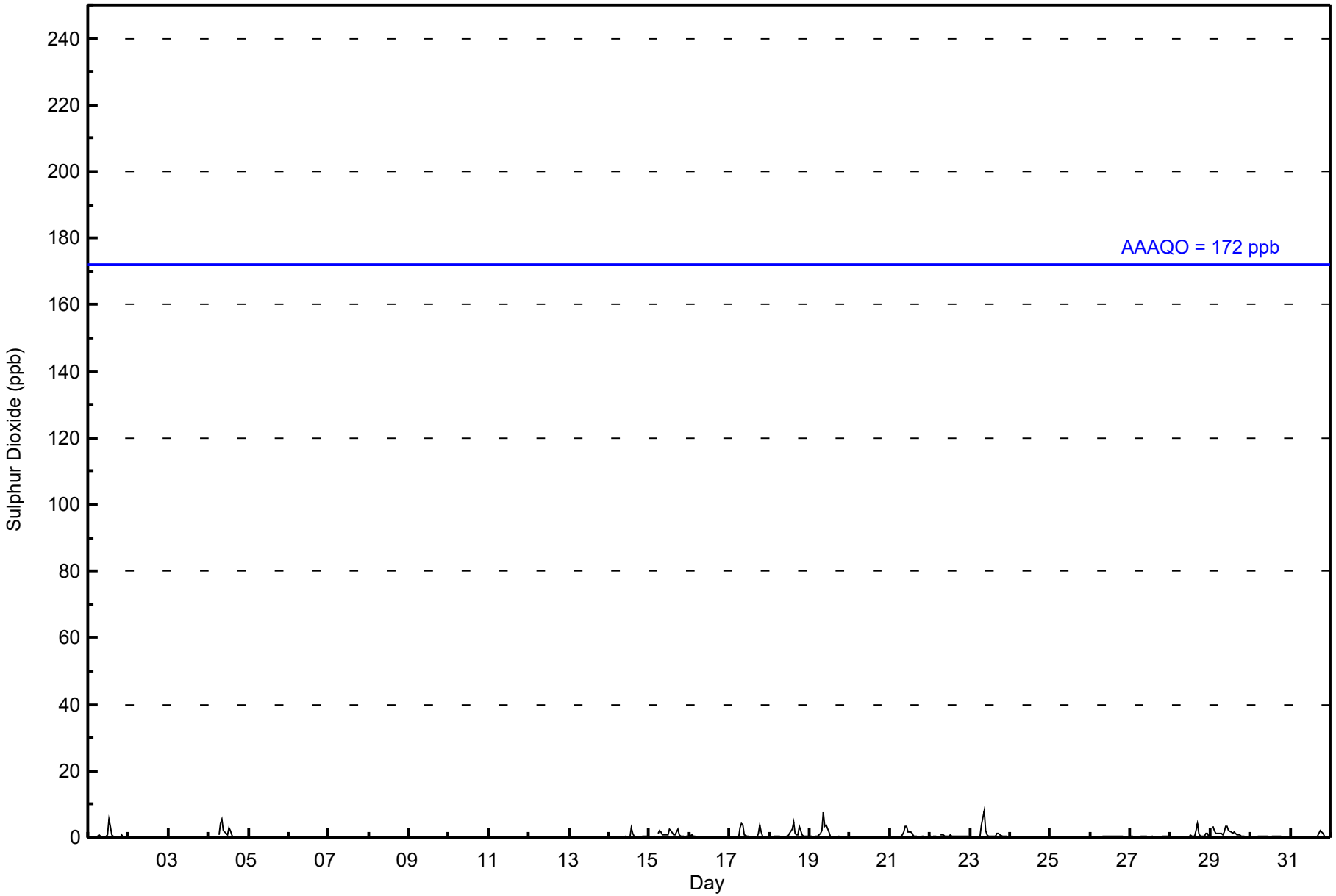
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Firebag - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 710 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Firebag - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 116 | 45 | 23 | 10 | 2 | 9 | 14 | 23 | 54 | 65 | 58 | 65 | 31 | 29 | 54 | 112 | 710 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 116 | 45 | 23 | 10 | 2 | 9 | 14 | 23 | 54 | 65 | 58 | 65 | 31 | 29 | 54 | 112 | 710 |

Total Number of Valid Hours: 710

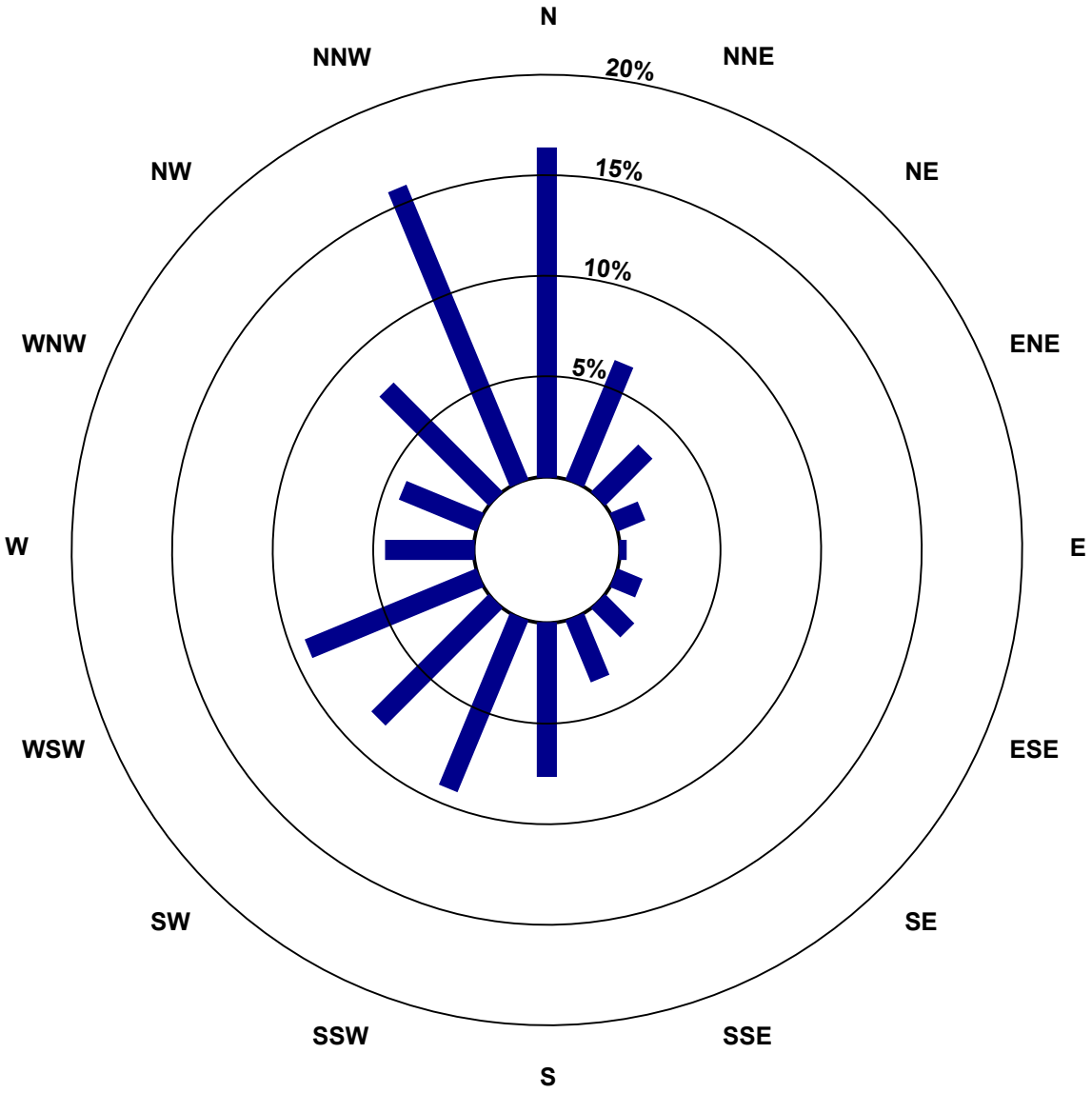
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Firebag




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

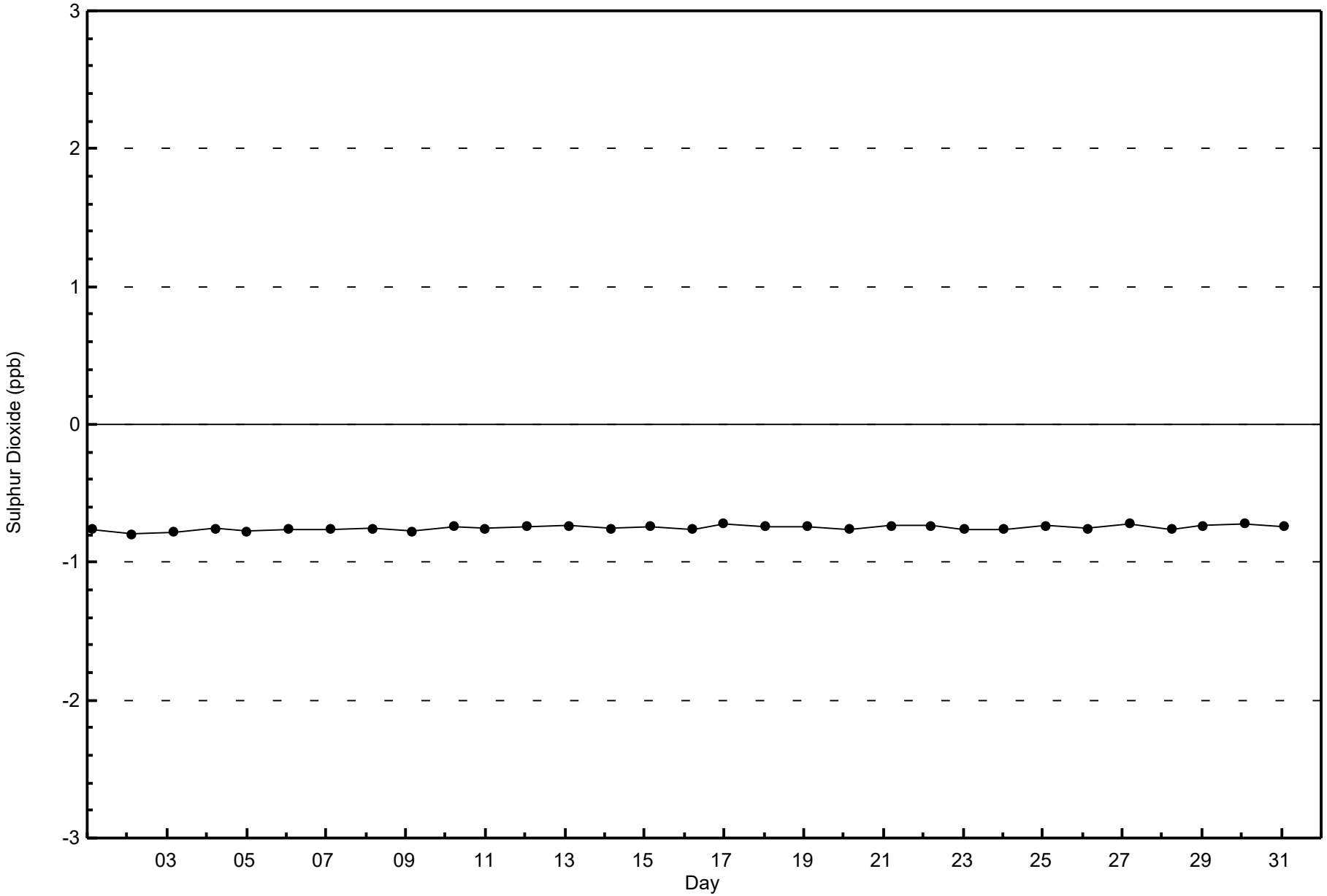
Total Number of Valid Hours: 710

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Firebag - August 2026**

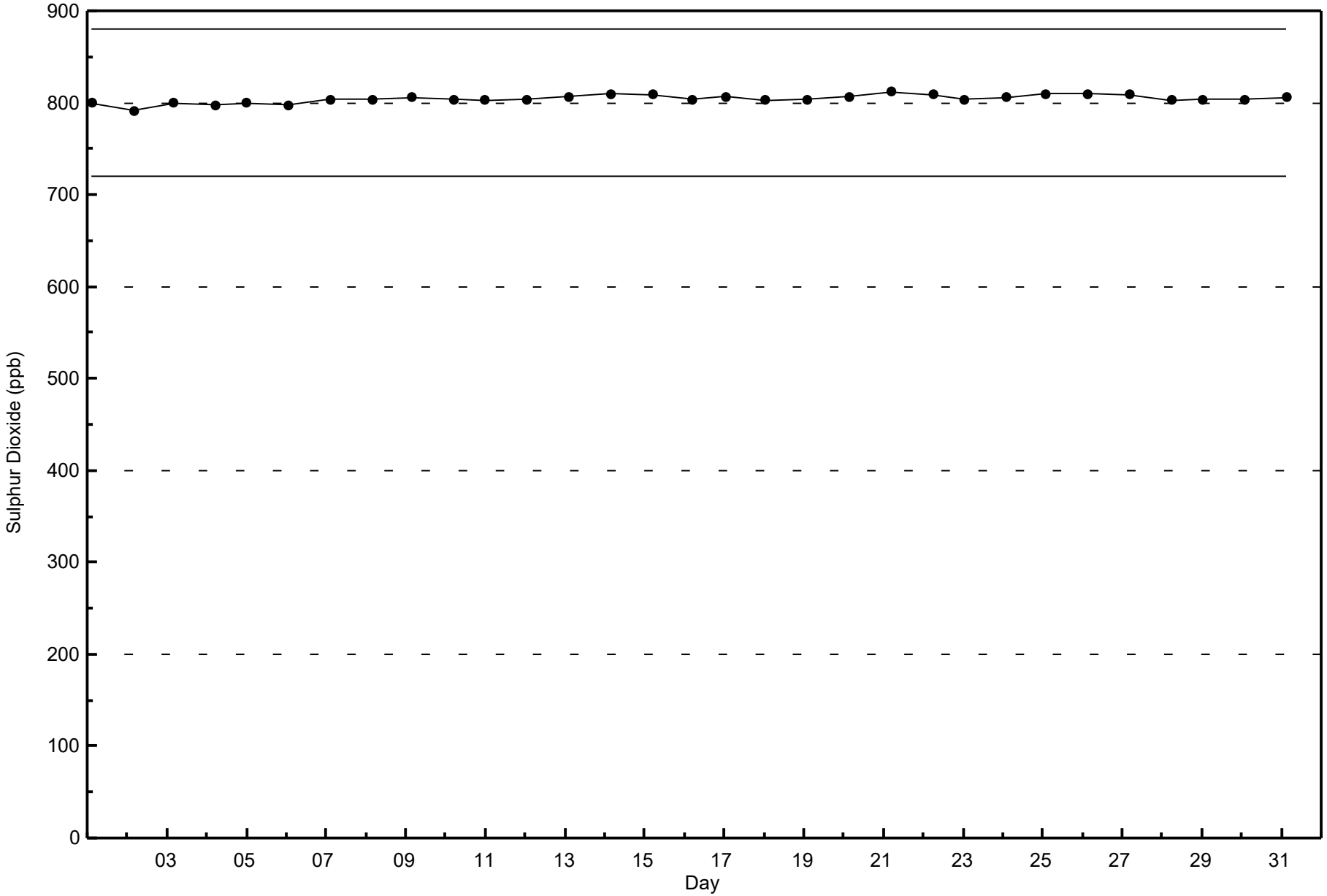


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Firebag - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Firebag - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.5 ppb on Aug 25 22:00

Maximum Daily Average: 0.6 ppb on Aug 19

Minimum Value: 0.0 ppb on Aug 12 14:00

Minimum Daily Average: 0.1 ppb on Aug 13

Maximum Diurnal Average: 0.3 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 16

Monthly Average: 0.21 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 0.4 $P_{99}$ = 1.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.9 | 0.1 | 0.2 | 0.9 |
| 2-Aug | 0.4 | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 |
| 3-Aug | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 4-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.3 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.6 |
| 5-Aug | 0.3 | Z | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 6-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 8-Aug | 0.4 | 0.4 | 0.4 | 0.4 | Z | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 |
| 9-Aug | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | Z | 0.7 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.7 |
| 10-Aug | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.4 |
| 11-Aug | 0.3 | Z | 0.3 | 0.3 | 0.5 | 0.4 | 0.5 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.2 | 0.5 |
| 12-Aug | 0.3 | 0.5 | Z | 0.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.5 |
| 13-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.6 | 0.9 | 0.6 | 0.2 | 0.2 | 0.9 |
| 15-Aug | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | Z | 0.6 | 0.4 | 0.1 | 0.2 | 0.2 | 0.3 | 0.6 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.5 | 0.1 | 0.3 | 0.5 | 0.3 | 0.6 |
| 16-Aug | Z | 1.2 | 0.9 | 0.8 | 0.5 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 1.2 |
| 17-Aug | 0.4 | Z | 0.7 | 1.0 | 0.5 | 0.9 | 1.6 | 1.0 | 0.7 | 0.3 | 0.3 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 1.6 |
| 18-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 0.4 | 0.3 | 1.0 | 0.2 | 1.0 |
| 19-Aug | 1.0 | 0.9 | 1.1 | Z | 1.2 | 1.1 | 0.7 | 0.9 | 1.0 | 0.4 | 0.6 | 0.9 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 1.2 |
| 20-Aug | 0.6 | 0.5 | 0.4 | 0.4 | Z | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| 21-Aug | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | Z | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 22-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| 23-Aug | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 |
| 24-Aug | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.1 | 0.3 |
| 25-Aug | 0.5 | 0.3 | 0.2 | Z | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | C | C | C | C | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 2.5 | 0.3 | 0.2 | 0.4 | 2.5 |
| 26-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 28-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.3 | 0.1 | 0.3 | 0.2 | 0.4 | 0.3 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 |
| 29-Aug | 0.6 | Z | 0.3 | 0.3 | 0.3 | 0.7 | 0.7 | 0.7 | 0.3 | 0.5 | 0.4 | 0.6 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 |
| 30-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 31-Aug | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | Diurnal Average | |
| | 1.0 | 1.2 | 1.1 | 1.0 | 1.2 | 1.1 | 1.6 | 1.0 | 1.0 | 0.5 | 0.6 | 0.9 | 0.6 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 2.5 | 0.9 | 1.0 | Diurnal Maximum | |

Z - zerospan C - Calibration

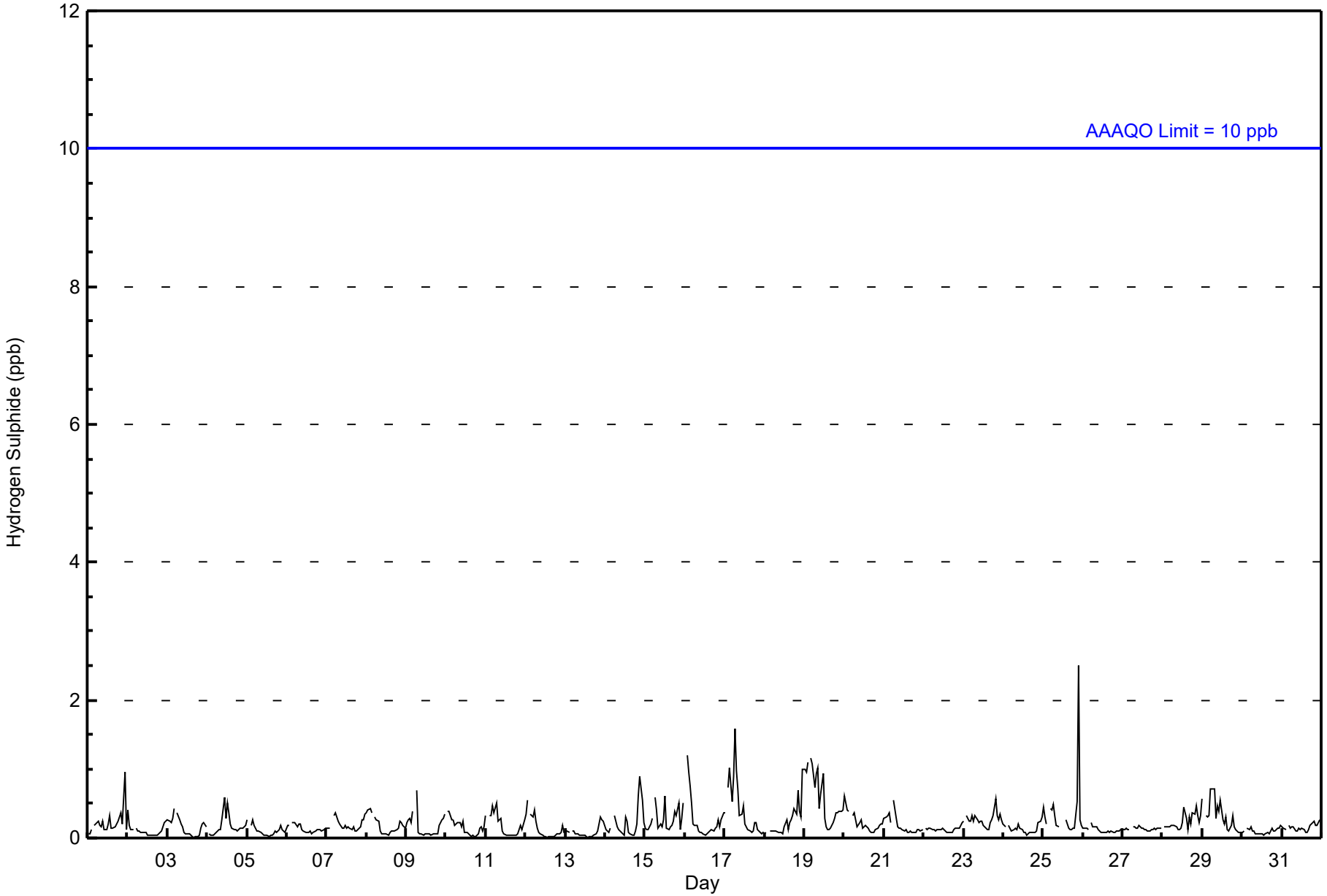
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Firebag - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 709 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Firebag - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 117 | 45 | 25 | 10 | 2 | 8 | 14 | 21 | 56 | 64 | 56 | 66 | 32 | 29 | 48 | 116 | 709 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 117 | 45 | 25 | 10 | 2 | 8 | 14 | 21 | 56 | 64 | 56 | 66 | 32 | 29 | 48 | 116 | 709 |

Total Number of Valid Hours: 709

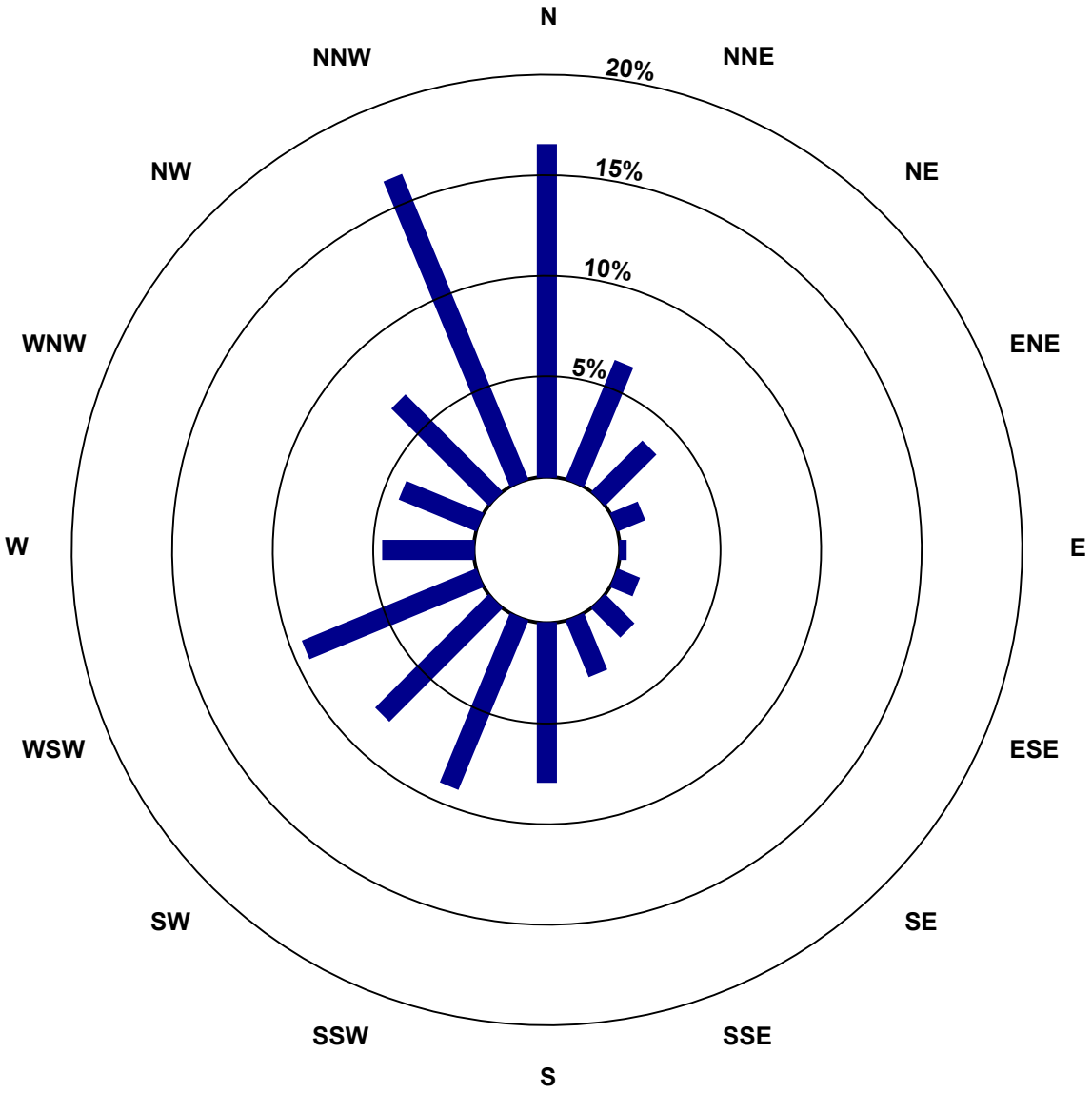
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Firebag




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

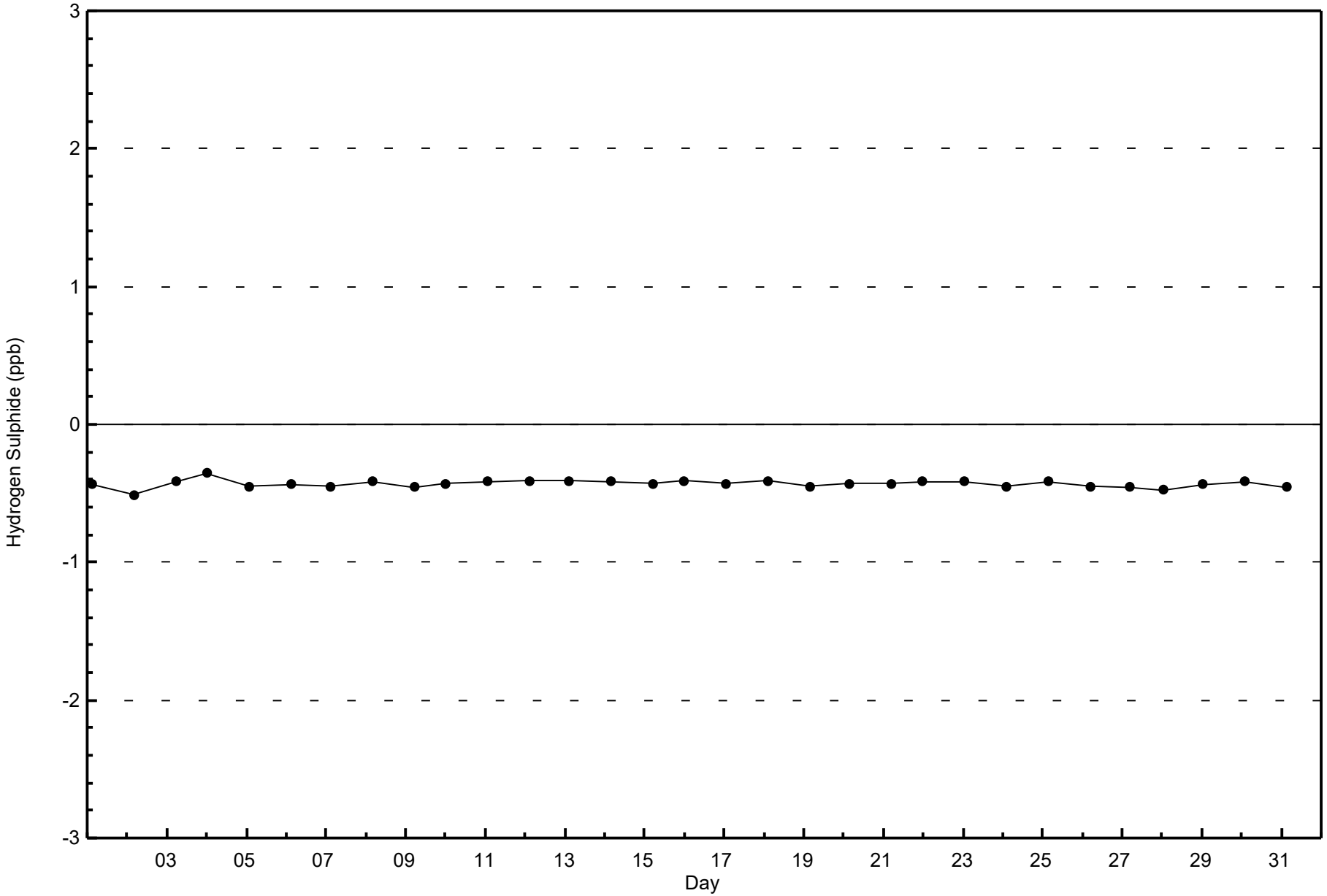
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Firebag - August 2026**

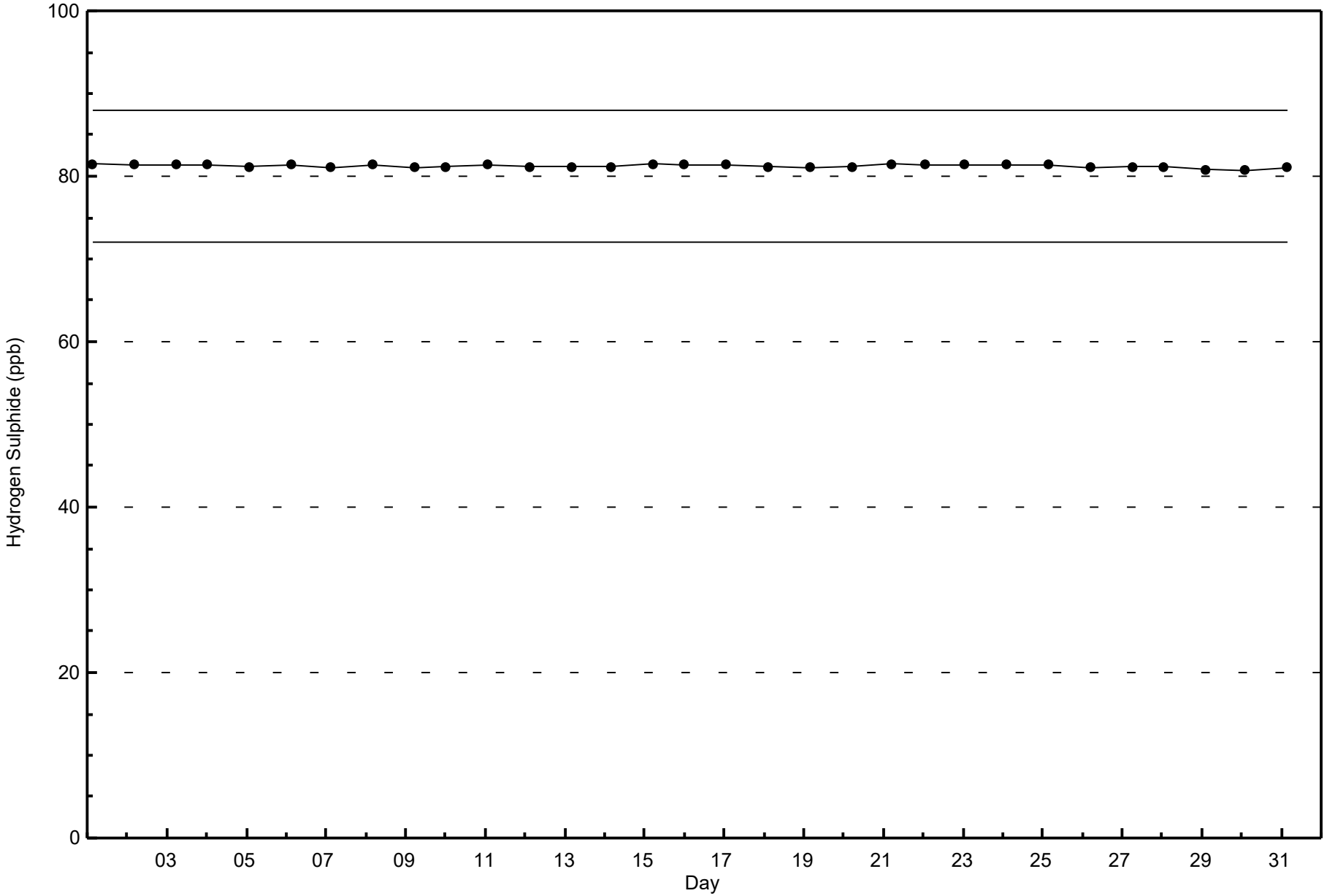


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Firebag - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Hydrocarbons (THC) - ppm

## Firebag - August 2026

Maximum Value: 3.2 ppm on Aug 20 05:00

Maximum Daily Average: 2.4 ppm on Aug 10

Minimum Value: 2.0 ppm on Aug 26 16:00

Minimum Daily Average: 2.1 ppm on Aug 27

Maximum Diurnal Average: 2.4 ppm at hour 6

Minimum Diurnal Average: 2.1 ppm at hour 16

Monthly Average: 2.25 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.1 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 3.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.4 | 2.3 | Z | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 |
| 2-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 |
| 3-Aug | 2.2 | 2.2 | 2.1 | 2.2 | Z | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.8 | 2.9 | 2.8 | 2.3 | 2.9 |
| 4-Aug | 2.6 | 2.3 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 |
| 5-Aug | Z | 2.2 | 2.2 | 2.4 | 2.4 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 |
| 6-Aug | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 |
| 7-Aug | 2.2 | 2.3 | Z | 2.4 | 2.5 | 2.6 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.6 |
| 8-Aug | 2.4 | 2.4 | 2.3 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 2.5 | 2.3 | 2.5 |
| 9-Aug | 2.5 | 2.6 | 2.6 | 2.5 | Z | 2.6 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.6 | 3.0 | 3.0 | 2.4 | 3.0 |
| 10-Aug | 3.1 | 3.1 | 2.9 | 2.7 | 2.7 | Z | 2.9 | 2.6 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 3.1 |
| 11-Aug | Z | 2.8 | 2.7 | 2.7 | 2.7 | 2.7 | 2.9 | 2.4 | 2.4 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.9 |
| 12-Aug | 2.4 | Z | 2.6 | 2.5 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.3 | 2.3 | 2.6 |
| 13-Aug | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.5 | 2.6 | 2.4 | 2.2 | 2.6 |
| 14-Aug | 2.2 | 2.4 | 2.4 | Z | 2.6 | 2.7 | 2.7 | 2.6 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.4 | 2.3 | 2.3 | 2.7 |
| 15-Aug | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.3 | 2.5 |
| 16-Aug | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.3 | 2.4 | 2.6 | 2.3 | 2.6 |
| 17-Aug | Z | 2.4 | 2.4 | 2.5 | 2.8 | 3.0 | 2.7 | 2.4 | 2.3 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 3.0 |
| 18-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 |
| 19-Aug | 2.3 | 2.4 | Z | 2.6 | 2.8 | 2.6 | 2.5 | 2.5 | 2.3 | 2.3 | 2.4 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.4 | 2.6 | 2.5 | 2.3 | 2.8 |
| 20-Aug | 2.5 | 2.7 | 2.9 | Z | 3.2 | 2.8 | 2.8 | 2.9 | 2.2 | 2.2 | 2.3 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.4 | 3.2 |
| 21-Aug | 2.7 | 2.8 | 3.1 | 3.2 | Z | 2.7 | 2.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 3.2 |
| 22-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 23-Aug | Z | 2.3 | 2.4 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 |
| 24-Aug | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | C | C | C | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 | 2.3 | 2.5 | 2.1 | 2.5 |
| 25-Aug | 2.9 | 2.5 | Z | 2.6 | 2.5 | 2.7 | 2.7 | 2.6 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 | 2.3 | 2.3 | 2.3 | 2.9 |
| 26-Aug | 2.4 | 2.3 | 2.2 | Z | 2.4 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.4 |
| 27-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 28-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 |
| 29-Aug | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.3 |
| 30-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.1 | 2.4 |
| 31-Aug | 2.5 | 2.4 | Z | 2.2 | 2.2 | 2.4 | 2.4 | 2.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.3 | 2.3 | 2.5 | 2.9 | 2.3 | 2.9 |
| | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | Diurnal Average | |
| | 3.1 | 3.1 | 3.1 | 3.2 | 3.2 | 3.0 | 2.9 | 2.9 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.4 | 2.8 | 3.0 | 3.0 | Diurnal Maximum | |

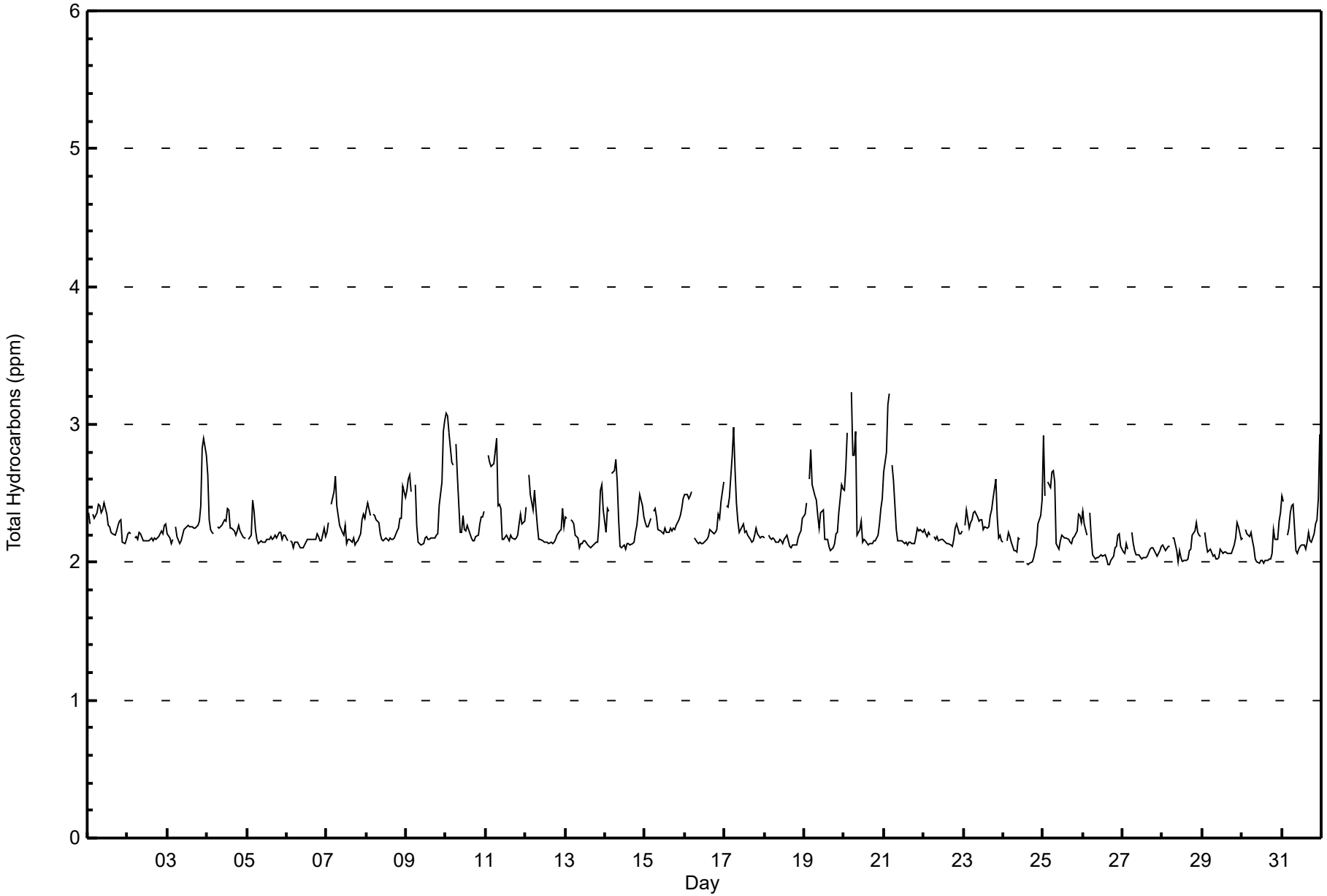
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Firebag - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 42 | 5.92 | 5.92 |
| 2.1 - 3.0 | 663 | 93.38 | 99.30 |
| 3.1 - 10.0 | 5 | 0.70 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Firebag - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 4 | 1 | 4 | 0 | 0 | 0 | 0 | 3 | 6 | 6 | 7 | 10 | 0 | 0 | 0 | 1 | 42 |
| 2.1 - 3.0 | 112 | 44 | 19 | 10 | 2 | 9 | 14 | 20 | 46 | 59 | 51 | 53 | 31 | 28 | 54 | 111 | 663 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 5 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 116 | 45 | 23 | 10 | 2 | 9 | 14 | 23 | 54 | 65 | 58 | 65 | 31 | 29 | 54 | 112 | 710 |

Total Number of Valid Hours: 710

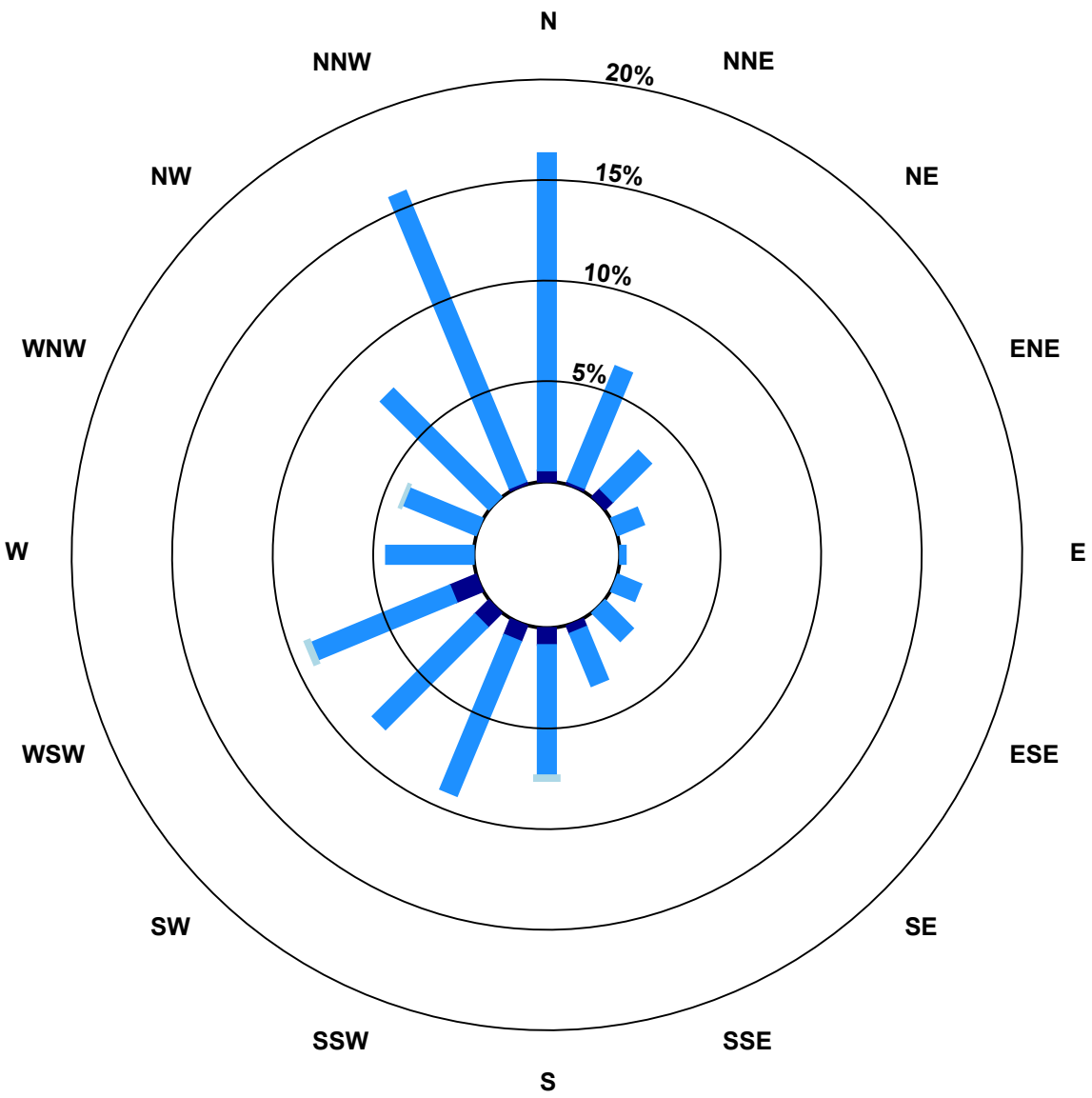
Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Total Hydrocarbons (THC) - ppm

## Firebag




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

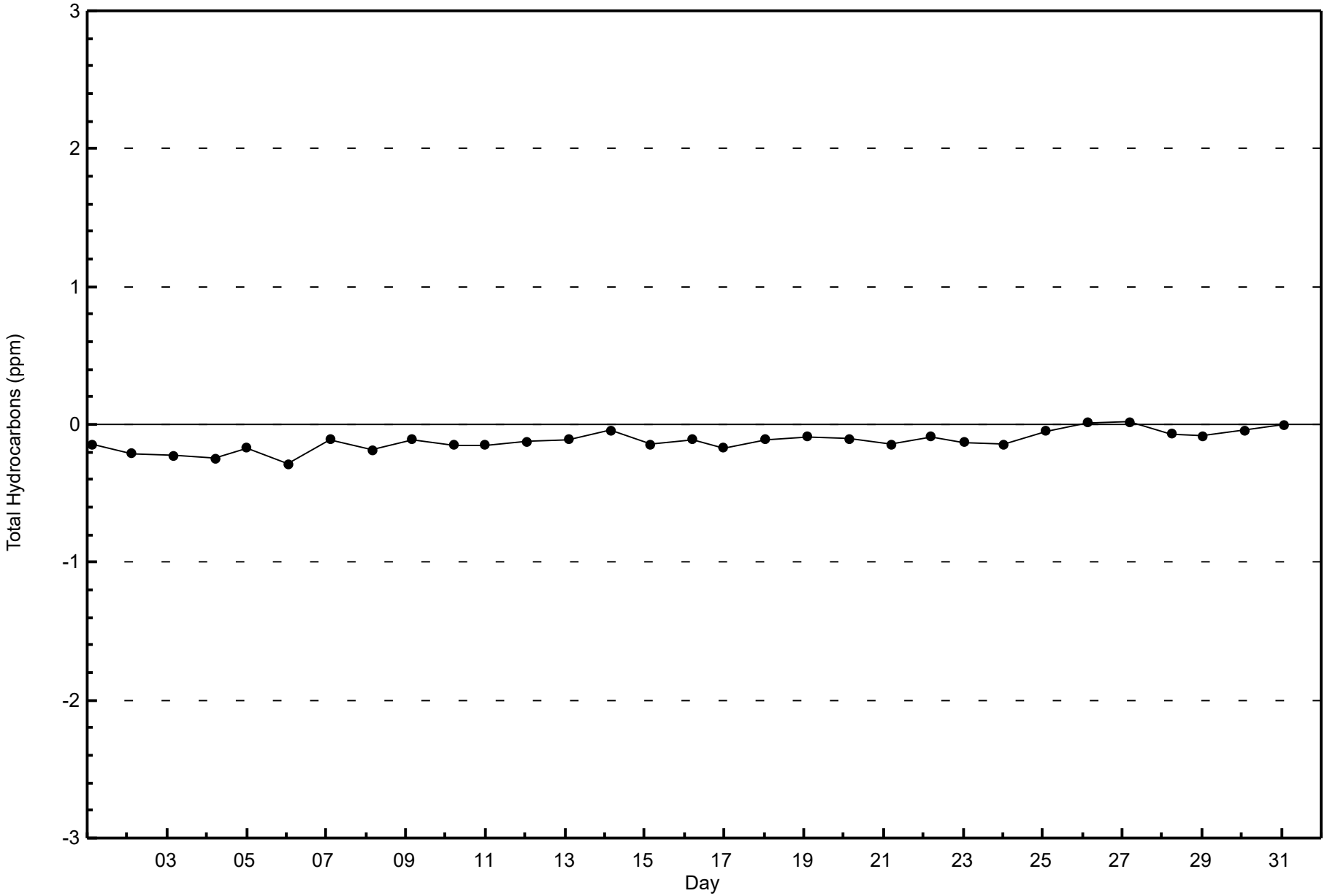
Total Number of Valid Hours: 710

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Firebag - August 2026**

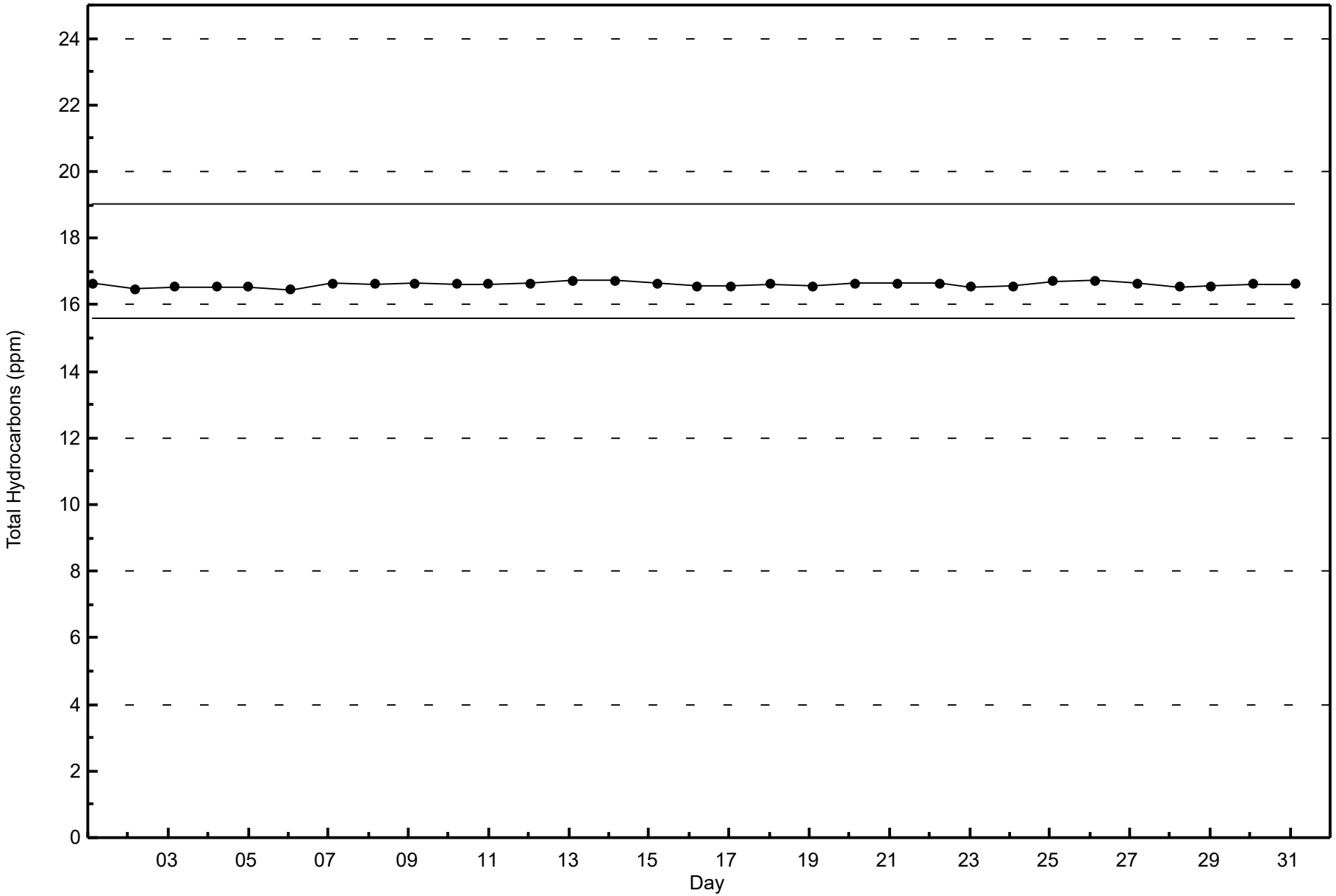


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Firebag - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Firebag - August 2026

Maximum Value: 10.4 ppb on Aug 21 07:00

Maximum Daily Average: 1.4 ppb on Aug 7

Minimum Value: 0.0 ppb on Aug 19 21:00

Minimum Daily Average: 0.0 ppb on Aug 13

Maximum Diurnal Average: 1.6 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 24

Monthly Average: 0.43 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 0.9 $P_{99}$ = 5.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 2.0 | 1.3 | 0.3 | 7.5 | 0.2 | 0.2 | 0.2 | 0.6 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 7.5 |
| 2-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 3-Aug | 0.1 | 0.0 | Z | 0.0 | 0.1 | 0.6 | 0.5 | 0.3 | 1.0 | 0.7 | 0.4 | 0.4 | 0.5 | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.1 | 0.3 | 1.0 |
| 4-Aug | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.4 | 0.3 | 1.4 | 1.4 | 1.1 | 0.8 | 0.3 | 0.7 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 1.4 |
| 5-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.1 | 0.1 | 0.3 | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.6 | 0.5 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.2 | 0.4 | 0.5 | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 7-Aug | Z | 0.1 | 0.3 | 1.0 | 1.9 | 5.1 | 5.0 | 5.0 | 4.4 | 2.3 | 0.9 | 1.0 | 0.9 | 1.5 | 0.6 | 0.3 | 0.7 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 1.4 | 5.1 |
| 8-Aug | 0.3 | Z | 0.0 | 0.4 | 0.3 | 0.6 | 1.5 | 1.7 | 0.6 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 0.9 | 0.6 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.4 | 1.7 |
| 9-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 10-Aug | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.1 | 0.1 | 0.5 | 0.5 | 0.8 | 3.8 | 0.4 | 0.4 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 3.8 |
| 11-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 2.1 | 4.5 | 3.4 | 4.6 | 4.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 4.6 |
| 12-Aug | 0.0 | 0.7 | 0.1 | 0.0 | 0.5 | Z | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 1.0 |
| 13-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 |
| 14-Aug | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 2.1 | 0.7 | 0.2 | 0.1 | 1.4 | 0.3 | 0.1 | 1.0 | 0.9 | 0.4 | 0.2 | 0.2 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 2.1 |
| 15-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.6 | 1.9 | 1.7 | 0.9 | 0.8 | 0.6 | 0.5 | 0.7 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 1.9 |
| 16-Aug | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.4 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.8 | Z | 5.6 | 3.8 | 5.1 | 3.2 | 0.7 | 0.7 | 0.5 | 0.3 | 0.7 | 0.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 1.0 | 5.6 |
| 18-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | Z | 2.0 | 1.8 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.5 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 2.0 |
| 19-Aug | Z | 0.1 | 0.1 | 0.1 | 1.6 | 0.7 | 1.1 | 1.4 | 2.6 | 2.1 | 2.8 | 2.8 | 0.5 | 1.0 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 2.8 |
| 20-Aug | 1.6 | Z | 0.2 | 0.1 | 0.3 | 0.2 | 0.6 | 1.0 | 0.8 | 3.2 | 3.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 3.2 |
| 21-Aug | 0.1 | 0.1 | Z | 0.1 | 0.0 | 4.8 | 10.4 | 2.5 | 0.7 | 0.7 | 0.5 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.9 | 10.4 |
| 22-Aug | 0.0 | 0.0 | 0.0 | Z | 0.9 | 1.9 | 0.7 | 0.4 | 0.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.9 |
| 23-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 8.9 | 0.5 | 1.5 | 1.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 8.9 |
| 24-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.3 | 0.3 | 2.1 | 1.1 | 0.7 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 2.1 |
| 25-Aug | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 3.2 | 7.4 | 0.5 | 0.1 | 0.1 | 0.2 | 0.5 | 0.6 | 0.7 | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.7 | 7.4 |
| 26-Aug | 0.1 | Z | 0.2 | 0.1 | 0.6 | 5.5 | 1.0 | 0.2 | 0.1 | C | C | C | C | C | C | 0.1 | 0.3 | 1.4 | 0.6 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | -- | 5.5 |
| 27-Aug | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.5 | 0.9 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.7 | 0.2 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.9 |
| 28-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.5 | 0.6 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.0 | 0.2 | 0.6 |
| 29-Aug | 0.0 | 0.3 | 0.2 | 0.1 | Z | 0.5 | 0.5 | 0.9 | 1.0 | 1.3 | 1.2 | 0.8 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 1.3 |
| 30-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 1.3 | Z | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 1.3 |
| 31-Aug | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 4.5 | 0.3 | 0.1 | 0.1 | 1.8 | 1.9 | 1.4 | 0.8 | 0.2 | 0.5 | 0.7 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.6 | 4.5 |
| | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 1.5 | 1.6 | 1.3 | 0.9 | 1.0 | 0.7 | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 1.6 | 0.7 | 0.3 | 1.0 | 1.9 | 8.9 | 10.4 | 7.4 | 4.6 | 7.5 | 3.8 | 2.8 | 1.4 | 1.5 | 0.9 | 0.6 | 0.7 | 1.4 | 0.6 | 0.3 | 0.2 | 0.3 | 0.6 | 0.2 | Diurnal Maximum | |

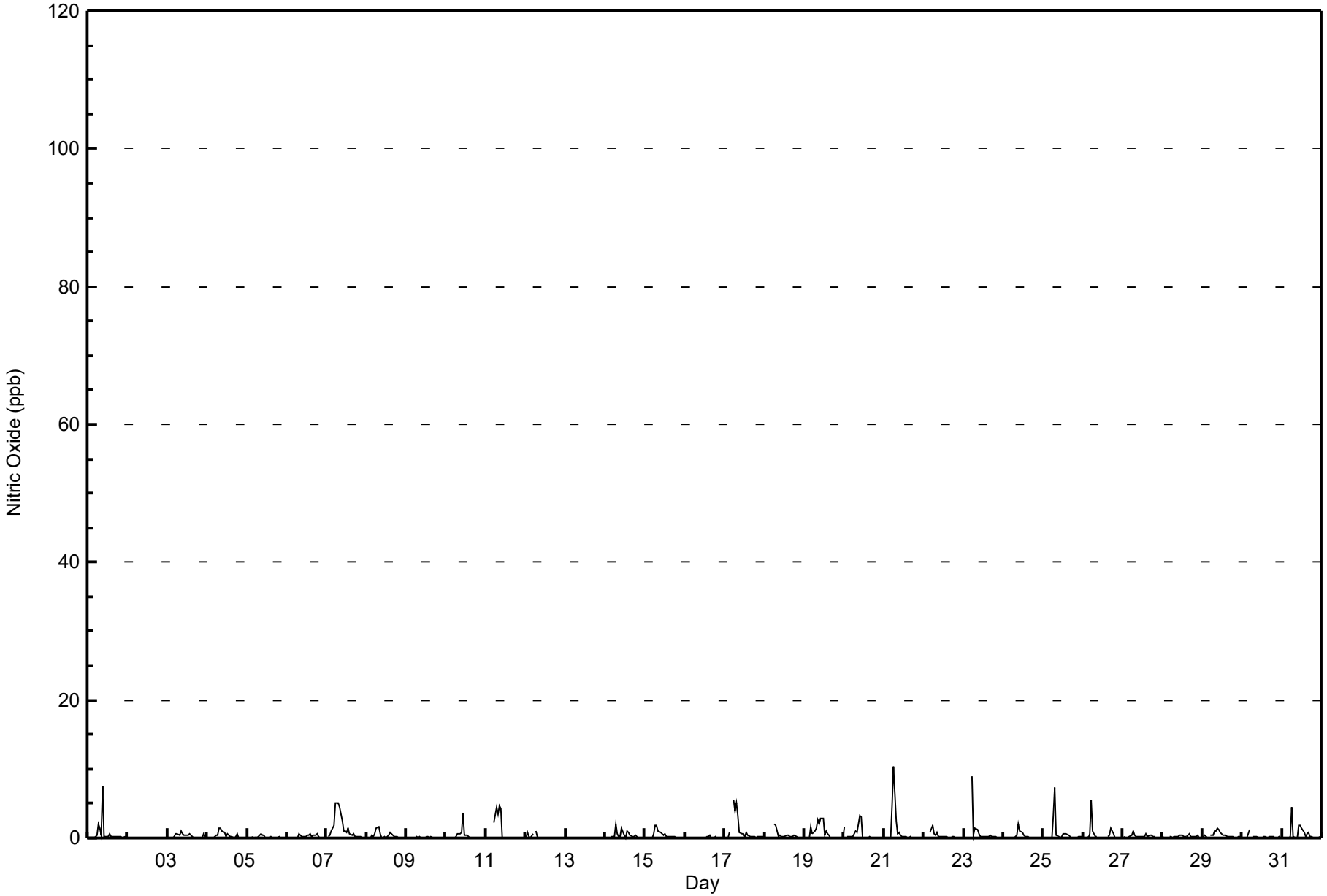
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Firebag - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 707 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Firebag - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 116 | 44 | 26 | 10 | 2 | 9 | 14 | 23 | 52 | 62 | 56 | 64 | 32 | 29 | 51 | 117 | 707 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 116 | 44 | 26 | 10 | 2 | 9 | 14 | 23 | 52 | 62 | 56 | 64 | 32 | 29 | 51 | 117 | 707 |

Total Number of Valid Hours: 707

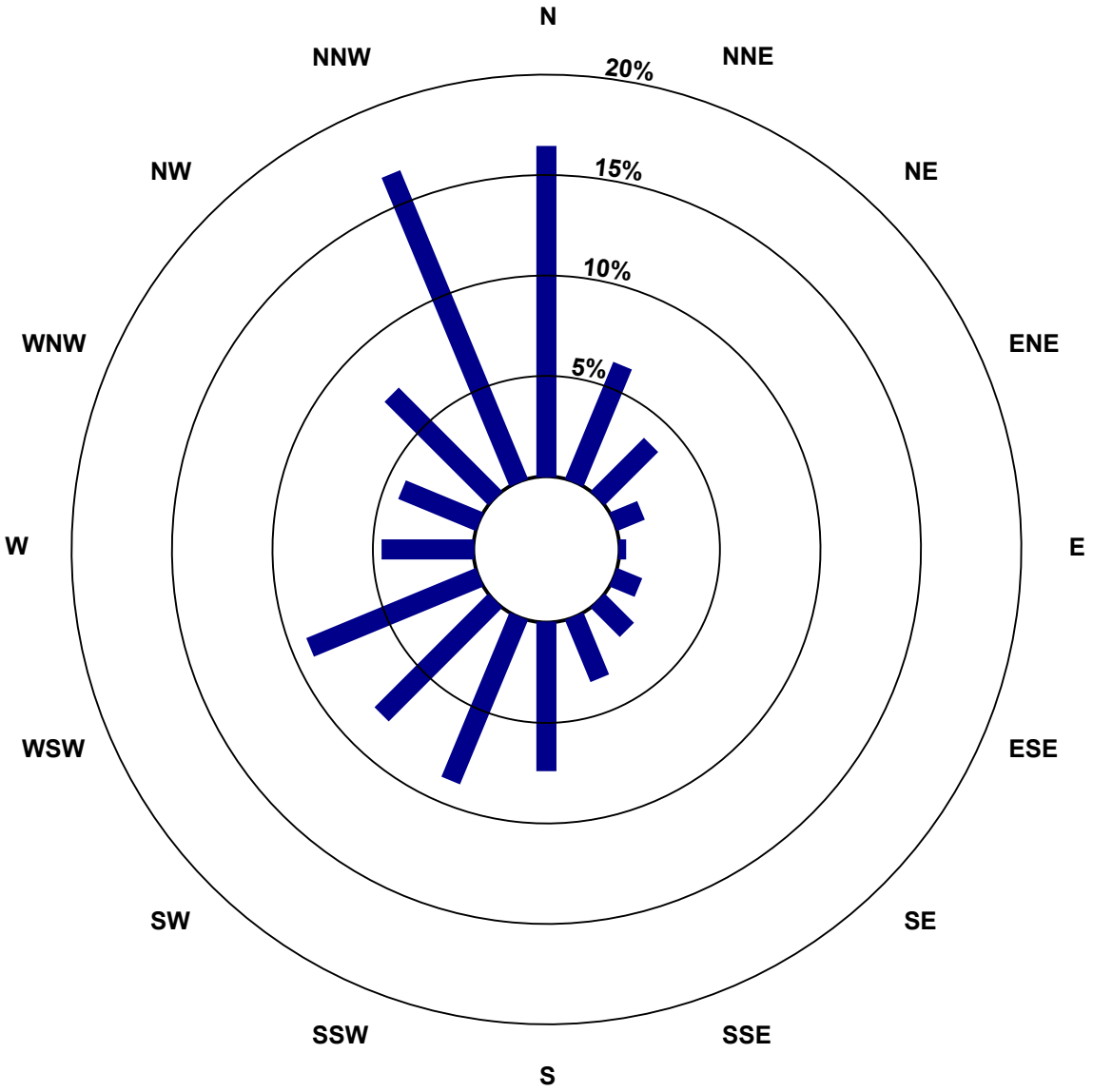
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Firebag




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

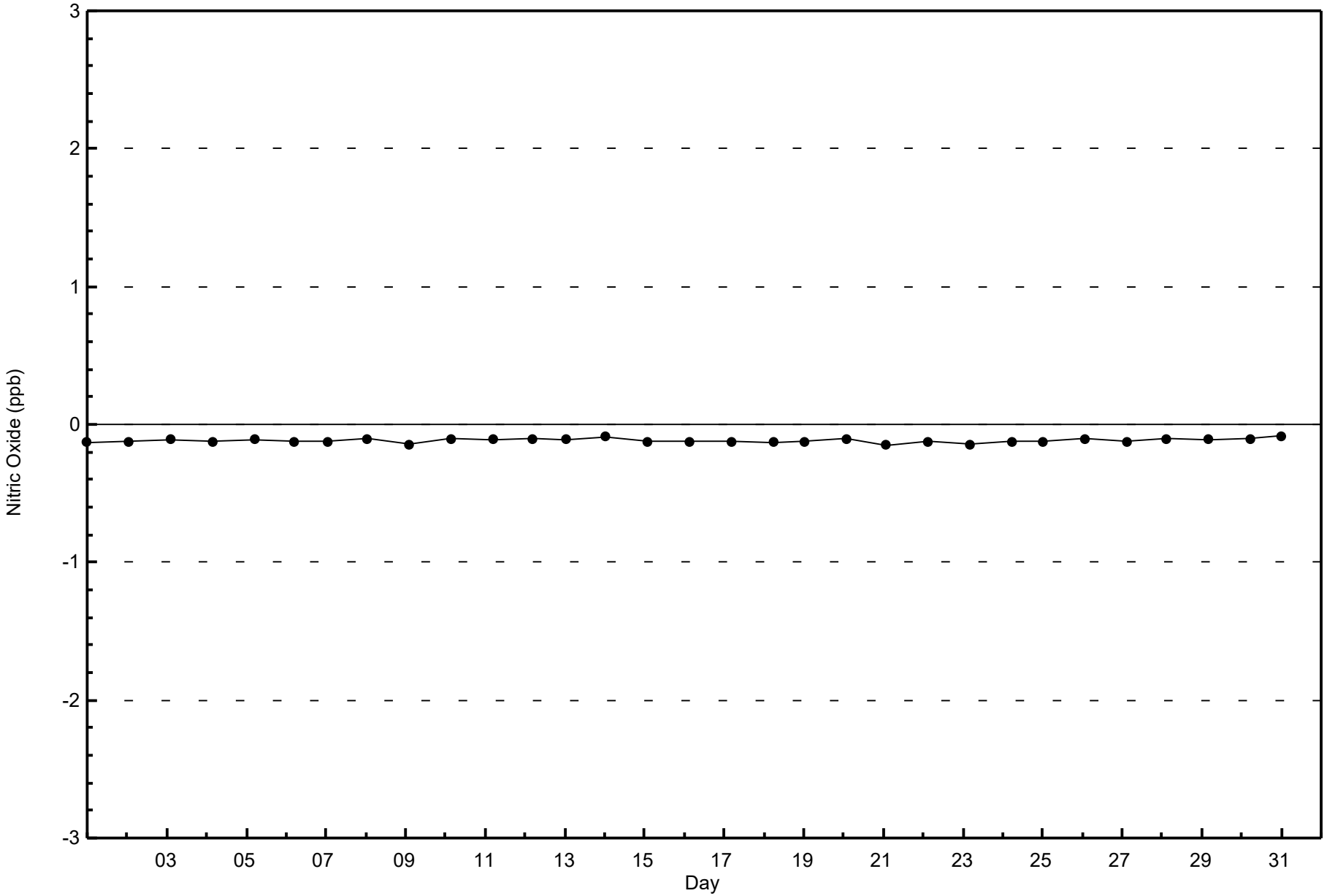
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Firebag - August 2026**

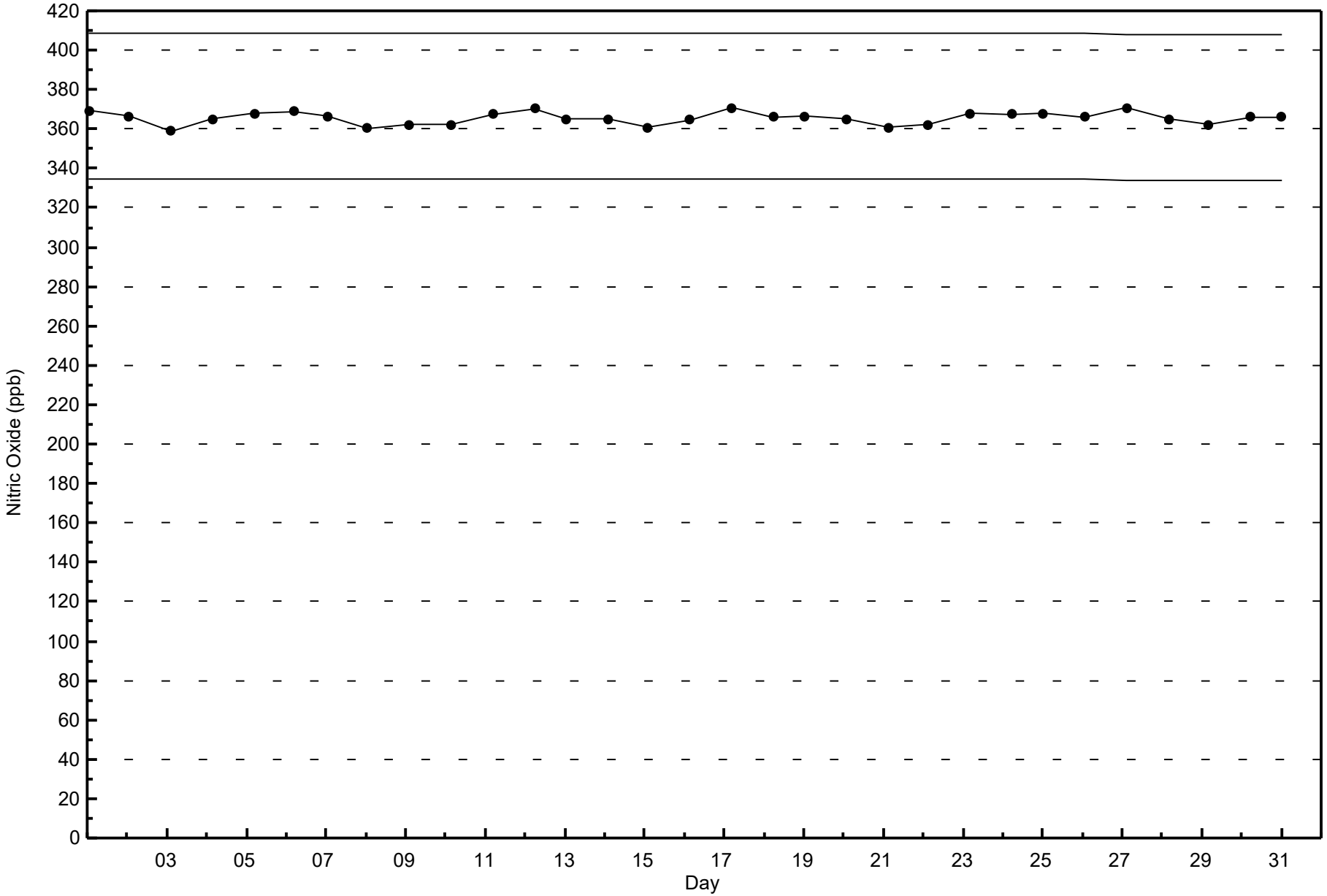


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Firebag - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Firebag - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 15.0 ppb on Aug 20 01:00

Maximum Daily Average: 4.8 ppb on Aug 7

Minimum Value: 0.0 ppb on Aug 12 22:00

Minimum Daily Average: 0.4 ppb on Aug 9

Maximum Diurnal Average: 4.5 ppb at hour 6

Minimum Diurnal Average: 1.0 ppb at hour 16

Monthly Average: 2.03 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.6 Median = 1.2 $Q_3$ = 2.6 $P_{90}$ = 5.0 $P_{99}$ = 11.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.7 | 1.0 | 1.1 | 0.6 | 2.1 | 3.9 | 3.2 | 1.8 | 4.7 | 1.2 | 0.7 | 1.0 | 1.9 | 0.7 | 0.7 | 0.5 | 0.6 | 0.8 | 0.7 | 1.4 | 2.1 | 3.2 | 2.2 | 1.6 | 4.7 |
| 2-Aug | 2.6 | Z | 1.4 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1.0 | 2.0 | 3.2 | 4.0 | 0.8 | 4.0 |
| 3-Aug | 3.3 | 3.2 | Z | 2.5 | 4.7 | 5.0 | 2.3 | 0.9 | 1.8 | 1.6 | 1.1 | 0.9 | 1.1 | 1.2 | 0.7 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 1.1 | 3.3 | 2.2 | 1.7 | 5.0 |
| 4-Aug | 1.1 | 0.6 | 0.8 | Z | 0.8 | 3.3 | 1.5 | 2.6 | 3.0 | 2.8 | 2.4 | 1.3 | 2.7 | 2.0 | 1.1 | 1.9 | 1.2 | 1.9 | 4.1 | 1.2 | 2.5 | 1.5 | 1.6 | 1.4 | 1.9 | 4.1 |
| 5-Aug | 2.4 | 0.5 | 3.2 | 11.8 | Z | 1.6 | 0.3 | 0.7 | 1.3 | 0.9 | 0.8 | 0.3 | 0.2 | 0.3 | 0.9 | 0.4 | 0.2 | 0.7 | 0.6 | 2.7 | 2.8 | 0.4 | 2.0 | 1.0 | 1.6 | 11.8 |
| 6-Aug | 2.2 | 1.7 | 1.4 | 1.3 | 1.3 | Z | 0.4 | 1.8 | 1.1 | 0.3 | 0.6 | 0.4 | 0.7 | 0.9 | 0.9 | 0.5 | 1.0 | 1.4 | 2.6 | 0.4 | 0.2 | 1.9 | 4.9 | 1.5 | 1.3 | 4.9 |
| 7-Aug | Z | 5.9 | 8.5 | 12.8 | 12.3 | 11.1 | 7.1 | 6.1 | 4.0 | 2.9 | 3.4 | 4.4 | 1.8 | 2.5 | 1.3 | 1.1 | 2.7 | 0.6 | 1.6 | 1.5 | 5.1 | 6.3 | 5.1 | 3.1 | 4.8 | 12.8 |
| 8-Aug | 9.7 | Z | 6.8 | 9.7 | 9.6 | 5.4 | 4.5 | 3.2 | 0.9 | 0.1 | 0.2 | 0.4 | 0.2 | 0.6 | 1.3 | 1.3 | 1.1 | 1.0 | 0.7 | 0.3 | 1.0 | 1.2 | 0.6 | 0.3 | 2.6 | 9.7 |
| 9-Aug | 0.2 | 0.2 | Z | 0.3 | 0.1 | 0.1 | 0.5 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.6 | 0.6 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.9 | 1.2 | 1.6 | 1.6 | 0.4 | 1.6 |
| 10-Aug | 2.8 | 2.3 | 3.7 | Z | 0.9 | 0.6 | 0.4 | 1.3 | 1.4 | 1.8 | 6.6 | 1.2 | 1.2 | 1.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 1.2 | 6.6 |
| 11-Aug | 0.3 | 0.5 | 3.5 | 6.0 | Z | 13.5 | 9.1 | 7.1 | 7.7 | 6.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 2.4 | 13.5 |
| 12-Aug | 3.4 | 14.6 | 8.6 | 3.8 | 8.4 | Z | 4.3 | 1.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.5 | 2.0 | 14.6 |
| 13-Aug | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.7 | 4.7 | 4.8 | 4.3 | 3.0 | 0.8 | 4.8 |
| 14-Aug | 0.6 | Z | 0.3 | 0.4 | 2.9 | 2.8 | 6.4 | 2.7 | 0.9 | 0.6 | 2.7 | 1.7 | 0.4 | 2.9 | 2.2 | 1.1 | 0.7 | 0.9 | 3.5 | 4.4 | 4.1 | 4.2 | 2.9 | 2.9 | 2.3 | 6.4 |
| 15-Aug | 3.4 | 2.5 | Z | 5.1 | 6.1 | 6.1 | 5.6 | 3.6 | 2.1 | 2.1 | 1.5 | 1.4 | 2.6 | 1.5 | 1.0 | 2.2 | 1.4 | 1.8 | 1.2 | 1.0 | 1.0 | 2.2 | 6.2 | 11.3 | 3.2 | 11.3 |
| 16-Aug | 9.9 | 7.9 | 5.4 | Z | 9.5 | 3.2 | 0.4 | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.2 | 0.5 | 1.0 | 1.9 | 1.1 | 0.5 | 2.2 | 0.5 | 0.8 | 0.9 | 2.8 | 7.2 | 2.5 | 9.9 |
| 17-Aug | 5.5 | 2.9 | 2.8 | 12.5 | Z | 10.3 | 8.7 | 8.3 | 6.1 | 2.3 | 2.3 | 2.0 | 1.2 | 2.5 | 1.8 | 1.2 | 0.8 | 1.0 | 2.8 | 2.6 | 3.6 | 2.7 | 1.8 | 1.8 | 3.8 | 12.5 |
| 18-Aug | 1.3 | 0.7 | 0.7 | 0.9 | 0.7 | Z | 4.6 | 3.0 | 0.7 | 1.0 | 0.8 | 0.8 | 1.3 | 2.0 | 2.3 | 1.0 | 1.2 | 1.2 | 2.9 | 1.6 | 1.0 | 0.9 | 1.1 | 3.4 | 1.5 | 4.6 |
| 19-Aug | Z | 7.5 | 8.3 | 9.0 | 10.4 | 8.3 | 7.0 | 7.2 | 8.0 | 5.3 | 6.4 | 4.7 | 1.5 | 2.7 | 2.5 | 1.8 | 0.7 | 0.6 | 1.1 | 0.9 | 1.0 | 1.6 | 1.2 | 2.7 | 4.4 | 10.4 |
| 20-Aug | 15.0 | Z | 8.5 | 5.6 | 5.0 | 3.3 | 2.9 | 3.1 | 3.3 | 6.2 | 4.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.4 | 2.8 | 15.0 |
| 21-Aug | 2.6 | 6.5 | Z | 5.1 | 2.7 | 11.3 | 13.4 | 5.6 | 2.2 | 2.2 | 1.6 | 1.2 | 1.1 | 1.3 | 0.7 | 0.8 | 1.6 | 0.7 | 0.6 | 1.1 | 0.9 | 0.7 | 0.6 | 0.7 | 2.8 | 13.4 |
| 22-Aug | 0.8 | 0.9 | 0.9 | Z | 3.2 | 4.1 | 2.3 | 2.0 | 2.0 | 1.1 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 | 0.7 | 0.8 | 1.0 | 1.3 | 1.5 | 1.5 | 0.9 | 1.0 | 1.0 | 1.4 | 4.1 |
| 23-Aug | 0.9 | 1.4 | 1.3 | 0.9 | Z | 7.3 | 2.4 | 4.0 | 4.8 | 2.1 | 1.1 | 1.2 | 1.2 | 1.0 | 2.0 | 1.4 | 3.0 | 2.5 | 2.9 | 5.2 | 2.3 | 1.8 | 0.4 | 1.0 | 2.3 | 7.3 |
| 24-Aug | 0.9 | 0.4 | 0.0 | 0.0 | 0.0 | Z | 0.6 | 1.2 | 1.2 | 5.8 | 3.3 | 2.3 | 1.1 | 0.7 | 0.6 | 0.4 | 0.2 | 0.3 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 2.3 | 1.0 | 5.8 |
| 25-Aug | Z | 7.8 | 3.5 | 1.4 | 0.6 | 0.5 | 2.9 | 6.3 | 1.1 | 0.6 | 0.5 | 1.0 | 2.3 | 2.5 | 2.6 | 2.3 | 1.5 | 0.7 | 0.3 | 0.4 | 0.7 | 2.3 | 1.7 | 1.0 | 1.9 | 7.8 |
| 26-Aug | 1.6 | Z | 1.1 | 0.9 | 3.4 | 6.1 | 2.2 | 1.0 | 0.8 | C | C | C | C | C | C | 0.8 | 1.1 | 3.9 | 2.3 | 1.6 | 0.8 | 1.2 | 0.8 | 0.9 | -- | 6.1 |
| 27-Aug | 1.2 | 1.0 | Z | 1.1 | 1.8 | 2.7 | 2.5 | 1.5 | 1.2 | 1.1 | 1.0 | 0.5 | 0.4 | 0.5 | 1.2 | 0.7 | 1.6 | 2.3 | 1.2 | 0.8 | 0.9 | 0.8 | 0.6 | 1.6 | 1.2 | 2.7 |
| 28-Aug | 1.4 | 1.0 | 1.0 | Z | 0.9 | 1.6 | 0.8 | 1.2 | 1.4 | 0.9 | 1.9 | 1.1 | 1.4 | 0.9 | 1.3 | 1.8 | 2.6 | 1.9 | 2.8 | 2.4 | 2.0 | 2.3 | 1.2 | 1.4 | 1.5 | 2.8 |
| 29-Aug | 2.5 | 3.7 | 2.3 | 1.3 | Z | 4.0 | 3.0 | 2.9 | 2.1 | 2.5 | 1.8 | 1.8 | 1.3 | 1.0 | 1.1 | 0.8 | 0.7 | 0.8 | 0.9 | 1.1 | 2.3 | 2.1 | 1.3 | 1.2 | 1.8 | 4.0 |
| 30-Aug | 0.9 | 1.2 | 1.1 | 1.1 | 2.3 | Z | 1.4 | 1.5 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.7 | 1.0 | 0.6 | 0.9 | 1.0 | 1.2 | 2.0 | 1.0 | 0.8 | 1.7 | 1.3 | 1.1 | 2.3 |
| 31-Aug | Z | 0.9 | 0.4 | 0.4 | 1.0 | 1.5 | 5.5 | 0.8 | 0.1 | 0.2 | 2.8 | 2.7 | 2.7 | 2.3 | 1.1 | 2.9 | 4.4 | 2.9 | 3.0 | 3.3 | 3.7 | 2.8 | 7.0 | 4.4 | 2.5 | 7.0 |
| | 3.1 | 3.0 | 2.9 | 3.7 | 3.5 | 4.5 | 3.5 | 2.7 | 2.0 | 1.9 | 1.7 | 1.2 | 1.0 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.4 | 1.3 | 1.6 | 1.7 | 2.0 | 2.2 | Diurnal Average | |
| | 15.0 | 14.6 | 8.6 | 12.8 | 12.3 | 13.5 | 13.4 | 8.3 | 8.0 | 6.4 | 6.6 | 4.7 | 2.7 | 2.9 | 2.6 | 2.9 | 4.4 | 3.9 | 4.1 | 5.2 | 5.1 | 6.3 | 7.0 | 11.3 | Diurnal Maximum | |

Z - zerospan C - Calibration

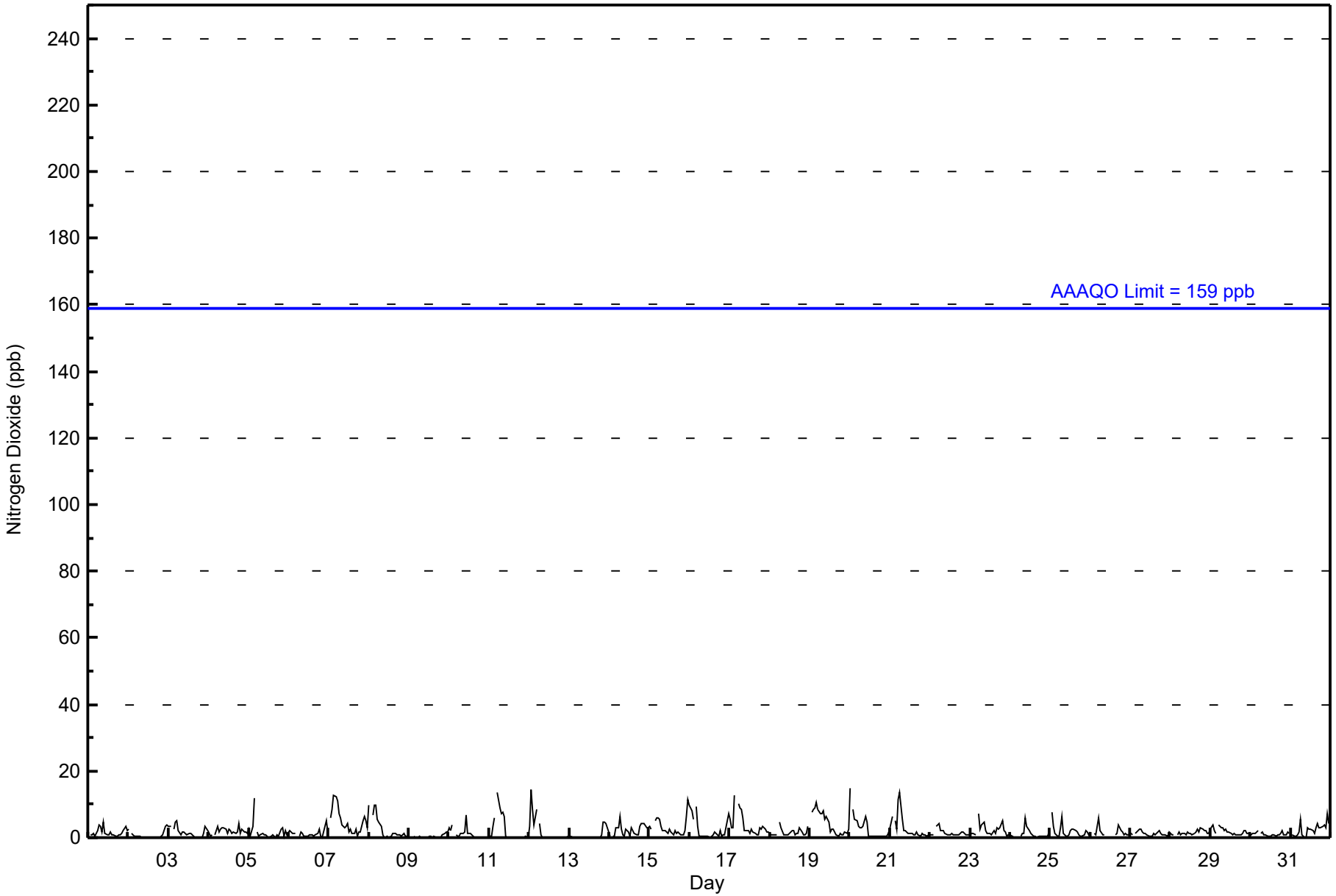
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Firebag - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Firebag - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 707 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Firebag - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 116 | 44 | 26 | 10 | 2 | 9 | 14 | 23 | 52 | 62 | 56 | 64 | 32 | 29 | 51 | 117 | 707 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 116 | 44 | 26 | 10 | 2 | 9 | 14 | 23 | 52 | 62 | 56 | 64 | 32 | 29 | 51 | 117 | 707 |

Total Number of Valid Hours: 707

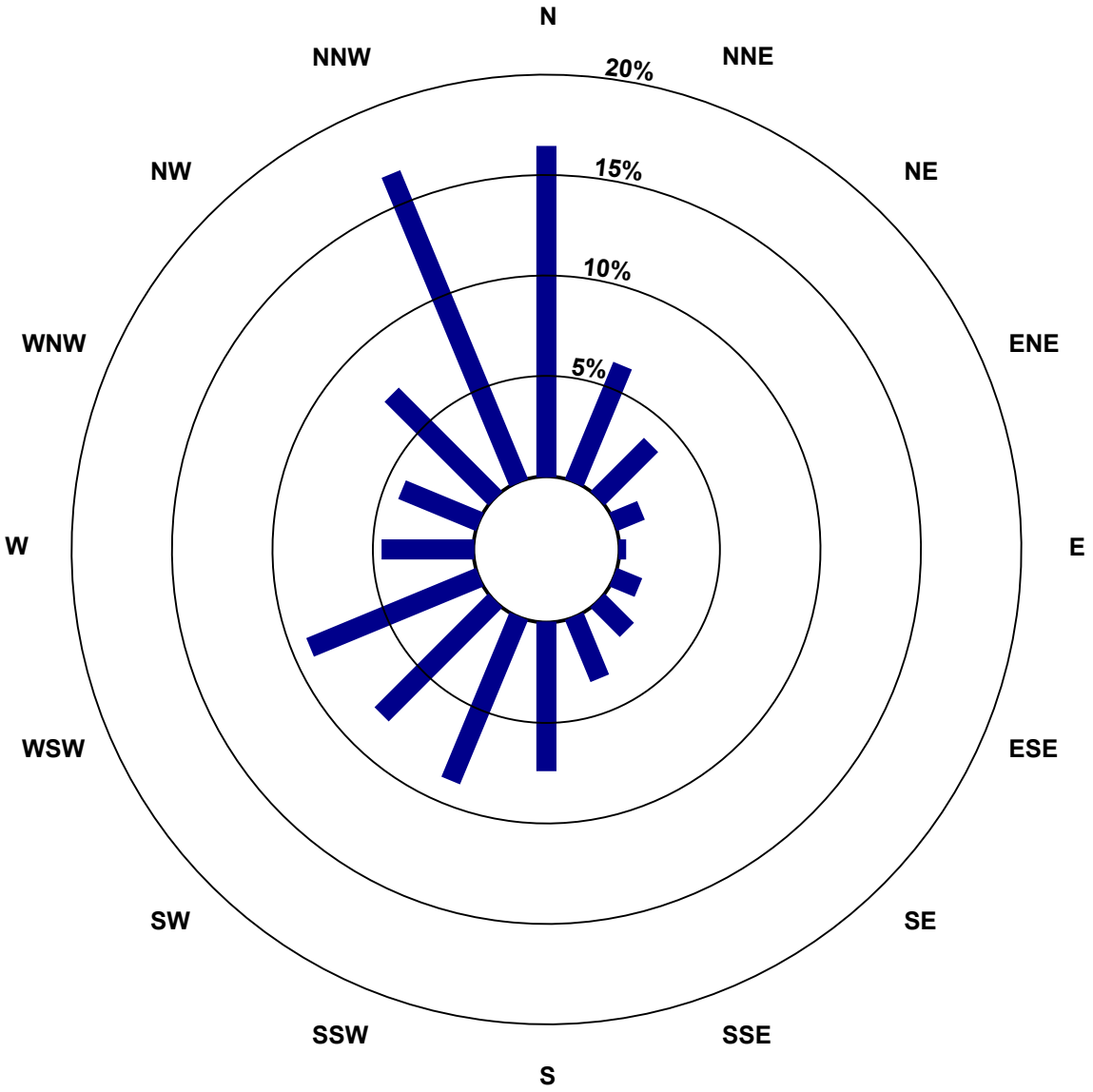
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Firebag




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

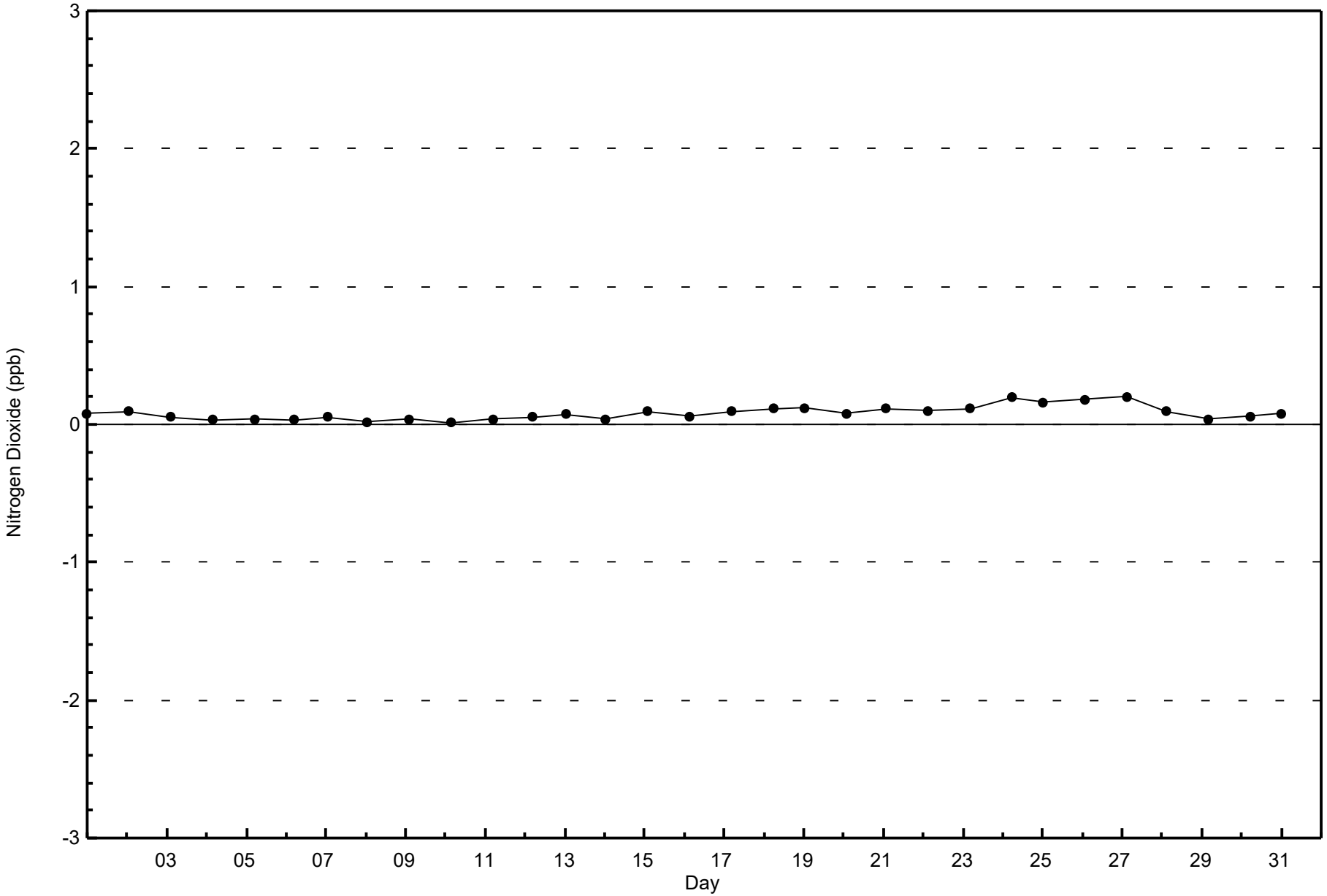
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Firebag - August 2026**

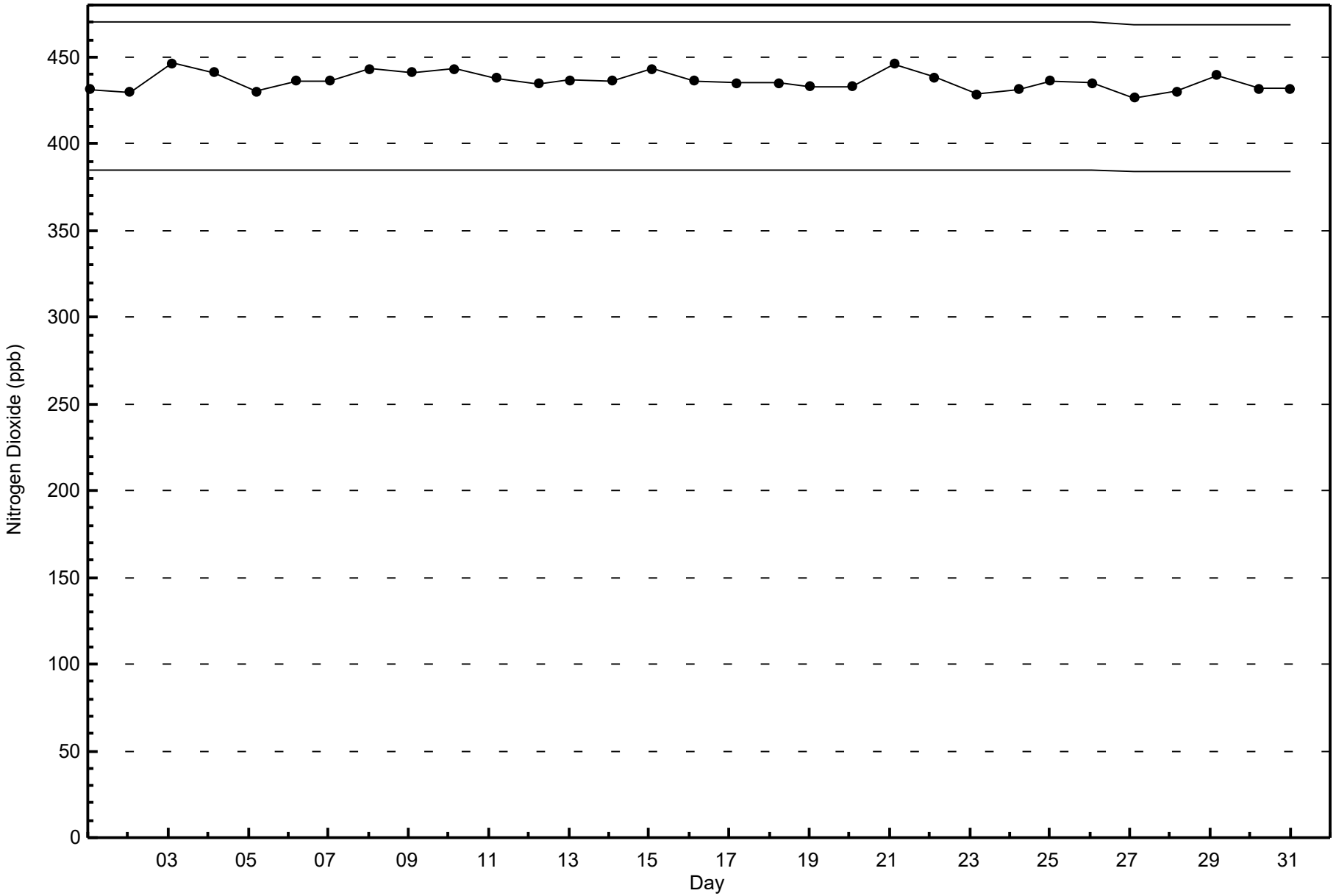


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Firebag - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Firebag - August 2026

Maximum Value: 23.8 ppb on Aug 21 07:00

Maximum Daily Average: 6.2 ppb on Aug 7

Minimum Value: 0.1 ppb on Aug 24 05:00

Minimum Daily Average: 0.5 ppb on Aug 9

Maximum Diurnal Average: 6.0 ppb at hour 6

Minimum Diurnal Average: 1.2 ppb at hour 16

Monthly Average: 2.47 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.7$ Median = 1.4 $Q_3 = 3.0$ $P_{90} = 6.0$ $P_{99} = 15.3$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.8 | 1.1 | 1.2 | 0.7 | 2.5 | 5.9 | 4.5 | 2.1 | 12.2 | 1.4 | 0.9 | 1.2 | 2.5 | 0.8 | 0.9 | 0.7 | 0.8 | 1.0 | 0.9 | 1.5 | 2.2 | 3.3 | 2.3 | 2.2 | 12.2 |
| 2-Aug | 2.7 | Z | 1.5 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 1.1 | 2.1 | 3.3 | 4.1 | 0.9 | 4.1 |
| 3-Aug | 3.4 | 3.2 | Z | 2.5 | 4.8 | 5.6 | 2.8 | 1.2 | 2.8 | 2.3 | 1.5 | 1.3 | 1.6 | 1.7 | 1.0 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 1.2 | 3.9 | 2.3 | 1.9 | 5.6 |
| 4-Aug | 1.2 | 0.7 | 0.8 | Z | 0.9 | 3.7 | 1.8 | 4.0 | 4.4 | 3.9 | 3.2 | 1.6 | 3.4 | 2.3 | 1.3 | 2.1 | 1.3 | 2.1 | 4.7 | 1.3 | 2.6 | 1.6 | 1.7 | 1.5 | 2.3 | 4.7 |
| 5-Aug | 2.5 | 0.6 | 3.3 | 12.0 | Z | 1.7 | 0.4 | 1.0 | 1.9 | 1.3 | 1.1 | 0.4 | 0.3 | 0.4 | 1.2 | 0.5 | 0.2 | 0.8 | 0.7 | 2.8 | 2.9 | 0.4 | 2.0 | 1.0 | 1.7 | 12.0 |
| 6-Aug | 2.2 | 1.7 | 1.4 | 1.3 | 1.4 | Z | 0.5 | 2.4 | 1.6 | 0.4 | 0.8 | 0.6 | 1.0 | 1.3 | 1.4 | 0.7 | 1.4 | 1.9 | 3.2 | 0.5 | 0.3 | 2.0 | 5.0 | 1.6 | 1.5 | 5.0 |
| 7-Aug | Z | 6.0 | 8.8 | 13.8 | 14.2 | 16.2 | 12.1 | 11.1 | 8.4 | 5.2 | 4.3 | 5.4 | 2.7 | 4.0 | 1.9 | 1.4 | 3.4 | 0.7 | 1.8 | 1.6 | 5.2 | 6.4 | 5.1 | 3.1 | 6.2 | 16.2 |
| 8-Aug | 10.0 | Z | 6.8 | 10.1 | 9.9 | 6.0 | 6.0 | 4.9 | 1.5 | 0.2 | 0.3 | 0.6 | 0.3 | 1.0 | 2.2 | 1.9 | 1.6 | 1.3 | 0.8 | 0.4 | 1.1 | 1.3 | 0.6 | 0.3 | 3.0 | 10.1 |
| 9-Aug | 0.3 | 0.3 | Z | 0.4 | 0.2 | 0.2 | 0.7 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.7 | 0.7 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 1.0 | 1.3 | 1.7 | 1.7 | 0.5 | 1.7 |
| 10-Aug | 2.9 | 2.4 | 3.8 | Z | 0.9 | 0.7 | 0.5 | 1.8 | 1.9 | 2.6 | 10.4 | 1.6 | 1.6 | 1.6 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 1.5 | 10.4 |
| 11-Aug | 0.4 | 0.6 | 3.6 | 6.1 | Z | 15.6 | 13.6 | 10.5 | 12.3 | 10.7 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 3.3 | 15.6 |
| 12-Aug | 3.4 | 15.3 | 8.7 | 3.8 | 8.9 | Z | 5.3 | 1.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 2.1 | 15.3 |
| 13-Aug | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 4.8 | 4.9 | 4.4 | 3.1 | 0.9 | 4.9 |
| 14-Aug | 0.6 | Z | 0.3 | 0.4 | 3.0 | 3.0 | 8.5 | 3.4 | 1.1 | 0.7 | 4.1 | 2.0 | 0.5 | 3.9 | 3.1 | 1.5 | 0.9 | 1.1 | 3.9 | 4.7 | 4.2 | 4.3 | 3.0 | 3.0 | 2.7 | 8.5 |
| 15-Aug | 3.5 | 2.6 | Z | 5.2 | 6.2 | 6.7 | 7.5 | 5.3 | 3.0 | 2.9 | 2.1 | 1.9 | 3.3 | 1.7 | 1.2 | 2.5 | 1.6 | 2.1 | 1.3 | 1.1 | 1.1 | 2.3 | 6.3 | 11.4 | 3.6 | 11.4 |
| 16-Aug | 10.0 | 8.0 | 5.4 | Z | 9.6 | 3.2 | 0.4 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.2 | 0.6 | 1.2 | 2.3 | 1.2 | 0.5 | 2.5 | 0.5 | 0.8 | 0.9 | 2.8 | 7.3 | 2.6 | 10.0 |
| 17-Aug | 5.5 | 2.9 | 2.8 | 13.3 | Z | 15.9 | 12.5 | 13.4 | 9.3 | 3.0 | 3.0 | 2.5 | 1.5 | 3.2 | 2.2 | 1.4 | 0.9 | 1.1 | 3.0 | 2.7 | 3.8 | 3.0 | 2.0 | 2.0 | 4.8 | 15.9 |
| 18-Aug | 1.4 | 0.7 | 0.7 | 0.9 | 0.8 | Z | 6.6 | 4.8 | 1.0 | 1.4 | 1.1 | 1.0 | 1.5 | 2.3 | 2.8 | 1.1 | 1.3 | 1.4 | 3.3 | 1.7 | 1.1 | 1.0 | 1.2 | 3.5 | 1.9 | 6.6 |
| 19-Aug | Z | 7.6 | 8.4 | 9.1 | 12.0 | 9.0 | 8.1 | 8.6 | 10.6 | 7.4 | 9.2 | 7.5 | 2.0 | 3.7 | 3.2 | 2.1 | 0.8 | 0.7 | 1.2 | 0.9 | 1.0 | 1.6 | 1.2 | 2.7 | 5.2 | 12.0 |
| 20-Aug | 16.6 | Z | 8.7 | 5.7 | 5.3 | 3.5 | 3.5 | 4.1 | 4.1 | 9.4 | 7.6 | 0.5 | 0.4 | 0.6 | 0.5 | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.4 | 3.3 | 16.6 |
| 21-Aug | 2.7 | 6.6 | Z | 5.2 | 2.7 | 16.1 | 23.8 | 8.1 | 2.9 | 2.9 | 2.1 | 1.4 | 1.4 | 1.5 | 0.8 | 0.9 | 1.8 | 0.8 | 0.6 | 1.2 | 1.0 | 0.8 | 0.7 | 0.7 | 3.8 | 23.8 |
| 22-Aug | 0.8 | 0.9 | 0.9 | Z | 4.1 | 6.0 | 3.0 | 2.4 | 2.8 | 1.3 | 1.1 | 1.1 | 1.1 | 1.2 | 1.1 | 0.8 | 0.9 | 1.1 | 1.4 | 1.6 | 1.6 | 1.0 | 1.1 | 1.1 | 1.7 | 6.0 |
| 23-Aug | 1.0 | 1.5 | 1.4 | 1.0 | Z | 16.2 | 2.9 | 5.5 | 6.0 | 2.6 | 1.3 | 1.4 | 1.4 | 1.1 | 2.2 | 1.6 | 3.3 | 2.7 | 3.0 | 5.3 | 2.4 | 1.9 | 0.5 | 1.1 | 2.9 | 16.2 |
| 24-Aug | 1.0 | 0.5 | 0.1 | 0.1 | 0.1 | Z | 0.7 | 1.5 | 1.5 | 7.9 | 4.4 | 3.0 | 1.5 | 1.0 | 0.8 | 0.5 | 0.3 | 0.3 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 2.3 | 1.3 | 7.9 |
| 25-Aug | Z | 7.9 | 3.6 | 1.4 | 0.7 | 0.6 | 6.1 | 13.7 | 1.6 | 0.7 | 0.6 | 1.2 | 2.8 | 3.1 | 3.3 | 2.8 | 1.8 | 0.8 | 0.4 | 0.4 | 0.7 | 2.4 | 1.9 | 1.1 | 2.6 | 13.7 |
| 26-Aug | 1.7 | Z | 1.3 | 1.0 | 4.0 | 11.6 | 3.2 | 1.2 | 0.9 | C | C | C | C | C | C | 0.9 | 1.4 | 5.3 | 2.9 | 1.7 | 0.8 | 1.2 | 0.9 | 1.0 | -- | 11.6 |
| 27-Aug | 1.3 | 1.1 | Z | 1.2 | 2.0 | 3.2 | 3.4 | 1.8 | 1.5 | 1.3 | 1.2 | 0.6 | 0.5 | 0.6 | 1.9 | 0.9 | 1.9 | 2.7 | 1.4 | 1.0 | 1.0 | 0.9 | 0.7 | 1.7 | 1.5 | 3.4 |
| 28-Aug | 1.5 | 1.1 | 1.1 | Z | 1.1 | 1.8 | 0.9 | 1.3 | 1.6 | 1.1 | 2.3 | 1.4 | 1.7 | 1.1 | 1.5 | 2.3 | 3.2 | 2.1 | 3.0 | 2.7 | 2.2 | 2.6 | 1.3 | 1.4 | 1.8 | 3.2 |
| 29-Aug | 2.5 | 4.0 | 2.5 | 1.4 | Z | 4.5 | 3.5 | 3.8 | 3.1 | 3.8 | 3.0 | 2.6 | 1.7 | 1.4 | 1.5 | 1.1 | 0.9 | 1.0 | 1.1 | 1.2 | 2.4 | 2.2 | 1.4 | 1.3 | 2.3 | 4.5 |
| 30-Aug | 1.0 | 1.3 | 1.2 | 1.2 | 3.6 | Z | 1.5 | 1.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.8 | 1.1 | 0.7 | 1.0 | 1.1 | 1.3 | 2.1 | 1.1 | 0.9 | 1.9 | 1.4 | 1.2 | 3.6 |
| 31-Aug | Z | 1.0 | 0.5 | 0.4 | 1.1 | 1.6 | 10.0 | 1.1 | 0.2 | 0.3 | 4.6 | 4.6 | 4.1 | 3.1 | 1.3 | 3.4 | 5.1 | 3.2 | 3.1 | 3.4 | 3.7 | 2.8 | 7.1 | 4.5 | 3.0 | 10.0 |
| | 3.2 | 3.1 | 3.0 | 3.8 | 3.8 | 6.0 | 5.1 | 4.1 | 2.9 | 2.9 | 2.4 | 1.6 | 1.3 | 1.6 | 1.4 | 1.2 | 1.2 | 1.2 | 1.5 | 1.4 | 1.6 | 1.8 | 2.1 | 2.3 | Diurnal Average | |
| | 16.6 | 15.3 | 8.8 | 13.8 | 14.2 | 16.2 | 23.8 | 13.7 | 12.3 | 12.2 | 10.4 | 7.5 | 4.1 | 4.0 | 3.3 | 3.4 | 5.1 | 5.3 | 4.7 | 5.3 | 5.2 | 6.4 | 7.1 | 11.4 | Diurnal Maximum | |

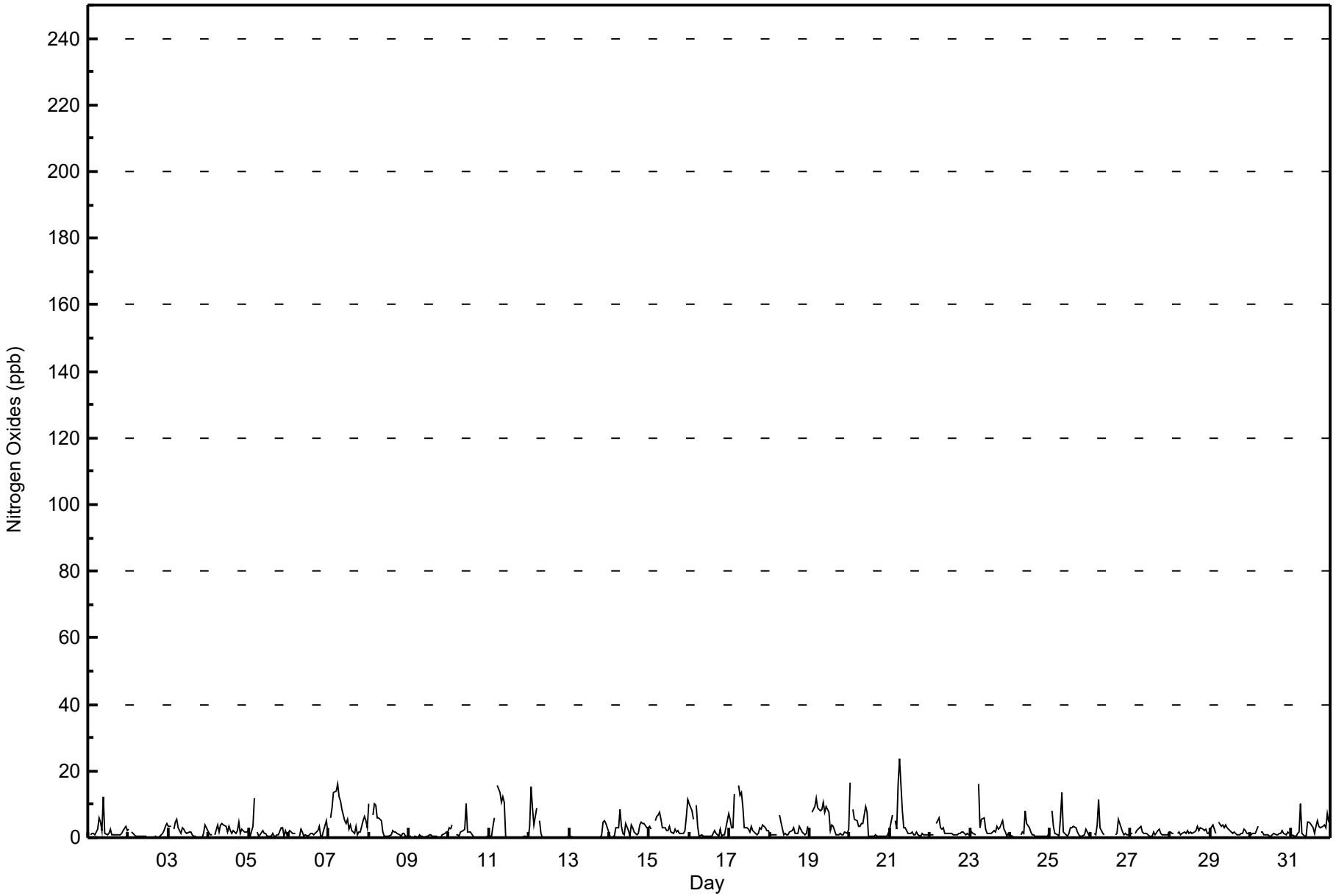
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Firebag - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Firebag - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 706 | 99.86 | 99.86 |
| 21 - 40 | 1 | 0.14 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

# Nitrogen Oxides ($NO_X$) - ppb

## Firebag - August 2026

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 116 | 44 | 26 | 10 | 2 | 9 | 14 | 23 | 52 | 62 | 55 | 64 | 32 | 29 | 51 | 117 | 706 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 116 | 44 | 26 | 10 | 2 | 9 | 14 | 23 | 52 | 62 | 56 | 64 | 32 | 29 | 51 | 117 | 707 |

Total Number of Valid Hours: 707

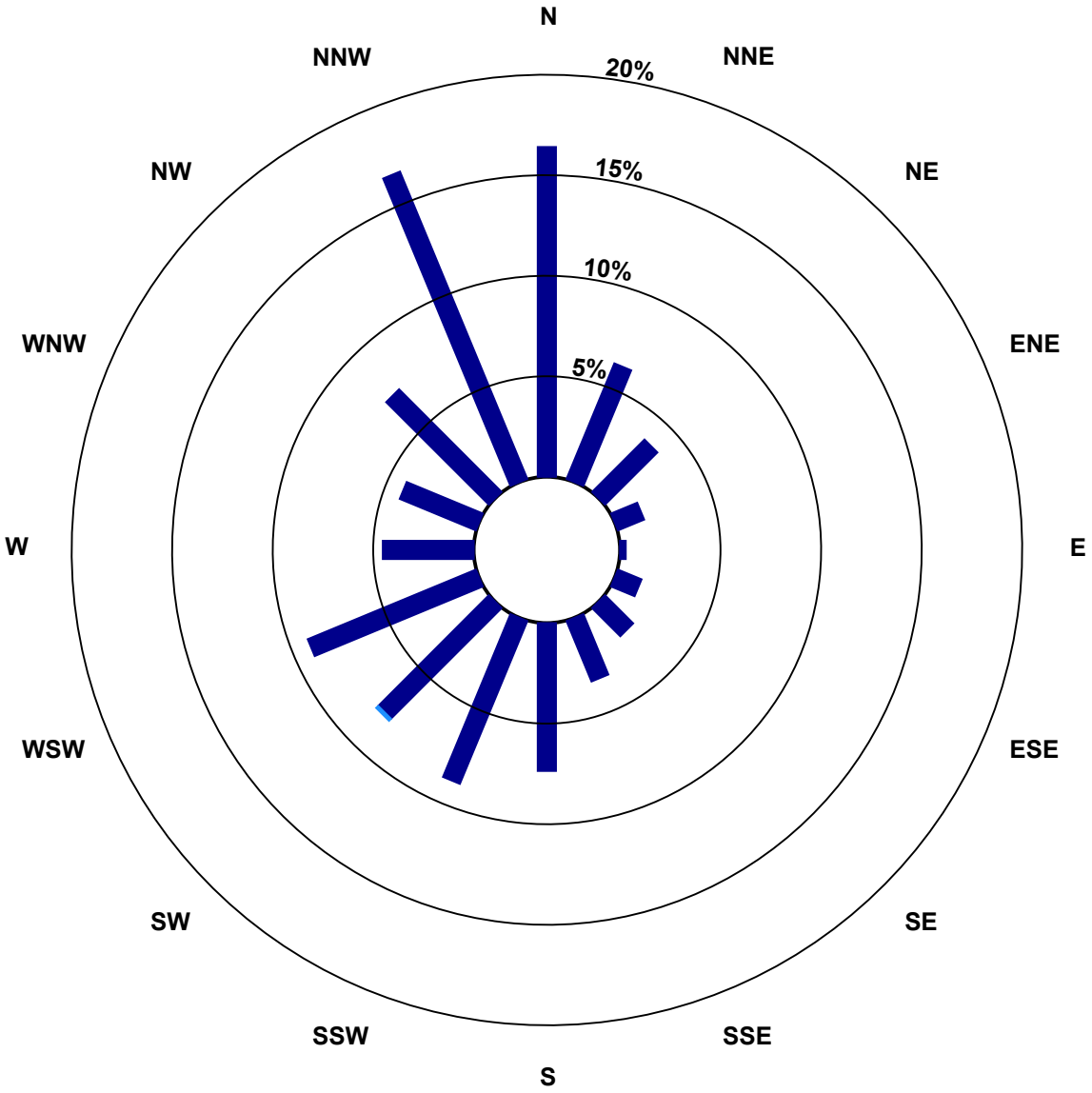
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Firebag




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

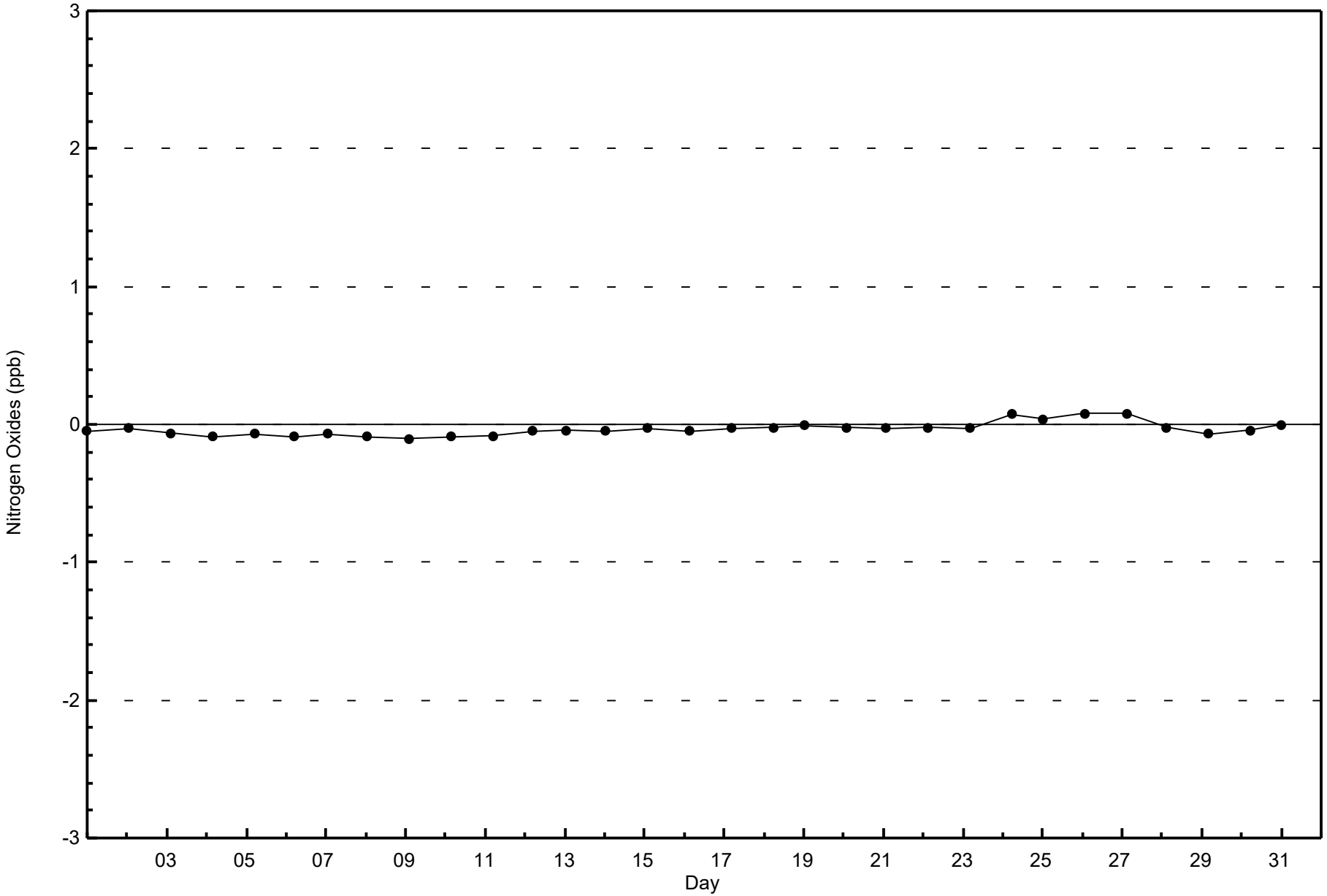
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Firebag - August 2026**

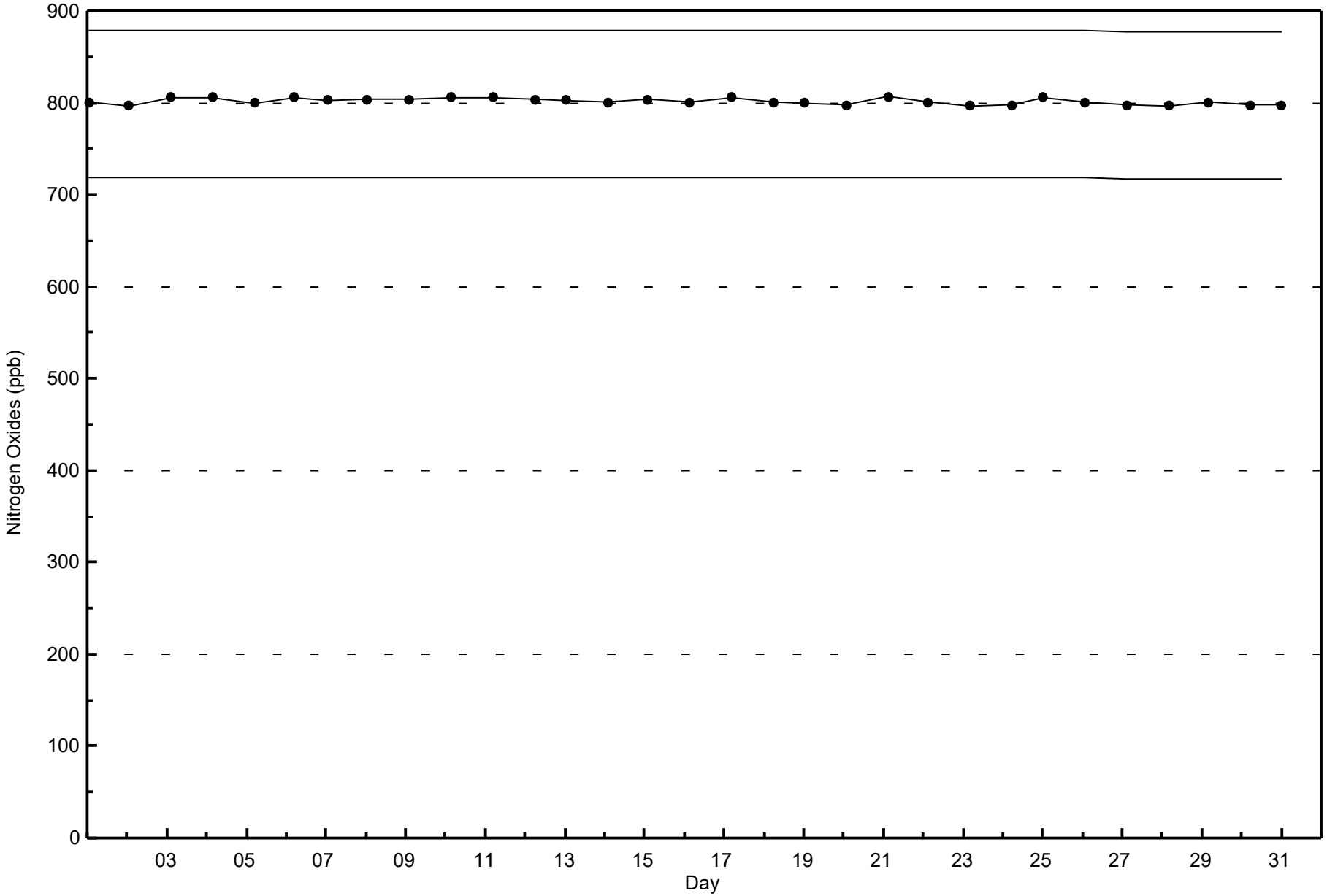


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Firebag - August 2026**



Maximum Value: 26.6 C on Aug 27 16:00

Maximum Daily Average: 21.8 C on Aug 27

Minimum Value: 5.8 C on Aug 17 06:00

Minimum Daily Average: 11.3 C on Aug 3

Maximum Diurnal Average: 19.5 C at hour 15

Minimum Diurnal Average: 11.8 C at hour 5

Monthly Average: 15.48 C

Percentiles: $P_1$ = 7.9 $P_{10}$ = 10.0 $Q_1$ = 12.2 Median = 15.0 $Q_3$ = 18.6 $P_{90}$ = 21.4 $P_{99}$ = 26.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

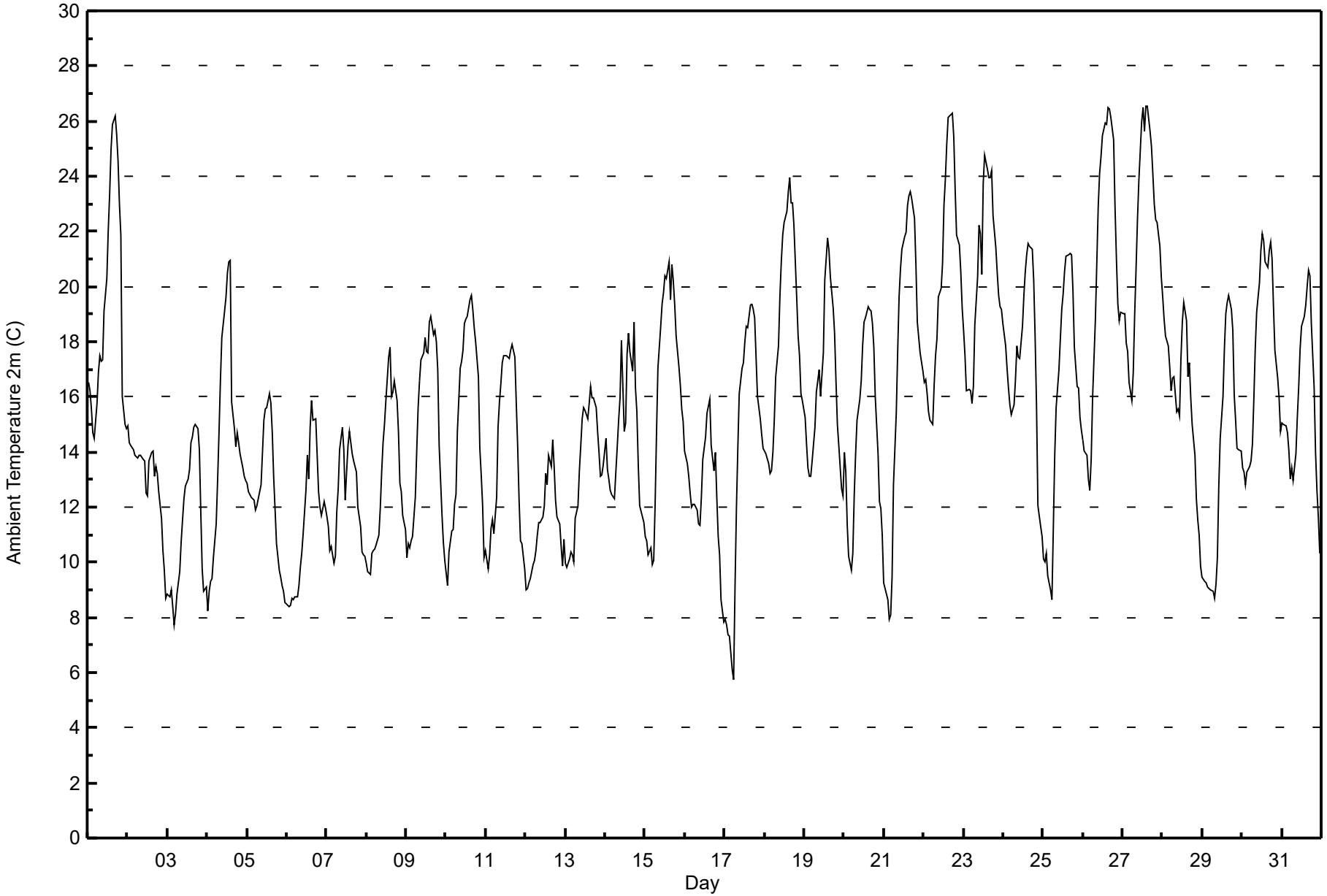
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 16.5 | 16.2 | 15.6 | 14.7 | 14.5 | 15.8 | 16.9 | 17.5 | 17.3 | 17.3 | 19.1 | 20.3 | 22.0 | 23.3 | 25.0 | 25.9 | 26.2 | 25.5 | 24.6 | 23.0 | 21.8 | 16.0 | 15.0 | 14.9 | 19.4 | 26.2 |
| 2-Aug | 15.0 | 14.3 | 14.2 | 14.1 | 13.9 | 13.8 | 13.8 | 13.9 | 13.9 | 13.7 | 13.7 | 12.5 | 12.4 | 13.7 | 14.0 | 14.0 | 13.1 | 13.5 | 13.2 | 12.6 | 11.6 | 10.4 | 9.7 | 8.7 | 13.1 | 15.0 |
| 3-Aug | 8.8 | 8.7 | 9.0 | 8.4 | 7.7 | 8.1 | 8.8 | 9.6 | 10.7 | 11.5 | 12.3 | 12.8 | 13.0 | 13.4 | 14.3 | 14.6 | 14.9 | 15.0 | 14.8 | 14.1 | 11.9 | 9.8 | 8.9 | 9.1 | 11.3 | 15.0 |
| 4-Aug | 8.2 | 8.9 | 9.3 | 9.4 | 10.2 | 11.4 | 13.0 | 14.7 | 16.6 | 18.2 | 19.1 | 19.6 | 20.5 | 20.9 | 20.9 | 15.8 | 14.9 | 14.2 | 14.7 | 14.3 | 13.9 | 13.4 | 13.1 | 12.9 | 14.5 | 20.9 |
| 5-Aug | 12.8 | 12.6 | 12.4 | 12.3 | 12.2 | 11.9 | 12.1 | 12.3 | 12.8 | 14.0 | 15.2 | 15.5 | 15.6 | 16.1 | 15.8 | 14.7 | 13.1 | 11.9 | 10.7 | 9.7 | 9.5 | 9.2 | 8.9 | 8.6 | 12.5 | 16.1 |
| 6-Aug | 8.4 | 8.4 | 8.4 | 8.7 | 8.6 | 8.8 | 8.7 | 9.2 | 9.8 | 10.3 | 11.0 | 12.6 | 13.9 | 13.0 | 14.9 | 15.9 | 15.2 | 15.2 | 13.9 | 12.5 | 12.0 | 11.7 | 12.2 | 12.0 | 11.5 | 15.9 |
| 7-Aug | 11.6 | 11.3 | 10.4 | 10.6 | 10.0 | 10.2 | 11.9 | 12.7 | 14.1 | 14.9 | 14.1 | 12.2 | 13.3 | 14.3 | 14.8 | 14.0 | 13.7 | 13.5 | 13.3 | 12.0 | 11.3 | 10.4 | 10.3 | 10.2 | 12.3 | 14.9 |
| 8-Aug | 10.0 | 9.7 | 9.5 | 10.3 | 10.4 | 10.5 | 10.6 | 11.0 | 11.9 | 13.3 | 14.3 | 15.0 | 15.9 | 17.4 | 17.8 | 16.0 | 16.2 | 16.6 | 15.9 | 14.7 | 12.9 | 12.6 | 11.7 | 11.2 | 13.1 | 17.8 |
| 9-Aug | 10.2 | 10.7 | 10.5 | 10.8 | 11.0 | 12.3 | 14.0 | 15.6 | 16.6 | 17.3 | 17.6 | 18.1 | 17.7 | 17.6 | 18.7 | 18.9 | 18.3 | 18.4 | 18.0 | 17.0 | 14.3 | 11.8 | 10.7 | 10.0 | 14.8 | 18.9 |
| 10-Aug | 9.6 | 9.2 | 10.4 | 11.2 | 11.2 | 12.1 | 12.5 | 14.7 | 17.0 | 17.3 | 17.7 | 18.7 | 18.8 | 18.9 | 19.5 | 19.7 | 19.2 | 18.5 | 18.0 | 16.7 | 14.1 | 13.2 | 12.1 | 10.2 | 15.0 | 19.7 |
| 11-Aug | 10.4 | 9.7 | 10.3 | 11.2 | 11.5 | 11.0 | 12.4 | 14.9 | 15.8 | 16.5 | 17.3 | 17.5 | 17.5 | 17.4 | 17.4 | 17.7 | 17.9 | 17.4 | 15.8 | 14.2 | 12.2 | 10.8 | 10.7 | 9.8 | 14.1 | 17.9 |
| 12-Aug | 9.0 | 9.0 | 9.3 | 9.4 | 9.9 | 10.1 | 10.4 | 11.0 | 11.5 | 11.4 | 11.7 | 12.0 | 13.2 | 12.8 | 13.9 | 13.5 | 14.5 | 13.5 | 12.2 | 11.6 | 11.4 | 10.6 | 9.9 | 10.8 | 11.4 | 14.5 |
| 13-Aug | 10.0 | 9.8 | 10.1 | 10.4 | 10.3 | 10.0 | 11.6 | 12.0 | 13.3 | 14.2 | 15.2 | 15.6 | 15.5 | 15.2 | 15.8 | 16.4 | 16.0 | 16.0 | 15.6 | 14.7 | 14.0 | 13.1 | 13.2 | 13.5 | 13.4 | 16.4 |
| 14-Aug | 14.5 | 13.4 | 13.0 | 12.6 | 12.4 | 12.3 | 13.3 | 14.2 | 15.2 | 16.0 | 18.0 | 14.8 | 15.0 | 17.5 | 18.3 | 17.7 | 16.9 | 18.7 | 16.3 | 15.5 | 13.5 | 12.1 | 11.7 | 11.5 | 14.8 | 18.7 |
| 15-Aug | 10.9 | 10.8 | 10.2 | 10.5 | 9.9 | 10.1 | 12.0 | 14.6 | 17.0 | 18.6 | 19.4 | 19.8 | 20.4 | 20.3 | 20.9 | 19.5 | 20.8 | 20.2 | 19.3 | 18.2 | 17.1 | 16.4 | 15.6 | 15.1 | 16.2 | 20.9 |
| 16-Aug | 14.0 | 13.6 | 13.1 | 12.5 | 12.0 | 12.1 | 12.1 | 11.9 | 11.4 | 11.3 | 12.3 | 13.7 | 14.6 | 15.4 | 15.7 | 15.9 | 14.2 | 13.3 | 14.0 | 12.3 | 10.9 | 10.3 | 8.7 | 7.9 | 12.6 | 15.9 |
| 17-Aug | 7.9 | 7.7 | 7.4 | 7.3 | 6.1 | 5.8 | 9.1 | 12.0 | 14.2 | 16.1 | 17.0 | 17.2 | 18.0 | 18.5 | 18.5 | 19.3 | 19.4 | 19.2 | 18.9 | 17.4 | 16.0 | 15.2 | 14.6 | 14.1 | 14.0 | 19.4 |
| 18-Aug | 14.0 | 13.9 | 13.6 | 13.2 | 13.3 | 14.0 | 15.1 | 16.7 | 17.9 | 19.6 | 20.9 | 21.8 | 22.3 | 22.7 | 23.4 | 23.9 | 23.1 | 23.0 | 22.2 | 19.6 | 18.2 | 17.5 | 16.1 | 15.9 | 18.4 | 23.9 |
| 19-Aug | 15.3 | 14.3 | 13.4 | 13.1 | 13.1 | 13.7 | 14.9 | 16.2 | 16.6 | 17.0 | 16.0 | 17.6 | 20.2 | 21.0 | 21.8 | 21.3 | 20.3 | 19.2 | 18.3 | 16.6 | 15.0 | 14.2 | 12.7 | 12.4 | 16.4 | 21.8 |
| 20-Aug | 14.0 | 13.3 | 11.4 | 10.2 | 9.7 | 10.3 | 12.4 | 13.9 | 15.2 | 15.9 | 16.6 | 17.8 | 18.7 | 18.8 | 19.3 | 19.2 | 19.1 | 18.7 | 17.8 | 16.0 | 13.9 | 12.2 | 12.0 | 11.0 | 14.9 | 19.3 |
| 21-Aug | 9.3 | 8.8 | 8.6 | 8.0 | 8.1 | 9.5 | 12.8 | 15.4 | 17.6 | 19.6 | 20.7 | 21.3 | 21.8 | 22.0 | 23.0 | 23.3 | 23.4 | 23.2 | 22.5 | 20.8 | 18.7 | 18.1 | 17.6 | 16.9 | 17.1 | 23.4 |
| 22-Aug | 16.5 | 16.6 | 16.1 | 15.5 | 15.2 | 15.0 | 16.4 | 17.5 | 18.1 | 19.6 | 19.9 | 20.8 | 22.9 | 23.9 | 25.2 | 26.1 | 26.3 | 26.3 | 25.4 | 23.5 | 21.9 | 21.5 | 20.6 | 19.2 | 20.4 | 26.3 |
| 23-Aug | 18.4 | 17.5 | 16.2 | 16.3 | 16.2 | 15.7 | 16.4 | 18.6 | 20.3 | 22.2 | 21.9 | 20.4 | 23.8 | 24.8 | 24.3 | 24.0 | 23.9 | 24.2 | 22.6 | 21.4 | 20.5 | 19.7 | 19.3 | 19.2 | 20.3 | 24.8 |
| 24-Aug | 18.7 | 17.8 | 17.0 | 16.3 | 15.7 | 15.3 | 15.7 | 16.6 | 17.8 | 17.4 | 17.4 | 18.6 | 19.7 | 20.5 | 21.1 | 21.6 | 21.5 | 21.4 | 20.3 | 18.2 | 15.7 | 12.1 | 11.3 | 10.9 | 17.4 | 21.6 |
| 25-Aug | 10.1 | 10.0 | 10.3 | 9.5 | 9.0 | 8.6 | 11.2 | 13.9 | 15.6 | 17.0 | 18.1 | 19.2 | 19.7 | 20.5 | 21.1 | 21.2 | 21.2 | 21.1 | 19.8 | 17.8 | 16.4 | 16.3 | 15.2 | 14.8 | 15.7 | 21.2 |
| 26-Aug | 14.4 | 14.0 | 13.9 | 13.0 | 12.6 | 13.7 | 16.0 | 18.8 | 20.8 | 22.9 | 24.1 | 24.7 | 25.5 | 25.9 | 25.9 | 26.5 | 26.5 | 26.1 | 25.3 | 22.9 | 21.0 | 19.4 | 18.8 | 19.1 | 20.5 | 26.5 |
| 27-Aug | 19.0 | 19.0 | 17.9 | 17.6 | 16.5 | 15.8 | 16.9 | 19.0 | 20.7 | 22.4 | 23.8 | 26.0 | 26.5 | 25.6 | 26.5 | 26.6 | 25.7 | 25.0 | 24.1 | 23.0 | 22.4 | 22.3 | 21.5 | 20.3 | 21.8 | 26.6 |
| 28-Aug | 19.6 | 18.8 | 18.2 | 17.8 | 17.1 | 16.2 | 16.7 | 16.7 | 15.4 | 15.5 | 15.3 | 17.4 | 18.7 | 19.4 | 18.7 | 16.7 | 17.2 | 15.9 | 15.0 | 13.9 | 12.3 | 11.5 | 11.0 | 9.9 | 16.1 | 19.6 |
| 29-Aug | 9.4 | 9.3 | 9.2 | 9.1 | 9.1 | 9.0 | 8.9 | 8.7 | 9.2 | 10.2 | 12.8 | 14.5 | 16.0 | 17.7 | 19.0 | 19.4 | 19.7 | 19.2 | 18.4 | 16.0 | 15.1 | 14.1 | 14.1 | 14.0 | 13.4 | 19.7 |
| 30-Aug | 13.4 | 13.3 | 12.8 | 13.3 | 13.5 | 13.7 | 14.3 | 15.9 | 17.7 | 19.1 | 20.1 | 21.3 | 21.9 | 21.6 | 20.9 | 20.7 | 21.3 | 21.6 | 21.0 | 19.3 | 17.7 | 16.7 | 16.0 | 14.8 | 17.6 | 21.9 |
| 31-Aug | 15.0 | 15.0 | 15.0 | 14.7 | 14.0 | 13.0 | 13.4 | 13.0 | 13.9 | 15.3 | 16.4 | 17.8 | 18.6 | 18.9 | 19.3 | 20.0 | 20.6 | 20.4 | 18.7 | 16.3 | 14.0 | 12.6 | 11.6 | 10.3 | 15.7 | 20.6 |
| | 12.8 | 12.4 | 12.2 | 12.0 | 11.8 | 11.9 | 13.0 | 14.3 | 15.4 | 16.3 | 17.1 | 17.7 | 18.5 | 19.0 | 19.5 | 19.3 | 19.2 | 18.9 | 18.1 | 16.6 | 15.2 | 14.0 | 13.4 | 12.9 | Diurnal Average | |
| | 19.6 | 19.0 | 18.2 | 17.8 | 17.1 | 16.2 | 16.9 | 19.0 | 20.8 | 22.9 | 24.1 | 26.0 | 26.5 | 25.9 | 26.5 | 26.6 | 26.5 | 26.3 | 25.4 | 23.5 | 22.4 | 22.3 | 21.5 | 20.3 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Firebag - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 77 | 10.35 | 10.35 |
| 10 - 20 | 549 | 73.79 | 84.14 |
| > 20 | 118 | 15.86 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Firebag - August 2026

Maximum Value: 98.1 % on Aug 2 07:00

Maximum Daily Average: 90.7 % on Aug 12

Minimum Value: 34.1 % on Aug 21 15:00

Minimum Daily Average: 52.9 % on Aug 27

Maximum Diurnal Average: 86.2 % at hour 5

Minimum Diurnal Average: 53.8 % at hour 15

Monthly Average: 71.66 %

Percentiles: $P_1$ = 36.8 $P_{10}$ = 49.4 $Q_1$ = 57.3 Median = 72.3 $Q_3$ = 86.1 $P_{90}$ = 94.2 $P_{99}$ = 97.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

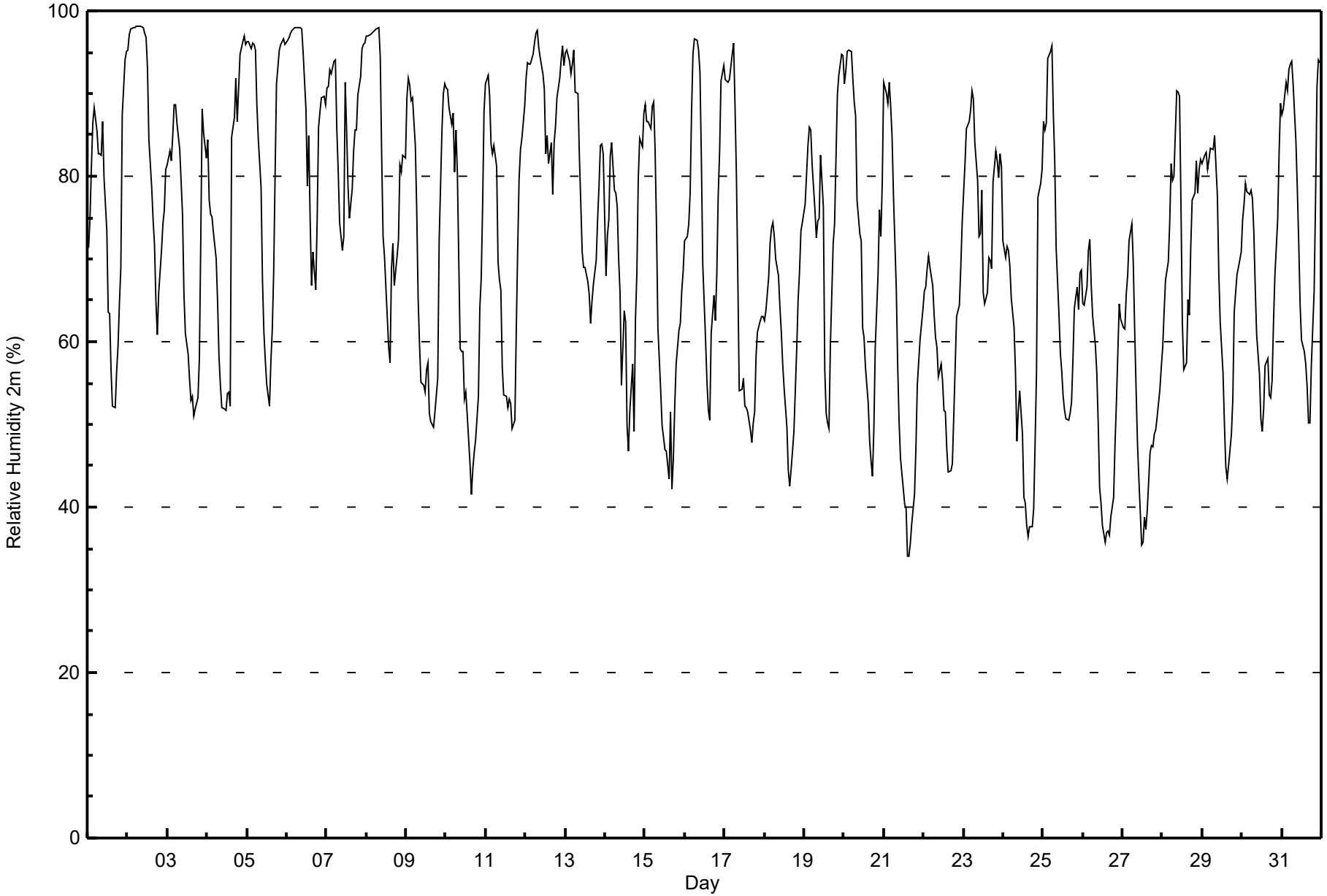
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 71.3 | 74.9 | 81.2 | 86.5 | 88.2 | 85.4 | 82.8 | 82.7 | 82.6 | 86.6 | 79.9 | 73.3 | 63.5 | 63.3 | 56.6 | 52.2 | 52.0 | 56.4 | 59.5 | 64.7 | 68.9 | 87.4 | 94.1 | 95.1 | 74.6 | 95.1 |
| 2-Aug | 95.2 | 97.1 | 97.7 | 97.9 | 98.0 | 98.1 | 98.1 | 98.1 | 98.1 | 98.0 | 97.3 | 96.8 | 93.1 | 84.4 | 78.7 | 74.8 | 71.7 | 64.9 | 60.8 | 66.0 | 71.0 | 74.2 | 75.9 | 80.9 | 86.1 | 98.1 |
| 3-Aug | 81.4 | 83.0 | 81.9 | 84.9 | 88.7 | 88.6 | 86.4 | 83.3 | 79.4 | 75.3 | 65.7 | 61.0 | 58.5 | 55.4 | 52.8 | 53.5 | 51.0 | 51.8 | 53.3 | 57.9 | 72.4 | 88.1 | 85.3 | 82.1 | 71.7 | 88.7 |
| 4-Aug | 84.4 | 77.1 | 75.5 | 75.1 | 73.3 | 70.0 | 64.8 | 58.1 | 54.7 | 52.0 | 51.8 | 51.6 | 53.7 | 53.9 | 52.2 | 84.8 | 87.1 | 91.9 | 86.5 | 90.7 | 94.8 | 96.2 | 97.0 | 95.9 | 73.9 | 97.0 |
| 5-Aug | 96.2 | 96.3 | 95.3 | 96.2 | 96.0 | 95.2 | 88.7 | 84.6 | 78.7 | 67.4 | 61.1 | 57.9 | 54.9 | 52.3 | 57.7 | 61.6 | 68.4 | 80.1 | 91.2 | 95.2 | 96.0 | 96.4 | 96.6 | 95.9 | 81.7 | 96.6 |
| 6-Aug | 96.4 | 96.8 | 97.3 | 97.6 | 97.8 | 97.9 | 97.9 | 97.9 | 97.9 | 97.7 | 95.0 | 88.2 | 78.8 | 84.9 | 74.7 | 66.9 | 70.9 | 66.3 | 74.8 | 86.0 | 87.8 | 89.5 | 89.7 | 88.6 | 88.2 | 97.9 |
| 7-Aug | 90.6 | 90.9 | 92.9 | 92.3 | 94.0 | 94.2 | 85.7 | 80.6 | 74.4 | 71.0 | 72.8 | 91.4 | 85.6 | 78.8 | 75.0 | 78.4 | 83.0 | 85.6 | 85.5 | 89.9 | 92.0 | 95.4 | 95.9 | 96.1 | 86.3 | 96.1 |
| 8-Aug | 97.0 | 96.9 | 97.2 | 97.3 | 97.5 | 97.6 | 97.8 | 97.9 | 94.5 | 82.6 | 72.7 | 70.3 | 66.5 | 59.3 | 57.5 | 68.8 | 71.8 | 66.8 | 70.3 | 72.4 | 81.4 | 80.5 | 82.6 | 82.2 | 81.6 | 97.9 |
| 9-Aug | 89.4 | 91.9 | 91.0 | 89.2 | 89.6 | 83.7 | 75.9 | 65.3 | 59.7 | 55.1 | 54.8 | 54.0 | 56.7 | 57.5 | 51.3 | 50.4 | 49.6 | 51.6 | 53.5 | 55.6 | 72.1 | 85.5 | 89.9 | 91.3 | 69.4 | 91.9 |
| 10-Aug | 90.6 | 90.6 | 88.3 | 86.2 | 87.7 | 80.4 | 85.6 | 80.4 | 59.2 | 58.8 | 58.8 | 53.1 | 53.9 | 51.3 | 45.2 | 41.5 | 44.6 | 46.6 | 48.1 | 53.3 | 64.1 | 67.7 | 76.5 | 87.8 | 66.7 | 90.6 |
| 11-Aug | 91.2 | 92.2 | 89.7 | 83.9 | 82.7 | 83.8 | 81.2 | 69.7 | 67.4 | 66.3 | 57.0 | 53.6 | 53.3 | 52.0 | 53.0 | 52.5 | 49.4 | 50.4 | 61.3 | 71.2 | 79.6 | 83.2 | 84.6 | 88.5 | 70.7 | 92.2 |
| 12-Aug | 91.8 | 93.8 | 93.6 | 93.6 | 94.7 | 96.2 | 97.3 | 97.6 | 95.7 | 94.4 | 92.4 | 90.5 | 82.6 | 85.0 | 81.4 | 84.0 | 77.8 | 84.1 | 86.0 | 89.5 | 91.8 | 94.0 | 95.7 | 93.5 | 90.7 | 97.6 |
| 13-Aug | 94.8 | 95.2 | 93.8 | 92.4 | 93.6 | 95.3 | 90.1 | 90.0 | 82.3 | 76.8 | 70.9 | 68.9 | 68.9 | 67.4 | 65.7 | 62.1 | 65.0 | 66.9 | 69.8 | 74.7 | 78.8 | 83.7 | 83.9 | 82.8 | 79.7 | 95.3 |
| 14-Aug | 68.0 | 72.9 | 74.8 | 82.3 | 84.1 | 78.4 | 78.0 | 76.3 | 70.0 | 65.9 | 54.8 | 63.7 | 62.4 | 49.8 | 46.8 | 51.7 | 57.3 | 49.2 | 62.8 | 68.2 | 79.6 | 84.7 | 83.5 | 87.6 | 68.9 | 87.6 |
| 15-Aug | 88.7 | 86.6 | 86.6 | 85.8 | 88.5 | 89.0 | 83.2 | 73.8 | 61.6 | 54.0 | 49.9 | 48.6 | 47.0 | 46.7 | 43.4 | 51.5 | 42.3 | 45.8 | 52.2 | 57.4 | 61.3 | 62.2 | 66.2 | 68.5 | 64.2 | 89.0 |
| 16-Aug | 72.2 | 72.7 | 74.2 | 78.0 | 87.9 | 94.7 | 96.6 | 96.4 | 95.3 | 92.5 | 82.0 | 69.3 | 60.2 | 55.1 | 51.7 | 50.5 | 61.0 | 65.6 | 62.6 | 68.1 | 77.7 | 82.9 | 91.6 | 93.5 | 76.3 | 96.6 |
| 17-Aug | 91.8 | 91.5 | 91.3 | 91.6 | 94.7 | 96.2 | 88.4 | 80.0 | 67.8 | 54.1 | 54.2 | 55.6 | 52.2 | 52.0 | 51.5 | 49.3 | 47.9 | 50.1 | 51.5 | 58.2 | 61.3 | 62.6 | 63.0 | 63.1 | 67.5 | 96.2 |
| 18-Aug | 62.6 | 63.7 | 67.8 | 71.8 | 73.7 | 74.4 | 72.7 | 70.0 | 68.0 | 64.2 | 61.1 | 57.4 | 54.4 | 49.7 | 44.5 | 42.5 | 44.5 | 46.8 | 49.1 | 59.1 | 65.1 | 68.5 | 73.4 | 74.4 | 61.6 | 74.4 |
| 19-Aug | 76.6 | 80.2 | 83.7 | 86.0 | 85.5 | 81.4 | 75.9 | 72.5 | 74.6 | 74.9 | 82.6 | 76.3 | 56.6 | 51.4 | 50.2 | 49.5 | 59.6 | 71.9 | 74.2 | 82.2 | 89.9 | 92.2 | 94.7 | 94.6 | 75.7 | 94.7 |
| 20-Aug | 91.1 | 92.8 | 95.0 | 95.2 | 95.0 | 91.9 | 88.9 | 87.3 | 77.1 | 73.0 | 72.2 | 61.7 | 60.5 | 56.9 | 52.6 | 47.9 | 45.6 | 43.7 | 49.4 | 59.4 | 68.2 | 75.9 | 72.7 | 79.2 | 72.2 | 95.2 |
| 21-Aug | 91.3 | 89.9 | 88.8 | 91.4 | 88.5 | 84.8 | 77.5 | 66.4 | 57.2 | 50.4 | 45.9 | 44.0 | 40.4 | 39.9 | 34.1 | 34.1 | 35.6 | 38.0 | 41.6 | 47.2 | 54.8 | 57.6 | 60.4 | 63.8 | 59.3 | 91.4 |
| 22-Aug | 66.0 | 66.6 | 68.8 | 70.3 | 69.0 | 66.8 | 63.2 | 60.6 | 59.3 | 55.8 | 57.2 | 55.2 | 51.7 | 51.5 | 47.0 | 44.2 | 44.3 | 45.2 | 51.1 | 56.9 | 63.1 | 64.4 | 68.9 | 74.3 | 59.2 | 74.3 |
| 23-Aug | 77.9 | 81.5 | 85.8 | 86.6 | 88.1 | 90.4 | 89.3 | 84.1 | 79.5 | 72.8 | 73.1 | 78.3 | 66.0 | 64.6 | 66.0 | 70.1 | 69.7 | 68.7 | 79.3 | 83.1 | 81.8 | 79.8 | 82.7 | 81.2 | 78.4 | 90.4 |
| 24-Aug | 72.2 | 70.3 | 71.6 | 71.1 | 69.2 | 65.3 | 61.7 | 56.4 | 47.9 | 51.4 | 54.1 | 48.9 | 41.3 | 40.5 | 37.7 | 36.4 | 37.7 | 37.7 | 39.9 | 47.8 | 56.2 | 77.4 | 79.1 | 80.8 | 56.4 | 80.8 |
| 25-Aug | 86.6 | 85.6 | 86.4 | 94.2 | 95.1 | 95.7 | 87.7 | 81.8 | 71.4 | 63.5 | 58.7 | 56.4 | 53.4 | 51.6 | 50.6 | 50.6 | 51.4 | 52.7 | 58.0 | 64.0 | 66.6 | 63.9 | 68.3 | 68.7 | 69.3 | 95.7 |
| 26-Aug | 64.6 | 64.4 | 66.5 | 71.0 | 72.4 | 67.0 | 63.3 | 59.5 | 56.3 | 50.1 | 42.5 | 40.6 | 37.8 | 35.8 | 36.9 | 37.1 | 36.6 | 38.8 | 41.3 | 47.6 | 52.8 | 58.7 | 64.5 | 62.8 | 52.9 | 72.4 |
| 27-Aug | 61.7 | 61.5 | 65.8 | 68.0 | 72.2 | 74.3 | 69.7 | 61.5 | 54.3 | 47.7 | 43.4 | 35.4 | 35.7 | 38.8 | 37.3 | 39.6 | 46.6 | 47.5 | 47.3 | 48.8 | 49.3 | 50.9 | 54.2 | 56.9 | 52.9 | 74.3 |
| 28-Aug | 59.4 | 63.6 | 67.5 | 69.7 | 74.3 | 81.6 | 79.5 | 80.0 | 90.4 | 90.1 | 89.7 | 76.9 | 62.4 | 56.7 | 57.5 | 65.1 | 63.2 | 71.4 | 77.1 | 78.0 | 81.9 | 78.0 | 80.8 | 82.1 | 74.0 | 90.4 |
| 29-Aug | 81.5 | 82.6 | 82.9 | 80.9 | 82.0 | 83.5 | 83.2 | 84.9 | 81.3 | 77.6 | 68.3 | 62.3 | 56.3 | 50.1 | 45.0 | 43.3 | 45.1 | 48.7 | 53.0 | 63.5 | 66.0 | 68.1 | 68.9 | 70.8 | 67.9 | 84.9 |
| 30-Aug | 74.8 | 76.6 | 79.1 | 78.1 | 77.9 | 78.2 | 77.3 | 73.2 | 66.4 | 60.8 | 56.1 | 50.8 | 49.2 | 51.9 | 57.1 | 58.0 | 53.6 | 53.2 | 55.2 | 62.2 | 68.0 | 74.8 | 82.6 | 88.9 | 66.8 | 88.9 |
| 31-Aug | 87.5 | 88.2 | 91.3 | 90.3 | 92.8 | 93.6 | 94.0 | 91.2 | 84.2 | 78.5 | 72.1 | 64.3 | 60.2 | 58.7 | 57.4 | 54.6 | 50.2 | 50.2 | 57.0 | 66.0 | 77.1 | 90.6 | 94.1 | 93.8 | 76.6 | 94.1 |
| | 82.1 | 82.8 | 84.0 | 85.0 | 86.2 | 85.6 | 82.7 | 78.8 | 73.8 | 69.7 | 66.1 | 63.1 | 58.6 | 56.4 | 53.8 | 55.1 | 56.0 | 57.7 | 61.4 | 67.3 | 73.3 | 77.9 | 80.6 | 82.1 | Diurnal Average | |
| | 97.0 | 97.1 | 97.7 | 97.9 | 98.0 | 98.1 | 98.1 | 98.1 | 98.1 | 98.0 | 97.3 | 96.8 | 93.1 | 85.0 | 81.4 | 84.8 | 87.1 | 91.9 | 91.2 | 95.2 | 96.0 | 96.4 | 97.0 | 96.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Firebag - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 21 | 2.82 | 2.82 |
| 40 - 60 | 195 | 26.21 | 29.03 |
| 60 - 80 | 248 | 33.33 | 62.37 |
| 80 - 100 | 280 | 37.63 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Firebag - August 2026

Maximum Speed: 30 km/h on Aug 2 12:00

Maximum Daily Speed Average: 20.2 km/h on Aug 2

Minimum Speed Value: 1 km/h on Aug 11 01:00

Minimum Daily Speed Average: 0.4 km/h on Aug 14

Maximum Diurnal Speed Average: 6.9 km/h at hour 14

Minimum Diurnal Speed Average: 2.0 km/h at hour 23

Monthly Average Velocity: 3.7 km/h 297.5 deg

Percentiles: $P_1$ = 2 $P_{10}$ = 5 $Q_1$ = 7 Median = 11 $Q_3$ = 16 $P_{90}$ = 19 $P_{99}$ = 26

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | S10 | S11 | SSW9 | SSW9 | SSW9 | SSW9 | S8 | SSW7 | SSW7 | ESE5 | SE8 | SE15 | ESE18 | ESE19 | SE20 | SE19 | SE19 | SE16 | SE15 | SE14 | E8 | N15 | NE15 | SE9 | SE8.6 | SE20 |
| 2-Aug | NNW2 | N8 | N12 | N21 | N19 | NNE16 | NNE16 | N15 | N19 | N22 | N23 | N30 | N26 | N22 | N26 | N26 | NNW29 | NNW26 | N26 | NNW27 | NNW25 | NNW22 | NNW20 | NNW16 | N20.2 | N30 |
| 3-Aug | NNW16 | NNW16 | NNW17 | NNW13 | NNW10 | NNW11 | NNW15 | NNW17 | NNW17 | NNW18 | NNW20 | NNW20 | NNW19 | NNW18 | NNW18 | N17 | N16 | N14 | N11 | N6 | NNW2 | S4 | S4 | SSW5 | NNW12.4 | NNW20 |
| 4-Aug | SSW4 | SW11 | SSW11 | SSW11 | SW11 | SSW12 | SW13 | SW13 | WSW13 | W14 | W13 | W12 | WSW16 | WSW16 | W14 | WNW8 | WNW8 | SSW7 | SSW5 | W6 | NNW12 | NNW18 | NNW19 | NNW19 | W8.1 | NNW19 |
| 5-Aug | NNW17 | NW10 | WNW9 | WNW10 | NW11 | NW16 | NW19 | NW18 | NW18 | NNW21 | NNW18 | NW20 | NW22 | NW20 | NNW17 | N16 | N16 | NNW13 | N13 | NNW17 | NNW16 | NW17 | NW18 | NNW22 | NNW16.2 | NW22 |
| 6-Aug | NNW22 | NNW23 | NNW24 | NNW24 | NNW24 | NW19 | NW17 | NNW19 | NNW20 | NNW19 | NNW16 | NNW18 | NNW21 | NNW19 | NNW19 | NW20 | NW18 | NNW18 | NW12 | NW9 | NW10 | WNW7 | NW9 | NW10 | NNW17.1 | NNW24 |
| 7-Aug | NW8 | NW9 | WNW8 | WNW7 | WNW7 | WNW8 | WNW10 | WNW12 | NW14 | NW17 | NW15 | NNW8 | NNW9 | NW11 | NW11 | NNW9 | NNW9 | N9 | NNW11 | NNW9 | NNW8 | NNW7 | N8 | NNW6 | NW9.1 | NW17 |
| 8-Aug | NW6 | NNW7 | NW7 | NNW7 | NW7 | NW8 | NNW10 | N11 | N12 | N12 | N12 | N9 | N9 | NNW10 | NNW12 | NNW12 | NNW8 | N7 | NNW8 | NNW7 | NNW6 | NNW5 | NNE6 | NNE5 | NNW8.1 | N12 |
| 9-Aug | NNE2 | NNE1 | NNE2 | NE4 | NE4 | ENE5 | ENE3 | NE7 | NE6 | NNE6 | NNE8 | NNW10 | N10 | NNE8 | N7 | N11 | N11 | N9 | NNE9 | NNE6 | NE3 | NE2 | SSE2 | SSE3 | NNE5.1 | N11 |
| 10-Aug | S4 | S4 | S4 | SW3 | SW4 | WSW3 | N2 | NNW4 | N8 | N8 | N11 | NNW12 | NNW14 | NNW13 | NNW14 | NNE15 | NNE14 | NNE12 | N11 | N7 | N7 | N8 | NNE5 | N4 | N6.1 | NNE15 |
| 11-Aug | NNW1 | NNW3 | NW5 | WNW5 | NW6 | NW6 | NW5 | NNW11 | N12 | NNW14 | N15 | N17 | N18 | N18 | N19 | N17 | N18 | NNE18 | NNE18 | NNE12 | N7 | NNW8 | N9 | NNW8 | N10.8 | N19 |
| 12-Aug | NNW8 | NNW7 | NNW7 | NNW7 | NNW8 | NNW8 | NNW9 | N9 | N10 | N12 | N12 | N13 | NNE16 | NNE16 | NNE16 | N16 | NNE17 | NNE13 | NNE9 | NNE7 | NNE7 | N7 | N7 | N7 | N9.9 | NNE17 |
| 13-Aug | NNE6 | NE6 | NE7 | NE5 | NE7 | ENE7 | NE8 | NE7 | NNE10 | NNE13 | NNE12 | NNE12 | NNE9 | NNE12 | NE9 | NE10 | NNE10 | N7 | N7 | N7 | N6 | N6 | NNE4 | ENE2 | NNE7.5 | NNE13 |
| 14-Aug | ENE5 | ENE6 | NE5 | ENE3 | ESE3 | ENE2 | S4 | NW1 | NW3 | WNW4 | W5 | NE15 | ENE10 | ESE8 | SE11 | ENE6 | NW2 | W4 | NW7 | W5 | WSW6 | SW7 | SW8 | SW9 | E0.4 | NE15 |
| 15-Aug | SW9 | SW10 | SW9 | SW10 | SW8 | SW8 | SW9 | WSW8 | WSW7 | WNW8 | W10 | W13 | W13 | W13 | W12 | W7 | WSW13 | WSW12 | WSW11 | SW8 | SW10 | SW11 | SW10 | SW9 | WSW9.3 | W13 |
| 16-Aug | SW10 | SW11 | W8 | WNW6 | NNW8 | NNE11 | N14 | N18 | N17 | N18 | N21 | N18 | N16 | NNW18 | NNW18 | NW17 | NNW15 | NNW11 | NNW10 | N8 | NNW7 | NW5 | WNW4 | W5 | NNW10.2 | N21 |
| 17-Aug | W5 | WSW7 | WSW8 | WSW8 | WSW4 | SW3 | WSW6 | W5 | W8 | NW9 | WNW11 | WNW12 | NW13 | NW13 | NW11 | WNW9 | WNW7 | WSW6 | SW9 | SW8 | SSW11 | SSW13 | SSW13 | SSW12 | W6.5 | SSW13 |
| 18-Aug | SSW13 | SSW15 | SSW15 | SSW14 | SSW15 | SSW16 | SSW16 | SSW17 | SW18 | SSW18 | SSW20 | SW19 | WSW16 | WSW14 | W14 | WSW13 | WSW12 | W11 | W12 | WSW7 | WSW8 | SW9 | SW8 | SW9 | SW12.7 | SSW20 |
| 19-Aug | SW8 | WSW8 | SW5 | SW6 | SW6 | SW8 | SW7 | SW7 | WSW8 | SW9 | WSW11 | W9 | NW13 | NNW11 | NW12 | NNW14 | N14 | NNW12 | N12 | NNW11 | N4 | NE2 | WNW2 | NW6 | WNW5.1 | N14 |
| 20-Aug | WNW4 | WSW4 | WNW3 | WNW3 | WNW3 | W4 | W3 | NNW5 | N11 | N13 | N16 | N16 | N16 | NNW17 | N17 | NNW18 | NNW19 | N19 | N14 | N8 | N8 | N6 | N8 | NNW6 | NNW9.1 | N19 |
| 21-Aug | WNW4 | W4 | WSW3 | WSW5 | WSW5 | SW6 | SW4 | SW8 | SW11 | WSW9 | W8 | W10 | W10 | WSW11 | SW10 | WSW11 | WSW10 | SW12 | SSW13 | S11 | S13 | S15 | S14 | S13 | SW7.8 | S15 |
| 22-Aug | SSW16 | SSW17 | SSW17 | S15 | S16 | S15 | S14 | S14 | S15 | SSW15 | SSW15 | SSW16 | SSW15 | SW16 | SSW15 | SSW15 | SSW15 | SSW16 | S15 | S10 | S12 | SSW16 | SSW14 | SW13 | SSW14.6 | SSW17 |
| 23-Aug | SSW14 | SSW9 | S8 | SSW13 | SSW11 | SSW10 | S8 | SSW7 | SSW9 | SSW11 | SW15 | SSW14 | SW10 | SW15 | SW11 | WNW5 | WNW4 | WNW6 | W7 | NNW11 | N11 | N10 | N10 | N12 | SW5.5 | SW15 |
| 24-Aug | N13 | N11 | N12 | N11 | NNE11 | N13 | N12 | N13 | N17 | NNW12 | NNW10 | NNW12 | N15 | NNW19 | N20 | N19 | N18 | N15 | NNE12 | NNE8 | NNE6 | N4 | N6 | NNW6 | N12.1 | N20 |
| 25-Aug | N4 | NNE6 | NE5 | NNE4 | N3 | N3 | N3 | NNE7 | NE9 | N7 | NW7 | NW9 | NW9 | NW10 | NW9 | N9 | N9 | NNE6 | NE8 | NE8 | E8 | ESE7 | SE9 | SE10 | NNE4.3 | SE10 |
| 26-Aug | SSE10 | SSE12 | SSE13 | SSE10 | SSE10 | S13 | SSW14 | SSW13 | SSW12 | SW13 | SW15 | SSW18 | SSW19 | SSW17 | SSW16 | S17 | SSW19 | S19 | S16 | SSE11 | SSE13 | SSE13 | S14 | S15 | S13.3 | S19 |
| 27-Aug | S18 | S17 | S14 | S16 | S13 | SSE11 | S11 | S13 | S16 | S17 | SSE20 | SSE25 | S28 | S29 | S27 | S24 | SSE17 | SE15 | SE14 | SE16 | SE16 | SSE22 | SSE23 | SSE19 | SSE17.6 | S29 |
| 28-Aug | SSE19 | SSE18 | SSE19 | S21 | S23 | S10 | SSW22 | SSW19 | SSW18 | SW20 | SW20 | SW22 | WSW22 | WSW24 | WSW22 | WSW24 | WSW22 | WSW19 | WSW23 | WSW23 | WSW18 | WSW23 | WSW19 | W17 | SW16.6 | WSW24 |
| 29-Aug | WSW16 | WSW16 | WSW18 | WSW22 | WSW18 | WSW17 | WSW19 | WSW20 | WSW22 | WSW22 | WSW23 | WSW21 | WSW21 | WSW22 | WSW22 | WSW22 | W17 | WSW13 | SW9 | SSW6 | SSW7 | S6 | S10 | SSW10 | WSW15.9 | WSW23 |
| 30-Aug | S9 | S10 | S8 | S10 | S12 | S9 | S10 | SSW9 | SW10 | SW11 | SSW8 | SW5 | WSW2 | NNW4 | NE6 | NE7 | NE4 | NE4 | ESE6 | SSE7 | S8 | S9 | SSW5 | WSW4 | SSW4.9 | S12 |
| 31-Aug | S4 | WSW3 | SW7 | SW7 | NNW4 | ENE4 | SSE5 | NNW8 | NNE11 | N12 | NNW11 | NNW11 | NNW10 | NW8 | NNW7 | NW6 | WSW7 | WSW7 | WSW5 | SW7 | WSW8 | WNW6 | NW4 | ESE2 | NW3.6 | N12 |
| | WSW3.0 | WSW3.4 | WSW3.3 | WSW3.4 | WSW3.1 | WSW2.5 | W3.4 | WNW4.0 | WNW4.7 | NW5.9 | NW6.2 | NW5.7 | NW6.9 | NW6.9 | NW6.5 | NW6.6 | NNW6.1 | NW4.6 | NW3.4 | NNW2.3 | NW2.1 | WNW2.4 | WNW2.0 | W2.4 | Diurnal Average | |
| | NNW22 | NNW23 | NNW24 | NNW24 | NNW24 | NW19 | SSW22 | WSW20 | WSW22 | WSW22 | N23 | N30 | SSE28 | S29 | S27 | N26 | NNW29 | NNW26 | N26 | NNW27 | NNW25 | WSW23 | SSE23 | NNW22 | Diurnal Maximum | |

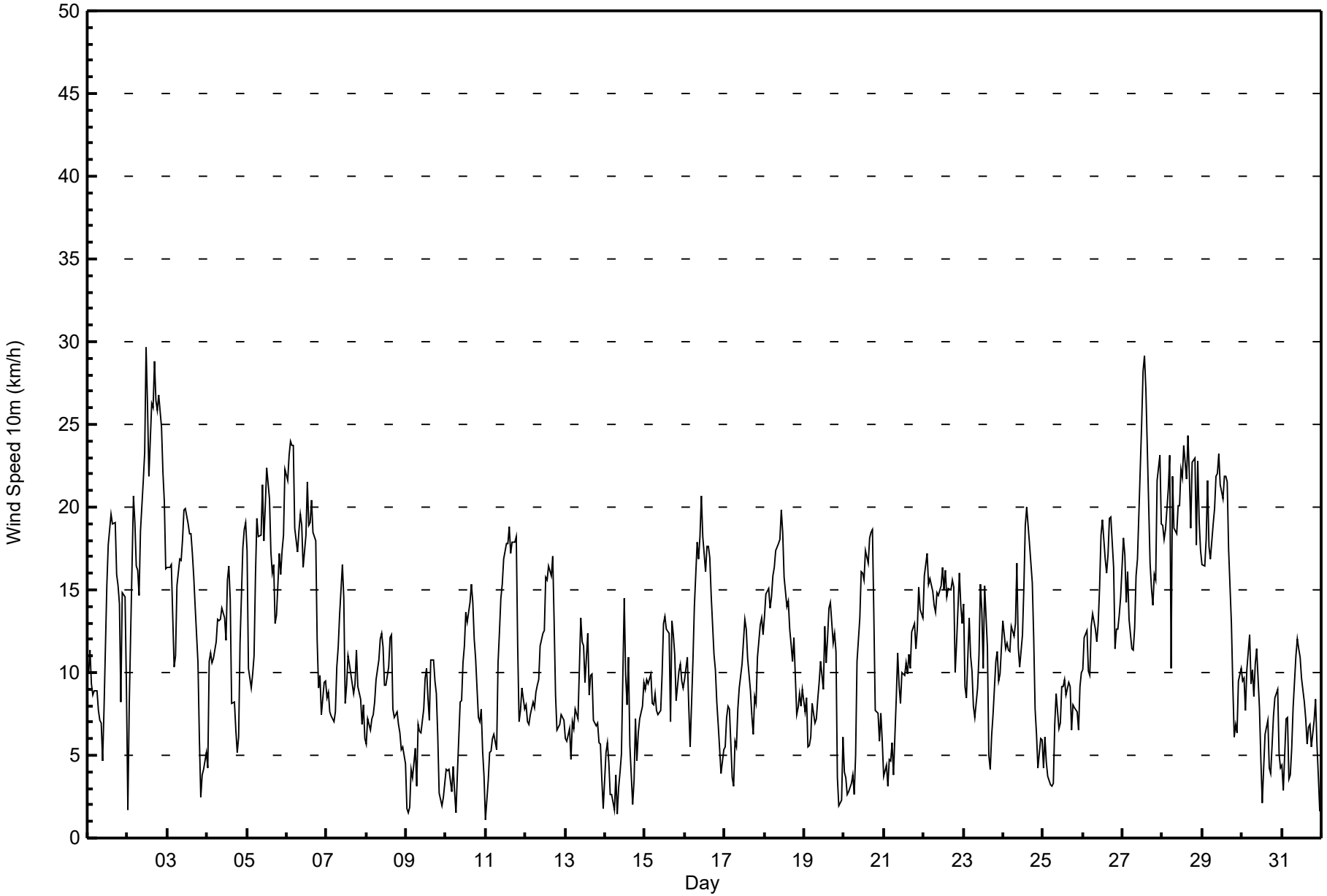
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Firebag - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 101 | 13.58 | 13.58 |
| 6 - 11 | 307 | 41.26 | 54.84 |
| 12 - 19 | 270 | 36.29 | 91.13 |
| 20 - 28 | 63 | 8.47 | 99.60 |
| 29 - 38 | 3 | 0.40 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wind Speed 10m (WS10) - km/h
## Firebag - August 2026

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 8 | 7 | 10 | 7 | 0 | 3 | 0 | 3 | 7 | 4 | 6 | 10 | 9 | 11 | 7 | 9 | 101 |
| 6 - 11 | 48 | 21 | 14 | 4 | 2 | 3 | 5 | 6 | 19 | 21 | 43 | 21 | 11 | 18 | 26 | 45 | 307 |
| 12 - 19 | 52 | 18 | 2 | 0 | 0 | 3 | 8 | 10 | 27 | 42 | 9 | 19 | 12 | 2 | 17 | 49 | 270 |
| 20 - 28 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 4 | 2 | 3 | 18 | 0 | 0 | 4 | 16 | 63 |
| 29 - 38 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 119 | 46 | 26 | 11 | 2 | 9 | 14 | 24 | 58 | 69 | 61 | 68 | 32 | 31 | 54 | 120 | 744 |

Total Number of Valid Hours: 744

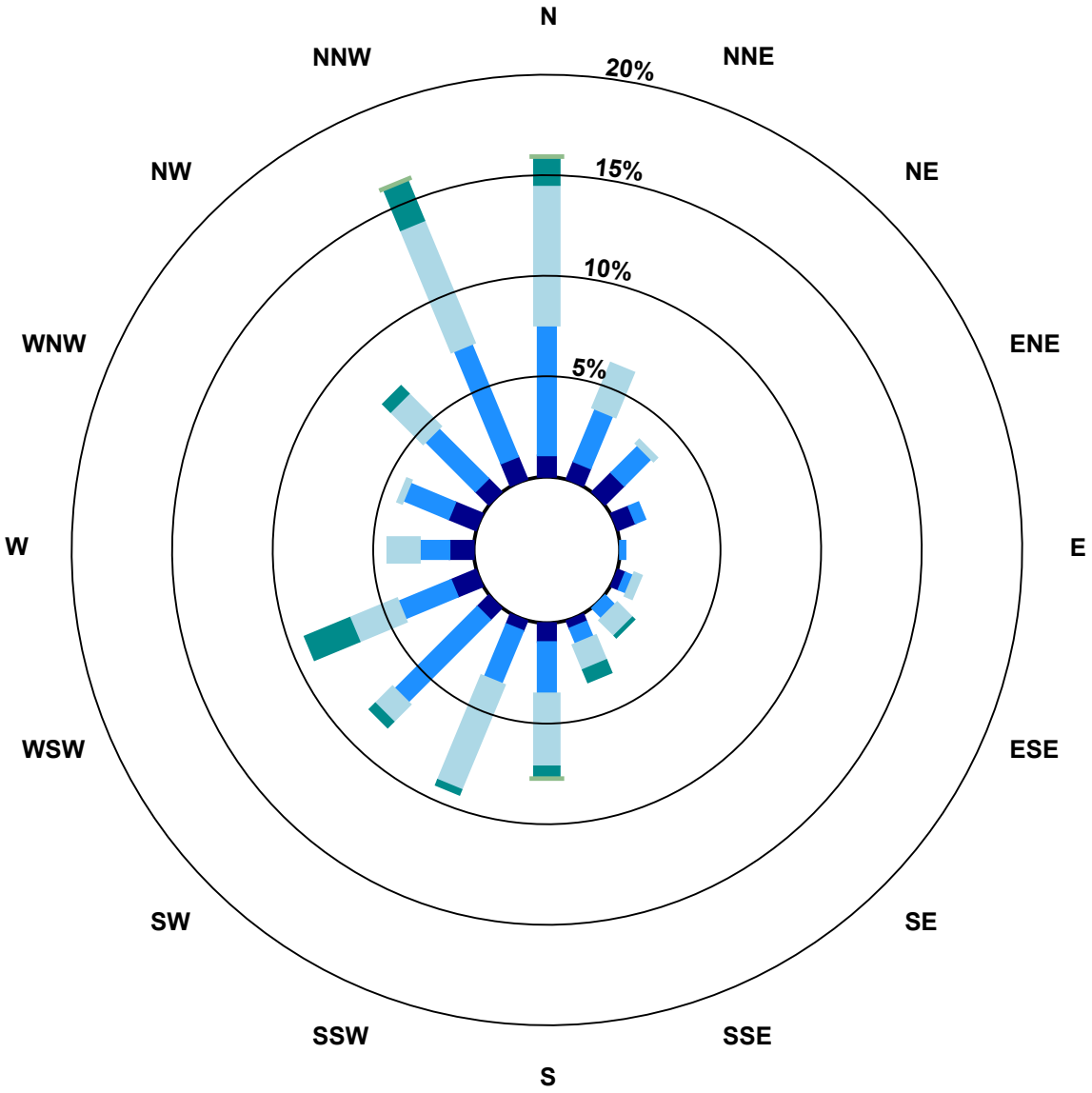
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Firebag




Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Firebag - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 8 km/h on Aug 2 12:00

Minimum Value: 0 km/h on Aug 10 01:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 3 $Q_3$ = 4 $P_{90}$ = 5 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 7 | 7 | 6 | 3 | 7 |
| 2-Aug | 5 | 2 | 4 | 6 | 5 | 4 | 4 | 4 | 5 | 5 | 7 | 8 | 7 | 6 | 7 | 8 | 7 | 7 | 7 | 7 | 6 | 5 | 4 | 3 | 8 |
| 3-Aug | 4 | 3 | 4 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 5 |
| 4-Aug | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 1 | 1 | 6 | 4 | 5 | 5 | 6 |
| 5-Aug | 5 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| 6-Aug | 5 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 6 | 5 | 4 | 5 | 4 | 2 | 2 | 2 | 3 | 2 | 6 |
| 7-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 5 | 5 | 4 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 5 |
| 8-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 6 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 6 |
| 9-Aug | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 4 |
| 10-Aug | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 1 | 1 | 2 | 1 | 5 |
| 12-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 5 |
| 13-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 4 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 6 | 5 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 6 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 4 |
| 16-Aug | 1 | 1 | 2 | 1 | 2 | 3 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 3 | 3 | 1 | 1 | 0 | 1 | 2 | 5 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 4 |
| 18-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 4 |
| 19-Aug | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 1 | 2 | 2 | 4 |
| 20-Aug | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 1 | 1 | 1 | 0 | 1 | 5 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 4 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 4 |
| 23-Aug | 3 | 1 | 2 | 2 | 3 | 1 | 2 | 3 | 2 | 2 | 5 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 5 |
| 24-Aug | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 5 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 1 | 2 | 1 | 1 | 1 | 5 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 |
| 26-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 5 |
| 27-Aug | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 4 | 3 | 3 | 3 | 4 | 6 | 5 | 4 | 6 |
| 28-Aug | 4 | 4 | 3 | 4 | 4 | 7 | 4 | 4 | 5 | 4 | 4 | 5 | 6 | 5 | 6 | 6 | 6 | 5 | 5 | 6 | 4 | 6 | 4 | 5 | 7 |
| 29-Aug | 4 | 4 | 6 | 5 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 2 | 1 | 1 | 2 | 1 | 2 | 6 |
| 30-Aug | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 3 |
| 31-Aug | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 3 |
| | 5 | 6 | 6 | 6 | 6 | 7 | 5 | 5 | 5 | 6 | 7 | 8 | 7 | 6 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

Direction of Maximum Speed: 1 deg on Aug 2 12:00

Direction of Maximum Daily Speed Average: 354.7 deg on Aug 2

Direction of Minimum Speed: 344 deg on Aug 11 01:00

Direction of Minimum Daily Speed Average: 0.4 deg on Aug 14

Monthly Average Direction: 297.5 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 171 | 191 | 202 | 204 | 211 | 204 | 189 | 201 | 212 | 118 | 132 | 124 | 117 | 118 | 127 | 142 | 137 | 142 | 144 | 139 | 92 | 11 | 41 | 129 | 141.9 |
| 2-Aug | 338 | 357 | 0 | 4 | 8 | 18 | 15 | 7 | 359 | 2 | 0 | 1 | 2 | 359 | 355 | 351 | 348 | 348 | 350 | 347 | 345 | 337 | 332 | 332 | 354.7 |
| 3-Aug | 335 | 340 | 344 | 337 | 327 | 332 | 339 | 342 | 334 | 333 | 340 | 335 | 336 | 334 | 339 | 351 | 358 | 353 | 360 | 360 | 338 | 189 | 187 | 195 | 339.3 |
| 4-Aug | 210 | 220 | 212 | 210 | 216 | 204 | 217 | 230 | 253 | 273 | 277 | 261 | 258 | 251 | 267 | 298 | 283 | 208 | 197 | 275 | 335 | 341 | 342 | 346 | 263.2 |
| 5-Aug | 328 | 311 | 300 | 300 | 304 | 326 | 325 | 326 | 326 | 332 | 328 | 320 | 322 | 326 | 339 | 349 | 352 | 343 | 349 | 339 | 332 | 319 | 326 | 344 | 329.2 |
| 6-Aug | 335 | 330 | 329 | 338 | 336 | 324 | 318 | 335 | 345 | 348 | 348 | 342 | 337 | 332 | 328 | 321 | 326 | 335 | 321 | 307 | 313 | 299 | 311 | 317 | 330.9 |
| 7-Aug | 309 | 306 | 299 | 298 | 286 | 291 | 297 | 301 | 310 | 316 | 322 | 333 | 334 | 320 | 315 | 341 | 346 | 359 | 337 | 331 | 328 | 332 | 353 | 327 | 320.4 |
| 8-Aug | 315 | 338 | 318 | 332 | 317 | 321 | 342 | 356 | 0 | 359 | 356 | 3 | 356 | 340 | 329 | 333 | 334 | 352 | 340 | 345 | 335 | 334 | 14 | 31 | 343.5 |
| 9-Aug | 31 | 23 | 28 | 50 | 49 | 57 | 66 | 42 | 37 | 23 | 30 | 347 | 356 | 14 | 9 | 353 | 1 | 10 | 21 | 28 | 45 | 51 | 156 | 158 | 20.6 |
| 10-Aug | 175 | 176 | 191 | 224 | 229 | 249 | 9 | 344 | 10 | 353 | 353 | 347 | 340 | 344 | 344 | 13 | 15 | 24 | 7 | 4 | 360 | 359 | 13 | 6 | 356.4 |
| 11-Aug | 344 | 340 | 317 | 303 | 318 | 323 | 325 | 344 | 350 | 342 | 353 | 355 | 355 | 3 | 7 | 7 | 7 | 12 | 19 | 22 | 355 | 345 | 359 | 342 | 355.8 |
| 12-Aug | 339 | 343 | 348 | 348 | 340 | 338 | 335 | 355 | 360 | 354 | 8 | 10 | 18 | 18 | 13 | 11 | 21 | 31 | 25 | 26 | 30 | 5 | 359 | 7 | 6.1 |
| 13-Aug | 24 | 37 | 39 | 50 | 48 | 57 | 35 | 36 | 28 | 32 | 33 | 24 | 12 | 33 | 39 | 35 | 33 | 9 | 5 | 5 | 5 | 351 | 16 | 71 | 28.5 |
| 14-Aug | 65 | 57 | 51 | 62 | 113 | 63 | 180 | 310 | 325 | 295 | 271 | 42 | 70 | 107 | 139 | 60 | 312 | 277 | 306 | 275 | 237 | 219 | 220 | 222 | 83.2 |
| 15-Aug | 229 | 226 | 222 | 219 | 220 | 222 | 231 | 239 | 258 | 293 | 281 | 259 | 261 | 263 | 267 | 281 | 258 | 251 | 240 | 231 | 229 | 228 | 231 | 233 | 245.2 |
| 16-Aug | 228 | 230 | 264 | 295 | 331 | 16 | 350 | 349 | 352 | 351 | 1 | 354 | 359 | 340 | 334 | 323 | 346 | 347 | 347 | 360 | 341 | 320 | 293 | 273 | 338.7 |
| 17-Aug | 261 | 242 | 244 | 241 | 249 | 235 | 240 | 264 | 274 | 305 | 292 | 292 | 325 | 313 | 319 | 298 | 302 | 254 | 233 | 216 | 205 | 202 | 202 | 204 | 260.0 |
| 18-Aug | 207 | 209 | 207 | 207 | 205 | 206 | 204 | 212 | 214 | 206 | 212 | 227 | 255 | 253 | 261 | 245 | 249 | 266 | 262 | 250 | 239 | 234 | 233 | 231 | 225.8 |
| 19-Aug | 230 | 242 | 224 | 215 | 215 | 220 | 233 | 223 | 247 | 217 | 248 | 277 | 315 | 330 | 316 | 347 | 355 | 340 | 349 | 348 | 2 | 47 | 300 | 305 | 292.5 |
| 20-Aug | 291 | 248 | 294 | 295 | 283 | 275 | 273 | 334 | 7 | 354 | 350 | 3 | 349 | 346 | 349 | 341 | 346 | 352 | 356 | 7 | 4 | 356 | 354 | 335 | 346.2 |
| 21-Aug | 296 | 271 | 241 | 243 | 239 | 231 | 227 | 236 | 224 | 258 | 276 | 261 | 266 | 257 | 235 | 244 | 240 | 232 | 211 | 187 | 176 | 180 | 188 | 189 | 226.5 |
| 22-Aug | 194 | 195 | 195 | 191 | 184 | 183 | 190 | 184 | 188 | 200 | 209 | 196 | 206 | 214 | 203 | 210 | 206 | 203 | 189 | 172 | 179 | 197 | 207 | 214 | 196.7 |
| 23-Aug | 207 | 200 | 191 | 206 | 202 | 200 | 188 | 200 | 209 | 205 | 231 | 208 | 215 | 232 | 231 | 289 | 303 | 288 | 275 | 343 | 359 | 8 | 7 | 3 | 231.8 |
| 24-Aug | 2 | 359 | 7 | 10 | 13 | 359 | 0 | 3 | 359 | 348 | 336 | 343 | 352 | 344 | 349 | 355 | 0 | 9 | 16 | 20 | 18 | 358 | 4 | 336 | 358.4 |
| 25-Aug | 355 | 28 | 42 | 16 | 4 | 4 | 356 | 21 | 49 | 9 | 323 | 312 | 321 | 319 | 319 | 5 | 359 | 18 | 38 | 53 | 79 | 107 | 127 | 140 | 16.6 |
| 26-Aug | 147 | 166 | 168 | 154 | 156 | 179 | 192 | 208 | 209 | 216 | 221 | 206 | 208 | 204 | 205 | 191 | 196 | 185 | 172 | 161 | 159 | 152 | 174 | 184 | 186.5 |
| 27-Aug | 189 | 189 | 181 | 182 | 170 | 166 | 171 | 171 | 176 | 174 | 153 | 161 | 169 | 182 | 175 | 176 | 153 | 146 | 128 | 126 | 139 | 157 | 155 | 149 | 165.1 |
| 28-Aug | 148 | 147 | 153 | 169 | 183 | 173 | 194 | 207 | 212 | 221 | 223 | 225 | 252 | 243 | 248 | 251 | 250 | 247 | 245 | 246 | 256 | 249 | 251 | 259 | 223.2 |
| 29-Aug | 253 | 247 | 249 | 251 | 244 | 246 | 247 | 238 | 241 | 250 | 245 | 244 | 250 | 254 | 249 | 250 | 259 | 255 | 230 | 204 | 195 | 183 | 188 | 194 | 243.0 |
| 30-Aug | 190 | 191 | 189 | 184 | 183 | 188 | 190 | 204 | 232 | 222 | 210 | 216 | 251 | 343 | 50 | 36 | 46 | 54 | 105 | 166 | 191 | 187 | 200 | 240 | 191.7 |
| 31-Aug | 179 | 238 | 217 | 220 | 336 | 67 | 159 | 335 | 14 | 354 | 332 | 342 | 327 | 326 | 335 | 321 | 257 | 258 | 241 | 218 | 246 | 293 | 322 | 104 | 304.7 |
| | 245.9 | 244.3 | 245.7 | 247.5 | 250.2 | 258.6 | 259.7 | 288.5 | 301.9 | 307.5 | 305.5 | 309.2 | 314.2 | 308.1 | 311.6 | 323.2 | 327.4 | 325.7 | 324.1 | 327.2 | 308.7 | 282.0 | 281.8 | 265.4 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

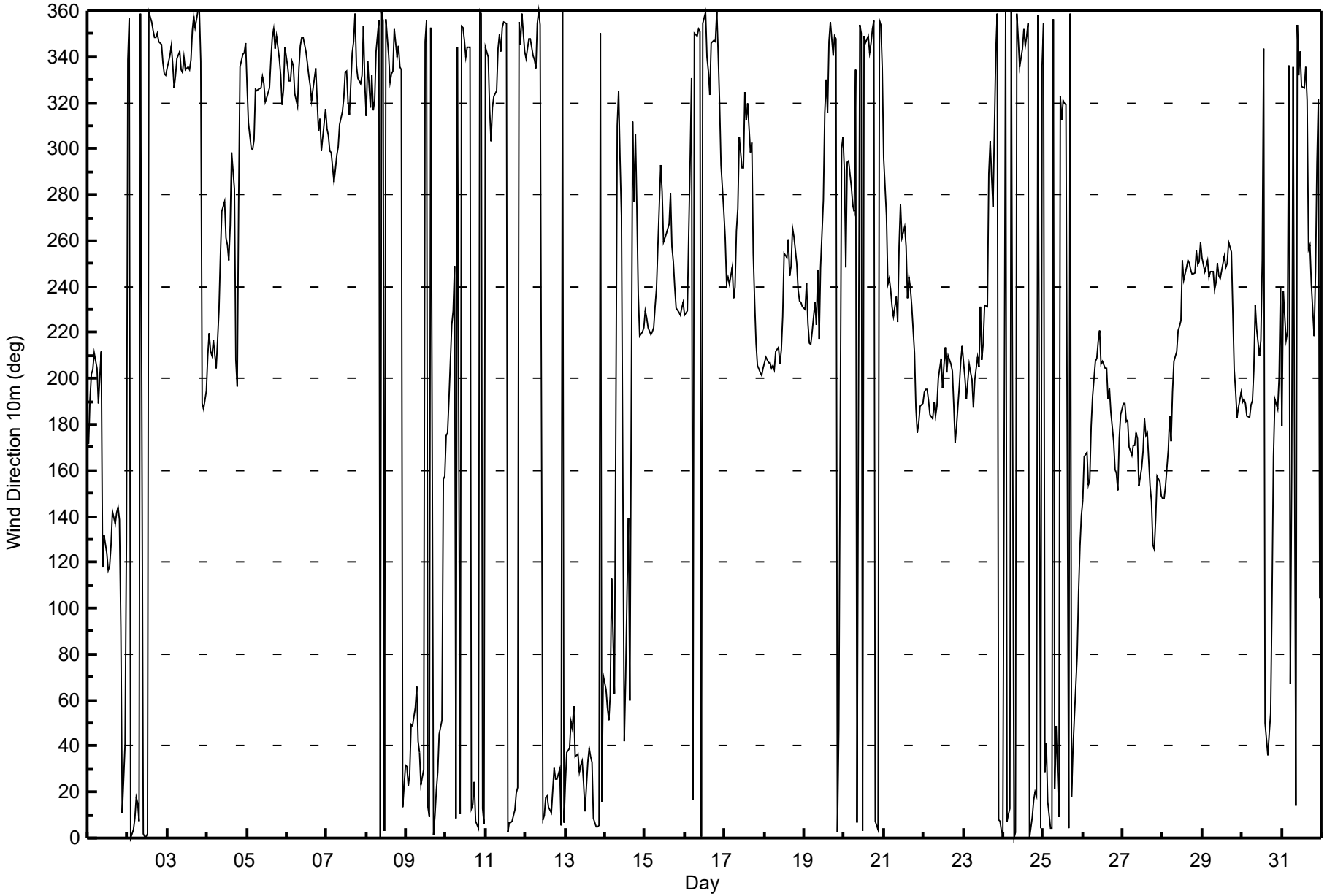
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Firebag - August 2026**



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 87 deg on Aug 2 01:00

Minimum Value: 3 deg on Aug 9 04:00

Percentiles: $P_1$ = 6 $P_{10}$ = 9 $Q_1$ = 12 Median = 16 $Q_3$ = 21 $P_{90}$ = 28 $P_{99}$ = 61

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 11 | 10 | 6 | 6 | 7 | 6 | 9 | 12 | 51 | 41 | 17 | 13 | 12 | 15 | 19 | 20 | 21 | 16 | 13 | 15 | 49 | 59 | 36 | 34 | 59 |
| 2-Aug | 87 | 27 | 15 | 17 | 16 | 17 | 16 | 17 | 17 | 17 | 18 | 20 | 18 | 17 | 16 | 16 | 15 | 16 | 15 | 15 | 15 | 13 | 13 | 12 | 87 |
| 3-Aug | 13 | 13 | 15 | 15 | 14 | 13 | 14 | 16 | 15 | 16 | 18 | 19 | 16 | 20 | 23 | 19 | 21 | 21 | 18 | 12 | 25 | 12 | 16 | 7 | 25 |
| 4-Aug | 23 | 9 | 8 | 7 | 10 | 10 | 13 | 13 | 18 | 20 | 21 | 20 | 20 | 21 | 24 | 46 | 34 | 54 | 31 | 26 | 25 | 16 | 16 | 16 | 54 |
| 5-Aug | 16 | 19 | 23 | 23 | 22 | 14 | 14 | 15 | 15 | 16 | 21 | 18 | 17 | 18 | 18 | 18 | 15 | 13 | 14 | 14 | 15 | 18 | 16 | 16 | 23 |
| 6-Aug | 16 | 15 | 15 | 14 | 13 | 17 | 17 | 16 | 16 | 16 | 16 | 15 | 16 | 17 | 18 | 18 | 15 | 15 | 21 | 19 | 17 | 22 | 19 | 16 | 22 |
| 7-Aug | 18 | 20 | 21 | 22 | 19 | 22 | 22 | 21 | 23 | 21 | 16 | 18 | 18 | 18 | 23 | 19 | 20 | 17 | 20 | 13 | 14 | 10 | 11 | 13 | 23 |
| 8-Aug | 19 | 11 | 13 | 13 | 18 | 18 | 16 | 16 | 17 | 19 | 21 | 24 | 38 | 34 | 31 | 27 | 21 | 34 | 13 | 12 | 5 | 13 | 11 | 7 | 38 |
| 9-Aug | 16 | 11 | 9 | 3 | 5 | 6 | 15 | 23 | 32 | 40 | 38 | 34 | 23 | 26 | 33 | 25 | 18 | 26 | 18 | 8 | 62 | 27 | 53 | 43 | 62 |
| 10-Aug | 5 | 7 | 10 | 36 | 13 | 38 | 35 | 22 | 22 | 24 | 23 | 25 | 25 | 25 | 24 | 23 | 20 | 15 | 14 | 9 | 9 | 9 | 7 | 8 | 38 |
| 11-Aug | 9 | 13 | 7 | 14 | 11 | 7 | 10 | 15 | 16 | 20 | 21 | 19 | 18 | 21 | 19 | 21 | 23 | 20 | 16 | 15 | 12 | 10 | 13 | 13 | 23 |
| 12-Aug | 6 | 9 | 11 | 8 | 16 | 14 | 14 | 17 | 16 | 16 | 16 | 16 | 16 | 17 | 18 | 16 | 16 | 17 | 12 | 12 | 10 | 9 | 10 | 13 | 18 |
| 13-Aug | 9 | 10 | 9 | 19 | 12 | 12 | 16 | 18 | 15 | 15 | 21 | 18 | 18 | 16 | 20 | 20 | 14 | 15 | 12 | 11 | 10 | 11 | 22 | 43 | 43 |
| 14-Aug | 19 | 13 | 13 | 22 | 45 | 42 | 48 | 74 | 22 | 24 | 49 | 30 | 20 | 38 | 32 | 65 | 71 | 31 | 20 | 22 | 9 | 13 | 8 | 8 | 74 |
| 15-Aug | 7 | 7 | 9 | 8 | 9 | 10 | 10 | 11 | 22 | 24 | 30 | 26 | 22 | 20 | 28 | 26 | 16 | 16 | 12 | 9 | 8 | 8 | 9 | 8 | 30 |
| 16-Aug | 7 | 9 | 24 | 17 | 22 | 24 | 15 | 16 | 16 | 17 | 17 | 21 | 20 | 19 | 19 | 20 | 23 | 16 | 16 | 10 | 13 | 10 | 21 | 19 | 24 |
| 17-Aug | 23 | 4 | 6 | 6 | 15 | 35 | 16 | 14 | 21 | 24 | 27 | 26 | 25 | 23 | 25 | 28 | 32 | 28 | 13 | 10 | 7 | 7 | 7 | 8 | 35 |
| 18-Aug | 7 | 9 | 8 | 9 | 8 | 9 | 9 | 12 | 15 | 12 | 15 | 20 | 18 | 17 | 18 | 25 | 22 | 17 | 14 | 12 | 9 | 7 | 8 | 7 | 25 |
| 19-Aug | 7 | 8 | 17 | 12 | 24 | 10 | 19 | 11 | 24 | 23 | 16 | 29 | 22 | 30 | 25 | 18 | 15 | 16 | 15 | 13 | 21 | 38 | 40 | 14 | 40 |
| 20-Aug | 20 | 17 | 22 | 30 | 21 | 23 | 40 | 19 | 15 | 18 | 19 | 20 | 20 | 20 | 22 | 20 | 18 | 18 | 16 | 8 | 8 | 6 | 5 | 12 | 40 |
| 21-Aug | 12 | 10 | 30 | 16 | 10 | 17 | 18 | 13 | 14 | 23 | 34 | 32 | 25 | 30 | 31 | 22 | 27 | 17 | 12 | 11 | 7 | 9 | 9 | 9 | 34 |
| 22-Aug | 8 | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 10 | 11 | 11 | 12 | 18 | 17 | 23 | 16 | 16 | 12 | 11 | 10 | 14 | 11 | 11 | 10 | 23 |
| 23-Aug | 8 | 8 | 11 | 8 | 10 | 10 | 14 | 30 | 10 | 15 | 13 | 19 | 24 | 14 | 10 | 32 | 26 | 20 | 19 | 25 | 12 | 16 | 14 | 14 | 32 |
| 24-Aug | 13 | 12 | 13 | 13 | 13 | 13 | 13 | 15 | 16 | 14 | 17 | 21 | 19 | 16 | 19 | 17 | 15 | 16 | 13 | 8 | 7 | 12 | 7 | 14 | 21 |
| 25-Aug | 17 | 11 | 7 | 7 | 11 | 7 | 6 | 19 | 21 | 30 | 32 | 30 | 30 | 26 | 27 | 24 | 19 | 24 | 10 | 9 | 21 | 19 | 13 | 13 | 32 |
| 26-Aug | 11 | 12 | 10 | 12 | 13 | 9 | 9 | 10 | 12 | 16 | 16 | 18 | 17 | 24 | 18 | 20 | 13 | 13 | 10 | 10 | 9 | 10 | 10 | 9 | 24 |
| 27-Aug | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 15 | 11 | 16 | 17 | 14 | 13 | 11 | 12 | 11 | 12 | 12 | 14 | 13 | 13 | 15 | 11 | 12 | 17 |
| 28-Aug | 12 | 13 | 13 | 11 | 10 | 57 | 16 | 12 | 15 | 14 | 13 | 15 | 16 | 16 | 16 | 13 | 15 | 14 | 13 | 13 | 15 | 13 | 13 | 14 | 57 |
| 29-Aug | 14 | 13 | 14 | 12 | 13 | 12 | 13 | 13 | 13 | 14 | 14 | 17 | 17 | 17 | 17 | 16 | 17 | 14 | 12 | 14 | 8 | 10 | 8 | 8 | 17 |
| 30-Aug | 8 | 9 | 9 | 10 | 9 | 12 | 11 | 20 | 15 | 19 | 35 | 72 | 83 | 43 | 17 | 18 | 27 | 38 | 18 | 12 | 14 | 11 | 54 | 44 | 83 |
| 31-Aug | 61 | 66 | 14 | 27 | 45 | 37 | 24 | 23 | 18 | 18 | 21 | 20 | 28 | 30 | 27 | 35 | 35 | 25 | 20 | 14 | 15 | 19 | 27 | 53 | 66 |
| | 87 | 66 | 30 | 36 | 45 | 57 | 48 | 74 | 51 | 41 | 49 | 72 | 83 | 43 | 33 | 65 | 71 | 54 | 31 | 26 | 62 | 59 | 54 | 53 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS20
## MACKAY RIVER
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MACKAY RIVER (AMS20)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 708 | 36 | 36 | 100 | 19.6 | 0 | 3 | 0 |
| H2S (ppb) Average | 708 | 36 | 36 | 100 | 0.7 | 0 | 0.3 | 0 |
| THC (ppm) Average | 678 | 35 | 66 | 95.83 | 3.5 | - | 2.5 | - |
| NO2 (ppb) Average | 708 | 36 | 36 | 100 | 10.6 | 0 | 2.2 | - |
| NO (ppb) Average | 708 | 36 | 36 | 100 | 7.4 | - | 1.1 | - |
| NOX (ppb) Average | 708 | 36 | 36 | 100 | 18 | - | 3.3 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 28.9 | - | 21.1 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 98.5 | - | 88.6 | - |
| Wind Speed 10 m (km/h) Average | 679 | 0 | 65 | 91.26 | 20 | - | 12 | - |
| Wind Direction 10 m (deg) Average | 679 | 0 | 65 | 91.26 | - | - | - | - |
| Precipitation (mm) Total | 744 | 0 | 0 | 100 | 10.3 | - | 18 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MACKAY RIVER (AMS20)
AUGUST 2026
MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 708 | 0.67 | 1.8 | - | 0 | 0 | 0 | 0.1 | 0.3 | 1.7 | 19.6 |
| H2S (ppb) Average | 708 | 0.15 | 0.1 | - | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.7 |
| THC (ppm) Average | 678 | 2.34 | 0.2 | - | 1.9 | 2.2 | 2.2 | 2.3 | 2.4 | 2.6 | 3.5 |
| NO2 (ppb) Average | 708 | 0.79 | 1 | - | 0.1 | 0.2 | 0.2 | 0.4 | 0.9 | 1.9 | 10.6 |
| NO (ppb) Average | 708 | 0.14 | 0.6 | - | 0 | 0 | 0 | 0 | 0.1 | 0.3 | 7.4 |
| NOX (ppb) Average | 708 | 0.93 | 1.5 | - | 0.1 | 0.2 | 0.2 | 0.4 | 1 | 2.1 | 18 |
| Temperature 2 m (C) Average | 744 | 15.65 | 5.4 | - | 4.5 | 8.6 | 11.6 | 15.4 | 19.6 | 23 | 28.9 |
| Relative Humidity (%) Average | 744 | 71.19 | 19.4 | - | 29.4 | 43 | 54.7 | 73 | 89.5 | 94.8 | 98.5 |
| Wind Speed 10 m (km/h) Average | 679 | 5.9 | 4 | - | 0 | 2 | 3 | 5 | 8 | 11 | 20 |
| Wind Direction 10 m (deg) Average | 679 | - | - | - | - | - | - | - | - | - | - |
| Precipitation (mm) Total | 744 | - | - | 48.9 | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION -MACKAY RIVER (AMS20)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| THC | 19 Aug 2026 04:00 | 20 Aug 2026 03:00 | 24 | Unstable Operation - excessive baseline drift |
| THC | 20 Aug 2026 05:00 | 20 Aug 2026 11:00 | 7 | Unstable Operation - excessive baseline drift |
| Wind Speed, Wind Direction | 11 Aug 2026 08:00 | 11 Aug 2026 09:00 | 2 | Maintenance - replaced sensor |
| Wind Speed, Wind Direction | 07 Aug 2026 23:00 | 27 Aug 2026 02:00 | 63 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Mackay River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 19.6 ppb on Aug 10 11:00

Maximum Daily Average: 3.0 ppb on Aug 24

Minimum Value: 0.0 ppb on Aug 1 04:00

Minimum Daily Average: 0.0 ppb on Aug 29

Maximum Diurnal Average: 2.4 ppb at hour 11

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 0.67 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 1.7 $P_{99}$ = 8.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 | 0.5 | 0.6 | 0.6 | 0.3 | 0.3 | 0.2 | 0.2 | 1.1 | 0.5 | 0.3 | 0.2 | 0.1 | 0.2 | 1.1 |
| 2-Aug | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.8 | 3.4 | 0.9 | 2.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 1.4 | 4.9 | 0.7 | 4.9 |
| 3-Aug | 3.0 | 3.8 | 2.0 | 0.2 | Z | 0.2 | 0.1 | 0.7 | 6.1 | 1.0 | 3.0 | 3.6 | 2.9 | 1.3 | 2.3 | 3.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.5 | 0.5 | 1.5 | 6.1 |
| 4-Aug | 0.4 | 0.4 | 0.2 | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 1.3 | 0.3 | 1.1 | 0.2 | 0.1 | 6.1 | 0.5 | 6.1 |
| 5-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 10.3 | 7.7 | 6.8 | 7.1 | 0.2 | 0.6 | 3.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 1.7 | 10.3 |
| 6-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.9 | 3.6 | 2.9 | 1.0 | 2.4 | 3.3 | 5.8 | 7.8 | 10.4 | 5.8 | 1.0 | 2.0 | 0.1 | 0.1 | 2.2 | 10.4 |
| 7-Aug | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 0.0 | 0.0 | 0.3 | 1.4 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1.4 |
| 8-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 | 0.1 | 0.0 | 0.1 | 0.7 | 1.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 9.8 | 6.6 | 2.7 | 1.4 | 0.9 | 0.8 | 0.4 | 0.8 | 0.8 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 1.2 | 9.8 |
| 10-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 1.1 | 1.7 | 7.0 | 19.6 | 7.8 | 2.6 | 1.4 | 0.5 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 1.9 | 19.6 |
| 11-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 1.1 | 2.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 2.1 |
| 12-Aug | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 3.7 | 1.1 | 1.6 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 3.7 |
| 13-Aug | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.3 | 5.1 | 7.1 | 7.0 | 1.2 | 4.1 | 0.8 | 0.9 | 1.7 | 2.1 | 1.4 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 1.5 | 7.1 |
| 14-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 | 1.8 | 2.7 | 3.6 | 1.4 | 0.2 | 0.8 | 0.0 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.6 | 3.6 |
| 15-Aug | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 |
| 16-Aug | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | Z | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 1.4 | 3.7 | 2.5 | 2.6 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.5 | 3.7 |
| 17-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 19-Aug | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 1.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 1.1 |
| 20-Aug | 0.1 | 0.1 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.2 | 3.7 | 2.0 | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 3.7 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 22-Aug | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | Z | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 |
| 23-Aug | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.7 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 8.4 | 0.5 | 8.4 |
| 24-Aug | 2.9 | Z | 0.7 | 1.0 | 1.6 | 2.0 | 1.8 | 3.7 | 2.5 | 7.4 | 6.3 | 8.8 | 5.8 | 6.5 | 8.6 | 1.8 | 5.3 | 0.7 | 0.1 | 0.5 | 1.8 | 0.0 | 0.1 | 0.0 | 3.0 | 8.8 |
| 25-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 8.6 | 16.8 | 10.9 | 8.2 | 1.3 | 0.9 | 1.4 | 1.2 | 0.4 | 0.6 | 0.7 | 1.0 | 0.8 | 0.6 | 0.4 | 0.2 | 2.3 | 16.8 |
| 26-Aug | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 |
| 27-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.4 | 0.6 |
| 28-Aug | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 29-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 2.0 | 1.4 | 0.0 | 0.2 | 0.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.0 |
| 31-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 1.0 | 1.9 | 2.4 | 2.0 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.7 | Diurnal Average | |
| | 3.0 | 3.8 | 2.0 | 1.0 | 1.6 | 2.0 | 3.4 | 3.7 | 8.6 | 16.8 | 19.6 | 8.8 | 7.1 | 6.5 | 8.6 | 3.3 | 5.8 | 7.8 | 10.4 | 5.8 | 1.8 | 2.0 | 1.4 | 8.4 | Diurnal Maximum | |

Z - zerospan C - Calibration

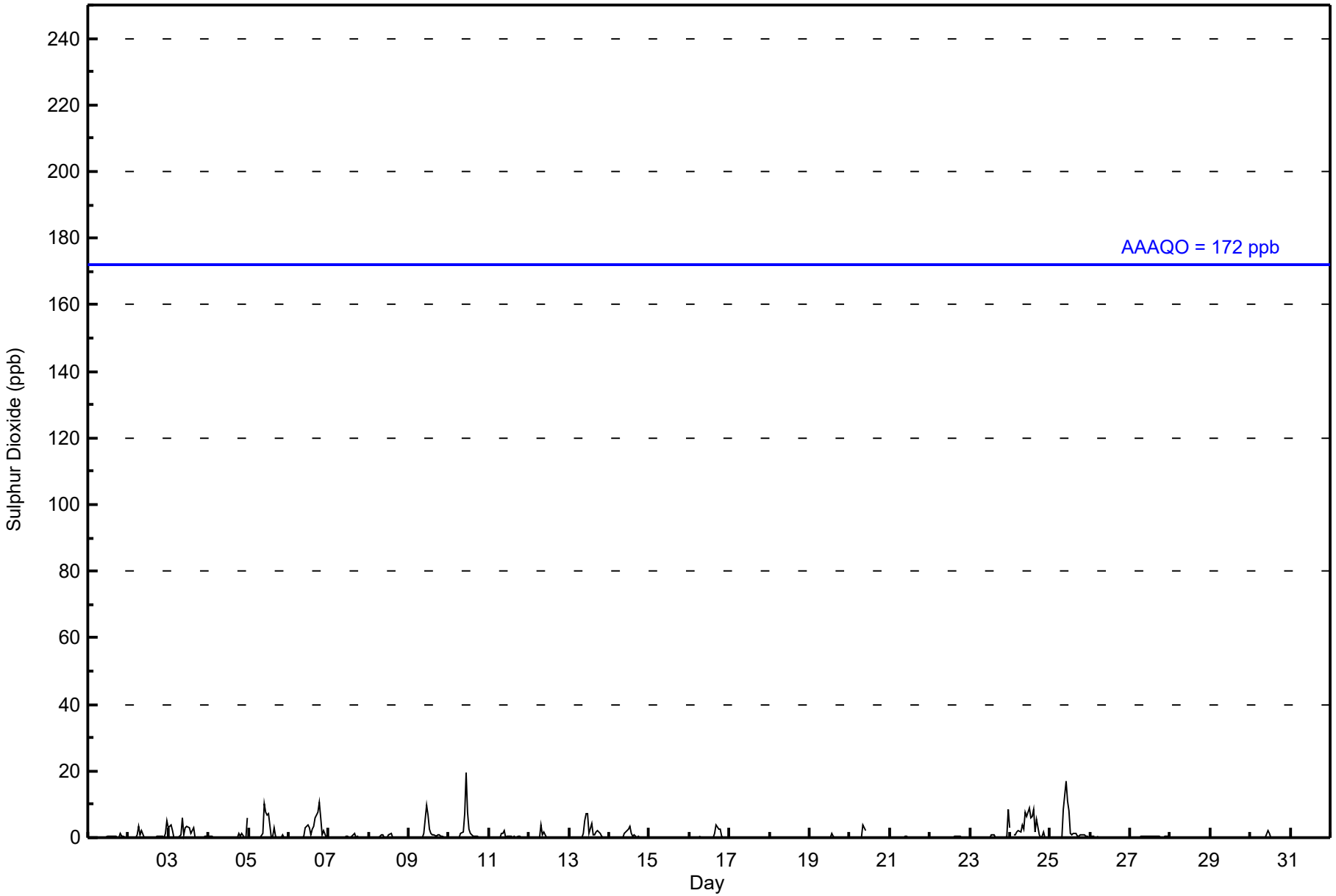
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mackay River - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Mackay River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 705 | 99.58 | 99.58 |
| 11 - 20 | 3 | 0.42 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mackay River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 24 | 38 | 16 | 7 | 11 | 20 | 27 | 61 | 72 | 25 | 50 | 53 | 58 | 58 | 69 | 56 | 645 |
| 11 - 20 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 38 | 17 | 7 | 11 | 20 | 28 | 61 | 72 | 25 | 50 | 53 | 58 | 58 | 70 | 56 | 648 |

Total Number of Valid Hours: 648

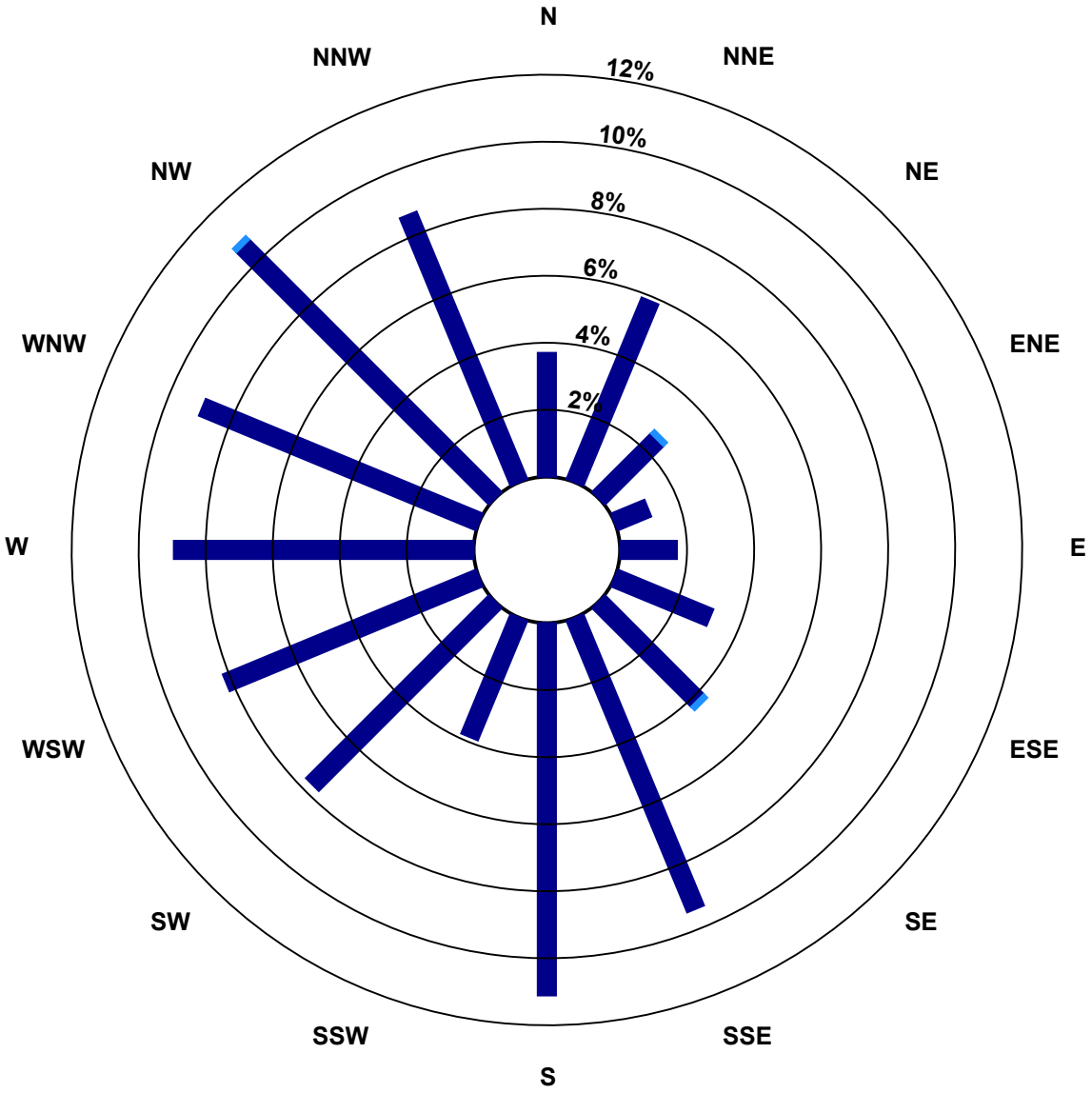
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Mackay River




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

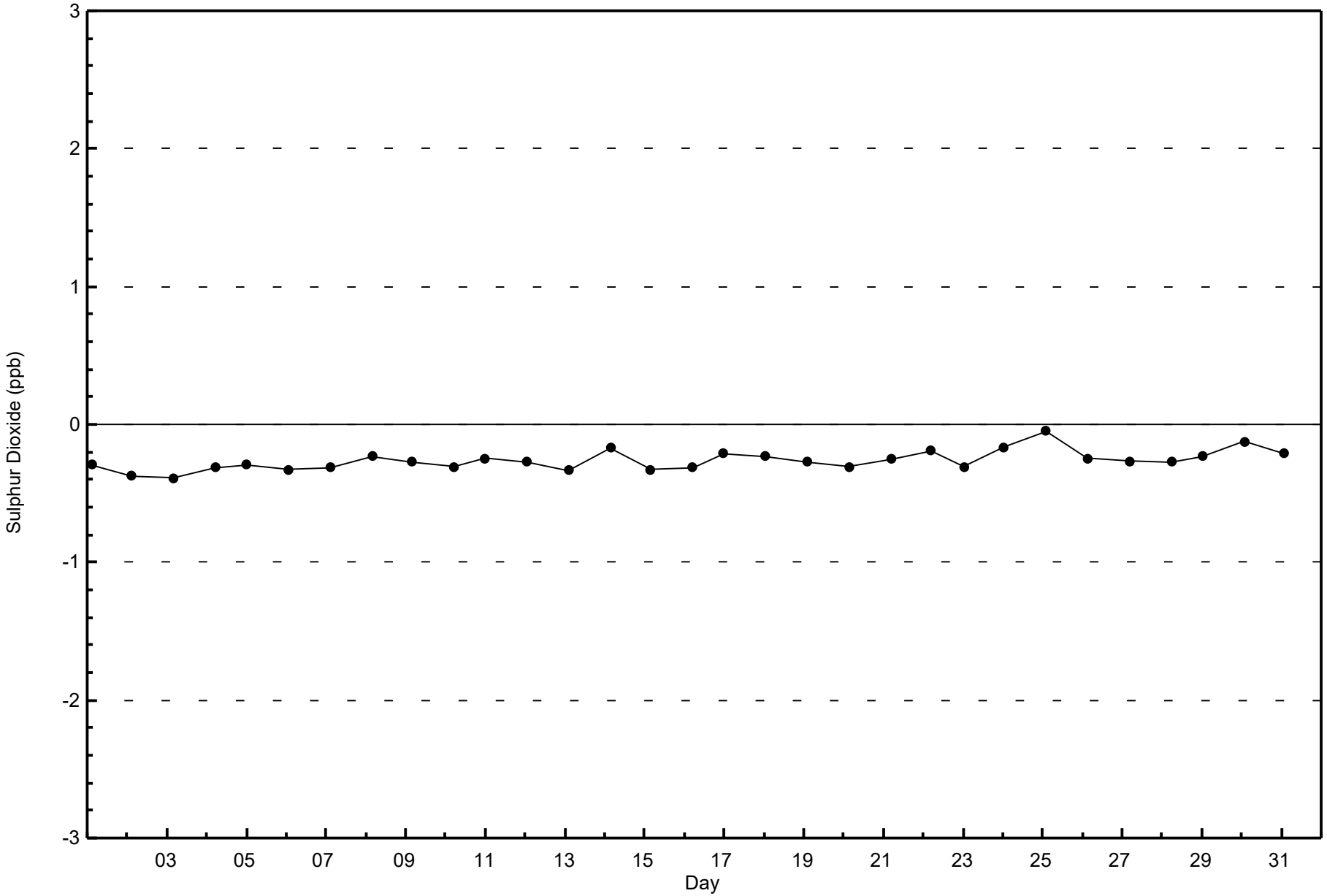
Total Number of Valid Hours: 648

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mackay River - August 2026**

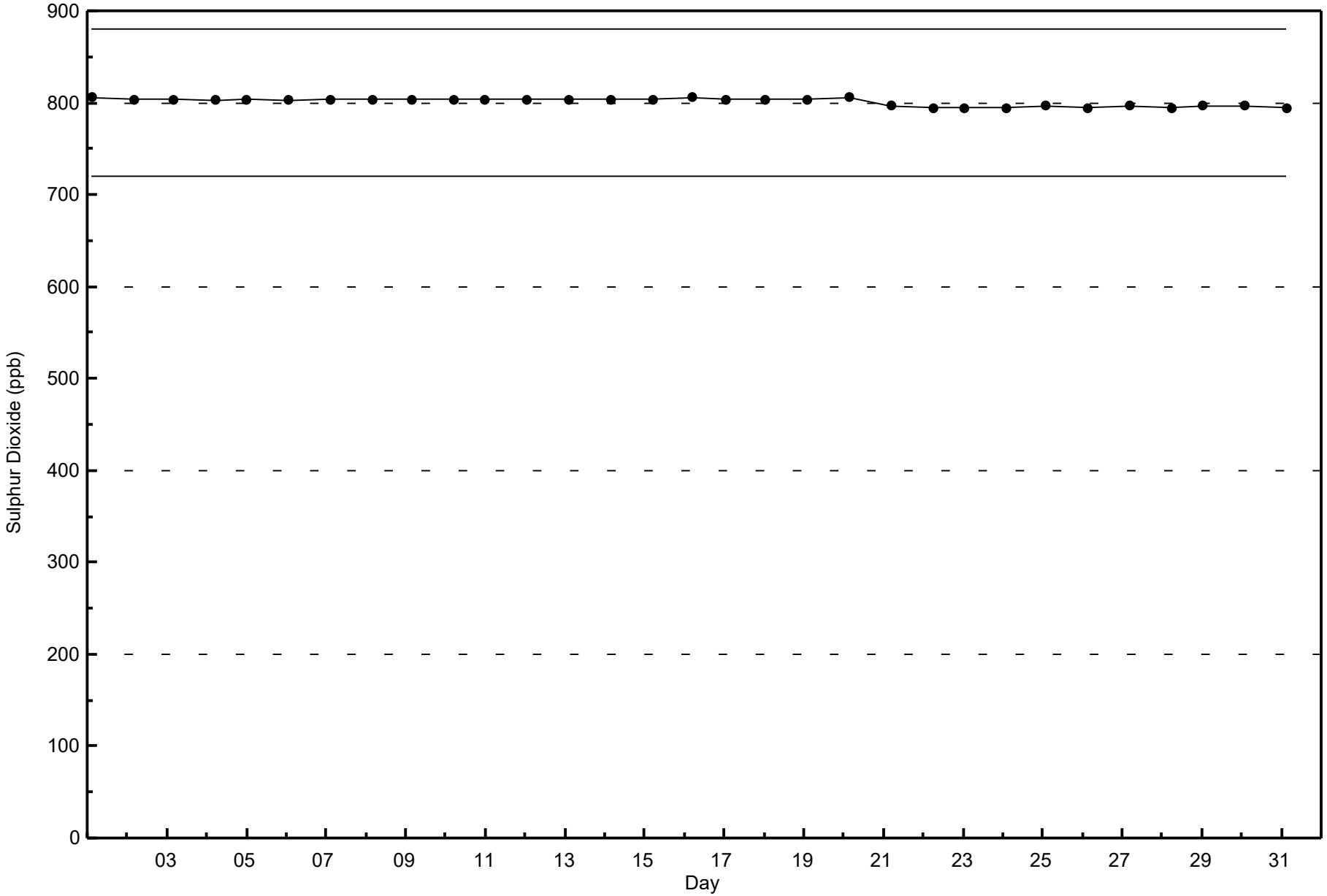


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Mackay River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Mackay River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.7 ppb on Aug 10 08:00 Maximum Daily Average: 0.3 ppb on Aug 10

Minimum Value: 0.0 ppb on Aug 11 16:00 Minimum Daily Average: 0.1 ppb on Aug 11
Maximum Diurnal Average: 0.2 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 15
Monthly Average: 0.15 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.2 $P_{99}$ = 0.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 |
| 2-Aug | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.4 |
| 3-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 4-Aug | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 5-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| 7-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 8-Aug | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 |
| 9-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 |
| 10-Aug | Z | 0.3 | 0.2 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 |
| 11-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | C | C | C | C | C | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 12-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 13-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 |
| 14-Aug | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 |
| 15-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 |
| 16-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 |
| 17-Aug | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 |
| 18-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 19-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 20-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 21-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 22-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 23-Aug | 0.3 | Z | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 |
| 24-Aug | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 25-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.5 |
| 26-Aug | 0.4 | 0.4 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| 28-Aug | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 29-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 |
| 30-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 31-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | Diurnal Maximum | |

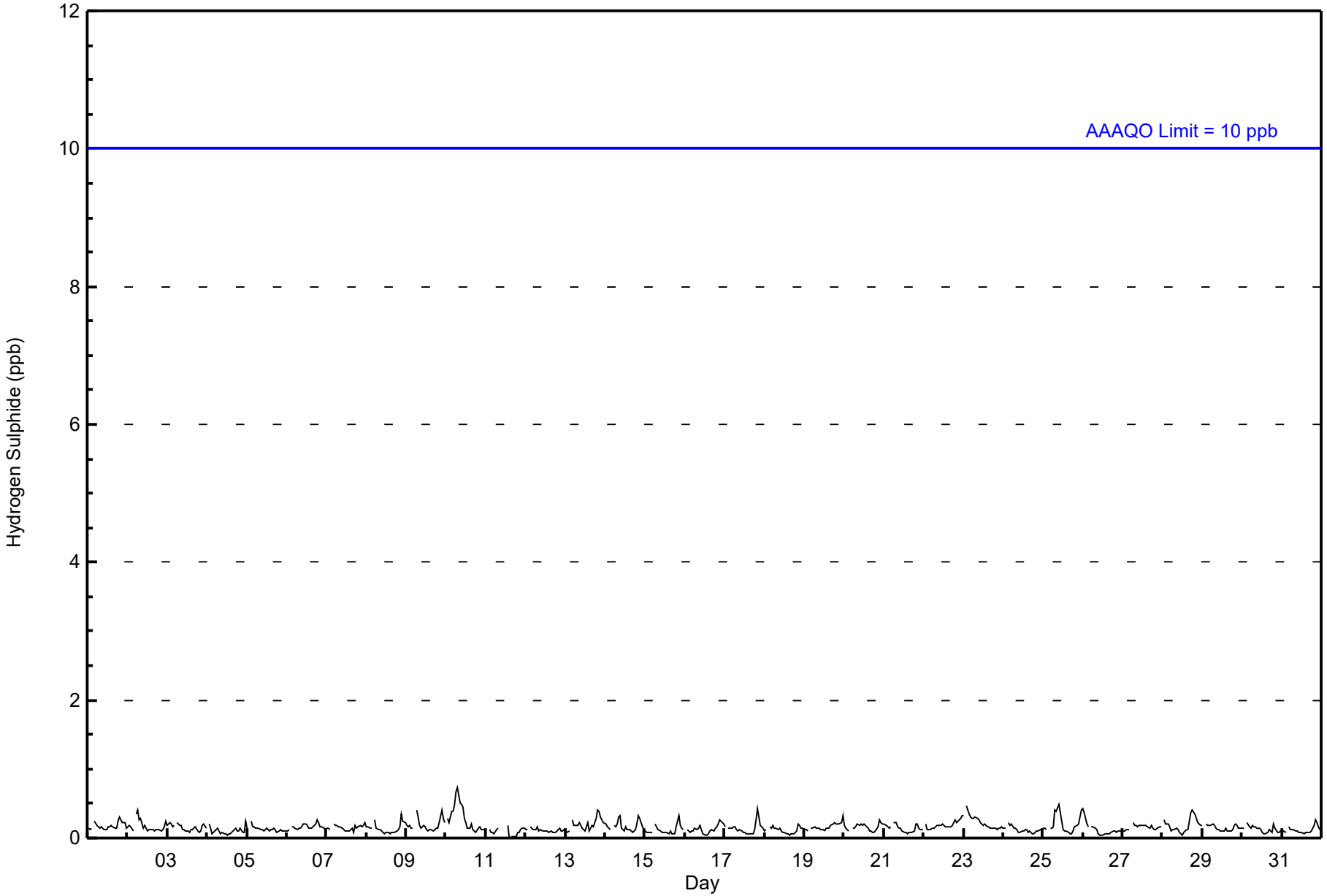
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mackay River - August 2026**



# Hydrogen Sulphide ($H_2S$) - ppb
## Mackay River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 708 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mackay River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 27 | 37 | 17 | 7 | 11 | 19 | 28 | 60 | 73 | 26 | 50 | 54 | 58 | 59 | 69 | 56 | 651 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 27 | 37 | 17 | 7 | 11 | 19 | 28 | 60 | 73 | 26 | 50 | 54 | 58 | 59 | 69 | 56 | 651 |

Total Number of Valid Hours: 651

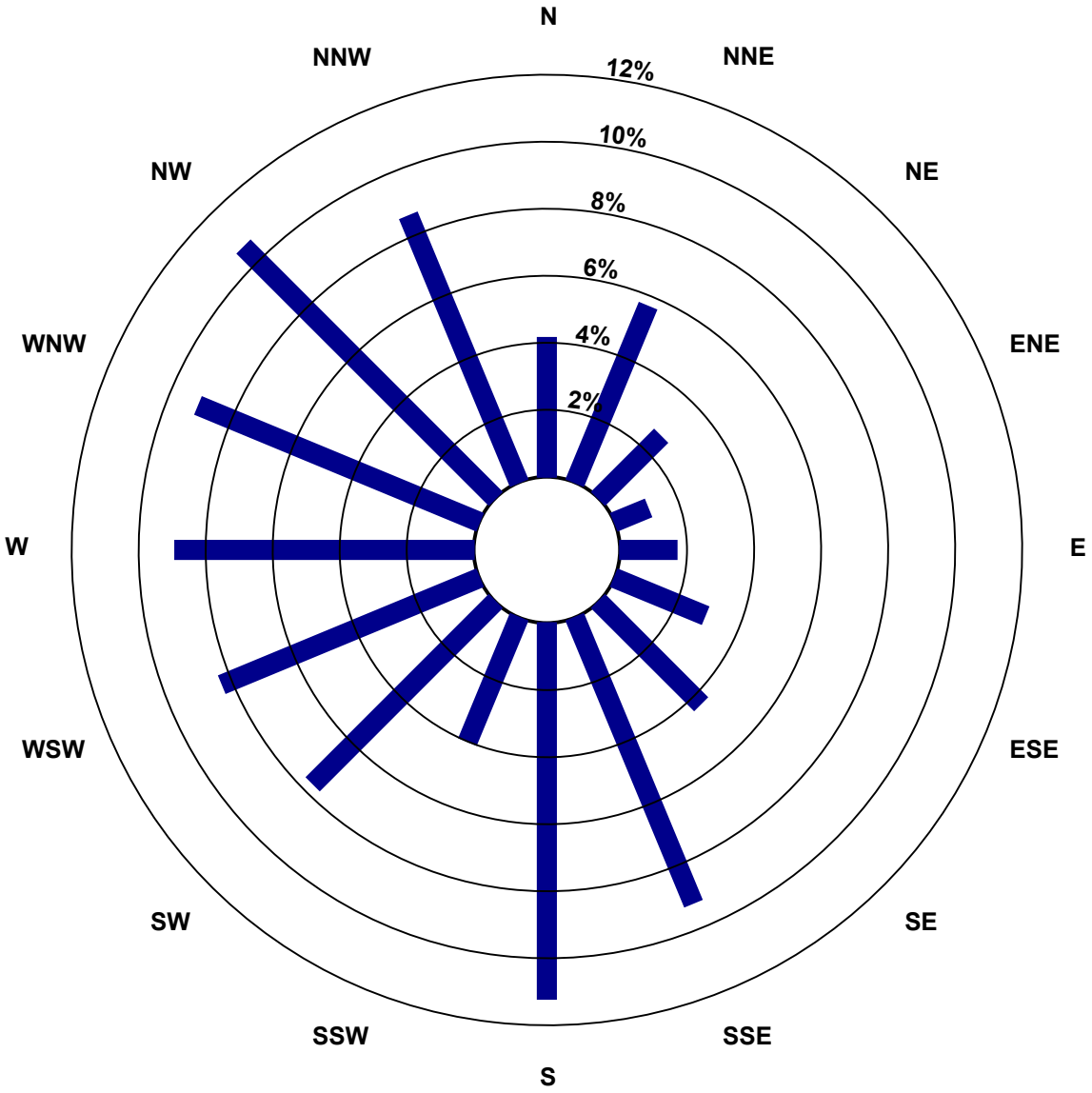
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Mackay River




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

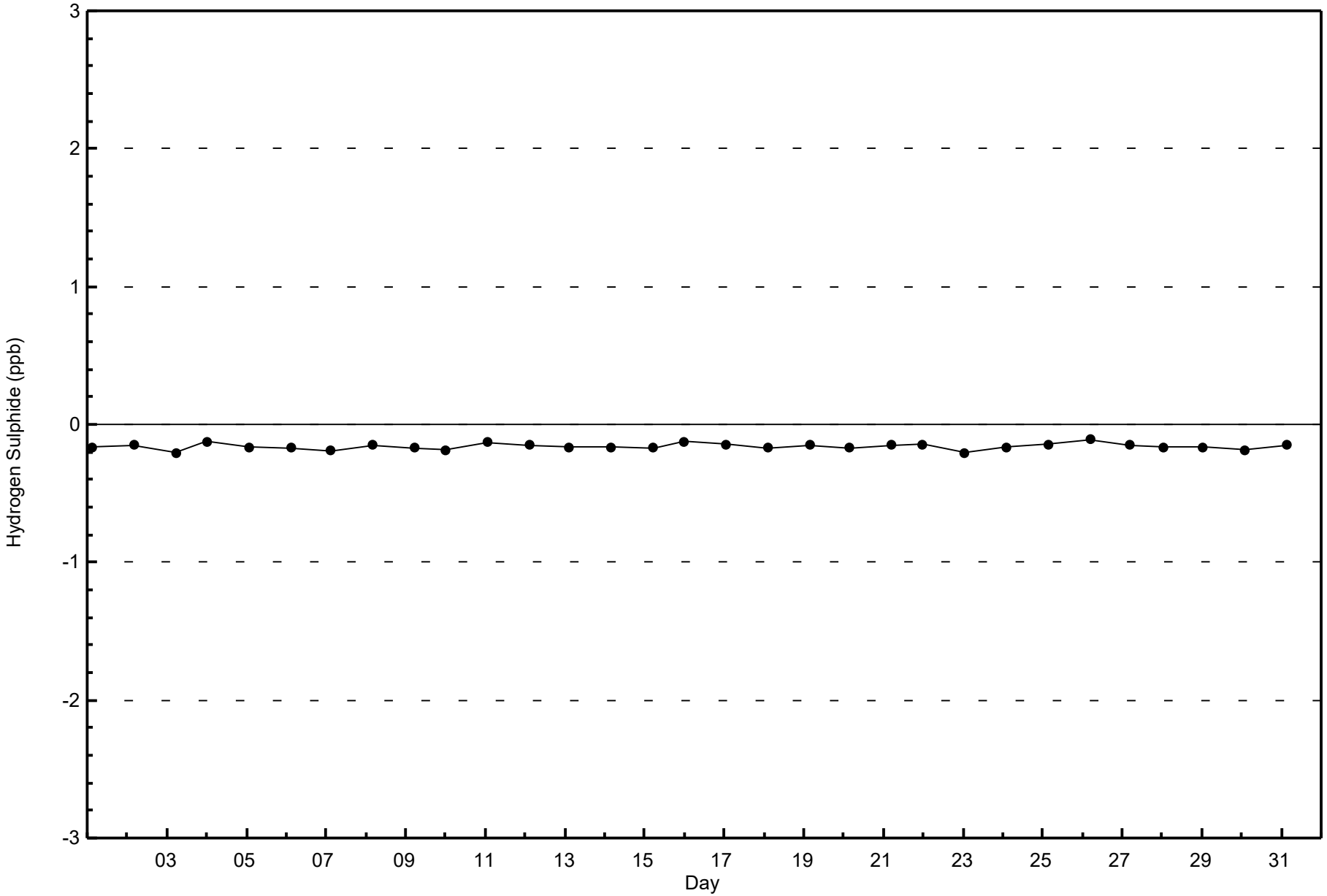
Total Number of Valid Hours: 651

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mackay River - August 2026**

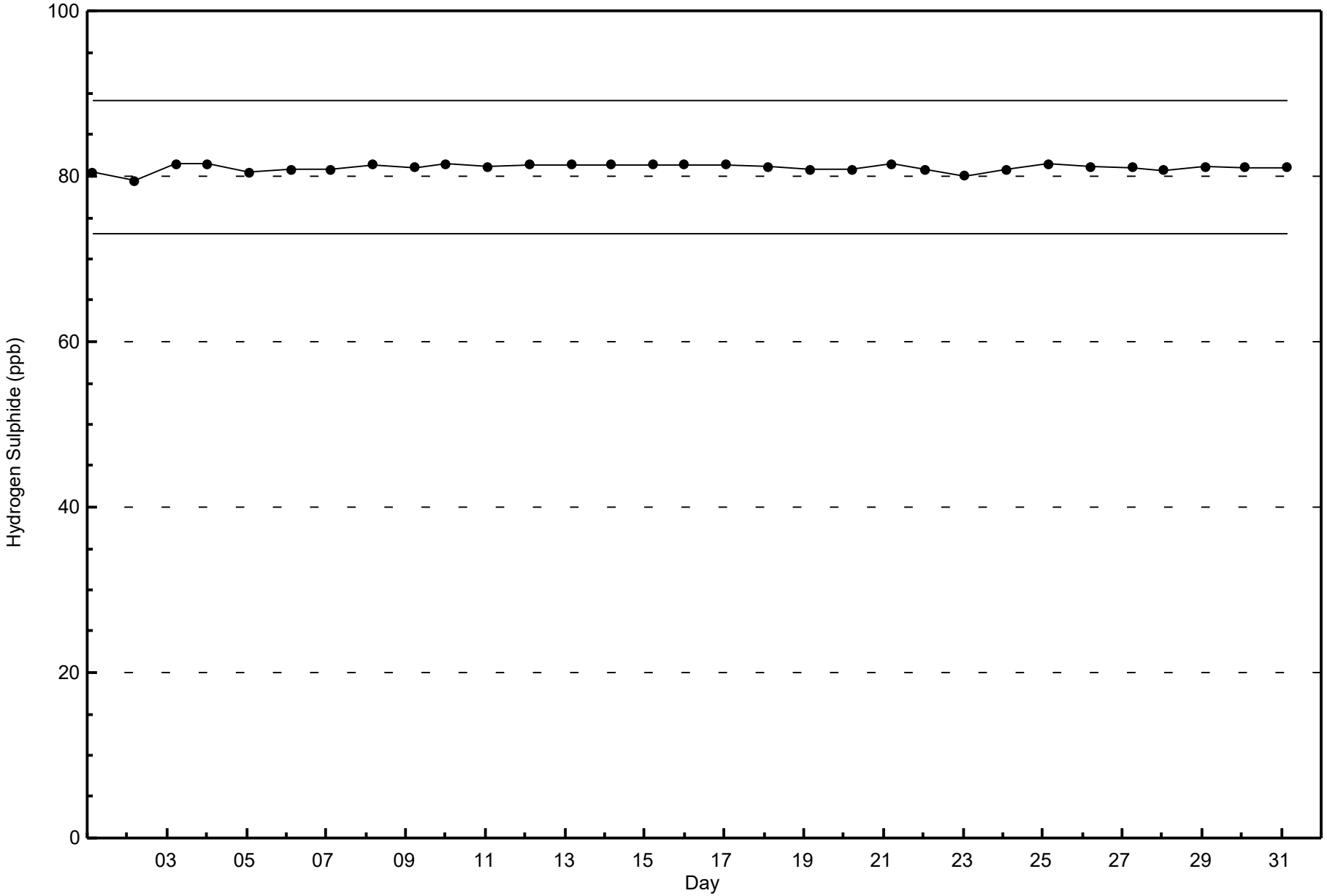


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Mackay River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Mackay River - August 2026

Maximum Value: 3.5 ppm on Aug 4 04:00

Maximum Daily Average: 2.5 ppm on Aug 10

Minimum Value: 1.9 ppm on Aug 18 18:00

Minimum Daily Average: 2.1 ppm on Aug 18

Maximum Diurnal Average: 2.6 ppm at hour 6

Minimum Diurnal Average: 2.2 ppm at hour 17

Monthly Average: 2.34 ppm

Percentiles: $P_1$ = 1.9 $P_{10}$ = 2.2 $Q_1$ = 2.2 Median = 2.3 $Q_3$ = 2.4 $P_{90}$ = 2.6 $P_{99}$ = 3.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 678 |
| Hours of Missing Data: | 66 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 95.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.7 | 2.7 | Z | 2.6 | 2.6 | 2.6 | 2.7 | 2.7 | 2.8 | 2.6 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 2.6 | 2.5 | 2.5 | 2.5 | 2.4 | 2.5 | 2.8 |
| 2-Aug | 2.4 | 2.4 | 2.4 | Z | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 |
| 3-Aug | 2.3 | 2.3 | 2.3 | 2.5 | Z | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 2.6 | 2.3 | 2.6 |
| 4-Aug | 2.9 | 3.1 | 3.5 | 3.5 | 3.3 | Z | 2.6 | 2.5 | 2.4 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.5 | 3.5 |
| 5-Aug | Z | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 |
| 6-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 |
| 7-Aug | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.3 | 2.5 |
| 8-Aug | 2.6 | 2.6 | 2.6 | Z | 2.9 | 2.8 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.5 | 2.4 | 2.6 | 2.4 | 2.9 |
| 9-Aug | 2.8 | 2.7 | 2.6 | 2.6 | Z | 2.6 | 2.7 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.5 | 2.6 | 2.4 | 2.8 |
| 10-Aug | 2.7 | 2.7 | 2.9 | 3.0 | 3.1 | Z | 3.0 | 2.7 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.5 | 2.5 | 3.1 |
| 11-Aug | Z | 2.6 | 2.6 | 2.6 | 2.7 | 2.7 | 2.9 | 2.8 | 2.7 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.9 |
| 12-Aug | 2.5 | Z | 2.5 | 2.6 | 2.8 | 2.8 | 2.8 | 2.6 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | 2.4 | 2.8 |
| 13-Aug | 2.4 | 2.4 | Z | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.6 |
| 14-Aug | 2.4 | 2.5 | 2.5 | Z | 2.6 | 2.9 | 3.2 | 3.2 | 3.0 | 2.9 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 3.2 |
| 15-Aug | 2.6 | 2.7 | 2.6 | 2.7 | Z | 2.7 | 2.7 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.7 |
| 16-Aug | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | Z | 2.5 | 2.5 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.5 |
| 17-Aug | Z | 2.6 | 2.6 | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.6 |
| 18-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 19-Aug | 2.3 | 2.3 | Z | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 2.3 |
| 20-Aug | UO | UO | UO | Z | UO | UO | UO | UO | UO | UO | UO | C | C | C | C | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | -- | 2.4 |
| 21-Aug | 2.6 | 2.8 | 2.8 | 2.8 | Z | 2.8 | 2.8 | 2.7 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.8 |
| 22-Aug | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 |
| 23-Aug | Z | 2.4 | 2.5 | 2.5 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.5 | 2.7 |
| 24-Aug | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.2 | 2.4 |
| 25-Aug | 2.5 | 2.6 | Z | 2.6 | 2.7 | 2.8 | 2.8 | 2.8 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | 2.8 |
| 26-Aug | 2.6 | 2.5 | 2.7 | Z | 2.8 | 2.9 | 2.9 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 | 2.9 |
| 27-Aug | 2.4 | 2.6 | 2.7 | 2.6 | Z | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.7 |
| 28-Aug | 2.4 | 2.4 | 2.6 | 2.5 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.6 |
| 29-Aug | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 |
| 30-Aug | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.5 |
| 31-Aug | 2.4 | 2.4 | Z | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.6 | 2.3 | 2.6 |
| | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | Diurnal Average | |
| | 2.9 | 3.1 | 3.5 | 3.5 | 3.3 | 2.9 | 3.2 | 3.2 | 3.0 | 2.9 | 2.7 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 2.6 | 2.5 | 2.5 | 2.5 | 2.6 | Diurnal Maximum | |

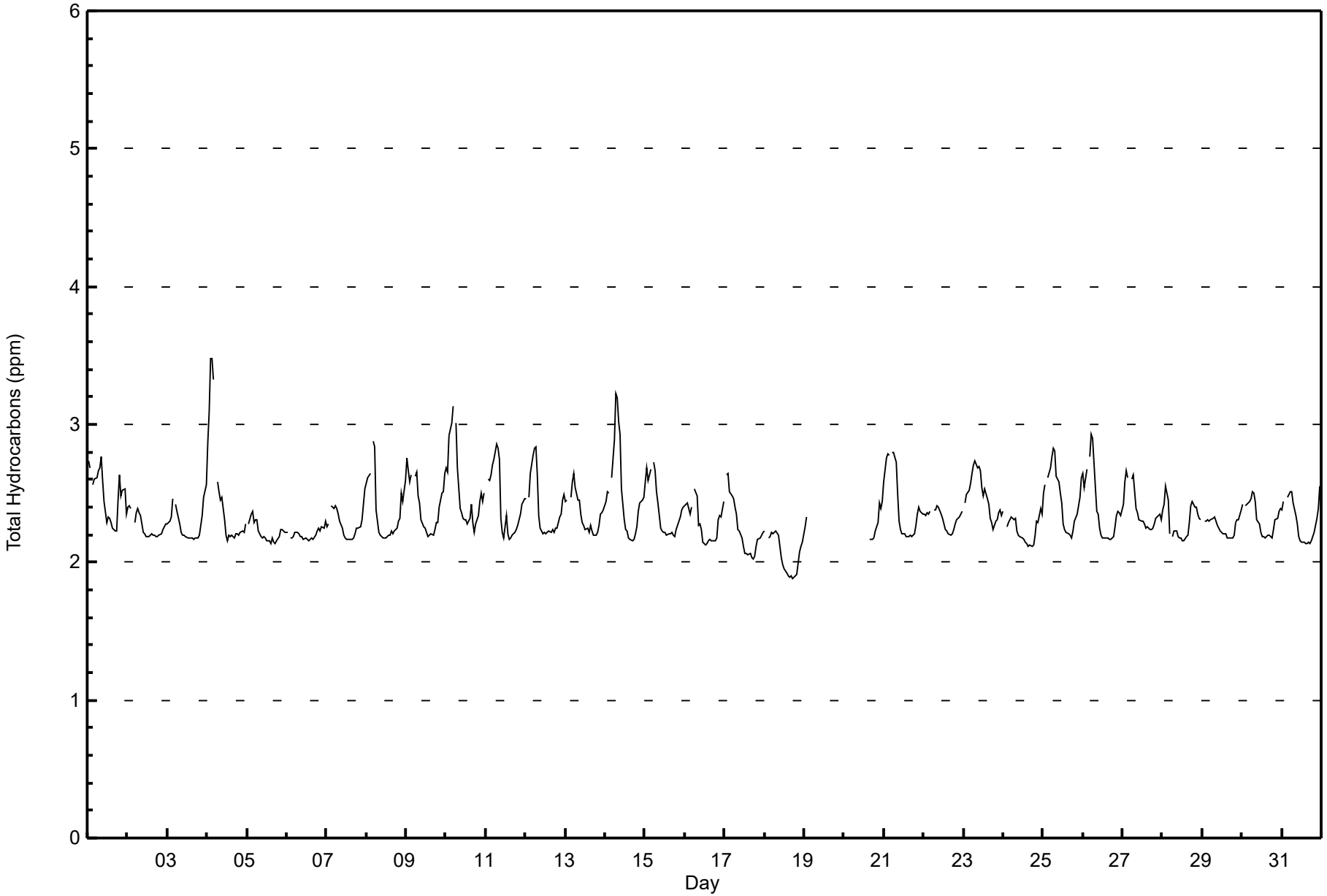
Z - zerospan C - Calibration UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Mackay River - August 2026**



# Total Hydrocarbons (THC) - ppm
## Mackay River - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 14 | 2.06 | 2.06 |
| 2.1 - 3.0 | 657 | 96.90 | 98.97 |
| 3.1 - 10.0 | 7 | 1.03 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 678

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Mackay River - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 5 | 1 | 0 | 0 | 0 | 14 |
| 2.1 - 3.0 | 24 | 36 | 17 | 6 | 11 | 19 | 27 | 59 | 67 | 22 | 43 | 45 | 53 | 54 | 69 | 55 | 607 |
| 3.1 - 10.0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 36 | 17 | 7 | 11 | 19 | 27 | 61 | 69 | 25 | 48 | 50 | 54 | 54 | 69 | 55 | 626 |

Total Number of Valid Hours: 626

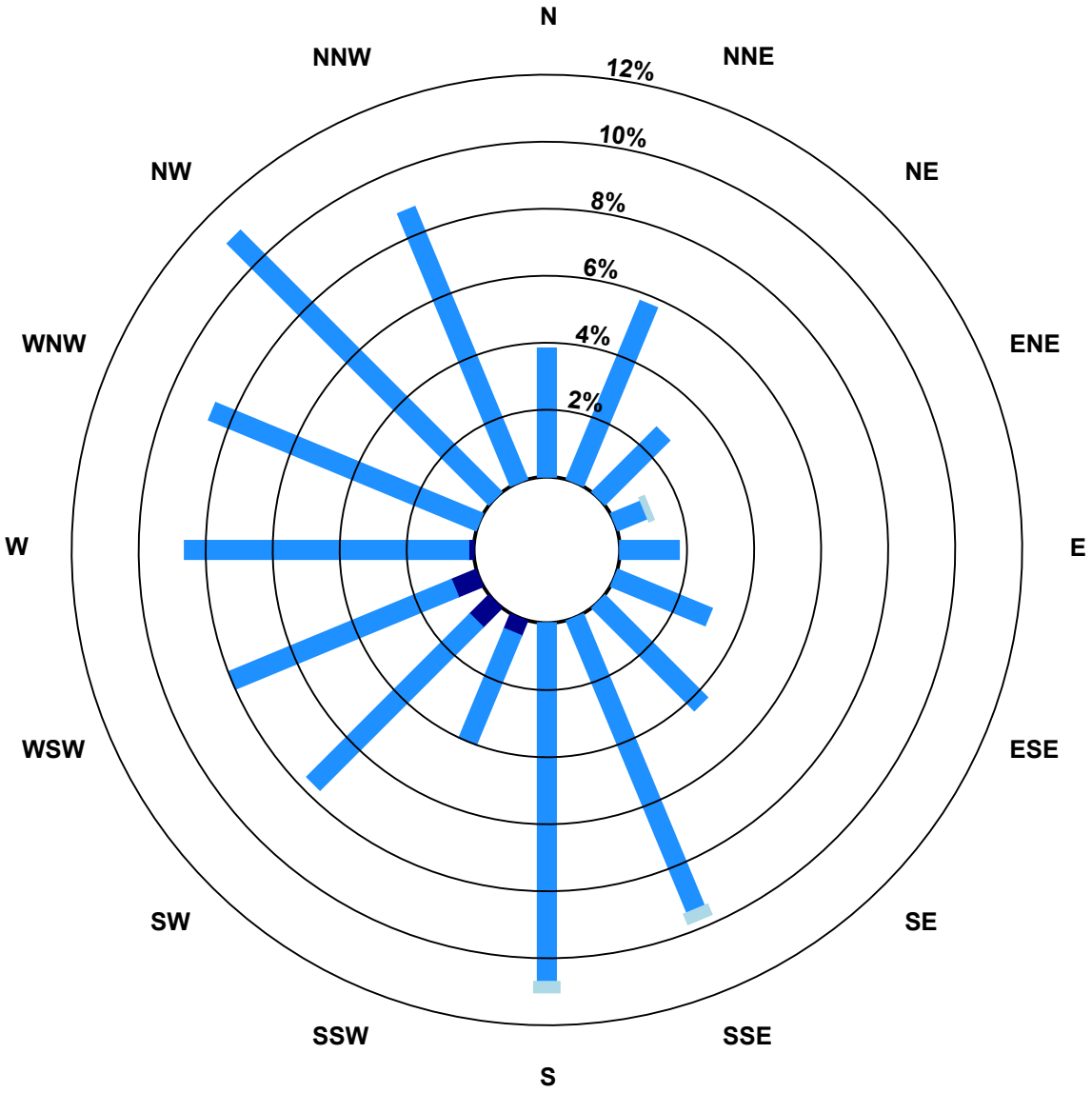
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Hydrocarbons (THC) - ppm**

**Mackay River**




**Classes (ppm)**

- 0 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

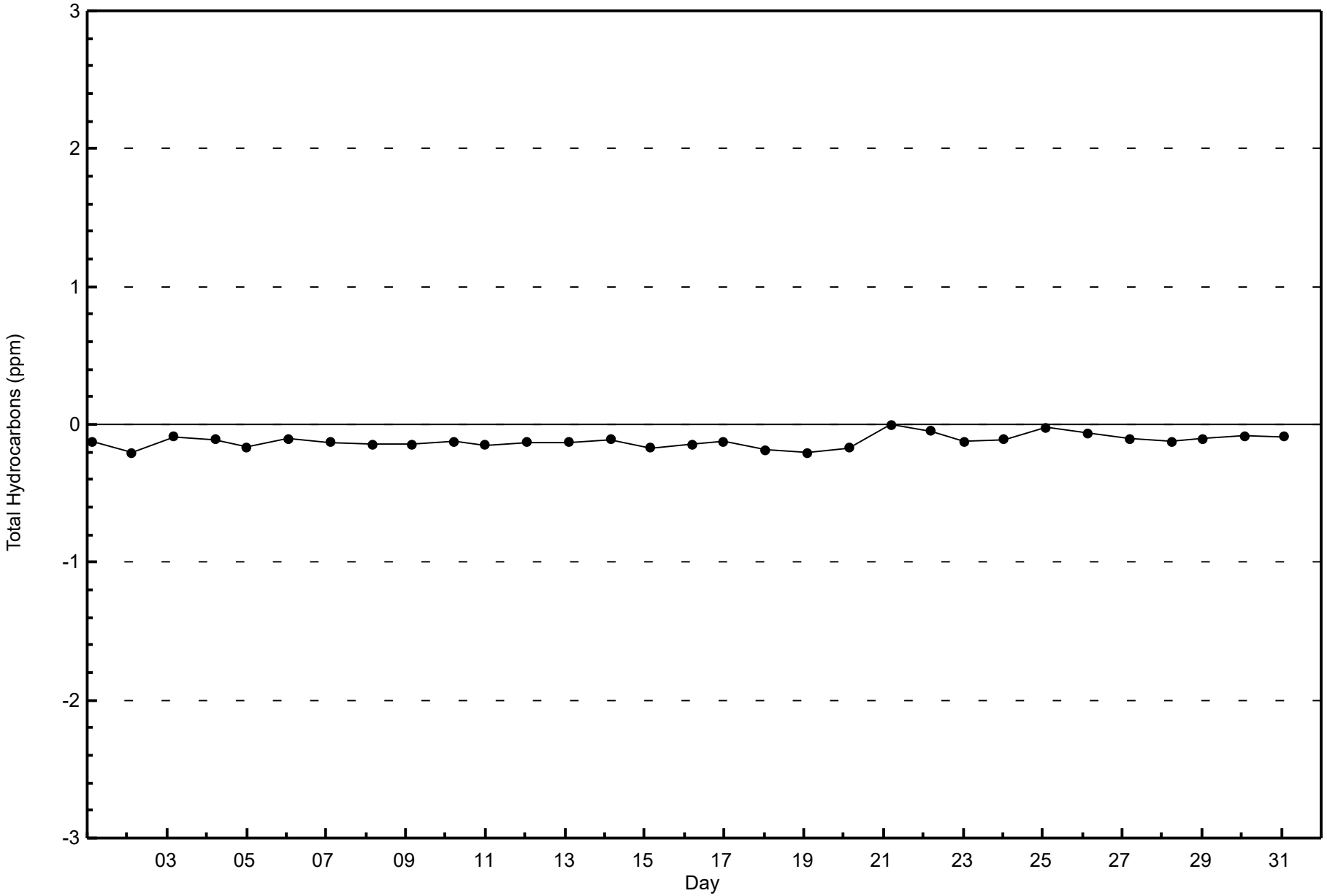
**Total Number of Valid Hours: 626**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Mackay River - August 2026**

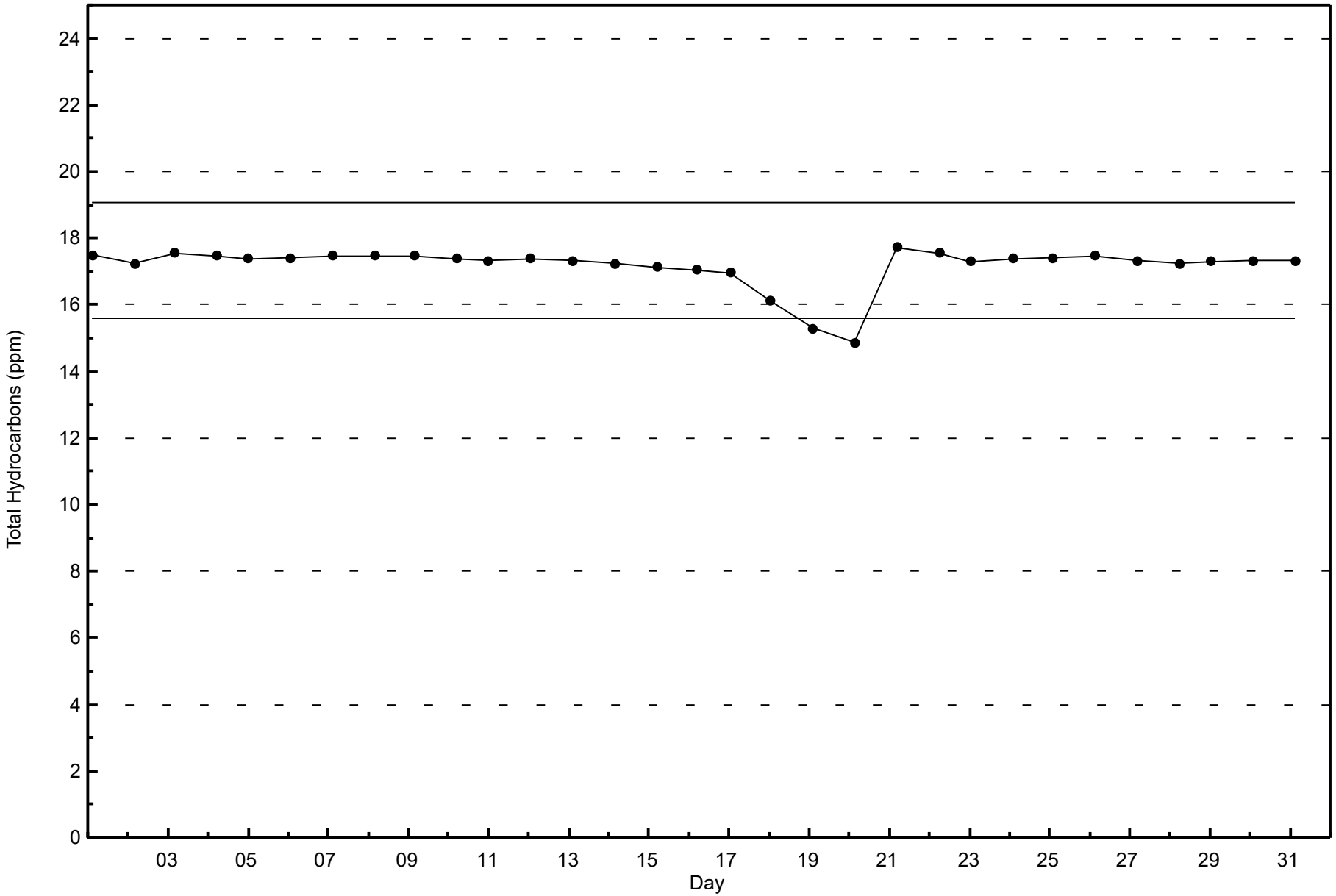


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Mackay River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Mackay River - August 2026

Maximum Value: 7.4 ppb on Aug 25 10:00

Maximum Daily Average: 1.1 ppb on Aug 13

Minimum Value: 0.0 ppb on Aug 1 03:00

Minimum Daily Average: 0.0 ppb on Aug 17

Maximum Diurnal Average: 0.7 ppb at hour 10

Minimum Diurnal Average: 0.0 ppb at hour 22

Monthly Average: 0.14 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.3 $P_{99}$ = 3.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.4 |
| 3-Aug | 0.2 | 0.2 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.1 | 0.1 | 0.4 | 0.5 | 0.4 | 0.2 | 0.3 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 |
| 4-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 1.7 | 1.2 | 0.9 | 0.8 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.7 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.9 | 0.5 | 0.1 | 0.3 | 0.4 | 0.6 | 0.7 | 0.9 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.9 |
| 7-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 8-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 |
| 9-Aug | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.4 | 1.4 | 0.8 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 1.4 |
| 10-Aug | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.2 | 0.4 | 0.8 | C | C | C | C | C | 0.5 | 0.5 | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.0 | 0.1 | 0.8 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.8 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 13-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 | 3.5 | 5.6 | 4.4 | 3.7 | 3.3 | 0.8 | 0.7 | 0.3 | 0.8 | 0.5 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1.1 | 5.6 |
| 14-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.9 | 3.5 | 1.7 | 0.7 | 0.6 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 3.5 |
| 15-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 16-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 20-Aug | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.6 | 0.4 | 0.7 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 21-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 22-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.0 | 0.3 |
| 24-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.4 | 0.3 | 0.9 | 0.8 | 1.0 | 0.7 | 0.8 | 1.1 | 0.2 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.1 |
| 25-Aug | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 5.9 | 7.4 | 3.4 | 1.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 7.4 |
| 26-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 28-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 31-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.6 | 0.7 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.3 | 3.5 | 5.9 | 7.4 | 3.7 | 3.3 | 0.8 | 0.8 | 1.1 | 1.0 | 0.6 | 0.7 | 0.9 | 0.3 | 0.1 | 0.1 | 0.1 | 0.4 | Diurnal Maximum | |

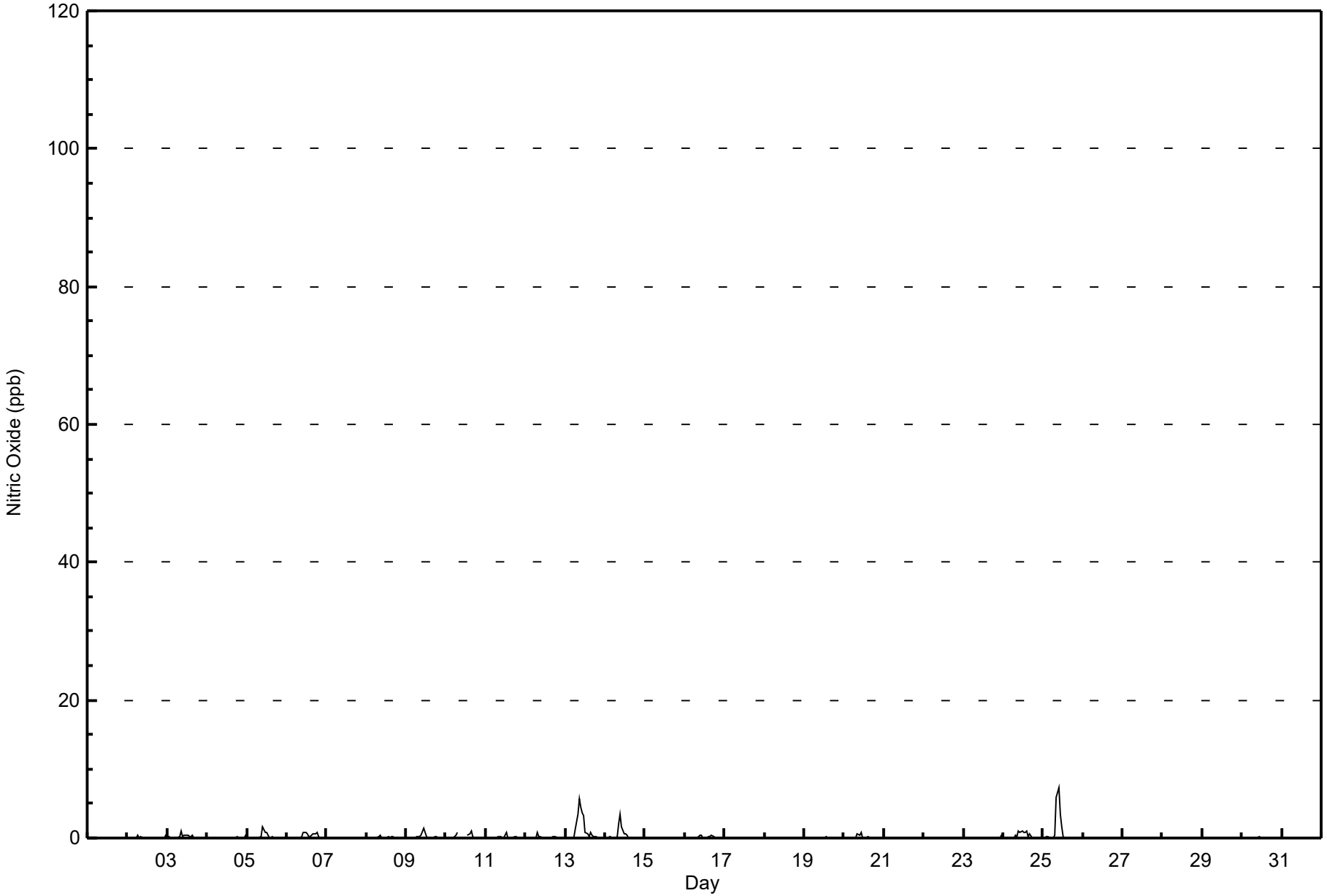
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Mackay River - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Mackay River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 27 | 36 | 15 | 6 | 11 | 20 | 27 | 59 | 75 | 26 | 49 | 54 | 57 | 59 | 70 | 57 | 648 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 27 | 36 | 15 | 6 | 11 | 20 | 27 | 59 | 75 | 26 | 49 | 54 | 57 | 59 | 70 | 57 | 648 |

Total Number of Valid Hours: 648

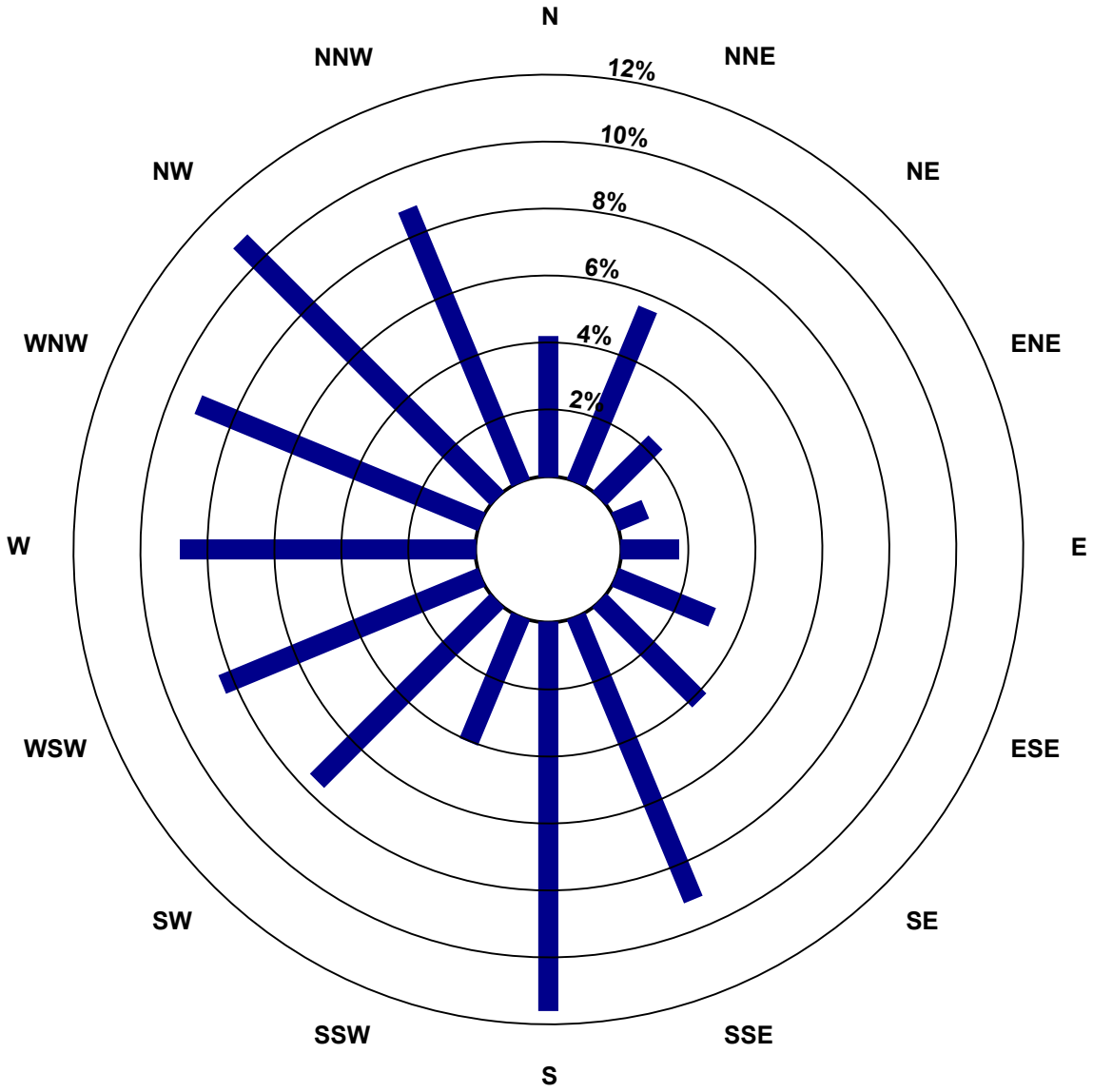
Total Number of Hours: 744

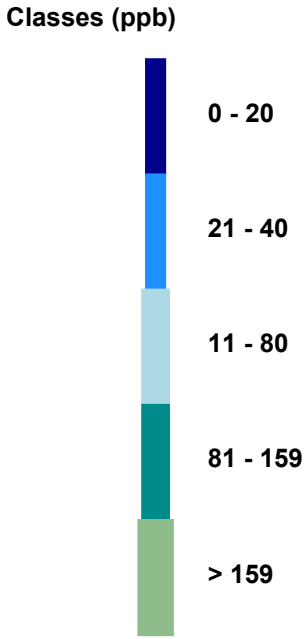
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Nitric Oxide (NO) - ppb**

**Mackay River**



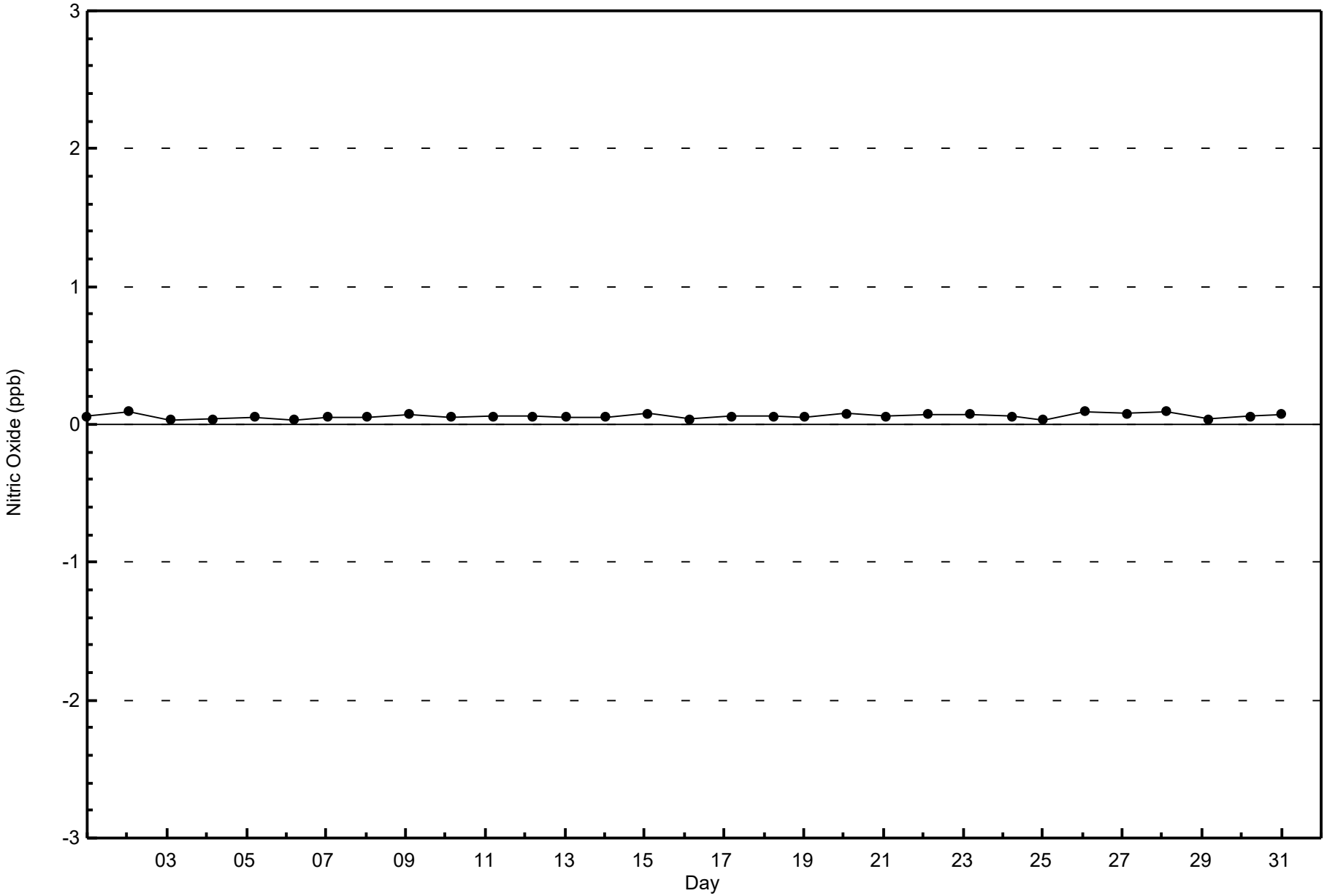

**Total Number of Valid Hours: 648**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Mackay River - August 2026**

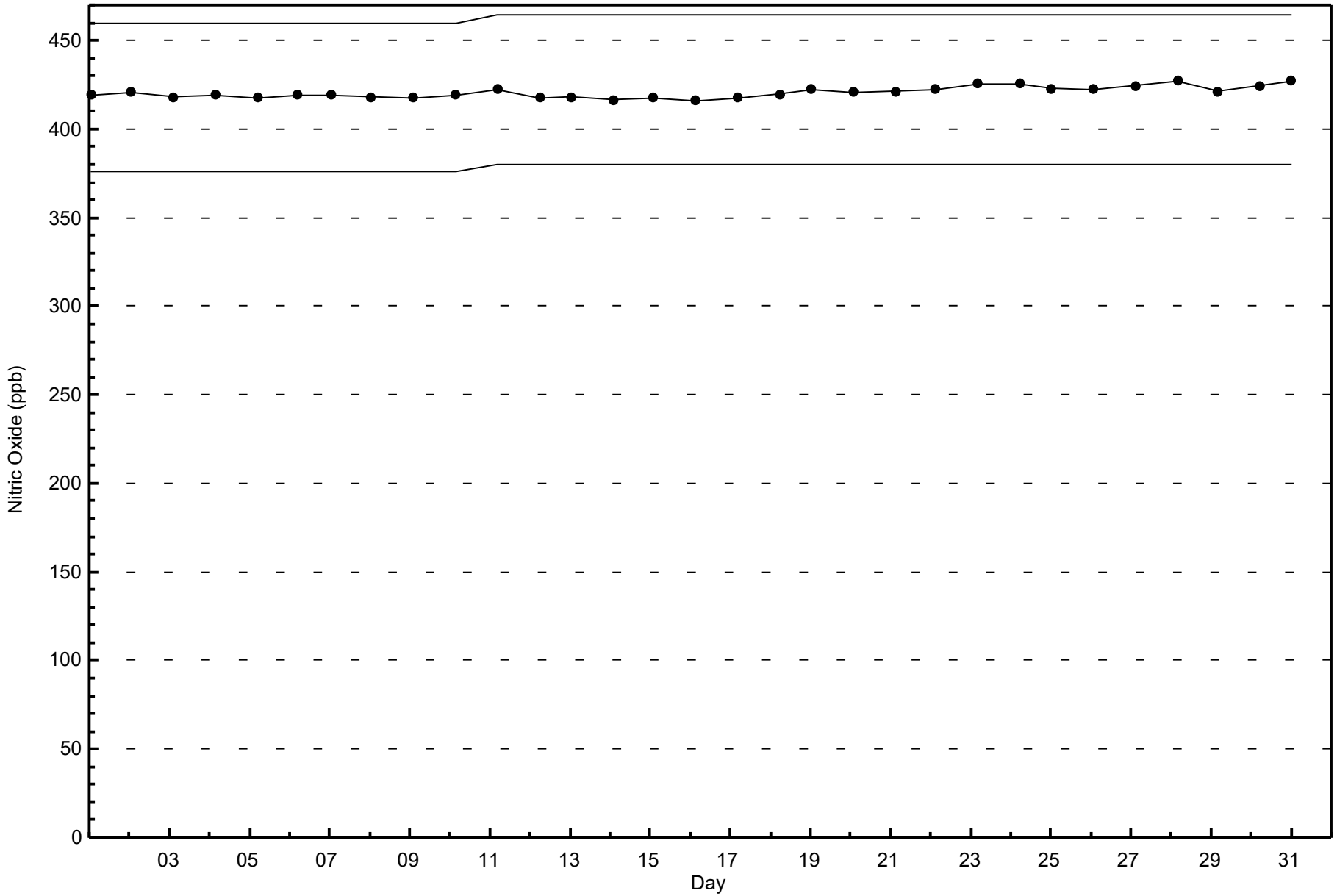


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Mackay River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Mackay River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 10.6 ppb on Aug 25 10:00

Maximum Daily Average: 2.2 ppb on Aug 25

Minimum Value: 0.1 ppb on Aug 2 12:00

Minimum Daily Average: 0.2 ppb on Aug 31

Maximum Diurnal Average: 1.4 ppb at hour 10

Minimum Diurnal Average: 0.4 ppb at hour 4

Monthly Average: 0.79 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.4 $Q_3 = 0.9$ $P_{90} = 1.9$ $P_{99} = 5.2$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.5 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 | 0.5 | 0.4 | 2.6 | 5.2 | 1.9 | 1.1 | 1.1 | 1.5 | 1.0 | 5.2 |
| 2-Aug | 2.6 | Z | 1.8 | 0.7 | 1.0 | 1.7 | 2.7 | 1.1 | 1.8 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.8 | 2.4 | 0.8 | 2.7 |
| 3-Aug | 1.6 | 2.0 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 1.5 | 0.5 | 0.9 | 1.1 | 0.8 | 0.4 | 0.8 | 1.2 | 0.2 | 0.4 | 0.3 | 0.1 | 0.2 | 0.6 | 1.6 | 2.1 | 0.7 | 2.1 |
| 4-Aug | 2.1 | 1.7 | 1.1 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 1.1 | 0.3 | 0.8 | 0.2 | 0.3 | 3.9 | 0.7 | 3.9 |
| 5-Aug | 0.6 | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.7 | 3.0 | 2.1 | 2.1 | 2.1 | 0.2 | 0.4 | 1.2 | 0.4 | 0.2 | 0.1 | 0.1 | 1.1 | 0.1 | 0.1 | 0.1 | 0.7 | 3.0 |
| 6-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.3 | 0.8 | 0.9 | 1.0 | 0.4 | 0.8 | 1.3 | 2.1 | 3.1 | 4.1 | 2.5 | 0.7 | 0.8 | 0.1 | 0.1 | 0.9 | 4.1 |
| 7-Aug | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.7 | 0.2 | 0.4 | 0.4 | 1.0 | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 1.0 |
| 8-Aug | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 0.8 | 0.3 | 0.1 | 0.3 | 0.5 | 0.7 | 0.5 | 1.5 | 0.8 | 1.0 | 1.6 | 1.5 | 1.1 | 0.7 | 0.6 | 0.4 | 0.6 | 1.6 |
| 9-Aug | 0.5 | 0.6 | Z | 1.2 | 1.1 | 0.8 | 1.0 | 1.2 | 0.9 | 1.5 | 3.3 | 2.4 | 1.1 | 0.8 | 0.9 | 1.1 | 0.9 | 2.3 | 3.8 | 2.6 | 2.2 | 1.7 | 1.2 | 1.1 | 1.5 | 3.8 |
| 10-Aug | 0.9 | 0.7 | 0.6 | Z | 0.9 | 0.9 | 1.1 | 2.7 | C | C | C | C | C | 3.8 | 4.4 | 7.7 | 3.3 | 1.9 | 2.5 | 2.2 | 1.8 | 1.3 | 1.0 | 0.9 | 2.1 | 7.7 |
| 11-Aug | 0.7 | 0.5 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.8 | 0.7 | 0.8 | 0.4 | 0.7 | 3.7 | 1.3 | 0.7 | 0.9 | 1.0 | 1.3 | 2.0 | 1.9 | 2.3 | 2.2 | 2.0 | 2.5 | 1.2 | 3.7 |
| 12-Aug | 1.8 | 1.1 | 0.6 | 0.3 | 0.3 | Z | 0.3 | 1.3 | 0.5 | 0.7 | 0.2 | 0.1 | 0.2 | 0.3 | 0.6 | 0.3 | 0.8 | 0.9 | 1.8 | 1.7 | 1.2 | 0.5 | 0.3 | 0.2 | 0.7 | 1.8 |
| 13-Aug | Z | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 3.5 | 5.7 | 6.8 | 5.1 | 4.6 | 4.3 | 2.5 | 2.5 | 1.6 | 2.8 | 1.8 | 1.8 | 1.9 | 1.4 | 0.9 | 0.6 | 0.5 | 0.4 | 2.2 | 6.8 |
| 14-Aug | 0.4 | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 2.9 | 5.0 | 3.6 | 2.0 | 2.9 | 1.5 | 0.8 | 0.9 | 0.4 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 1.1 | 5.0 |
| 15-Aug | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| 16-Aug | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.6 | 0.5 | 1.0 | 2.5 | 1.6 | 0.4 | 0.3 | 0.3 | 0.6 | 1.5 | 2.1 | 1.5 | 1.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.7 | 2.5 |
| 17-Aug | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 18-Aug | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 |
| 19-Aug | Z | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.7 | 2.1 | 0.4 | 2.1 |
| 20-Aug | 1.1 | Z | 0.6 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 1.4 | 1.3 | 2.4 | 1.0 | 0.9 | 0.8 | 0.9 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.6 | 2.4 |
| 21-Aug | 0.5 | 0.5 | Z | 0.5 | 0.4 | 0.3 | 0.3 | 0.7 | 0.7 | 0.7 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 |
| 22-Aug | 0.4 | 0.4 | 0.5 | Z | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 | 0.8 |
| 23-Aug | 0.7 | 0.5 | 0.6 | 0.6 | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 3.5 | 0.6 | 3.5 |
| 24-Aug | 1.4 | 1.4 | 0.4 | 0.6 | 0.8 | Z | 0.9 | 1.4 | 0.9 | 2.2 | 1.9 | 2.7 | 1.7 | 1.9 | 2.4 | 0.7 | 1.7 | 0.3 | 0.2 | 0.4 | 0.9 | 0.1 | 0.2 | 0.1 | 1.1 | 2.7 |
| 25-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 1.2 | 8.2 | 10.6 | 7.7 | 5.5 | 1.9 | 1.3 | 1.3 | 1.0 | 0.6 | 0.5 | 0.8 | 1.6 | 1.7 | 2.2 | 2.3 | 2.0 | 2.2 | 10.6 |
| 26-Aug | 1.7 | Z | 1.6 | 1.2 | 1.1 | 0.6 | 0.5 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 1.7 |
| 27-Aug | 0.6 | 0.6 | Z | 0.7 | 0.8 | 0.8 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.1 | 1.0 | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.9 | 1.2 |
| 28-Aug | 0.6 | 0.7 | 0.6 | Z | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 0.9 |
| 29-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 30-Aug | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | Z | 0.4 | 0.4 | 0.5 | 0.7 | 1.1 | 0.8 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 1.1 |
| 31-Aug | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.6 | 0.8 | 1.2 | 1.4 | 1.2 | 1.0 | 0.9 | 0.7 | 0.8 | 0.9 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 | Diurnal Average | |
| | 2.6 | 2.0 | 1.8 | 1.2 | 1.1 | 1.7 | 3.5 | 5.7 | 8.2 | 10.6 | 7.7 | 5.5 | 3.7 | 3.8 | 4.4 | 7.7 | 3.3 | 3.1 | 4.1 | 5.2 | 2.3 | 2.2 | 2.3 | 3.9 | Diurnal Maximum | |

Z - zerospan C - Calibration

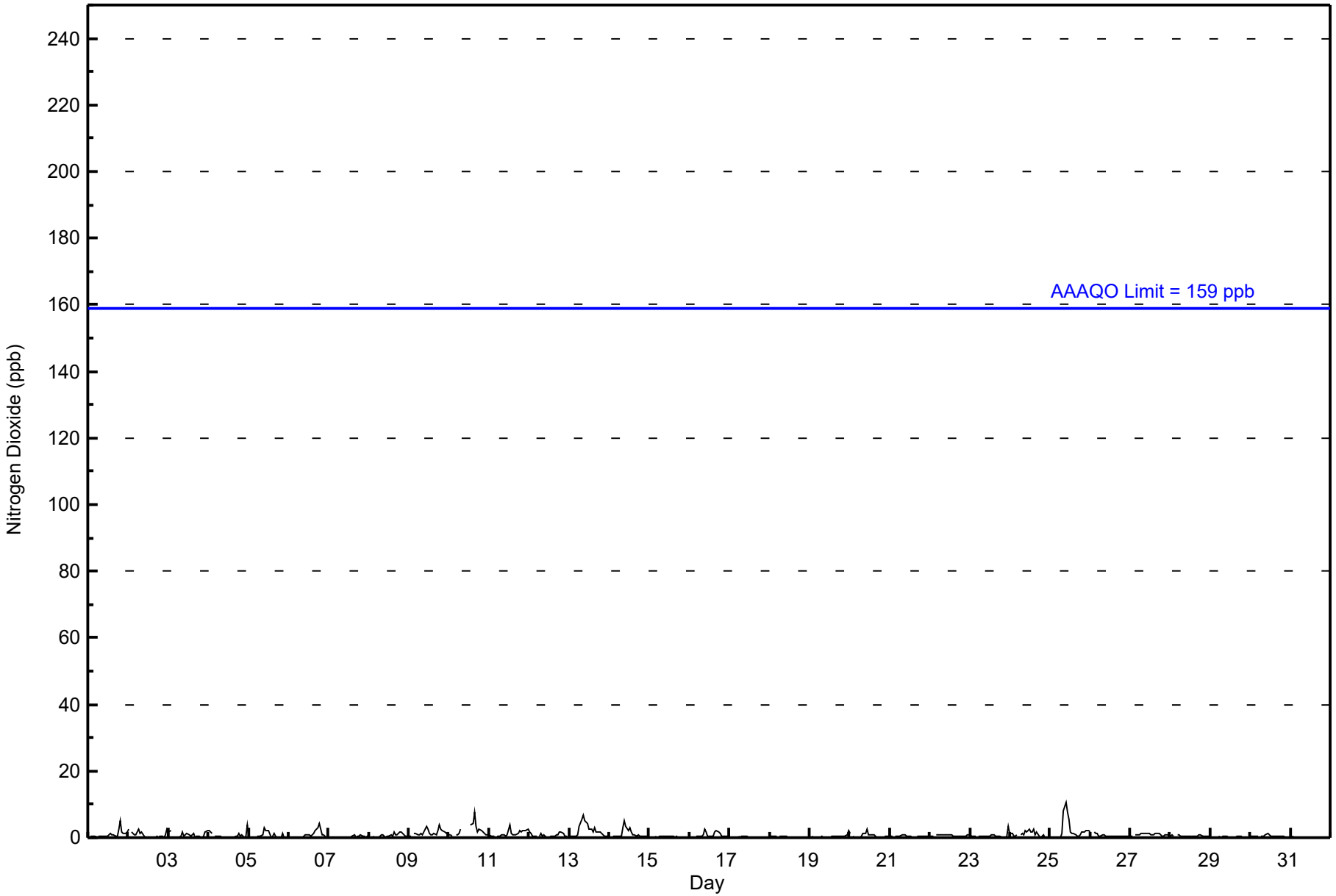
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Mackay River - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Mackay River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Mackay River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 27 | 36 | 15 | 6 | 11 | 20 | 27 | 59 | 75 | 26 | 49 | 54 | 57 | 59 | 70 | 57 | 648 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 27 | 36 | 15 | 6 | 11 | 20 | 27 | 59 | 75 | 26 | 49 | 54 | 57 | 59 | 70 | 57 | 648 |

Total Number of Valid Hours: 648

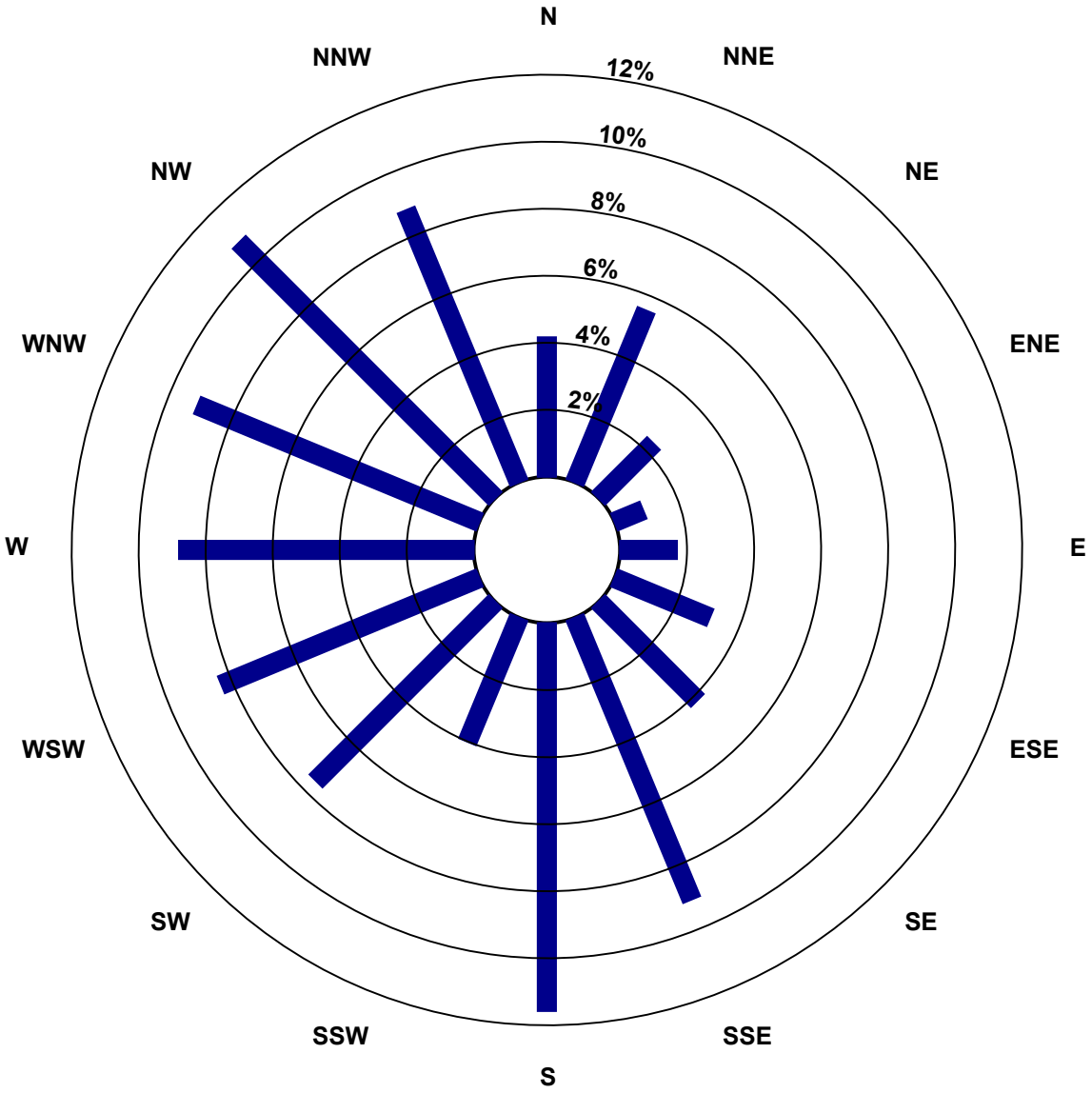
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Mackay River




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

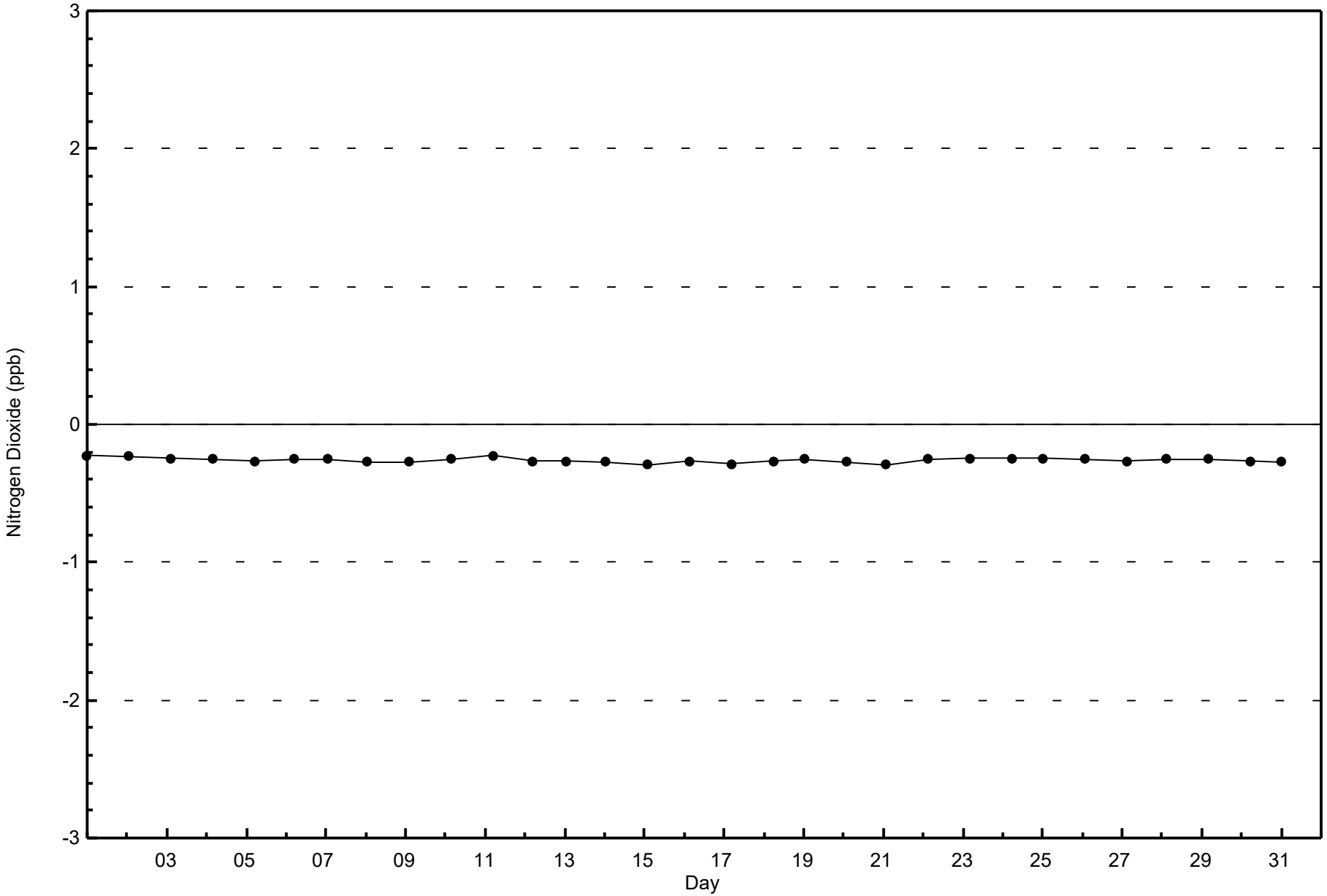
Total Number of Valid Hours: 648

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Mackay River - August 2026**

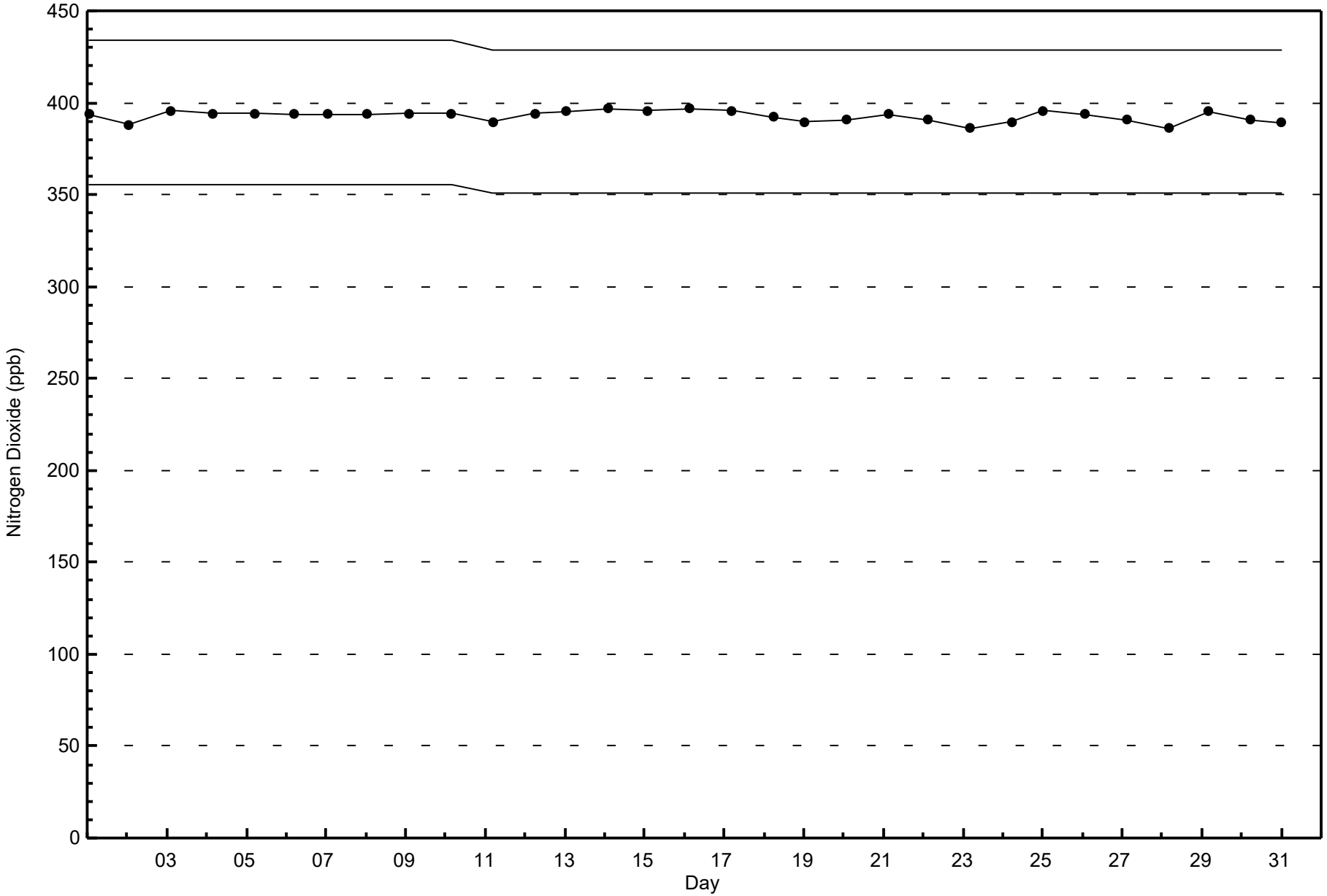


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Mackay River - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxides ($NO_X$) - ppb

## Mackay River - August 2026

Maximum Value: 18.0 ppb on Aug 25 10:00

Maximum Daily Average: 3.3 ppb on Aug 13

Minimum Value: 0.1 ppb on Aug 2 22:00

Minimum Daily Average: 0.2 ppb on Aug 31

Maximum Diurnal Average: 2.0 ppb at hour 10

Minimum Diurnal Average: 0.4 ppb at hour 4

Monthly Average: 0.93 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.2 $Q_1$ = 0.2 Median = 0.4 $Q_3$ = 1.0 $P_{90}$ = 2.1 $P_{99}$ = 8.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.5 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 | 0.5 | 0.4 | 2.6 | 5.3 | 1.9 | 1.1 | 1.1 | 1.5 | 1.0 | 5.3 |
| 2-Aug | 2.6 | Z | 1.8 | 0.7 | 1.0 | 1.8 | 3.1 | 1.1 | 2.0 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.8 | 2.7 | 0.9 | 3.1 |
| 3-Aug | 1.8 | 2.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 2.6 | 0.6 | 1.3 | 1.6 | 1.2 | 0.6 | 1.1 | 1.6 | 0.2 | 0.5 | 0.3 | 0.1 | 0.2 | 0.6 | 1.6 | 2.1 | 0.9 | 2.6 |
| 4-Aug | 2.1 | 1.7 | 1.1 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 1.3 | 0.3 | 0.9 | 0.2 | 0.3 | 4.3 | 0.7 | 4.3 |
| 5-Aug | 0.6 | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.9 | 4.7 | 3.3 | 3.0 | 2.9 | 0.2 | 0.5 | 1.5 | 0.4 | 0.2 | 0.1 | 0.1 | 1.1 | 0.1 | 0.1 | 0.1 | 0.9 | 4.7 |
| 6-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.4 | 1.5 | 1.8 | 1.5 | 0.5 | 1.1 | 1.7 | 2.7 | 3.8 | 5.0 | 2.8 | 0.7 | 0.9 | 0.1 | 0.1 | 1.1 | 5.0 |
| 7-Aug | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.8 | 0.2 | 0.4 | 0.4 | 1.0 | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 1.0 |
| 8-Aug | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.9 | 1.1 | 0.3 | 0.1 | 0.3 | 0.6 | 0.9 | 0.5 | 1.7 | 0.9 | 1.0 | 1.7 | 1.5 | 1.1 | 0.7 | 0.6 | 0.5 | 0.7 | 1.7 |
| 9-Aug | 0.5 | 0.7 | Z | 1.2 | 1.1 | 0.9 | 1.2 | 1.4 | 1.0 | 1.9 | 4.7 | 3.2 | 1.3 | 0.9 | 0.9 | 1.1 | 0.9 | 2.4 | 4.0 | 2.6 | 2.2 | 1.7 | 1.3 | 1.1 | 1.7 | 4.7 |
| 10-Aug | 0.9 | 0.7 | 0.7 | Z | 1.0 | 1.1 | 1.5 | 3.5 | C | C | C | C | C | 4.3 | 4.9 | 8.7 | 3.5 | 1.9 | 2.5 | 2.2 | 1.8 | 1.3 | 1.0 | 0.9 | 2.4 | 8.7 |
| 11-Aug | 0.7 | 0.5 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 1.0 | 0.8 | 1.1 | 0.4 | 0.8 | 4.5 | 1.4 | 0.7 | 1.0 | 1.1 | 1.4 | 2.1 | 1.9 | 2.3 | 2.2 | 2.0 | 2.5 | 1.3 | 4.5 |
| 12-Aug | 1.8 | 1.1 | 0.6 | 0.3 | 0.3 | Z | 0.3 | 2.1 | 0.7 | 0.9 | 0.2 | 0.1 | 0.2 | 0.3 | 0.7 | 0.3 | 0.9 | 1.1 | 2.0 | 1.8 | 1.2 | 0.5 | 0.3 | 0.2 | 0.8 | 2.1 |
| 13-Aug | Z | 0.3 | 0.3 | 0.4 | 0.6 | 0.8 | 4.8 | 9.2 | 12.4 | 9.5 | 8.3 | 7.6 | 3.3 | 3.2 | 1.9 | 3.6 | 2.3 | 2.1 | 2.1 | 1.4 | 0.9 | 0.6 | 0.6 | 0.5 | 3.3 | 12.4 |
| 14-Aug | 0.5 | Z | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 4.8 | 8.5 | 5.3 | 2.7 | 3.5 | 1.8 | 0.8 | 1.0 | 0.4 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 1.5 | 8.5 |
| 15-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 |
| 16-Aug | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.7 | 0.6 | 1.2 | 3.0 | 2.0 | 0.4 | 0.3 | 0.3 | 0.7 | 1.6 | 2.4 | 1.6 | 1.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.8 | 3.0 |
| 17-Aug | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 18-Aug | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 |
| 19-Aug | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 2.1 | 0.4 | 2.1 |
| 20-Aug | 1.1 | Z | 0.6 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 2.0 | 1.7 | 3.1 | 1.0 | 0.9 | 0.9 | 1.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.7 | 3.1 |
| 21-Aug | 0.5 | 0.5 | Z | 0.5 | 0.4 | 0.3 | 0.4 | 0.8 | 0.7 | 0.7 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.8 |
| 22-Aug | 0.4 | 0.4 | 0.5 | Z | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 | 0.8 |
| 23-Aug | 0.7 | 0.5 | 0.6 | 0.6 | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 1.0 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 3.8 | 0.7 | 3.8 |
| 24-Aug | 1.5 | 1.4 | 0.4 | 0.6 | 0.8 | Z | 0.9 | 1.8 | 1.2 | 3.1 | 2.7 | 3.7 | 2.4 | 2.7 | 3.5 | 0.9 | 2.3 | 0.3 | 0.2 | 0.4 | 0.9 | 0.1 | 0.2 | 0.1 | 1.4 | 3.7 |
| 25-Aug | Z | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 1.7 | 14.1 | 18.0 | 11.1 | 7.1 | 2.1 | 1.4 | 1.4 | 1.0 | 0.6 | 0.5 | 0.8 | 1.6 | 1.7 | 2.2 | 2.3 | 2.0 | 3.1 | 18.0 |
| 26-Aug | 1.7 | Z | 1.6 | 1.2 | 1.1 | 0.6 | 0.5 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 1.7 |
| 27-Aug | 0.6 | 0.6 | Z | 0.7 | 0.8 | 0.8 | 1.1 | 1.2 | 1.2 | 1.1 | 1.2 | 1.1 | 1.0 | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.9 | 1.2 |
| 28-Aug | 0.6 | 0.7 | 0.6 | Z | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 0.9 |
| 29-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 30-Aug | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | Z | 0.4 | 0.4 | 0.5 | 0.7 | 1.3 | 0.9 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 1.3 |
| 31-Aug | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 1.1 | 1.7 | 2.0 | 1.7 | 1.3 | 1.0 | 0.9 | 0.9 | 1.1 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 1.0 | Diurnal Average | |
| | 2.6 | 2.2 | 1.8 | 1.2 | 1.1 | 1.8 | 4.8 | 9.2 | 14.1 | 18.0 | 11.1 | 7.6 | 4.5 | 4.3 | 4.9 | 8.7 | 3.5 | 3.8 | 5.0 | 5.3 | 2.3 | 2.2 | 2.3 | 4.3 | Diurnal Maximum | |

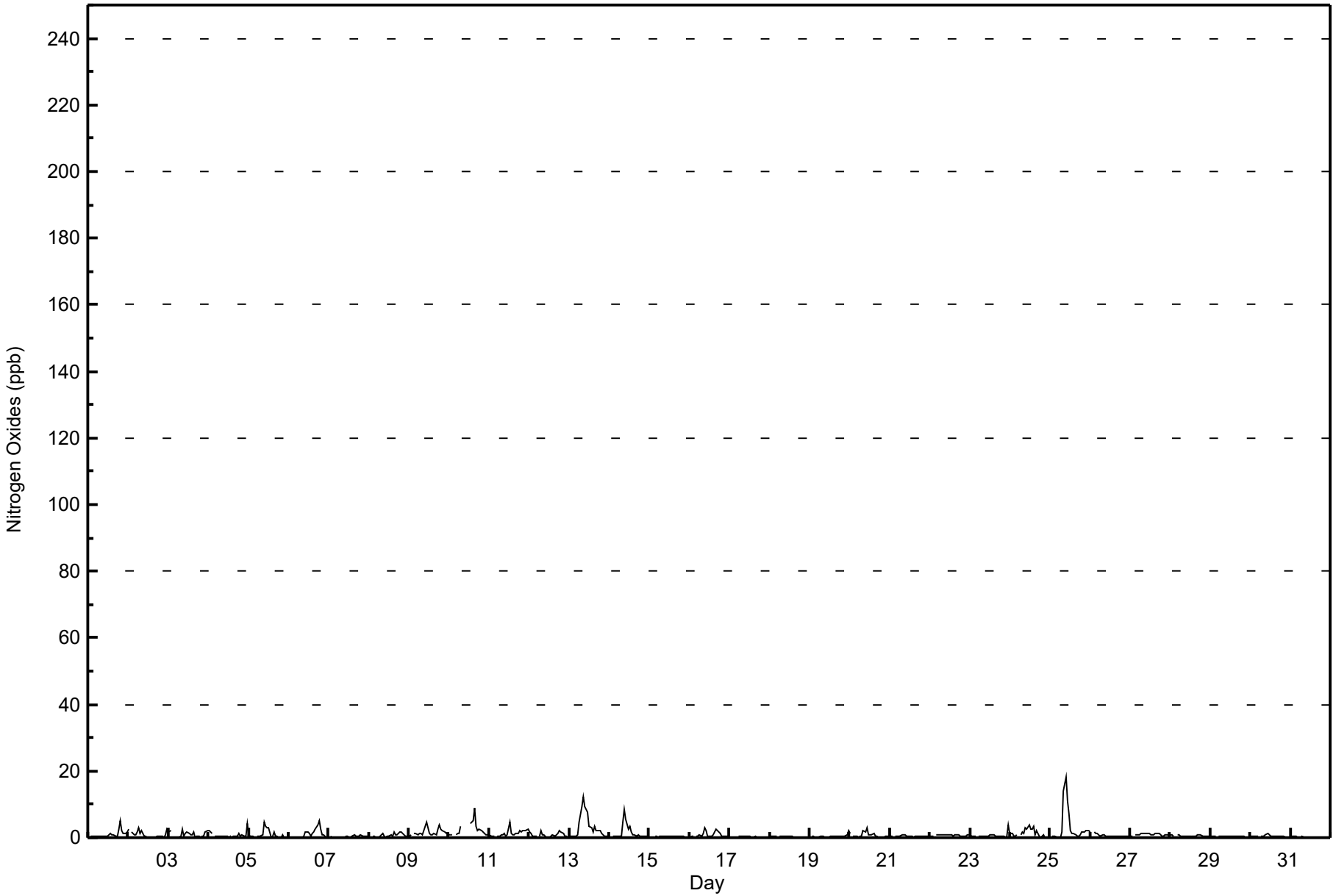
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Mackay River - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Mackay River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Mackay River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 27 | 36 | 15 | 6 | 11 | 20 | 27 | 59 | 75 | 26 | 49 | 54 | 57 | 59 | 70 | 57 | 648 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 27 | 36 | 15 | 6 | 11 | 20 | 27 | 59 | 75 | 26 | 49 | 54 | 57 | 59 | 70 | 57 | 648 |

Total Number of Valid Hours: 648

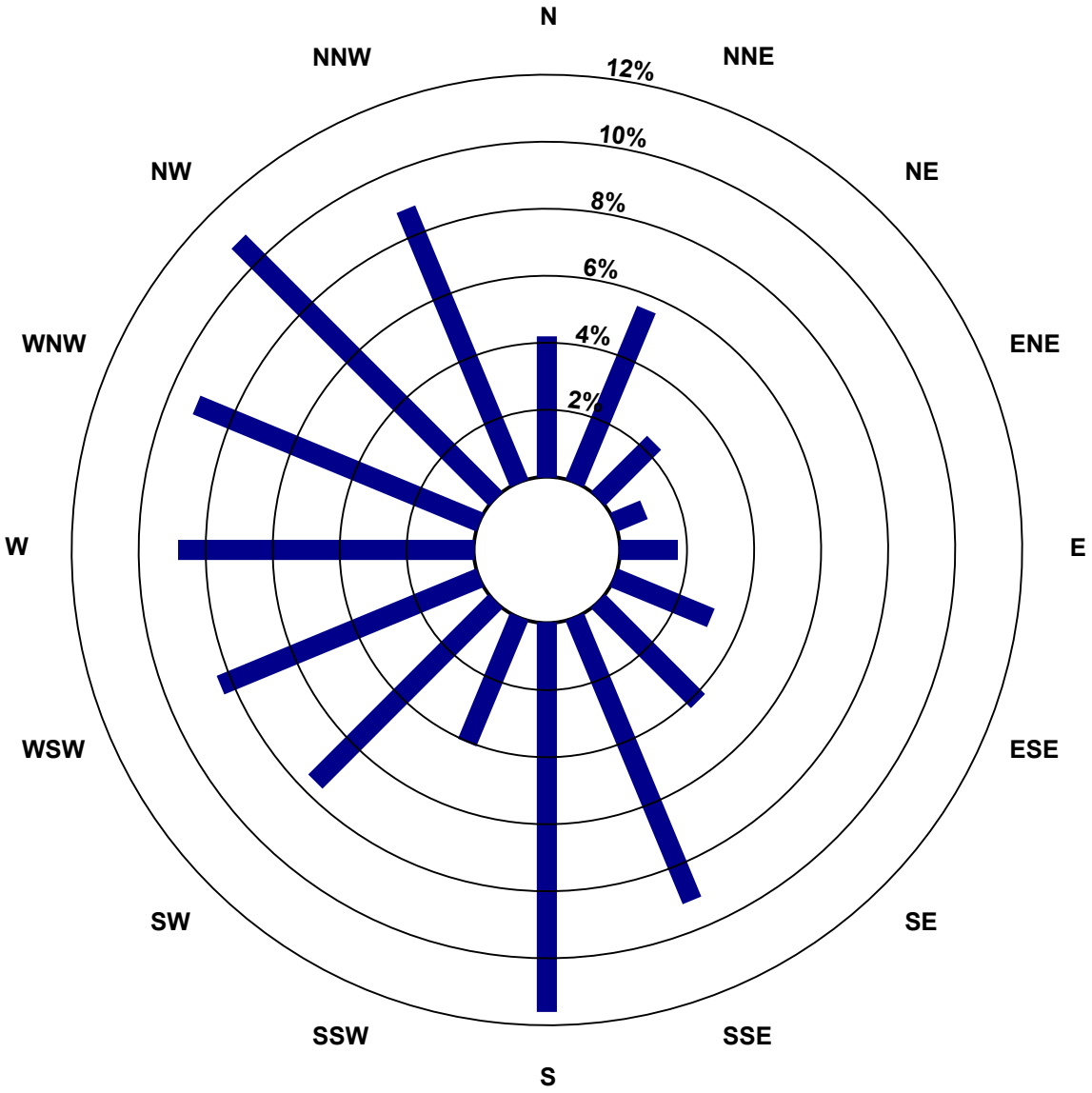
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Mackay River




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

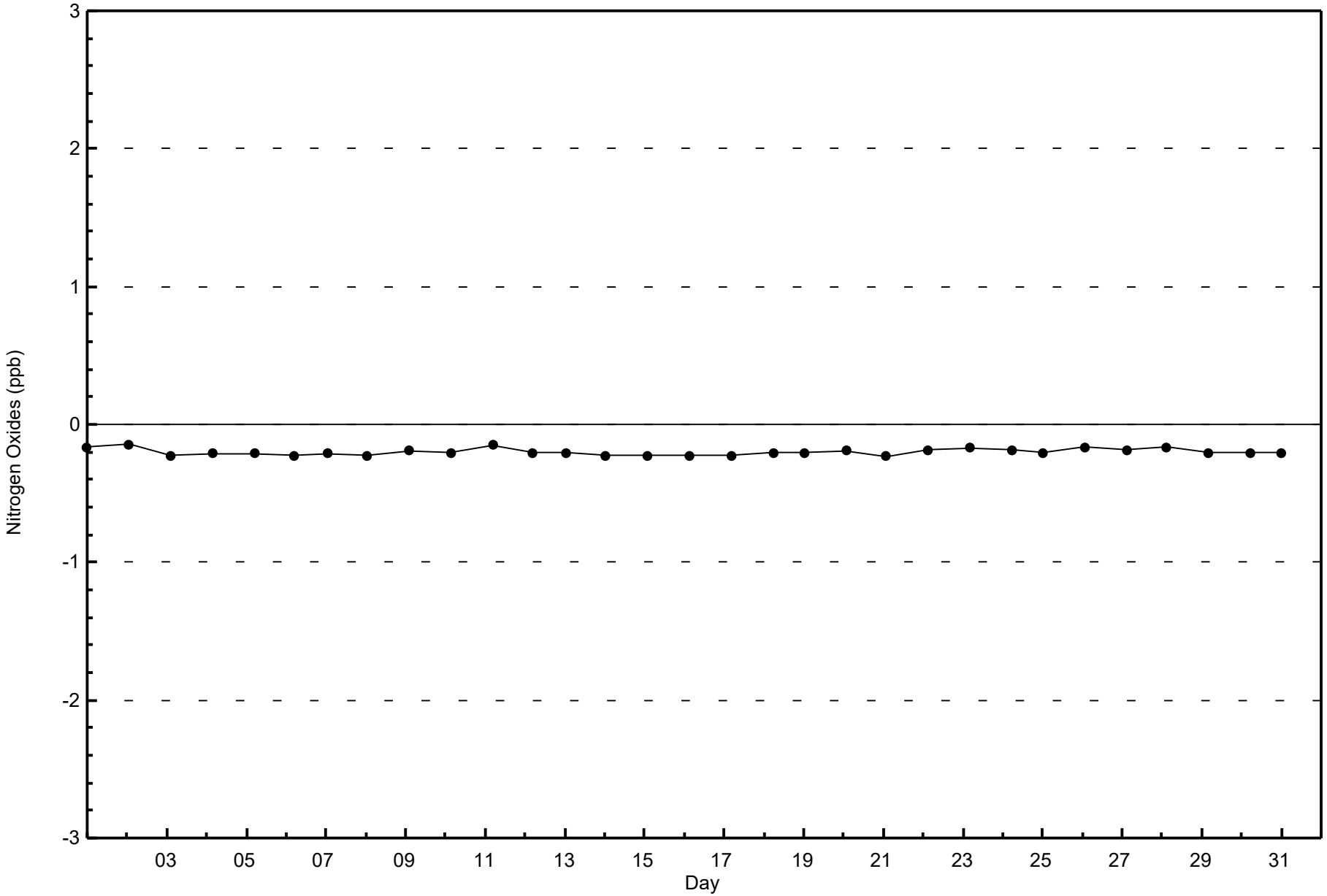
Total Number of Valid Hours: 648

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Mackay River - August 2026**

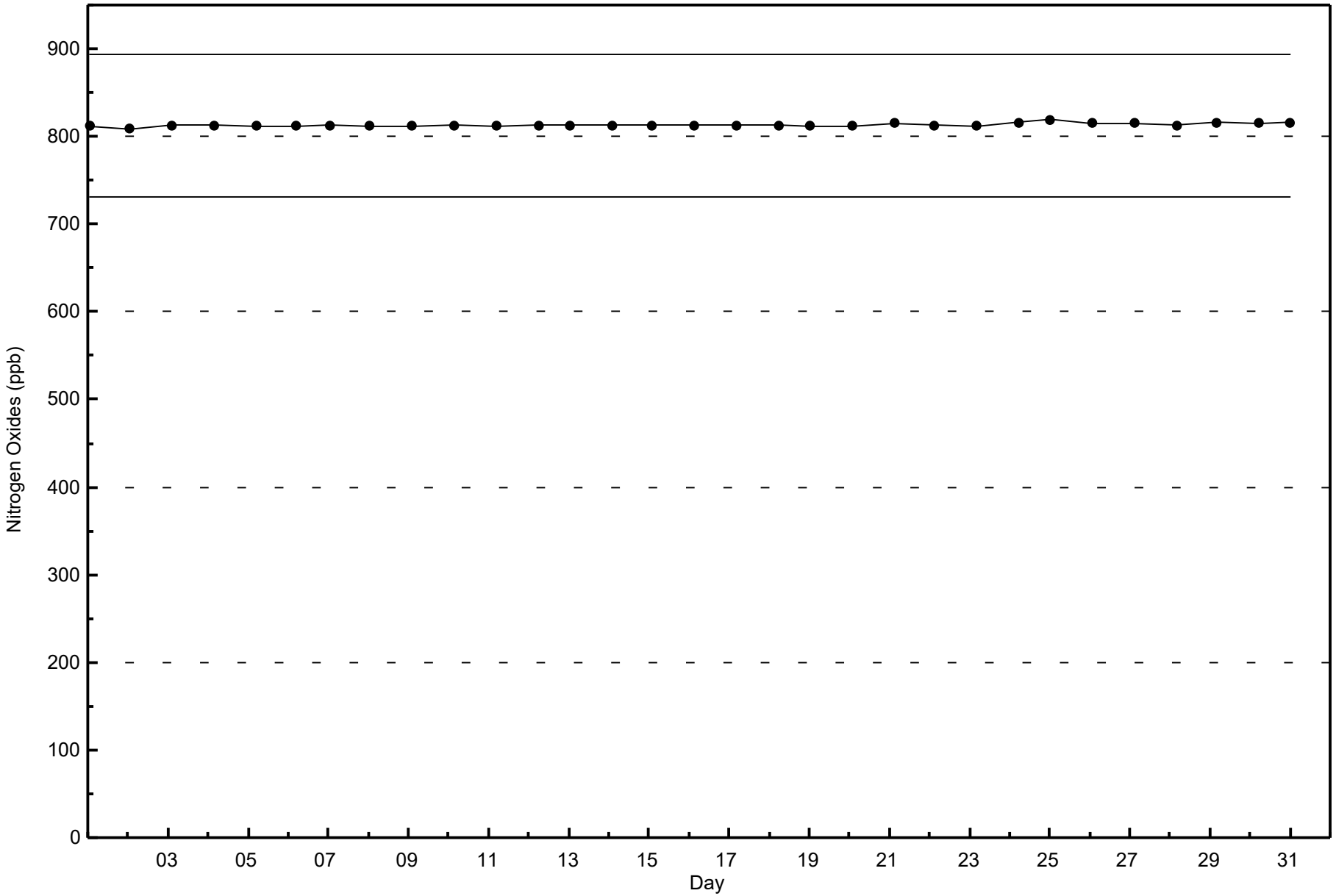


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Mackay River - August 2026**



Maximum Value: 28.9 C on Aug 22 17:00
Maximum Daily Average: 21.1 C on Aug 22

Minimum Value: 4.5 C on Aug 21 06:00
Minimum Daily Average: 11.5 C on Aug 12
Maximum Diurnal Average: 21.3 C at hour 16
Minimum Diurnal Average: 9.9 C at hour 6
Monthly Average: 15.65 C
Percentiles: $P_1$ = 4.9 $P_{10}$ = 8.6 $Q_1$ = 11.6 Median = 15.4 $Q_3$ = 19.6 $P_{90}$ = 23.0 $P_{99}$ = 27.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

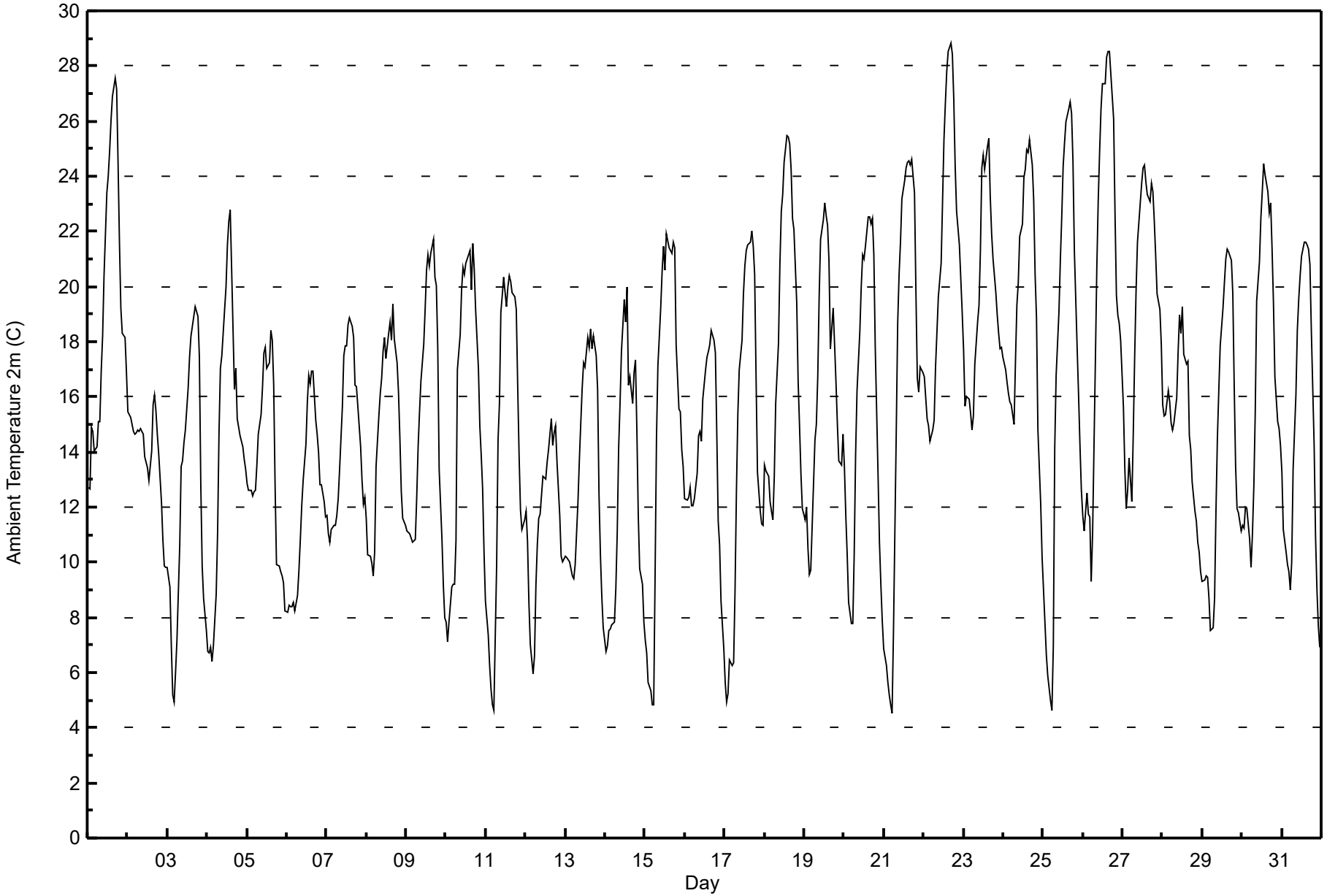
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 12.7 | 12.7 | 14.9 | 14.8 | 14.0 | 14.2 | 15.1 | 15.1 | 16.9 | 18.2 | 20.4 | 23.4 | 24.0 | 24.9 | 26.0 | 26.9 | 27.5 | 27.1 | 24.5 | 21.6 | 19.2 | 18.3 | 18.1 | 16.9 | 19.5 | 27.5 |
| 2-Aug | 15.5 | 15.4 | 15.2 | 14.8 | 14.6 | 14.7 | 14.8 | 14.8 | 14.8 | 14.6 | 13.8 | 13.6 | 13.4 | 13.0 | 14.0 | 15.7 | 16.1 | 15.5 | 14.6 | 14.0 | 12.2 | 10.8 | 9.9 | 9.8 | 14.0 | 16.1 |
| 3-Aug | 9.8 | 9.1 | 7.0 | 5.2 | 4.9 | 6.0 | 7.2 | 10.6 | 13.5 | 13.7 | 14.3 | 14.8 | 16.3 | 17.4 | 18.2 | 18.6 | 18.9 | 19.3 | 18.9 | 17.4 | 12.8 | 9.9 | 8.7 | 7.5 | 12.5 | 19.3 |
| 4-Aug | 6.8 | 6.7 | 6.9 | 6.4 | 7.0 | 8.9 | 11.1 | 14.7 | 17.1 | 17.5 | 19.2 | 20.0 | 21.5 | 22.4 | 22.8 | 20.6 | 16.3 | 17.0 | 15.2 | 14.9 | 14.6 | 14.2 | 13.7 | 13.4 | 14.5 | 22.8 |
| 5-Aug | 12.9 | 12.6 | 12.6 | 12.4 | 12.5 | 12.6 | 13.5 | 14.6 | 15.4 | 16.3 | 17.6 | 17.8 | 17.0 | 17.3 | 18.4 | 18.0 | 16.4 | 12.8 | 9.9 | 9.9 | 9.7 | 9.5 | 9.3 | 8.3 | 13.6 | 18.4 |
| 6-Aug | 8.2 | 8.4 | 8.4 | 8.4 | 8.5 | 8.2 | 8.8 | 9.7 | 10.8 | 12.1 | 13.0 | 14.3 | 15.8 | 16.8 | 16.5 | 16.9 | 17.0 | 15.1 | 14.6 | 14.0 | 12.8 | 12.8 | 12.2 | 11.6 | 12.3 | 17.0 |
| 7-Aug | 11.7 | 11.0 | 10.7 | 11.2 | 11.3 | 11.3 | 11.7 | 12.3 | 13.4 | 15.6 | 17.5 | 17.8 | 17.9 | 18.6 | 18.9 | 18.5 | 18.1 | 16.4 | 16.4 | 15.7 | 14.2 | 13.0 | 12.1 | 12.4 | 14.5 | 18.9 |
| 8-Aug | 11.6 | 10.3 | 10.2 | 10.0 | 9.5 | 10.4 | 13.5 | 15.3 | 16.1 | 16.7 | 17.6 | 18.1 | 17.4 | 18.3 | 18.7 | 18.0 | 19.4 | 18.1 | 17.2 | 16.2 | 14.5 | 12.5 | 11.6 | 11.3 | 14.7 | 19.4 |
| 9-Aug | 11.1 | 11.1 | 11.1 | 10.9 | 10.7 | 10.8 | 12.4 | 14.2 | 15.5 | 16.6 | 17.9 | 19.2 | 20.6 | 21.2 | 20.7 | 21.2 | 21.7 | 20.3 | 20.0 | 17.8 | 13.4 | 10.8 | 9.1 | 8.0 | 15.3 | 21.7 |
| 10-Aug | 7.8 | 7.1 | 7.8 | 9.1 | 9.2 | 9.2 | 10.8 | 17.0 | 18.3 | 19.9 | 20.7 | 20.4 | 20.8 | 21.0 | 21.3 | 19.9 | 21.6 | 20.6 | 19.2 | 17.0 | 15.0 | 13.9 | 12.7 | 10.4 | 15.4 | 21.6 |
| 11-Aug | 8.6 | 7.4 | 6.3 | 5.4 | 4.8 | 4.6 | 9.9 | 14.4 | 15.8 | 19.0 | 19.7 | 20.3 | 19.2 | 20.0 | 20.4 | 20.2 | 19.8 | 19.6 | 19.2 | 16.4 | 13.9 | 11.9 | 11.2 | 11.5 | 14.1 | 20.4 |
| 12-Aug | 11.8 | 10.8 | 8.6 | 7.0 | 5.9 | 6.6 | 9.1 | 10.6 | 11.6 | 11.8 | 13.1 | 13.1 | 13.0 | 13.6 | 14.1 | 15.2 | 14.2 | 14.7 | 14.9 | 13.7 | 11.7 | 10.2 | 10.0 | 10.1 | 11.5 | 15.2 |
| 13-Aug | 10.2 | 10.2 | 10.0 | 9.8 | 9.5 | 9.4 | 9.9 | 12.2 | 13.7 | 15.0 | 16.3 | 17.2 | 17.1 | 18.2 | 17.8 | 18.5 | 17.7 | 18.2 | 17.5 | 16.3 | 12.4 | 10.3 | 8.8 | 7.6 | 13.5 | 18.5 |
| 14-Aug | 6.7 | 7.0 | 7.5 | 7.6 | 7.7 | 7.9 | 9.1 | 11.1 | 14.1 | 15.7 | 17.6 | 19.5 | 18.7 | 20.0 | 16.4 | 16.7 | 15.7 | 16.9 | 17.3 | 14.8 | 11.7 | 9.8 | 9.2 | 7.8 | 12.8 | 20.0 |
| 15-Aug | 7.2 | 6.7 | 5.6 | 5.3 | 4.8 | 4.8 | 9.6 | 14.5 | 17.1 | 19.2 | 20.6 | 21.5 | 20.6 | 21.9 | 21.4 | 21.3 | 21.2 | 21.6 | 21.4 | 17.9 | 15.5 | 15.4 | 14.1 | 13.5 | 15.1 | 21.9 |
| 16-Aug | 12.3 | 12.2 | 12.3 | 12.7 | 12.1 | 12.0 | 12.3 | 13.2 | 14.6 | 14.7 | 14.4 | 15.9 | 17.0 | 17.4 | 17.7 | 17.9 | 18.4 | 18.1 | 17.6 | 14.6 | 11.5 | 10.6 | 8.6 | 6.9 | 14.0 | 18.4 |
| 17-Aug | 5.6 | 4.9 | 5.2 | 6.4 | 6.3 | 6.4 | 9.0 | 12.5 | 15.4 | 17.0 | 18.0 | 19.7 | 20.8 | 21.3 | 21.5 | 21.6 | 22.0 | 21.4 | 20.5 | 16.7 | 13.3 | 11.8 | 11.4 | 11.4 | 14.2 | 22.0 |
| 18-Aug | 13.5 | 13.3 | 13.1 | 12.2 | 11.8 | 11.6 | 13.1 | 15.8 | 17.9 | 20.8 | 22.8 | 23.3 | 24.5 | 25.5 | 25.4 | 25.2 | 24.2 | 22.5 | 22.1 | 19.4 | 16.6 | 14.9 | 13.2 | 12.0 | 18.1 | 25.5 |
| 19-Aug | 11.5 | 12.0 | 10.5 | 9.6 | 9.7 | 11.3 | 14.4 | 15.0 | 16.7 | 19.6 | 21.7 | 22.4 | 23.0 | 22.6 | 22.2 | 21.0 | 17.7 | 19.2 | 17.9 | 16.5 | 15.0 | 13.7 | 13.5 | 14.6 | 16.3 | 23.0 |
| 20-Aug | 13.5 | 11.7 | 10.2 | 8.5 | 7.8 | 7.8 | 10.3 | 13.9 | 16.2 | 18.4 | 20.0 | 21.1 | 21.0 | 21.5 | 22.5 | 22.5 | 22.3 | 22.5 | 21.1 | 17.8 | 13.2 | 10.8 | 9.2 | 7.9 | 15.5 | 22.5 |
| 21-Aug | 6.9 | 6.3 | 5.7 | 5.2 | 4.8 | 4.5 | 7.5 | 14.8 | 18.7 | 20.4 | 21.6 | 23.2 | 23.9 | 24.3 | 24.5 | 24.6 | 24.4 | 24.6 | 23.4 | 19.8 | 16.7 | 16.2 | 17.1 | 16.9 | 16.5 | 24.6 |
| 22-Aug | 16.7 | 16.0 | 15.2 | 14.9 | 14.4 | 14.8 | 15.2 | 17.1 | 18.3 | 19.6 | 20.9 | 23.1 | 25.3 | 26.6 | 27.8 | 28.5 | 28.9 | 28.4 | 26.8 | 24.3 | 22.7 | 21.5 | 20.3 | 19.1 | 21.1 | 28.9 |
| 23-Aug | 17.7 | 15.7 | 16.0 | 15.9 | 15.4 | 14.8 | 15.3 | 17.2 | 18.7 | 19.3 | 21.3 | 24.3 | 24.8 | 24.3 | 25.1 | 25.4 | 23.3 | 21.9 | 21.0 | 19.8 | 19.0 | 18.3 | 17.7 | 17.8 | 19.6 | 25.4 |
| 24-Aug | 17.4 | 17.0 | 16.6 | 16.1 | 15.8 | 15.7 | 15.0 | 17.3 | 19.3 | 20.1 | 21.8 | 22.3 | 24.0 | 24.3 | 25.0 | 24.9 | 25.3 | 24.4 | 23.1 | 20.4 | 18.8 | 14.8 | 12.1 | 10.2 | 19.2 | 25.3 |
| 25-Aug | 9.0 | 7.8 | 6.7 | 5.9 | 5.0 | 4.6 | 7.0 | 14.1 | 16.8 | 19.0 | 20.9 | 22.5 | 24.4 | 25.2 | 26.0 | 26.4 | 26.7 | 26.3 | 24.5 | 21.3 | 17.7 | 16.1 | 14.3 | 12.6 | 16.7 | 26.7 |
| 26-Aug | 11.7 | 11.1 | 12.5 | 11.7 | 11.6 | 9.3 | 11.0 | 17.3 | 20.6 | 23.1 | 24.9 | 26.4 | 27.3 | 27.3 | 28.3 | 28.5 | 28.5 | 27.7 | 26.1 | 22.6 | 19.7 | 19.0 | 18.6 | 18.0 | 20.1 | 28.5 |
| 27-Aug | 15.6 | 13.4 | 12.0 | 12.6 | 13.8 | 12.2 | 14.7 | 17.4 | 19.9 | 21.6 | 22.3 | 23.8 | 24.3 | 24.4 | 23.8 | 23.4 | 23.1 | 23.7 | 23.5 | 22.4 | 21.1 | 19.7 | 19.2 | 17.9 | 19.4 | 24.4 |
| 28-Aug | 15.7 | 15.3 | 15.3 | 16.2 | 15.8 | 15.0 | 14.8 | 15.1 | 16.0 | 17.6 | 19.0 | 18.3 | 19.3 | 17.5 | 17.2 | 17.3 | 14.6 | 14.1 | 12.9 | 11.8 | 11.5 | 10.7 | 10.4 | 9.7 | 15.0 | 19.3 |
| 29-Aug | 9.3 | 9.4 | 9.5 | 9.5 | 8.7 | 7.5 | 7.6 | 8.7 | 11.9 | 14.5 | 16.2 | 17.9 | 19.2 | 20.1 | 21.0 | 21.3 | 21.3 | 21.0 | 19.7 | 16.4 | 13.5 | 12.0 | 11.8 | 11.2 | 14.1 | 21.3 |
| 30-Aug | 11.3 | 11.2 | 12.0 | 12.0 | 10.8 | 9.8 | 11.0 | 12.7 | 15.5 | 19.5 | 20.9 | 22.5 | 23.4 | 24.5 | 24.1 | 23.4 | 22.7 | 23.0 | 21.3 | 19.4 | 16.7 | 15.1 | 14.8 | 14.2 | 17.2 | 24.5 |
| 31-Aug | 13.3 | 11.2 | 10.4 | 9.9 | 9.7 | 9.0 | 10.0 | 13.4 | 16.1 | 18.4 | 19.5 | 20.4 | 21.1 | 21.6 | 21.6 | 21.5 | 21.3 | 20.8 | 18.4 | 14.2 | 10.9 | 9.0 | 7.7 | 6.9 | 14.8 | 21.6 |
| | 11.4 | 10.8 | 10.5 | 10.2 | 10.0 | 9.9 | 11.4 | 14.1 | 16.0 | 17.6 | 18.9 | 19.9 | 20.5 | 21.1 | 21.3 | 21.3 | 20.8 | 20.4 | 19.4 | 17.3 | 14.9 | 13.5 | 12.6 | 11.8 | Diurnal Average | |
| | 17.7 | 17.0 | 16.6 | 16.2 | 15.8 | 15.7 | 15.3 | 17.4 | 20.6 | 23.1 | 24.9 | 26.4 | 27.3 | 27.3 | 28.3 | 28.5 | 28.9 | 28.4 | 26.8 | 24.3 | 22.7 | 21.5 | 20.3 | 19.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Mackay River - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 125 | 16.80 | 16.80 |
| 10 - 20 | 450 | 60.48 | 77.29 |
| > 20 | 169 | 22.72 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Mackay River - August 2026

Maximum Value: 98.5 % on Aug 5 22:00

Maximum Daily Average: 88.6 % on Aug 12

Minimum Value: 29.4 % on Aug 24 17:00

Minimum Daily Average: 48.5 % on Aug 24

Maximum Diurnal Average: 91.0 % at hour 6

Minimum Diurnal Average: 49.5 % at hour 15

Monthly Average: 71.19 %

Percentiles: $P_1$ = 32.3 $P_{10}$ = 43.0 $Q_1$ = 54.7 Median = 73.0 $Q_3$ = 89.5 $P_{90}$ = 94.8 $P_{99}$ = 98.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

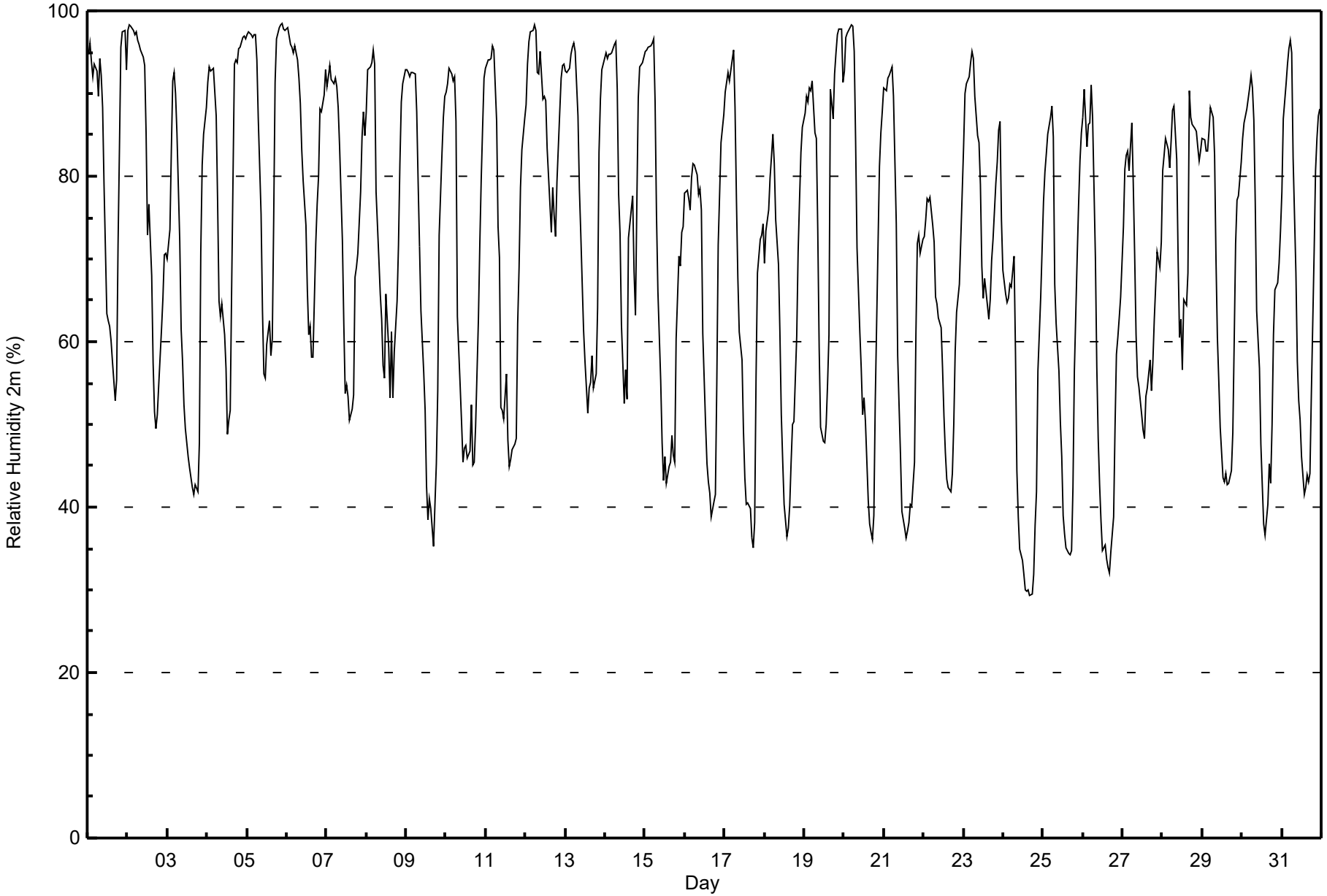
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 94.7 | 96.1 | 94.0 | 92.1 | 93.6 | 92.7 | 89.6 | 94.3 | 92.3 | 88.2 | 78.9 | 63.4 | 62.6 | 61.9 | 60.2 | 57.5 | 52.8 | 55.4 | 71.7 | 83.4 | 95.5 | 97.5 | 97.7 | 92.8 | 81.6 | 97.7 |
| 2-Aug | 97.7 | 98.2 | 98.2 | 97.6 | 97.2 | 97.4 | 96.4 | 95.9 | 95.3 | 94.3 | 93.4 | 85.3 | 72.9 | 76.7 | 68.0 | 57.5 | 51.5 | 49.5 | 51.1 | 54.7 | 61.6 | 65.3 | 70.4 | 70.6 | 79.0 | 98.2 |
| 3-Aug | 70.0 | 73.6 | 83.1 | 91.5 | 92.6 | 89.9 | 85.3 | 72.1 | 61.6 | 57.6 | 52.3 | 49.5 | 46.2 | 44.7 | 43.6 | 42.3 | 41.5 | 42.6 | 41.8 | 47.8 | 70.9 | 81.3 | 85.0 | 88.2 | 64.8 | 92.6 |
| 4-Aug | 91.3 | 93.2 | 92.7 | 92.9 | 93.1 | 87.2 | 76.9 | 64.9 | 63.0 | 64.6 | 60.8 | 56.8 | 48.8 | 50.5 | 51.6 | 66.2 | 93.6 | 94.0 | 93.7 | 95.5 | 95.5 | 96.9 | 97.0 | 96.6 | 79.9 | 97.0 |
| 5-Aug | 97.1 | 97.4 | 97.1 | 96.7 | 97.1 | 97.2 | 94.1 | 86.9 | 75.4 | 63.8 | 56.0 | 55.5 | 59.6 | 62.6 | 58.2 | 60.3 | 74.7 | 91.3 | 96.6 | 98.1 | 98.2 | 98.5 | 97.7 | 97.7 | 83.7 | 98.5 |
| 6-Aug | 98.0 | 97.0 | 96.0 | 95.7 | 94.9 | 95.8 | 94.1 | 91.9 | 88.8 | 83.2 | 79.6 | 74.1 | 66.3 | 60.8 | 61.9 | 58.1 | 58.1 | 71.8 | 76.6 | 80.1 | 88.1 | 87.8 | 89.8 | 92.9 | 82.6 | 98.0 |
| 7-Aug | 90.8 | 92.0 | 93.4 | 91.7 | 91.1 | 91.9 | 90.8 | 88.4 | 83.6 | 72.2 | 62.2 | 53.7 | 54.8 | 53.3 | 50.5 | 51.8 | 53.6 | 67.7 | 69.0 | 70.7 | 78.2 | 84.7 | 87.8 | 84.9 | 75.4 | 93.4 |
| 8-Aug | 87.9 | 92.8 | 93.3 | 93.8 | 95.2 | 93.6 | 78.2 | 70.0 | 65.7 | 62.6 | 57.2 | 55.5 | 65.7 | 59.3 | 53.1 | 61.1 | 53.2 | 58.9 | 64.9 | 71.8 | 81.5 | 89.0 | 91.3 | 92.8 | 74.5 | 95.2 |
| 9-Aug | 92.9 | 92.5 | 92.0 | 92.6 | 92.5 | 92.4 | 87.8 | 79.3 | 71.5 | 63.6 | 56.2 | 51.6 | 42.6 | 38.5 | 41.0 | 39.9 | 35.2 | 40.3 | 45.3 | 54.0 | 72.9 | 82.7 | 87.1 | 89.6 | 68.1 | 92.9 |
| 10-Aug | 90.2 | 91.2 | 93.1 | 92.4 | 91.6 | 92.0 | 86.7 | 63.1 | 54.6 | 50.2 | 45.5 | 47.2 | 47.5 | 46.0 | 46.8 | 52.4 | 45.0 | 45.4 | 49.8 | 62.6 | 71.8 | 79.6 | 85.9 | 91.8 | 67.6 | 93.1 |
| 11-Aug | 93.0 | 94.0 | 94.1 | 94.3 | 95.8 | 95.3 | 86.5 | 73.9 | 70.1 | 52.1 | 51.6 | 50.7 | 56.1 | 48.1 | 44.9 | 45.7 | 47.0 | 47.7 | 48.3 | 62.1 | 69.0 | 78.6 | 83.3 | 86.9 | 69.5 | 95.8 |
| 12-Aug | 88.7 | 93.5 | 96.4 | 97.4 | 97.6 | 98.3 | 97.6 | 92.5 | 92.4 | 95.2 | 89.3 | 89.6 | 89.1 | 83.4 | 80.1 | 73.1 | 78.7 | 75.2 | 72.6 | 79.3 | 87.8 | 91.8 | 93.4 | 93.5 | 88.6 | 98.3 |
| 13-Aug | 92.7 | 92.6 | 93.1 | 94.7 | 95.7 | 96.1 | 95.2 | 87.3 | 78.4 | 73.0 | 67.1 | 61.4 | 57.7 | 51.3 | 54.5 | 55.0 | 58.4 | 54.4 | 56.1 | 64.1 | 82.9 | 89.3 | 93.0 | 93.5 | 76.6 | 96.1 |
| 14-Aug | 94.9 | 94.3 | 94.8 | 94.8 | 95.0 | 95.9 | 96.3 | 90.4 | 77.8 | 73.0 | 62.1 | 52.5 | 56.7 | 53.1 | 72.6 | 74.2 | 77.7 | 68.5 | 63.2 | 77.0 | 89.4 | 93.2 | 93.7 | 94.4 | 80.6 | 96.3 |
| 15-Aug | 95.2 | 95.2 | 95.7 | 95.8 | 96.1 | 96.6 | 89.1 | 75.3 | 66.2 | 55.3 | 47.7 | 43.2 | 46.2 | 43.0 | 44.8 | 45.4 | 48.6 | 46.2 | 45.5 | 60.4 | 70.4 | 69.1 | 73.2 | 73.9 | 67.4 | 96.6 |
| 16-Aug | 77.9 | 78.3 | 77.2 | 75.9 | 79.9 | 81.6 | 81.4 | 80.2 | 77.7 | 78.5 | 76.0 | 60.9 | 49.9 | 45.2 | 43.1 | 41.7 | 38.9 | 40.7 | 41.6 | 54.9 | 71.7 | 77.9 | 84.1 | 87.5 | 66.8 | 87.5 |
| 17-Aug | 90.1 | 91.4 | 92.5 | 91.5 | 94.0 | 95.2 | 88.3 | 77.3 | 67.8 | 61.2 | 57.8 | 49.4 | 43.6 | 40.3 | 40.6 | 39.9 | 36.3 | 35.0 | 38.1 | 55.8 | 68.4 | 72.5 | 73.0 | 74.2 | 65.6 | 95.2 |
| 18-Aug | 69.4 | 73.4 | 75.9 | 79.8 | 82.4 | 85.0 | 81.6 | 74.8 | 69.3 | 61.1 | 51.1 | 45.6 | 40.3 | 36.4 | 37.4 | 40.2 | 45.5 | 50.0 | 50.3 | 60.7 | 70.9 | 77.1 | 82.9 | 85.9 | 63.6 | 85.9 |
| 19-Aug | 87.7 | 89.6 | 89.1 | 90.8 | 90.3 | 91.5 | 85.3 | 84.5 | 73.5 | 59.3 | 49.7 | 48.0 | 47.8 | 50.0 | 55.0 | 60.8 | 90.4 | 87.0 | 92.4 | 95.0 | 97.1 | 97.8 | 97.9 | 91.4 | 79.2 | 97.9 |
| 20-Aug | 92.6 | 96.8 | 97.3 | 97.7 | 98.4 | 98.1 | 95.1 | 84.2 | 71.4 | 61.3 | 56.7 | 51.1 | 53.3 | 50.3 | 40.8 | 37.9 | 36.9 | 36.1 | 39.0 | 52.7 | 71.9 | 81.2 | 85.2 | 87.7 | 69.7 | 98.4 |
| 21-Aug | 90.7 | 90.4 | 91.9 | 92.3 | 92.8 | 93.2 | 89.6 | 74.3 | 58.3 | 52.2 | 46.3 | 39.5 | 37.5 | 36.3 | 37.2 | 38.1 | 40.3 | 40.2 | 45.4 | 60.8 | 71.9 | 72.8 | 70.7 | 72.4 | 64.0 | 93.2 |
| 22-Aug | 72.6 | 74.8 | 77.3 | 77.0 | 77.5 | 74.0 | 72.1 | 65.5 | 64.5 | 63.0 | 61.7 | 56.8 | 51.0 | 46.6 | 43.3 | 42.3 | 41.8 | 44.1 | 49.9 | 58.8 | 63.5 | 67.0 | 72.4 | 78.0 | 62.3 | 78.0 |
| 23-Aug | 83.5 | 90.1 | 91.2 | 92.0 | 93.8 | 95.1 | 94.3 | 89.6 | 84.9 | 84.0 | 79.0 | 69.2 | 65.2 | 67.6 | 64.5 | 62.8 | 65.0 | 69.8 | 72.4 | 79.2 | 81.6 | 85.6 | 86.7 | 74.7 | 80.1 | 95.1 |
| 24-Aug | 68.7 | 65.8 | 64.8 | 65.3 | 66.9 | 66.6 | 70.3 | 58.8 | 44.5 | 38.7 | 34.8 | 33.6 | 31.8 | 30.1 | 29.8 | 30.0 | 29.4 | 29.4 | 31.9 | 37.8 | 41.9 | 56.5 | 65.5 | 71.2 | 48.5 | 71.2 |
| 25-Aug | 76.9 | 80.5 | 82.7 | 85.1 | 87.1 | 88.5 | 84.7 | 66.9 | 62.2 | 56.4 | 50.4 | 46.1 | 39.0 | 36.7 | 35.1 | 34.4 | 34.2 | 34.8 | 42.4 | 56.4 | 70.2 | 76.4 | 81.8 | 85.3 | 62.3 | 88.5 |
| 26-Aug | 87.0 | 90.5 | 83.6 | 86.3 | 86.4 | 91.0 | 87.2 | 70.1 | 57.0 | 48.4 | 42.7 | 38.2 | 34.8 | 35.3 | 33.8 | 32.7 | 32.1 | 34.5 | 38.9 | 49.7 | 58.4 | 60.4 | 62.8 | 65.4 | 58.6 | 91.0 |
| 27-Aug | 74.0 | 80.8 | 82.5 | 83.1 | 80.6 | 86.4 | 79.2 | 70.5 | 60.9 | 55.7 | 54.6 | 51.2 | 49.4 | 48.3 | 53.4 | 54.3 | 57.7 | 54.1 | 57.7 | 62.7 | 66.8 | 70.9 | 69.0 | 72.1 | 65.7 | 86.4 |
| 28-Aug | 80.6 | 82.5 | 84.6 | 83.3 | 81.0 | 84.3 | 88.0 | 88.4 | 82.1 | 69.9 | 60.5 | 62.7 | 56.6 | 65.0 | 64.4 | 68.4 | 90.3 | 87.1 | 86.3 | 85.7 | 85.4 | 83.6 | 81.9 | 83.0 | 78.6 | 90.3 |
| 29-Aug | 84.7 | 84.4 | 83.1 | 83.1 | 85.5 | 88.4 | 87.1 | 82.5 | 70.0 | 60.6 | 55.3 | 49.7 | 43.6 | 43.1 | 44.0 | 42.8 | 43.0 | 44.4 | 49.0 | 60.2 | 71.8 | 77.1 | 77.6 | 81.7 | 66.4 | 88.4 |
| 30-Aug | 84.6 | 86.4 | 87.3 | 88.1 | 90.8 | 92.2 | 90.6 | 86.8 | 76.9 | 63.7 | 56.8 | 47.6 | 42.7 | 38.0 | 36.6 | 40.4 | 45.2 | 42.9 | 50.0 | 60.8 | 66.2 | 67.1 | 69.4 | 73.3 | 66.0 | 92.2 |
| 31-Aug | 78.2 | 86.9 | 91.1 | 93.5 | 95.5 | 96.4 | 95.0 | 82.3 | 68.3 | 57.6 | 52.9 | 50.6 | 46.1 | 41.5 | 42.4 | 43.9 | 43.0 | 44.1 | 53.6 | 70.8 | 80.7 | 84.6 | 87.3 | 88.1 | 69.8 | 96.4 |
| | 86.3 | 88.3 | 89.0 | 89.6 | 90.4 | 91.0 | 87.6 | 79.5 | 71.8 | 65.2 | 59.6 | 54.5 | 51.8 | 49.8 | 49.5 | 50.0 | 52.9 | 54.3 | 57.6 | 66.6 | 75.9 | 80.4 | 83.0 | 84.3 | Diurnal Average | |
| | 98.0 | 98.2 | 98.2 | 97.7 | 98.4 | 98.3 | 97.6 | 95.9 | 95.3 | 95.2 | 93.4 | 89.6 | 89.1 | 83.4 | 80.1 | 74.2 | 93.6 | 94.0 | 96.6 | 98.1 | 98.2 | 98.5 | 97.9 | 97.7 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Mackay River - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 46 | 6.18 | 6.18 |
| 40 - 60 | 187 | 25.13 | 31.32 |
| 60 - 80 | 203 | 27.28 | 58.60 |
| 80 - 100 | 308 | 41.40 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 10.3 mm on Aug 4 17:00

Maximum Daily Total: 18.0 mm on Aug 4

Minimum Value: 0.0 mm on Aug 1 01:00

Minimum Daily Total: 0.0 mm on Aug 3

Maximum Diurnal Total: 12.1 mm at hour 17

Minimum Diurnal Total: 0.0 mm at hour 2

Monthly Total: 48.90 mm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 2.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

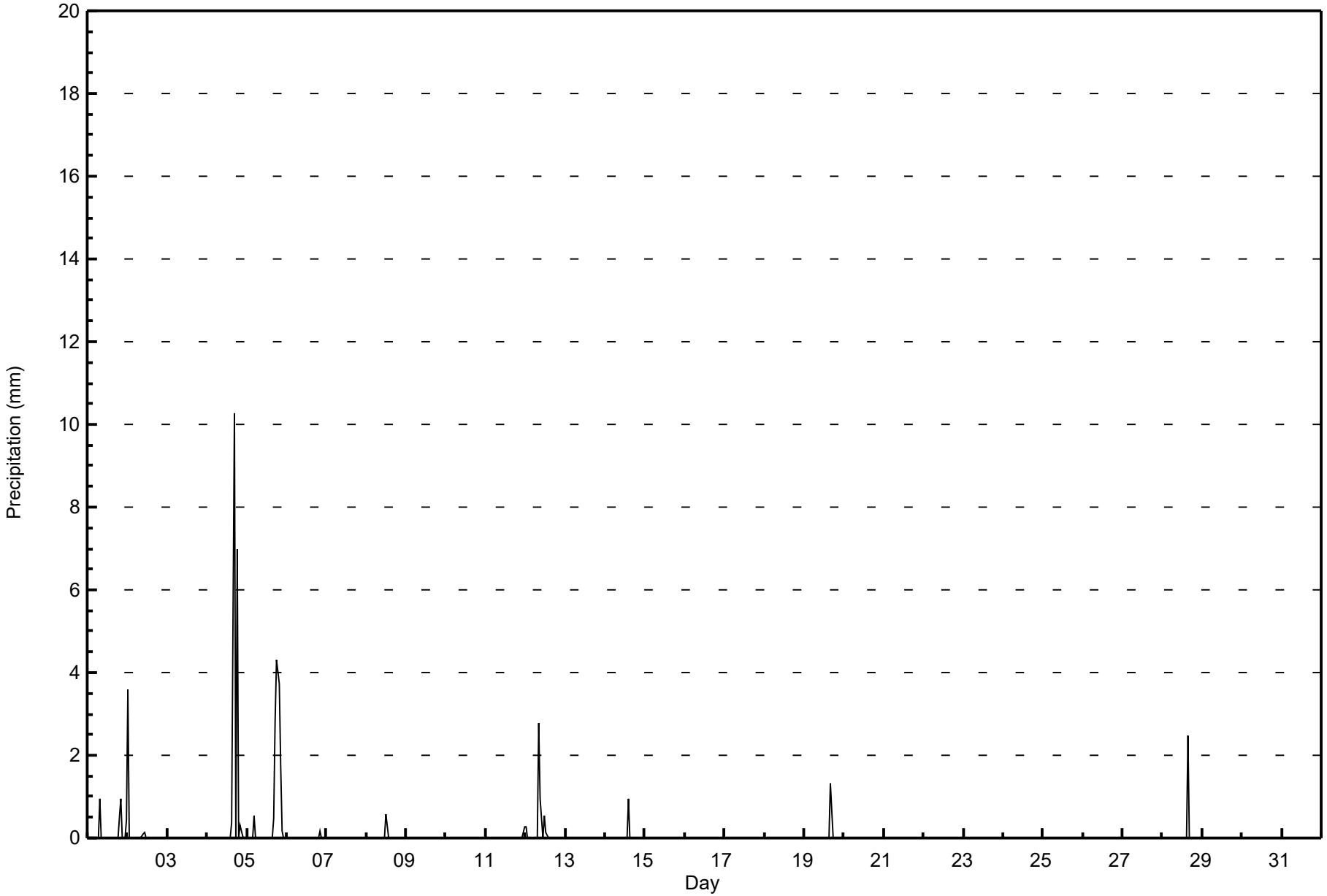
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.4 | 2.9 | 1.0 |
| 2-Aug | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 3.6 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 10.3 | 0.0 | 7.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 18.0 | 10.3 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 2.8 | 4.3 | 3.7 | 1.7 | 0.2 | 0.0 | 0.0 | 13.8 | 4.3 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.3 |
| 12-Aug | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 0.9 | 0.0 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.7 | 2.8 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.9 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 1.3 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 2.5 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3.9 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 1.0 | 2.8 | 1.1 | 0.1 | 0.5 | 0.7 | 0.1 | 0.9 | 2.8 | 12.1 | 2.8 | 11.3 | 4.2 | 3.2 | 0.2 | 0.0 | 0.7 | Diurnal Average | |
| | 3.6 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 1.0 | 2.8 | 0.9 | 0.1 | 0.5 | 0.6 | 0.1 | 0.9 | 2.5 | 10.3 | 2.8 | 7.0 | 3.7 | 1.7 | 0.2 | 0.0 | 0.4 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Precipitation (PC) - mm**

**Mackay River - August 2026**



| Concentration Ranges (mm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.3 | 723 | 97.18 | 97.18 |
| 0.4 - 0.5 | 6 | 0.81 | 97.98 |
| 0.6 - 0.7 | 1 | 0.13 | 98.12 |
| 0.8 - 1.4 | 5 | 0.67 | 98.79 |
| 1.5 - 10 | 8 | 1.08 | 99.87 |
| > 10 | 1 | 0.13 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Mackay River - August 2026

Maximum Speed: 20 km/h on Aug 2 18:00

Maximum Daily Speed Average: 11.9 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 8 22:00

Minimum Daily Speed Average: 0.2 km/h on Aug 25

Maximum Diurnal Speed Average: 3.9 km/h at hour 11

Minimum Diurnal Speed Average: 1.0 km/h at hour 21

Monthly Average Velocity: 2.1 km/h 277.3 deg

Percentiles: $P_1 = 0$ $P_{10} = 2$ $Q_1 = 3$ Median = 5 $Q_3 = 8$ $P_{90} = 11$ $P_{99} = 17$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 679 |
| Hours of Missing Data: | 65 |
| Percent Operational Time: | 91.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSE3 | S5 | S6 | S5 | SSE4 | S4 | S4 | SE2 | NNE3 | E4 | E8 | E10 | E10 | E11 | ESE13 | E11 | ESE11 | ESE6 | NE3 | NNW8 | N2 | W5 | N3 | NNW6 | ESE3.5 | ESE13 |
| 2-Aug | N6 | NNW6 | N9 | N9 | NNW6 | NW6 | NW8 | NW6 | NW7 | NNW10 | NNW16 | NNW16 | NNW16 | NNW17 | NNW18 | NNW18 | NNW19 | NW20 | NW17 | NNW16 | NW14 | NW11 | NW10 | NW10 | NNW11.9 | NW20 |
| 3-Aug | NW11 | NW8 | W4 | WSW4 | WSW4 | W5 | W5 | WNW8 | NW10 | NW12 | NW13 | NW12 | NW12 | NW11 | NW12 | NW13 | NNW11 | N10 | NNW10 | NNW5 | ESE2 | SSE4 | SSE4 | SSE5 | NW6.4 | NW13 |
| 4-Aug | SSE5 | SSE5 | SSE5 | S4 | S3 | SW4 | SSW5 | SSW5 | WSW7 | WSW7 | W9 | SW8 | SW10 | WSW8 | WSW9 | WSW4 | ENE1 | SSE3 | NW11 | WNW7 | WNW7 | WNW6 | WNW7 | NW7 | WSW4.1 | NW11 |
| 5-Aug | W4 | W6 | W5 | W6 | WNW7 | WNW6 | WNW8 | WNW10 | NW12 | NW17 | NW17 | NW15 | WNW12 | WNW8 | WNW12 | NW10 | NW5 | N10 | N9 | NNW8 | WNW4 | WNW8 | WNW8 | WNW8 | WNW8.3 | NW17 |
| 6-Aug | WNW9 | WNW10 | WNW11 | WNW11 | WNW9 | W8 | WNW9 | WNW10 | WNW11 | WNW13 | WNW11 | NW11 | NW11 | NW10 | NW10 | NW11 | NW12 | NW10 | NW9 | NW8 | NW5 | WNW6 | W5 | W5 | WNW9.2 | WNW13 |
| 7-Aug | WNW5 | W3 | WSW3 | WSW5 | W5 | W5 | W5 | WNW5 | WNW5 | WNW7 | WNW9 | WNW9 | WNW8 | WNW9 | WNW9 | NW6 | NNW6 | NNW2 | N3 | NNE2 | N1 | NW3 | UO | NNW2 | WNW4.6 | WNW9 |
| 8-Aug | NNW1 | W1 | SW1 | WNW3 | WNW1 | NNW2 | N5 | NNE3 | NNE5 | NNE6 | NNE6 | NNE4 | NW1 | NNE1 | NE2 | NNE5 | NNE3 | NNE3 | NE2 | ENE1 | SSE0 | SE0 | UO | UO | NNE2.2 | NNE6 |
| 9-Aug | UO | UO | UO | UO | W0 | UO | E0 | E1 | SE2 | SE2 | ESE1 | NE1 | WNW1 | N3 | N4 | NNE5 | NE5 | NE5 | ENE4 | ESE3 | SSE5 | SSE6 | SE6 | SE5 | E1.7 | SE6 |
| 10-Aug | UO | UO | UO | ENE0 | E1 | S1 | SSE1 | NE1 | NNE2 | N3 | NE4 | NNE4 | NE3 | N4 | NNE7 | NNE5 | NNE6 | NNE5 | NE3 | NNE0 | WSW0 | W2 | UO | UO | NNE2.4 | NNE7 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | M | M | NNW6 | NNW8 | N8 | NNE5 | NNE5 | NNE8 | NNE8 | NNE7 | NNE7 | NE6 | NE2 | NE4 | UO | UO | NNW1 | ---- | NNE8 |
| 12-Aug | N2 | UO | UO | UO | UO | W1 | W2 | WNW5 | NNW8 | NW7 | NNW9 | NNW9 | NNW8 | NNW8 | NNW8 | NNW11 | N10 | N9 | NNE8 | NNE3 | NNW4 | NNW3 | NNW3 | NNW3 | NNW5.5 | NNW11 |
| 13-Aug | NNW4 | NNW3 | NNW3 | NW2 | NNW2 | NNW4 | N4 | NNE6 | NNE8 | NNE8 | NNE9 | NNE8 | NNE6 | NE7 | N9 | NE10 | E7 | NE6 | ENE5 | UO | UO | UO | UO | UO | NNE5.1 | NE10 |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | NNW1 | W1 | NW2 | NW1 | NNE2 | WSW5 | NNW2 | N5 | NE3 | SE4 | SSE3 | S1 | SSE1 | S2 | SSW3 | S2 | ---- | WSW5 |
| 15-Aug | SSW2 | SW2 | SSW1 | SW2 | SSW2 | SW2 | SW2 | WSW4 | WSW4 | WSW5 | W6 | SW7 | WSW5 | SW6 | SW7 | SW4 | W3 | SW4 | SW3 | SW1 | SSW3 | SW3 | SW3 | SSW4 | SW3.5 | SW7 |
| 16-Aug | SW4 | SW4 | SW4 | SW4 | WNW2 | WNW5 | NW5 | NNW6 | NNW9 | N7 | N10 | NNW12 | NNW11 | NNW10 | NNW10 | NNW10 | NW11 | WNW8 | WNW6 | NW2 | UO | S0 | SSE1 | SSE2 | NW4.8 | NNW12 |
| 17-Aug | SSW2 | SW1 | WSW2 | WSW2 | WSW2 | W2 | W3 | WSW5 | WSW5 | WNW5 | W5 | WNW5 | WNW5 | SW5 | SW6 | W4 | WSW5 | SW7 | SSW5 | S3 | S4 | S5 | S5 | S5 | SW3.1 | SW7 |
| 18-Aug | S7 | S7 | S7 | SSE5 | S6 | SSE6 | S7 | S6 | SW5 | SW6 | WSW6 | WSW7 | SW9 | SW9 | SW11 | SW11 | W8 | WSW6 | WSW5 | SSW4 | SSW4 | S3 | S2 | SW1 | SSW5.4 | SW11 |
| 19-Aug | SW1 | W1 | WSW0 | WSW0 | S1 | SW3 | WSW4 | WSW4 | W5 | W7 | W9 | WNW10 | WNW11 | WNW10 | W5 | NNE2 | ESE1 | UO | UO | UO | UO | UO | S2 | NNE3 | W3.3 | WNW11 |
| 20-Aug | SE1 | S2 | SW1 | UO | UO | UO | UO | WNW2 | NW6 | NNW7 | N7 | N7 | N8 | NNW7 | NNW9 | N10 | NNW9 | NNW9 | N8 | UO | UO | UO | UO | UO | ---- | N10 |
| 21-Aug | UO | UO | UO | SSE2 | SSE2 | SSE2 | SSE3 | SSE2 | S2 | SSW5 | S7 | S5 | S6 | SSW5 | S7 | S9 | S7 | SSW7 | S6 | SSE1 | SSE2 | SSE3 | S5 | S6 | S4.4 | S9 |
| 22-Aug | S7 | SSE6 | SSE6 | SSE6 | S5 | S7 | S6 | S9 | SSW6 | SSW5 | S5 | S6 | S6 | S8 | SSE8 | SSE9 | SSE8 | S7 | S6 | S5 | SSW8 | SSW10 | SSW9 | S8 | S6.7 | SSW10 |
| 23-Aug | S4 | SSE3 | S6 | S4 | SSE4 | SE3 | SSE3 | S2 | S5 | SSW4 | S4 | SW5 | SSW6 | W3 | W1 | WSW4 | W5 | WNW6 | W5 | WNW4 | W4 | W3 | WNW3 | NW4 | SW2.5 | WNW6 |
| 24-Aug | NW5 | NW3 | NW5 | NW5 | NW4 | NW5 | WNW2 | NW5 | NW11 | NW12 | NW13 | NW12 | NW15 | NW17 | NW17 | NW15 | NW14 | NW15 | NW11 | NW8 | NW7 | NNW2 | UO | SE1 | NW8.7 | NW17 |
| 25-Aug | UO | UO | UO | UO | SSE1 | SSE1 | W0 | NNW1 | NNE4 | SE1 | NW3 | NNW3 | WSW5 | WNW5 | NNW2 | WNW3 | WSW3 | WSW2 | E5 | ESE5 | ENE3 | E1 | ESE2 | ESE3 | NNW0.2 | E5 |
| 26-Aug | SE2 | SE3 | SE4 | SSE5 | SSE4 | SSE2 | SSE3 | S6 | S7 | S8 | S10 | SSE11 | S13 | S10 | SSE11 | S12 | S10 | S8 | SSE5 | SE4 | SE4 | SSE4 | SSE4 | SSE4 | SSE6.2 | SSE13 |
| 27-Aug | SSE2 | UO | SE3 | SSE5 | SE5 | SE4 | SE5 | SE6 | ESE6 | ESE8 | ESE9 | SSE9 | SSE7 | SE7 | ESE6 | ESE13 | ESE13 | ESE9 | SE8 | ESE8 | SE8 | SE5 | SE5 | ESE3 | SE6.4 | ESE13 |
| 28-Aug | ESE3 | SSE4 | S5 | SW10 | WNW6 | SW6 | SSW6 | S9 | SW9 | SW11 | WSW12 | SW11 | WSW12 | WSW11 | WSW14 | WSW9 | SW11 | WSW11 | WSW11 | WSW9 | WSW11 | WSW9 | WSW11 | WSW9 | SW8.3 | WSW14 |
| 29-Aug | SW8 | SW9 | SW8 | SW8 | SW9 | SW9 | SW9 | SW9 | WSW10 | WSW11 | WSW10 | SW11 | SW12 | WSW12 | SW9 | SW10 | SSW9 | SW9 | SSW6 | S4 | S5 | S4 | S5 | S4 | SW8.0 | WSW12 |
| 30-Aug | S5 | SSE5 | S5 | S6 | S5 | SSE4 | SSW3 | W1 | S2 | WSW3 | W2 | SSE0 | W4 | W4 | W2 | SSE3 | S3 | SSE1 | S2 | SSE3 | WSW2 | WSW3 | W3 | WSW4 | SSW2.2 | S6 |
| 31-Aug | W5 | W3 | W3 | W3 | W4 | W2 | W4 | WNW6 | W6 | W7 | WNW8 | W8 | W8 | W9 | W10 | W9 | W8 | WSW5 | W2 | SSE1 | SE2 | SE3 | SSE4 | SE4 | W4.2 | W10 |
| | WSW1.6 | SW1.9 | SW2.1 | SW2.5 | SW1.8 | SW2.1 | WSW2.2 | WSW2.3 | WNW3.0 | WNW3.7 | WNW3.9 | WNW3.5 | WNW3.5 | WNW3.7 | WNW3.6 | NW2.8 | NW1.9 | NW2.2 | NW2.0 | NW1.3 | WSW1.0 | SW1.9 | SW2.1 | SW1.4 | Diurnal Average | |
| | NW11 | WNW10 | WNW11 | WNW11 | WNW9 | SW9 | WNW9 | WNW10 | NW12 | NW17 | NW17 | NNW16 | NNW16 | NNW17 | NNW18 | NNW18 | NNW19 | NW20 | NW17 | NNW16 | NW14 | NW11 | WSW11 | NW10 | Diurnal Maximum | |

M - Maintenance UO - Unstable Operation

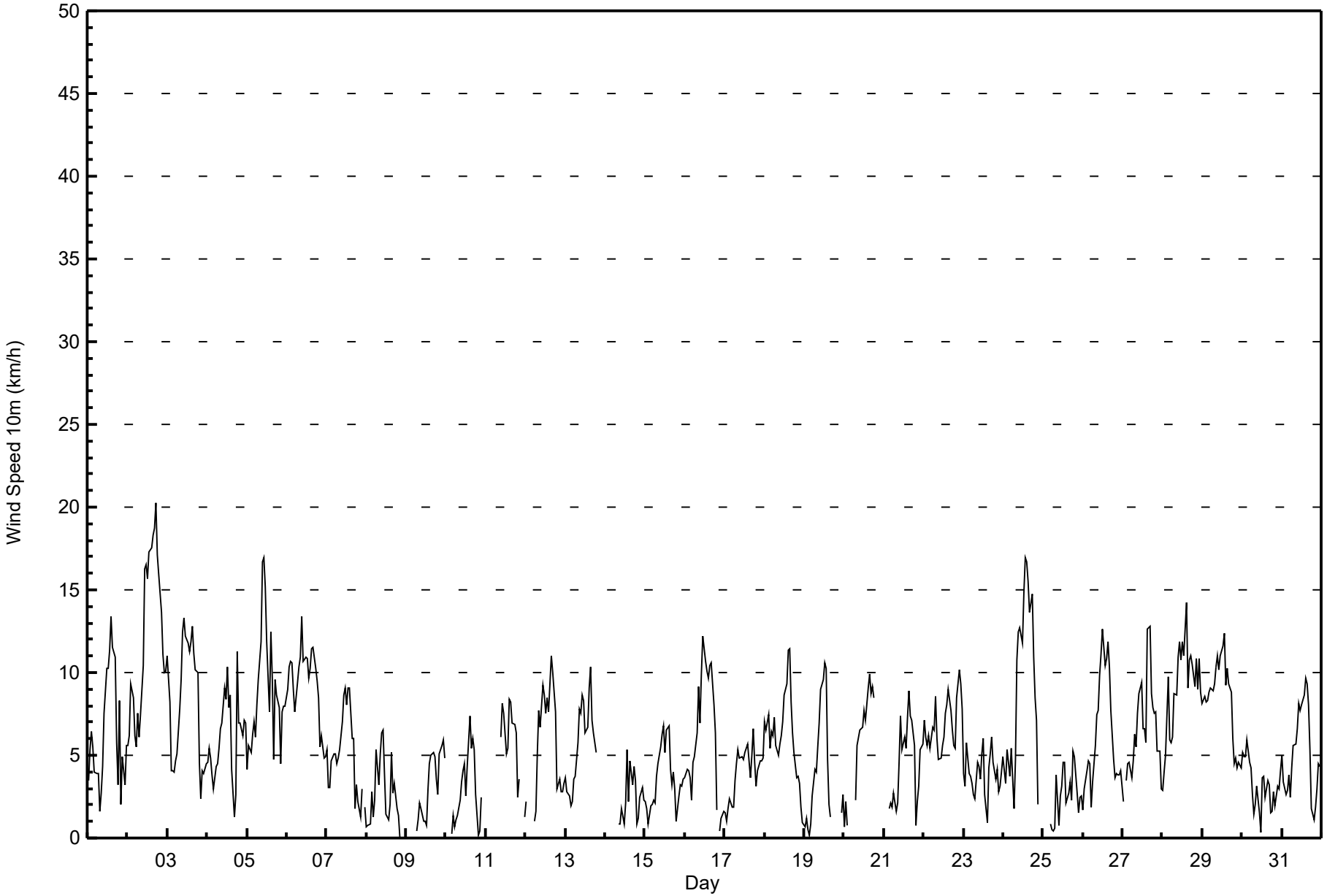
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Mackay River - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 362 | 53.31 | 53.31 |
| 6 - 11 | 272 | 40.06 | 93.37 |
| 12 - 19 | 44 | 6.48 | 99.85 |
| 20 - 28 | 1 | 0.15 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 679

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Mackay River - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 12 | 22 | 13 | 7 | 5 | 9 | 24 | 50 | 43 | 18 | 22 | 33 | 45 | 20 | 18 | 21 | 362 |
| 6 - 11 | 16 | 16 | 4 | 0 | 6 | 8 | 5 | 13 | 33 | 9 | 30 | 19 | 16 | 38 | 30 | 29 | 272 |
| 12 - 19 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 1 | 0 | 1 | 4 | 0 | 3 | 22 | 9 | 44 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 28 | 38 | 17 | 7 | 11 | 20 | 29 | 64 | 77 | 27 | 53 | 56 | 61 | 61 | 71 | 59 | 679 |

Total Number of Valid Hours: 679

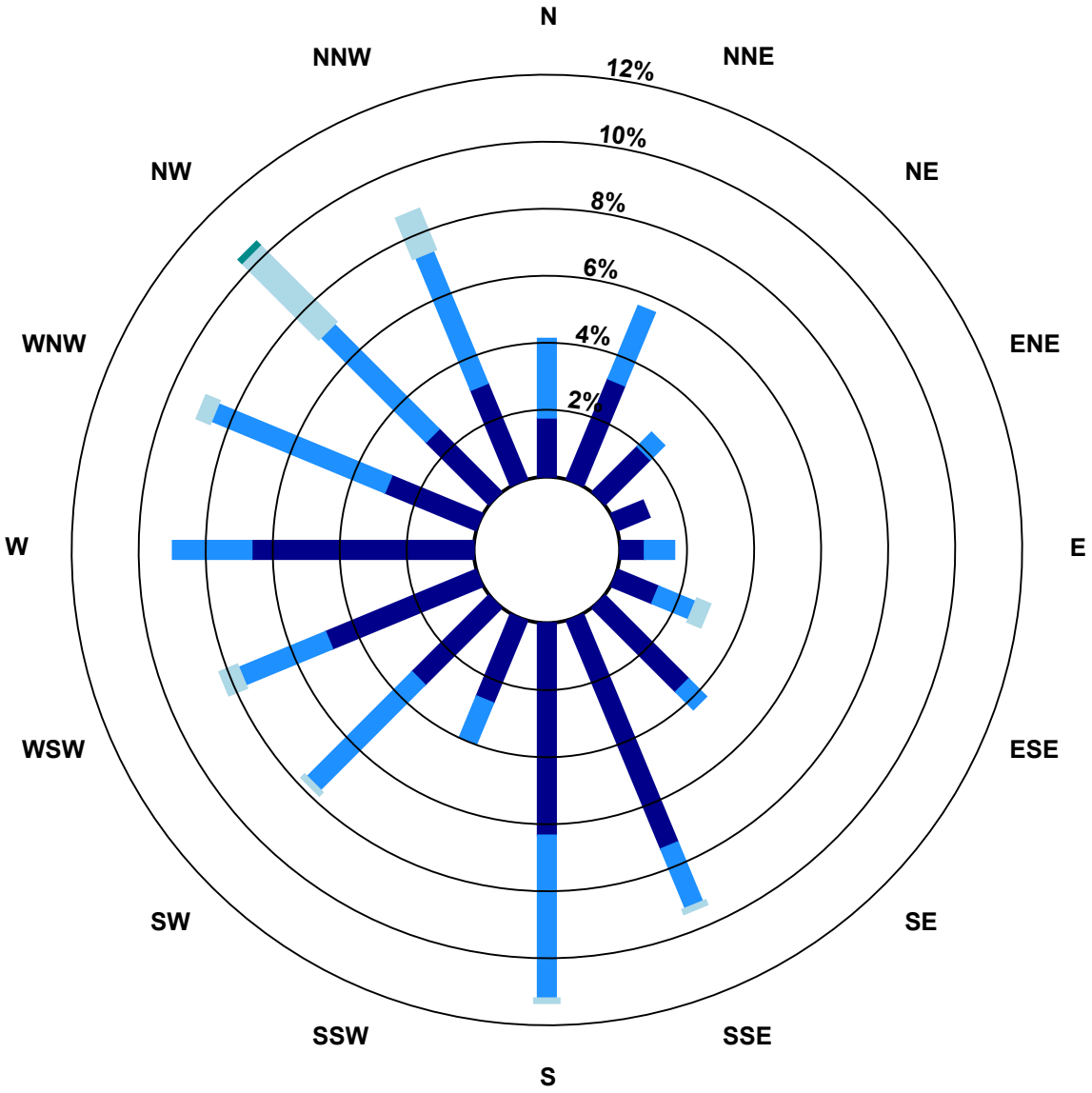
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Mackay River**




**Classes (km/h)**

- 0 - 5
- 6 - 11
- 12 - 19
- 20 - 28
- 29 - 38
- > 38

**Total Number of Valid Hours: 679**

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Mackay River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6 km/h on Aug 2 18:00

Minimum Value: 0 km/h on Aug 8 22:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 2 $Q_3 = 3$ $P_{90} = 4$ $P_{99} = 6$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 679 |
| Hours of Missing Data: | 65 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 91.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 5 | 2 | 2 | 2 | 2 | 5 |
| 2-Aug | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 6 |
| 3-Aug | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 0 | 1 | 1 | 5 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 5 | 2 | 5 | 2 | 2 | 2 | 2 | 2 | 5 |
| 5-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 6 | 6 | 5 | 4 | 3 | 5 | 4 | 3 | 5 | 3 | 2 | 3 | 3 | 3 | 3 | 6 |
| 6-Aug | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 5 |
| 7-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | UO | 1 | 4 |
| 8-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 5 | 3 | 3 | 2 | 2 | 0 | 0 | UO | UO | 5 |
| 9-Aug | UO | UO | UO | UO | 0 | UO | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 4 |
| 10-Aug | UO | UO | UO | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 2 | 0 | 1 | 2 | UO | UO | 4 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | M | M | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | UO | UO | 1 | 4 |
| 12-Aug | 2 | UO | UO | UO | UO | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 5 |
| 13-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | UO | UO | UO | UO | UO | 4 |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 4 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 4 |
| 16-Aug | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | UO | 1 | 1 | 2 | 4 |
| 17-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 18-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 4 | 4 | 3 | 1 | 1 | 1 | 2 | 1 | 5 |
| 19-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 4 | 1 | UO | UO | UO | UO | UO | 2 | 3 | 5 |
| 20-Aug | 1 | 2 | 1 | UO | UO | UO | UO | 2 | 3 | 2 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | UO | UO | UO | UO | UO | 4 |
| 21-Aug | UO | UO | UO | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 1 | 1 | 1 | 2 | 2 | 4 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 4 |
| 23-Aug | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 |
| 24-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 5 | 4 | 4 | 5 | 6 | 5 | 6 | 6 | 5 | 5 | 3 | 2 | 2 | 1 | UO | 1 | 6 |
| 25-Aug | UO | UO | UO | UO | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 |
| 26-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 4 |
| 27-Aug | 1 | UO | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 4 |
| 28-Aug | 2 | 2 | 2 | 5 | 3 | 4 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 3 | 6 |
| 29-Aug | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 30-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 |
| 31-Aug | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| | 3 | 4 | 4 | 5 | 3 | 4 | 3 | 4 | 5 | 6 | 6 | 5 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 3 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

M - Maintenance UO - Unstable Operation

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Mackay River - August 2026

Direction of Maximum Speed: 326 deg on Aug 2 18:00
Direction of Maximum Daily Speed Average: 332.9 deg on Aug 2

Direction of Minimum Speed: 138 deg on Aug 8 22:00
Direction of Minimum Daily Speed Average: 0.2 deg on Aug 25

Monthly Average Direction: 277.3 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 679 |
| Hours of Missing Data: | 65 |
| Percent Operational Time: | 91.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 147 | 169 | 183 | 179 | 167 | 171 | 175 | 130 | 31 | 81 | 85 | 91 | 95 | 89 | 105 | 100 | 104 | 102 | 37 | 329 | 1 | 281 | 350 | 348 | 102.4 |
| 2-Aug | 10 | 345 | 357 | 356 | 332 | 319 | 316 | 314 | 319 | 338 | 339 | 347 | 344 | 335 | 337 | 336 | 332 | 326 | 326 | 327 | 323 | 319 | 317 | 318 | 332.9 |
| 3-Aug | 318 | 322 | 277 | 257 | 244 | 278 | 279 | 293 | 315 | 322 | 315 | 322 | 313 | 313 | 317 | 321 | 347 | 349 | 333 | 346 | 118 | 151 | 161 | 150 | 315.3 |
| 4-Aug | 152 | 153 | 160 | 172 | 185 | 216 | 212 | 205 | 241 | 255 | 260 | 235 | 222 | 243 | 248 | 247 | 72 | 165 | 317 | 292 | 301 | 285 | 289 | 306 | 246.5 |
| 5-Aug | 274 | 277 | 266 | 272 | 287 | 283 | 288 | 294 | 304 | 313 | 311 | 312 | 303 | 290 | 297 | 318 | 314 | 354 | 0 | 327 | 298 | 292 | 286 | 288 | 303.4 |
| 6-Aug | 287 | 289 | 290 | 291 | 291 | 276 | 284 | 288 | 296 | 301 | 302 | 308 | 306 | 309 | 305 | 307 | 308 | 313 | 315 | 319 | 320 | 288 | 281 | 281 | 299.0 |
| 7-Aug | 284 | 277 | 251 | 258 | 268 | 264 | 267 | 283 | 287 | 292 | 284 | 291 | 287 | 282 | 294 | 304 | 339 | 337 | 10 | 28 | 349 | 313 | UO | 339 | 291.3 |
| 8-Aug | 340 | 259 | 227 | 286 | 290 | 336 | 359 | 13 | 24 | 14 | 16 | 33 | 316 | 32 | 52 | 20 | 28 | 28 | 49 | 77 | 151 | 138 | UO | UO | 12.3 |
| 9-Aug | UO | UO | UO | UO | 262 | UO | 98 | 99 | 133 | 136 | 111 | 42 | 300 | 359 | 4 | 20 | 45 | 45 | 63 | 105 | 154 | 147 | 138 | 144 | 89.4 |
| 10-Aug | UO | UO | UO | 78 | 79 | 173 | 165 | 40 | 16 | 5 | 36 | 14 | 55 | 6 | 18 | 29 | 25 | 25 | 37 | 30 | 248 | 273 | UO | UO | 23.0 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | M | M | 327 | 348 | 2 | 27 | 27 | 14 | 25 | 21 | 28 | 35 | 40 | 38 | UO | UO | 339 | -- |
| 12-Aug | 6 | UO | UO | UO | UO | 261 | 274 | 302 | 332 | 319 | 341 | 338 | 340 | 342 | 344 | 344 | 10 | 11 | 15 | 18 | 348 | 336 | 334 | 333 | 344.5 |
| 13-Aug | 342 | 346 | 338 | 322 | 334 | 342 | 8 | 19 | 23 | 15 | 23 | 30 | 32 | 46 | 4 | 37 | 90 | 53 | 62 | UO | UO | UO | UO | UO | 24.8 |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | 328 | 275 | 316 | 312 | 12 | 239 | 336 | 357 | 49 | 131 | 164 | 180 | 158 | 181 | 198 | 182 | -- |
| 15-Aug | 213 | 220 | 207 | 236 | 206 | 214 | 228 | 241 | 244 | 248 | 265 | 228 | 243 | 222 | 229 | 230 | 260 | 236 | 231 | 217 | 209 | 220 | 219 | 213 | 232.1 |
| 16-Aug | 216 | 228 | 228 | 229 | 292 | 282 | 318 | 343 | 347 | 2 | 351 | 330 | 335 | 338 | 345 | 330 | 312 | 301 | 303 | 323 | UO | 175 | 148 | 163 | 322.0 |
| 17-Aug | 201 | 226 | 244 | 242 | 254 | 262 | 266 | 257 | 258 | 285 | 268 | 283 | 289 | 228 | 236 | 260 | 245 | 214 | 200 | 181 | 176 | 178 | 175 | 172 | 234.4 |
| 18-Aug | 181 | 179 | 178 | 167 | 174 | 167 | 187 | 188 | 217 | 234 | 249 | 245 | 236 | 226 | 221 | 234 | 259 | 249 | 252 | 211 | 197 | 183 | 169 | 216 | 213.1 |
| 19-Aug | 235 | 259 | 243 | 245 | 179 | 216 | 238 | 256 | 276 | 279 | 281 | 290 | 291 | 302 | 272 | 19 | 121 | UO | UO | UO | UO | UO | 186 | 16 | 280.0 |
| 20-Aug | 140 | 170 | 216 | UO | UO | UO | UO | 291 | 323 | 343 | 1 | 356 | 358 | 340 | 329 | 352 | 348 | 343 | 353 | UO | UO | UO | UO | UO | -- |
| 21-Aug | UO | UO | UO | 151 | 151 | 153 | 153 | 167 | 179 | 207 | 190 | 187 | 188 | 192 | 189 | 178 | 182 | 196 | 177 | 152 | 150 | 156 | 172 | 176 | 180.3 |
| 22-Aug | 179 | 166 | 165 | 167 | 174 | 174 | 176 | 179 | 199 | 194 | 177 | 178 | 169 | 172 | 167 | 158 | 168 | 174 | 170 | 174 | 193 | 194 | 197 | 191 | 177.8 |
| 23-Aug | 178 | 166 | 177 | 181 | 161 | 144 | 149 | 183 | 187 | 203 | 175 | 228 | 203 | 281 | 281 | 248 | 269 | 282 | 281 | 287 | 277 | 270 | 291 | 317 | 224.8 |
| 24-Aug | 319 | 306 | 317 | 305 | 319 | 310 | 294 | 310 | 320 | 316 | 312 | 313 | 314 | 317 | 316 | 324 | 318 | 321 | 321 | 319 | 321 | 339 | UO | 140 | 316.7 |
| 25-Aug | UO | UO | UO | UO | 161 | 165 | 262 | 344 | 31 | 146 | 308 | 334 | 254 | 296 | 337 | 285 | 245 | 253 | 100 | 116 | 59 | 89 | 122 | 121 | 347.9 |
| 26-Aug | 140 | 134 | 145 | 150 | 152 | 152 | 147 | 170 | 180 | 176 | 171 | 168 | 169 | 174 | 168 | 182 | 177 | 174 | 166 | 132 | 132 | 156 | 167 | 160 | 166.3 |
| 27-Aug | 155 | UO | 144 | 150 | 138 | 141 | 139 | 138 | 119 | 116 | 119 | 155 | 148 | 124 | 110 | 114 | 116 | 118 | 126 | 122 | 131 | 136 | 136 | 123 | 128.4 |
| 28-Aug | 123 | 152 | 173 | 217 | 285 | 218 | 196 | 189 | 230 | 236 | 240 | 226 | 237 | 244 | 239 | 247 | 229 | 242 | 242 | 239 | 238 | 238 | 243 | 241 | 231.6 |
| 29-Aug | 229 | 226 | 230 | 221 | 217 | 217 | 224 | 223 | 238 | 246 | 243 | 233 | 236 | 241 | 234 | 226 | 213 | 220 | 212 | 190 | 175 | 172 | 172 | 172 | 223.6 |
| 30-Aug | 174 | 159 | 171 | 175 | 173 | 156 | 204 | 266 | 190 | 250 | 271 | 150 | 280 | 260 | 270 | 155 | 174 | 148 | 179 | 166 | 237 | 254 | 267 | 258 | 201.2 |
| 31-Aug | 271 | 268 | 274 | 261 | 266 | 262 | 265 | 282 | 281 | 272 | 288 | 272 | 265 | 266 | 273 | 260 | 268 | 258 | 267 | 148 | 145 | 144 | 147 | 144 | 263.2 |
| | 241.0 | 229.9 | 221.5 | 225.4 | 232.2 | 233.8 | 242.4 | 258.0 | 288.5 | 294.6 | 302.3 | 297.4 | 284.7 | 288.3 | 295.6 | 313.0 | 314.4 | 312.3 | 324.3 | 305.4 | 249.0 | 231.8 | 219.2 | 233.6 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

M - Maintenance UO - Unstable Operation

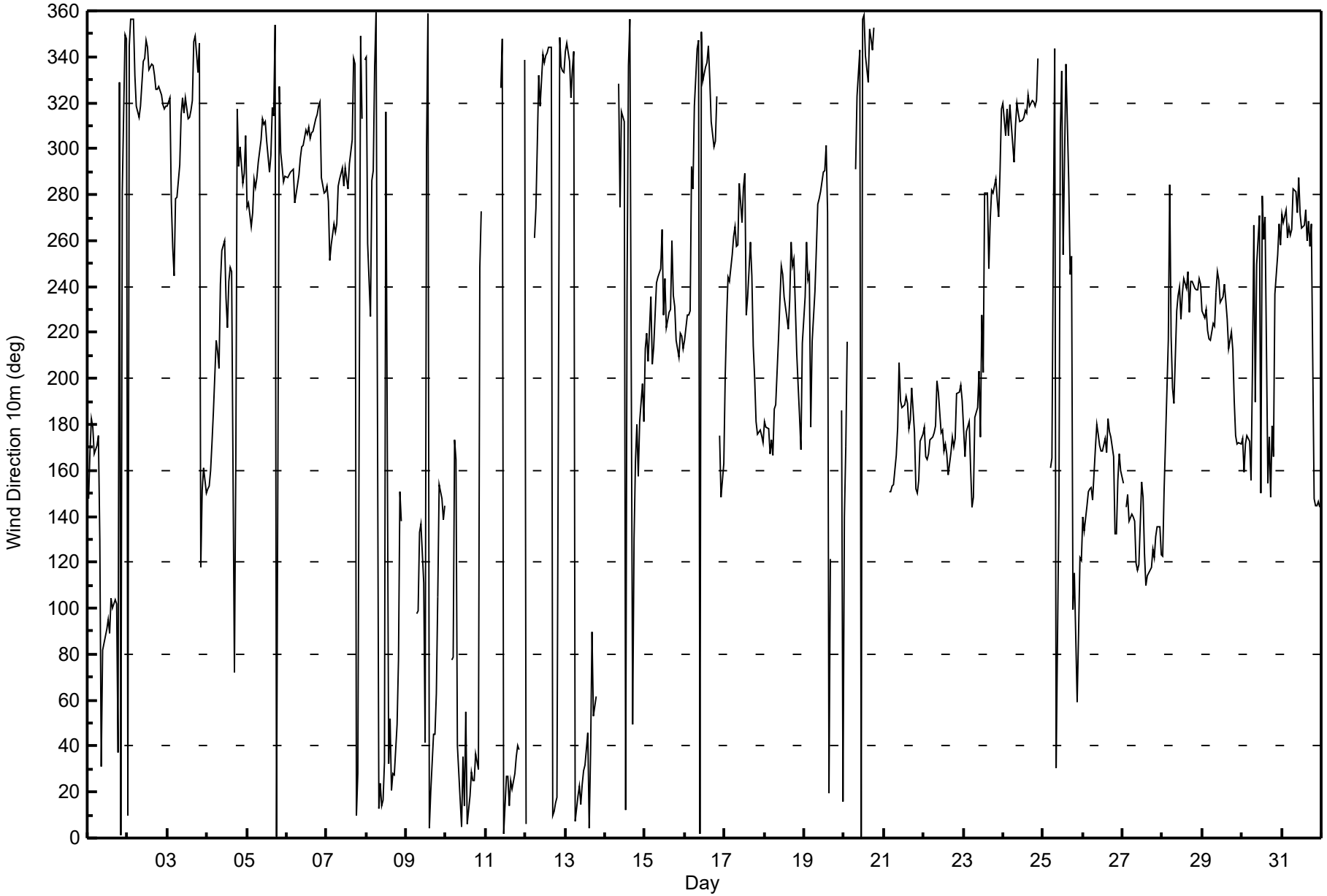
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Mackay River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Mackay River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 103 deg on Aug 14 12:00

Minimum Value: 7 deg on Aug 31 23:00

Percentiles: $P_1$ = 11 $P_{10}$ = 18 $Q_1$ = 23 Median = 31 $Q_3$ = 42 $P_{90}$ = 56 $P_{99}$ = 94

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 679 |
| Hours of Missing Data: | 65 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 91.3 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 11 | 18 | 14 | 12 | 16 | 20 | 41 | 81 | 37 | 34 | 33 | 35 | 34 | 34 | 28 | 33 | 29 | 41 | 64 | 42 | 80 | 38 | 54 | 32 | 81 |
| 2-Aug | 33 | 25 | 26 | 27 | 23 | 22 | 22 | 21 | 21 | 21 | 23 | 24 | 22 | 22 | 23 | 22 | 23 | 23 | 22 | 20 | 22 | 19 | 20 | 21 | 33 |
| 3-Aug | 21 | 22 | 46 | 53 | 53 | 41 | 34 | 34 | 32 | 28 | 29 | 29 | 34 | 36 | 28 | 24 | 26 | 27 | 23 | 19 | 44 | 11 | 13 | 12 | 53 |
| 4-Aug | 11 | 10 | 15 | 18 | 44 | 25 | 27 | 32 | 42 | 45 | 46 | 46 | 40 | 47 | 46 | 59 | 87 | 63 | 24 | 27 | 25 | 28 | 26 | 24 | 87 |
| 5-Aug | 37 | 37 | 37 | 41 | 27 | 27 | 29 | 30 | 31 | 25 | 26 | 27 | 27 | 33 | 31 | 23 | 48 | 40 | 33 | 22 | 36 | 27 | 28 | 28 | 48 |
| 6-Aug | 30 | 30 | 28 | 29 | 28 | 40 | 30 | 30 | 29 | 27 | 28 | 30 | 30 | 34 | 31 | 29 | 25 | 26 | 22 | 24 | 19 | 27 | 37 | 38 | 40 |
| 7-Aug | 34 | 51 | 49 | 44 | 41 | 42 | 56 | 38 | 40 | 40 | 43 | 36 | 37 | 42 | 37 | 34 | 28 | 28 | 28 | 16 | 38 | 48 | UO | 29 | 56 |
| 8-Aug | 69 | 44 | 36 | 52 | 52 | 26 | 28 | 31 | 30 | 35 | 38 | 52 | 66 | 76 | 47 | 32 | 51 | 24 | 22 | 28 | 30 | 19 | UO | UO | 76 |
| 9-Aug | UO | UO | UO | UO | 71 | UO | 97 | 41 | 26 | 28 | 77 | 62 | 85 | 69 | 44 | 59 | 40 | 26 | 25 | 43 | 14 | 11 | 15 | 24 | 97 |
| 10-Aug | UO | UO | UO | 63 | 69 | 95 | 80 | 80 | 35 | 43 | 47 | 43 | 52 | 63 | 33 | 26 | 35 | 29 | 19 | 59 | 10 | 36 | UO | UO | 95 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | M | M | 34 | 33 | 41 | 65 | 54 | 37 | 39 | 34 | 30 | 23 | 21 | 20 | UO | UO | 28 | 65 |
| 12-Aug | 24 | UO | UO | UO | UO | 17 | 31 | 33 | 22 | 24 | 26 | 24 | 30 | 26 | 28 | 28 | 26 | 30 | 31 | 23 | 28 | 16 | 12 | 13 | 33 |
| 13-Aug | 16 | 17 | 18 | 12 | 16 | 18 | 24 | 28 | 26 | 29 | 33 | 33 | 33 | 40 | 30 | 32 | 42 | 39 | 32 | UO | UO | UO | UO | UO | 42 |
| 14-Aug | UO | UO | UO | UO | UO | UO | UO | UO | 47 | 62 | 74 | 103 | 76 | 51 | 96 | 50 | 50 | 34 | 24 | 84 | 61 | 53 | 22 | 26 | 103 |
| 15-Aug | 16 | 18 | 23 | 19 | 19 | 21 | 53 | 35 | 44 | 47 | 48 | 49 | 48 | 51 | 33 | 51 | 45 | 38 | 36 | 41 | 18 | 18 | 17 | 16 | 53 |
| 16-Aug | 16 | 27 | 28 | 30 | 42 | 31 | 25 | 24 | 25 | 39 | 33 | 29 | 33 | 31 | 30 | 29 | 28 | 30 | 26 | 45 | UO | 68 | 43 | 51 | 68 |
| 17-Aug | 47 | 21 | 29 | 34 | 35 | 42 | 37 | 41 | 44 | 42 | 49 | 58 | 63 | 58 | 42 | 53 | 51 | 31 | 26 | 12 | 11 | 12 | 15 | 16 | 63 |
| 18-Aug | 20 | 21 | 19 | 23 | 20 | 21 | 24 | 26 | 35 | 44 | 46 | 44 | 44 | 43 | 38 | 40 | 48 | 50 | 44 | 21 | 16 | 18 | 69 | 81 | 81 |
| 19-Aug | 68 | 36 | 41 | 60 | 37 | 40 | 36 | 41 | 39 | 41 | 40 | 41 | 41 | 29 | 46 | 73 | 56 | UO | UO | UO | UO | UO | 68 | 83 | 83 |
| 20-Aug | 60 | 29 | 13 | UO | UO | UO | UO | 22 | 24 | 27 | 39 | 37 | 34 | 35 | 38 | 28 | 30 | 26 | 23 | UO | UO | UO | UO | UO | 60 |
| 21-Aug | UO | UO | UO | 11 | 42 | 13 | 13 | 15 | 36 | 36 | 34 | 49 | 53 | 44 | 38 | 33 | 28 | 29 | 27 | 44 | 17 | 22 | 23 | 22 | 53 |
| 22-Aug | 22 | 25 | 25 | 24 | 21 | 23 | 24 | 25 | 28 | 34 | 31 | 39 | 36 | 37 | 35 | 34 | 34 | 26 | 27 | 23 | 21 | 22 | 22 | 21 | 39 |
| 23-Aug | 42 | 20 | 21 | 19 | 22 | 18 | 16 | 62 | 26 | 34 | 62 | 51 | 32 | 49 | 96 | 47 | 42 | 39 | 33 | 24 | 31 | 33 | 29 | 23 | 96 |
| 24-Aug | 19 | 25 | 16 | 22 | 19 | 19 | 33 | 36 | 25 | 25 | 27 | 26 | 30 | 25 | 25 | 25 | 26 | 22 | 19 | 17 | 19 | 45 | UO | 88 | 88 |
| 25-Aug | UO | UO | UO | UO | 32 | 72 | 22 | 72 | 44 | 91 | 83 | 80 | 69 | 64 | 94 | 85 | 78 | 74 | 49 | 26 | 31 | 34 | 22 | 48 | 94 |
| 26-Aug | 20 | 11 | 21 | 16 | 14 | 12 | 14 | 23 | 25 | 30 | 29 | 31 | 29 | 31 | 32 | 28 | 31 | 25 | 28 | 18 | 18 | 23 | 25 | 26 | 32 |
| 27-Aug | 26 | UO | 13 | 15 | 17 | 17 | 22 | 19 | 28 | 23 | 25 | 32 | 32 | 29 | 69 | 21 | 20 | 18 | 19 | 16 | 20 | 22 | 19 | 16 | 69 |
| 28-Aug | 38 | 34 | 16 | 44 | 41 | 32 | 26 | 28 | 38 | 40 | 46 | 39 | 37 | 45 | 41 | 41 | 35 | 42 | 44 | 39 | 38 | 46 | 39 | 40 | 46 |
| 29-Aug | 33 | 30 | 35 | 30 | 29 | 29 | 31 | 30 | 42 | 43 | 47 | 41 | 42 | 40 | 42 | 42 | 38 | 34 | 22 | 19 | 11 | 12 | 14 | 13 | 47 |
| 30-Aug | 15 | 16 | 20 | 25 | 17 | 16 | 42 | 62 | 40 | 56 | 95 | 101 | 80 | 76 | 79 | 54 | 23 | 75 | 60 | 44 | 43 | 32 | 44 | 49 | 101 |
| 31-Aug | 42 | 52 | 36 | 52 | 48 | 48 | 45 | 42 | 37 | 48 | 42 | 46 | 47 | 46 | 45 | 46 | 46 | 49 | 52 | 21 | 41 | 8 | 7 | 7 | 52 |
| | 69 | 52 | 49 | 63 | 71 | 95 | 97 | 81 | 47 | 91 | 95 | 103 | 85 | 76 | 96 | 85 | 87 | 75 | 64 | 84 | 80 | 68 | 69 | 88 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

M - Maintenance UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS21
## CONKLIN
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS21)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 709 | 35 | 35 | 100 | - | - | 2.4 | 0 | 0.8 | 0 |
| TRS(ppb) Average | 708 | 36 | 36 | 100 | 0.8 | 0 | 0.6 | 0 | 0.3 | 0 |
| THC(ppm) Average | 709 | 35 | 35 | 100 | - | - | 5.2 | - | 2.8 | - |
| NMHC(ppm) Average | 709 | 35 | 35 | 100 | - | - | 0.077 | - | 0.01 | - |
| CH4(ppm) Average | 709 | 35 | 35 | 100 | - | - | 5.2 | - | 2.8 | - |
| O3 (ppb) Average | 709 | 35 | 35 | 100 | - | - | 46.2 | 0 | 27.5 | - |
| NO2 (ppb) Average | 707 | 37 | 37 | 100 | - | - | 13.7 | 0 | 3.2 | - |
| NO (ppb) Average | 707 | 37 | 37 | 100 | - | - | 40.8 | - | 6.6 | - |
| NOX (ppb) Average | 707 | 37 | 37 | 100 | - | - | 46.8 | - | 9.6 | - |
| PM2.5 (ug/m3) Average | 743 | 1 | 1 | 100 | - | - | 43.8 | 0 | 20.3 | 0 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 29.8 | - | 21.6 | - |
| Relative Humidity (%) Average | 707 | 0 | 37 | 95.03 | - | - | 100 | - | 96.2 | - |
| Wind Speed 10 m (km/h) Average | 739 | 1 | 5 | 99.46 | - | - | 16 | - | 8 | - |
| Wind Direction 10 m (deg) Average | 739 | 1 | 5 | 99.46 | - | - | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS21)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 709 | 0.19 | 0.3 | - | 0 | 0 | 0 | 0.1 | 0.2 | 0.4 | 2.4 |
| TRS (ppb) Average | 708 | 0.21 | 0.1 | - | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 |
| THC (ppm) Average | 709 | 2.3 | 0.4 | - | 2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.7 | 5.2 |
| NMHC(ppm) Average | 709 | 0.001 | 0.006 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.077 |
| CH4(ppm) Average | 709 | 2.3 | 0.4 | - | 2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.7 | 5.2 |
| O3 (ppb) Average | 709 | 17.34 | 11.4 | - | 0.9 | 1.8 | 6.9 | 17.6 | 25.6 | 32.4 | 46.2 |
| NO2 (ppb) Average | 707 | 1.73 | 1.9 | - | 0 | 0.3 | 0.5 | 1 | 2.2 | 4.1 | 13.7 |
| NO (ppb) Average | 707 | 1.87 | 4.5 | - | 0 | 0 | 0 | 0 | 1 | 6.7 | 40.8 |
| NOX (ppb) Average | 707 | 3.6 | 6 | - | 0 | 0.3 | 0.5 | 1.1 | 3.4 | 10.3 | 46.8 |
| PM2.5 (ug/m3) Average | 743 | 9.26 | 7.2 | - | 0.8 | 2.5 | 3.9 | 6.7 | 13.2 | 19.5 | 43.8 |
| Temperature 2 m (C) Average | 744 | 14.88 | 5.7 | - | 3.7 | 7.7 | 10.5 | 14.3 | 19 | 22.7 | 29.8 |
| Relative Humidity (%) Average | 707 | 77.72 | 20.2 | - | 31.8 | 47.4 | 60 | 84.7 | 96.4 | 99.6 | 100 |
| Wind Speed 10 m (km/h) Average | 739 | 4.7 | 3 | - | 0 | 1 | 2 | 4 | 6 | 9 | 16 |
| Wind Direction 10 m (deg) Average | 739 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS 21)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| Relative Humidity | 09 Aug 2026 06:00 | 09 Aug 2026 06:00 | 1 | Sensor operated out of range |
| Relative Humidity | 10 Aug 2026 04:00 | 10 Aug 2026 07:00 | 4 | Sensor operated out of range |
| Relative Humidity | 12 Aug 2026 03:00 | 12 Aug 2026 06:00 | 4 | Sensor operated out of range |
| Relative Humidity | 13 Aug 2026 01:00 | 13 Aug 2026 07:00 | 7 | Sensor operated out of range |
| Relative Humidity | 14 Aug 2026 00:00 | 14 Aug 2026 01:00 | 2 | Sensor operated out of range |
| Relative Humidity | 14 Aug 2026 03:00 | 14 Aug 2026 03:00 | 1 | Sensor operated out of range |
| Relative Humidity | 14 Aug 2026 05:00 | 14 Aug 2026 07:00 | 3 | Sensor operated out of range |
| Relative Humidity | 15 Aug 2026 01:00 | 15 Aug 2026 07:00 | 7 | Sensor operated out of range |
| Relative Humidity | 21 Aug 2026 06:00 | 21 Aug 2026 07:00 | 2 | Sensor operated out of range |
| Relative Humidity | 25 Aug 2026 05:00 | 25 Aug 2026 06:00 | 2 | Sensor operated out of range |
| Relative Humidity | 26 Aug 2026 07:00 | 26 Aug 2026 07:00 | 1 | Sensor operated out of range |
| Relative Humidity | 30 Aug 2026 07:00 | 30 Aug 2026 09:00 | 3 | Sensor operated out of range |
| Wind Speed, Wind Direction | 20 Aug 2026 01:00 | 20 Aug 2026 01:00 | 1 | Unstable Operation - flatline in analyzer output signal |
| Wind Speed, Wind Direction | 20 Aug 2026 22:00 | 20 Aug 2026 22:00 | 1 | Unstable Operation - flatline in analyzer output signal |
| Wind Speed, Wind Direction | 27 Aug 2026 00:00 | 27 Aug 2026 01:00 | 2 | Unstable Operation - flatline in analyzer output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Conklin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.4 ppb on Aug 10 09:00

Maximum Daily Average: 0.8 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 3 14:00

Minimum Daily Average: 0.0 ppb on Aug 4

Maximum Diurnal Average: 0.4 ppb at hour 10

Minimum Diurnal Average: 0.1 ppb at hour 6

Monthly Average: 0.19 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.4$ $P_{99} = 1.5$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.0 | 0.1 | 0.4 | 1.2 | 1.2 | 1.5 | 1.4 | 1.0 | 0.8 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.6 | 1.5 |
| 2-Aug | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| 3-Aug | 0.2 | 0.1 | 0.3 | 0.3 | 0.3 | Z | 0.2 | 0.4 | 0.9 | 1.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.2 |
| 4-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 6-Aug | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 |
| 7-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 |
| 8-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.5 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.9 | 0.6 | 0.6 | 0.8 | 0.8 | 0.7 | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.9 |
| 9-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.3 | 1.2 | 0.6 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 1.2 |
| 10-Aug | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 2.4 | 2.4 | 0.7 | 0.8 | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 2.4 |
| 11-Aug | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.6 | 0.4 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 12-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.5 | 0.7 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 13-Aug | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.6 |
| 15-Aug | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | Z | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 16-Aug | Z | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 17-Aug | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 18-Aug | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 | 0.6 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.9 |
| 19-Aug | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 20-Aug | 0.1 | 0.1 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.4 | 1.0 | 1.1 | 0.7 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 1.1 |
| 21-Aug | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.2 | 0.3 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.7 |
| 22-Aug | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.8 | 0.4 | 0.3 | 0.3 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.8 |
| 23-Aug | 0.3 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 24-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 |
| 25-Aug | 0.0 | 0.1 | 0.1 | Z | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 26-Aug | 0.1 | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.3 |
| 27-Aug | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | Z | 0.2 | 0.7 | 1.6 | 1.7 | 1.4 | 0.5 | 0.4 | 0.7 | 1.1 | 1.1 | 0.8 | 1.0 | 1.7 | 1.2 | 0.7 | 0.5 | 0.7 | 0.3 | 0.8 | 1.7 |
| 28-Aug | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.1 | 0.3 |
| 29-Aug | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 30-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 0.2 | 0.9 | 1.6 | 1.5 | 1.2 | 0.8 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 1.6 |
| 31-Aug | 0.0 | 0.1 | 0.1 | Z | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.4 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.7 | 2.4 | 2.4 | 1.5 | 1.4 | 1.0 | 0.9 | 1.1 | 1.6 | 1.5 | 1.2 | 1.7 | 1.2 | 0.7 | 0.5 | 0.7 | 0.3 | Diurnal Maximum | |

Z - zerospan C - Calibration

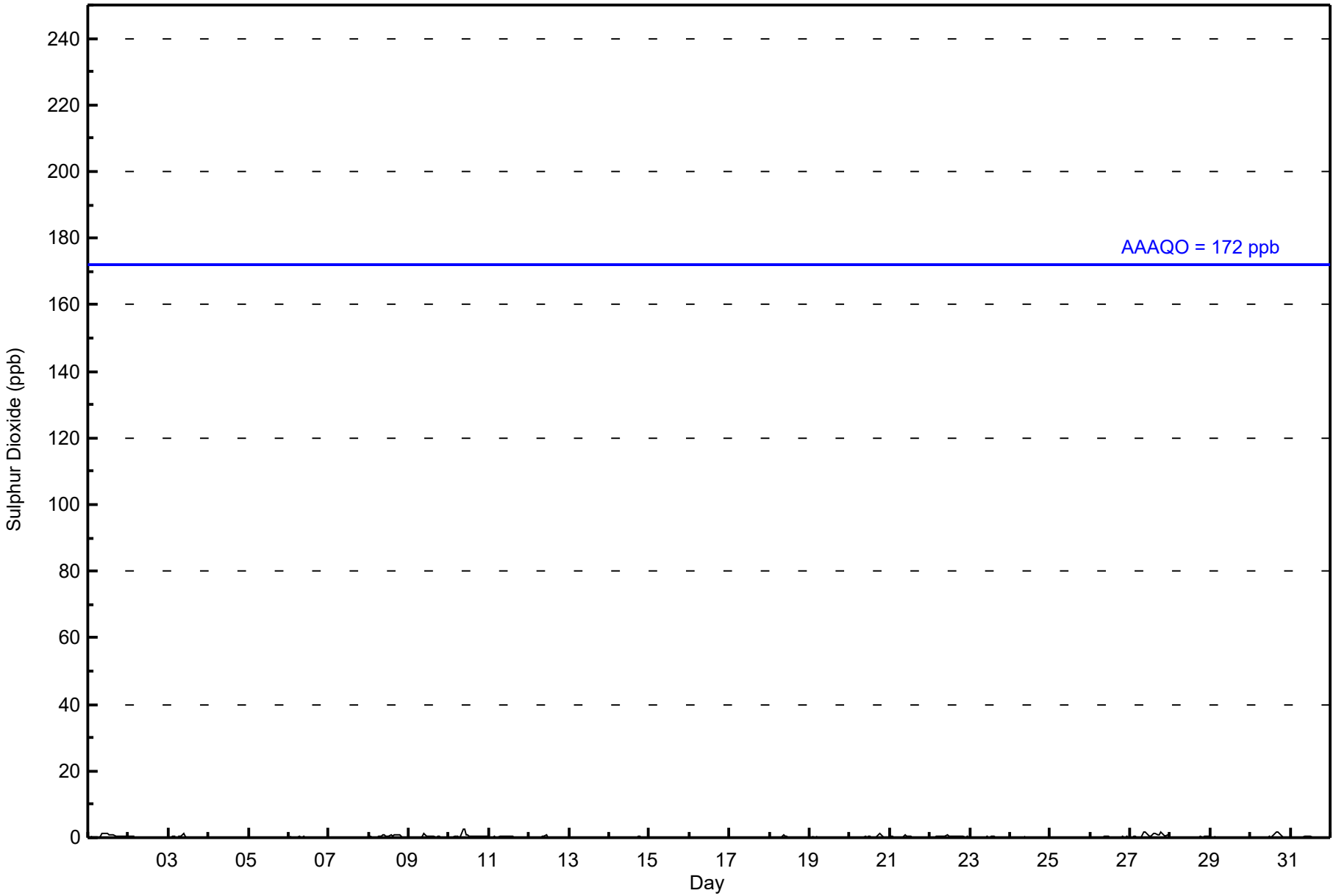
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Conklin - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb

## Conklin - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 709 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Conklin - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 121 | 41 | 20 | 10 | 16 | 21 | 30 | 53 | 45 | 27 | 41 | 39 | 18 | 33 | 69 | 120 | 704 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 121 | 41 | 20 | 10 | 16 | 21 | 30 | 53 | 45 | 27 | 41 | 39 | 18 | 33 | 69 | 120 | 704 |

Total Number of Valid Hours: 704

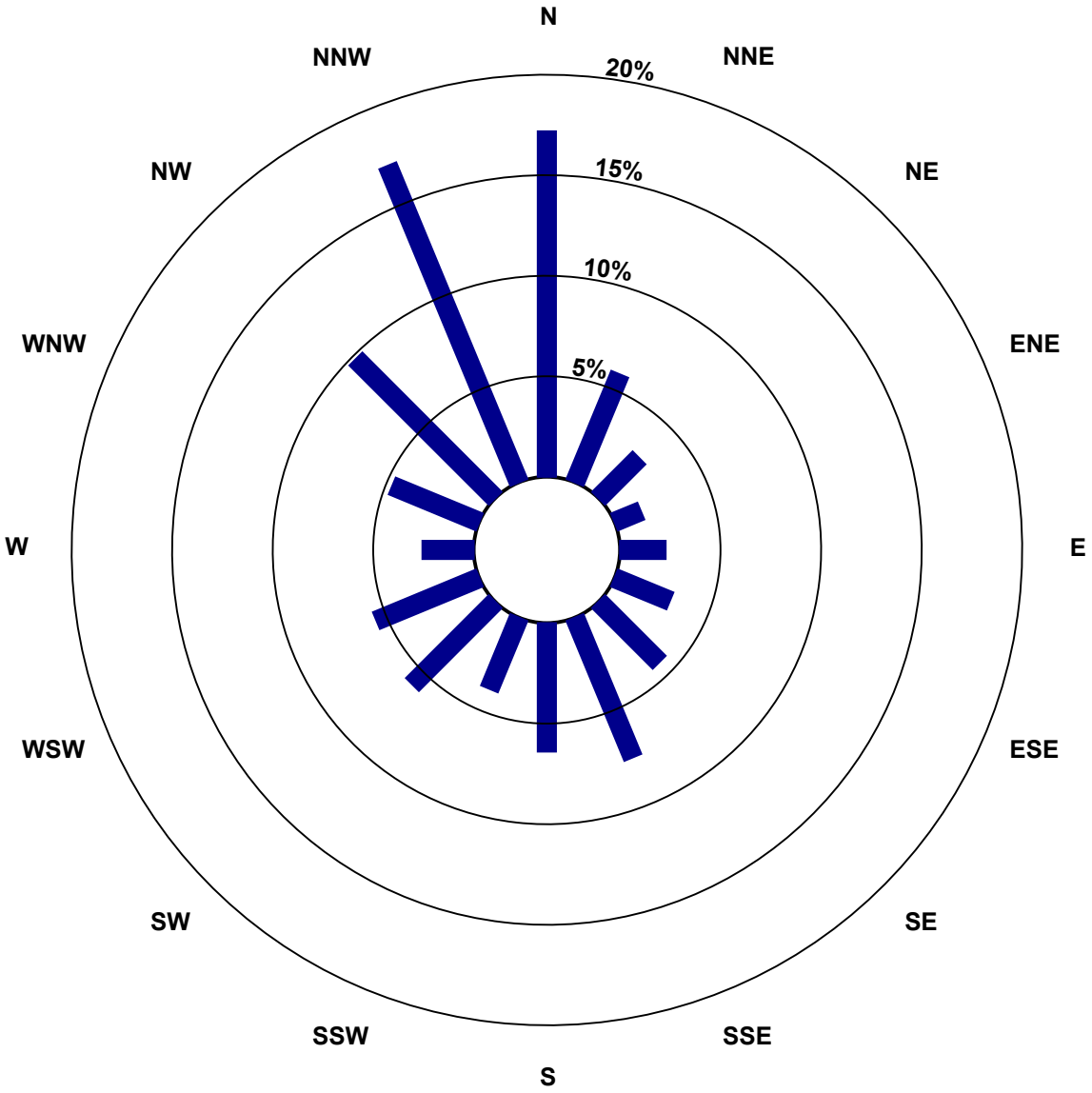
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Conklin




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

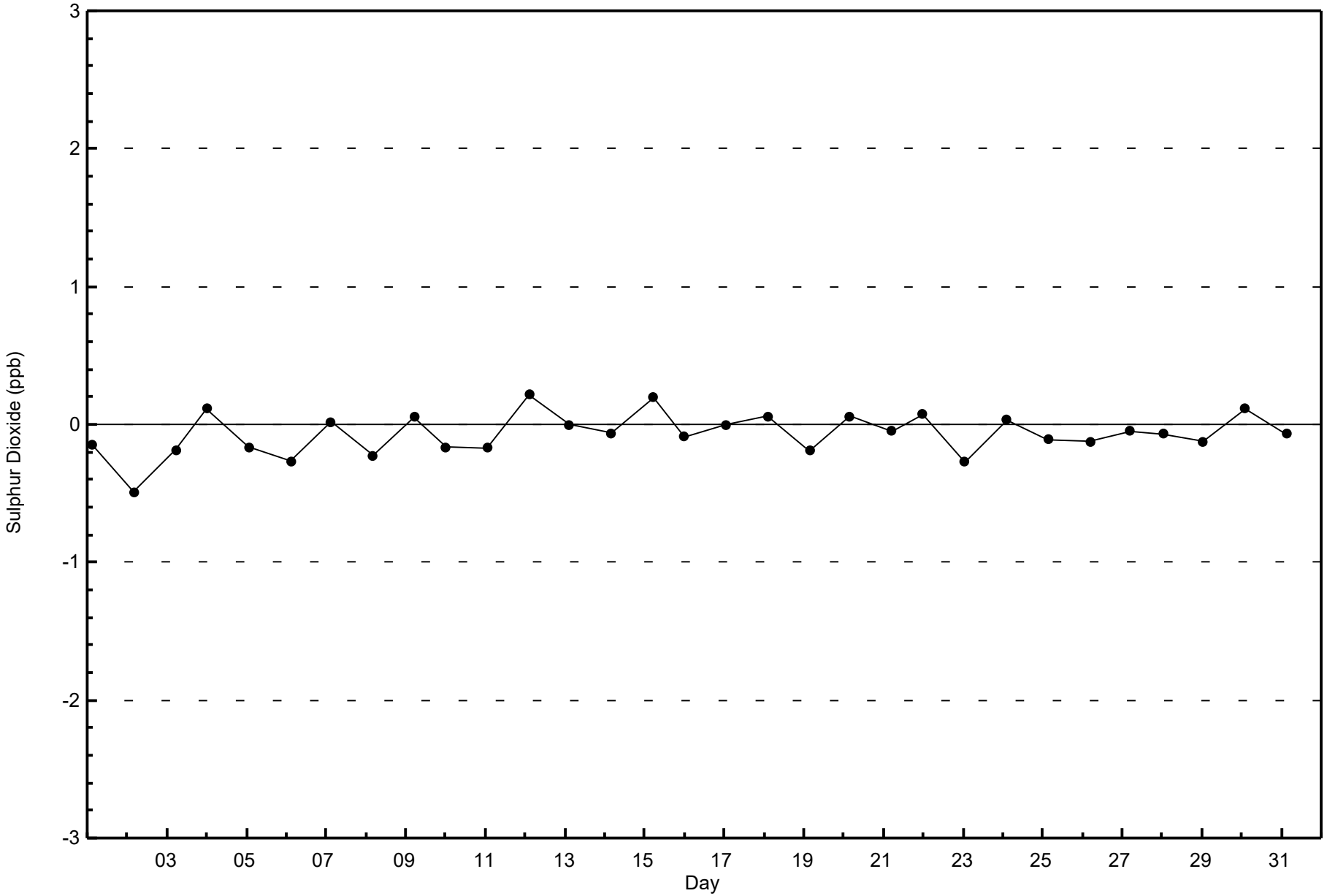
Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Conklin - August 2026**

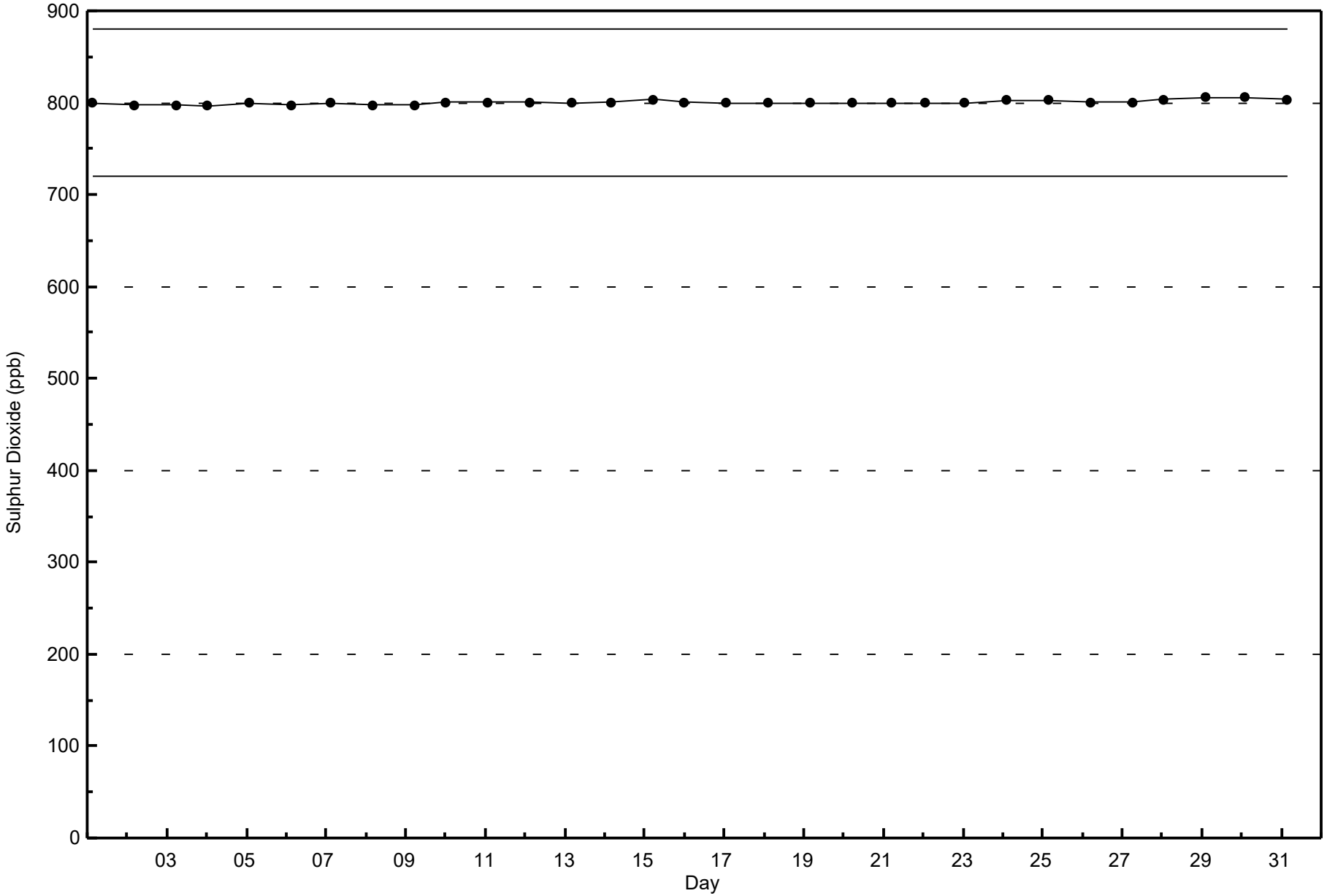


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Conklin - August 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.8 ppb on Aug 21 01:30 Maximum Daily Average: 0.3 ppb on Aug 22

Minimum Value: 0.1 ppb on Aug 24 14:00 Minimum Daily Average: 0.1 ppb on Aug 24

Maximum Diurnal Average: 0.2 ppb at hour 23 Minimum Diurnal Average: 0.2 ppb at hour 16

Monthly Average: 0.21 ppb Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.2 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.4

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1413 |
| Periods of Invalid Data: | 75 |
| Periods of Calibration: | 74 |
| Percent Operational Time: | 99.9 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.4 |
| | 0.3 | 0.2 | 0.3 | 0.2 | SP | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | | |
| 2-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 3-Aug | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 |
| | SP | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | | |
| 4-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | PF | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 5-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 |
| | 0.1 | 0.1 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 7-Aug | 0.2 | 0.1 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.1 | 0.2 | 0.1 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | | |
| 8-Aug | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 9-Aug | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 |
| | SP | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | | |
| 10-Aug | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| | 0.4 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | | |
| 11-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | | |
| 12-Aug | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 |
| | 0.3 | 0.3 | 0.2 | SP | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | | |
| 13-Aug | 0.1 | 0.1 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| | 0.1 | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | | |
| 14-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 |
| | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | | |
| 15-Aug | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| | SP | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Conklin - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | | |
| 17-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 |
| | 0.2 | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | | |
| 18-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | | |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | | |
| 20-Aug | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 |
| | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | SP | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | | |
| 21-Aug | Z | 0.8 | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.8 |
| | SP | 0.4 | 0.3 | 0.3 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | | |
| 22-Aug | 0.2 | Z | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 |
| | 0.2 | SP | 0.4 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | | |
| 23-Aug | 0.4 | 0.4 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| | 0.3 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 24-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.1 | 0.3 |
| | 0.1 | 0.1 | 0.1 | SP | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 25-Aug | 0.2 | 0.1 | 0.2 | 0.1 | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.4 |
| | 0.2 | 0.1 | 0.1 | 0.2 | SP | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| 26-Aug | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.5 |
| | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | SP | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.5 | 0.4 | | |
| 27-Aug | Z | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | C | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | -- | 0.4 |
| | SP | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | C | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | | |
| 28-Aug | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.3 |
| | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | | |
| 29-Aug | 0.3 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| | 0.3 | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | | |
| 30-Aug | 0.2 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| | 0.2 | 0.3 | 0.4 | SP | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 31-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 |
| | 0.1 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | | |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.4 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | Diurnal Maximum | |

Z - zerospan C - Calibration PF - Power Failure SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Reduced Sulphur (TRS) - ppb

## Conklin - August 2026

Maximum Value: 0.6 ppb on Aug 21 02:00

Maximum Daily Average: 0.3 ppb on Aug 22

Minimum Value: 0.1 ppb on Aug 24 16:00

Minimum Daily Average: 0.1 ppb on Aug 24

Maximum Diurnal Average: 0.2 ppb at hour 23

Minimum Diurnal Average: 0.2 ppb at hour 16

Monthly Average: 0.21 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.1 $Q_1$ = 0.2 Median = 0.2 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.3 | 0.2 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 |
| 2-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 3-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 4-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 5-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 7-Aug | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 8-Aug | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 9-Aug | Z | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 10-Aug | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| 11-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| 12-Aug | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 |
| 13-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 14-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 |
| 15-Aug | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 16-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 17-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 18-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| 19-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| 20-Aug | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.3 | 0.5 |
| 21-Aug | Z | 0.6 | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.6 |
| 22-Aug | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 |
| 23-Aug | 0.4 | 0.4 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 24-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 25-Aug | 0.2 | 0.1 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.4 |
| 26-Aug | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.3 | 0.4 |
| 27-Aug | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| 28-Aug | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 |
| 29-Aug | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 |
| 30-Aug | 0.2 | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 31-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.4 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | Diurnal Maximum | |

Z - zerospan C - Calibration

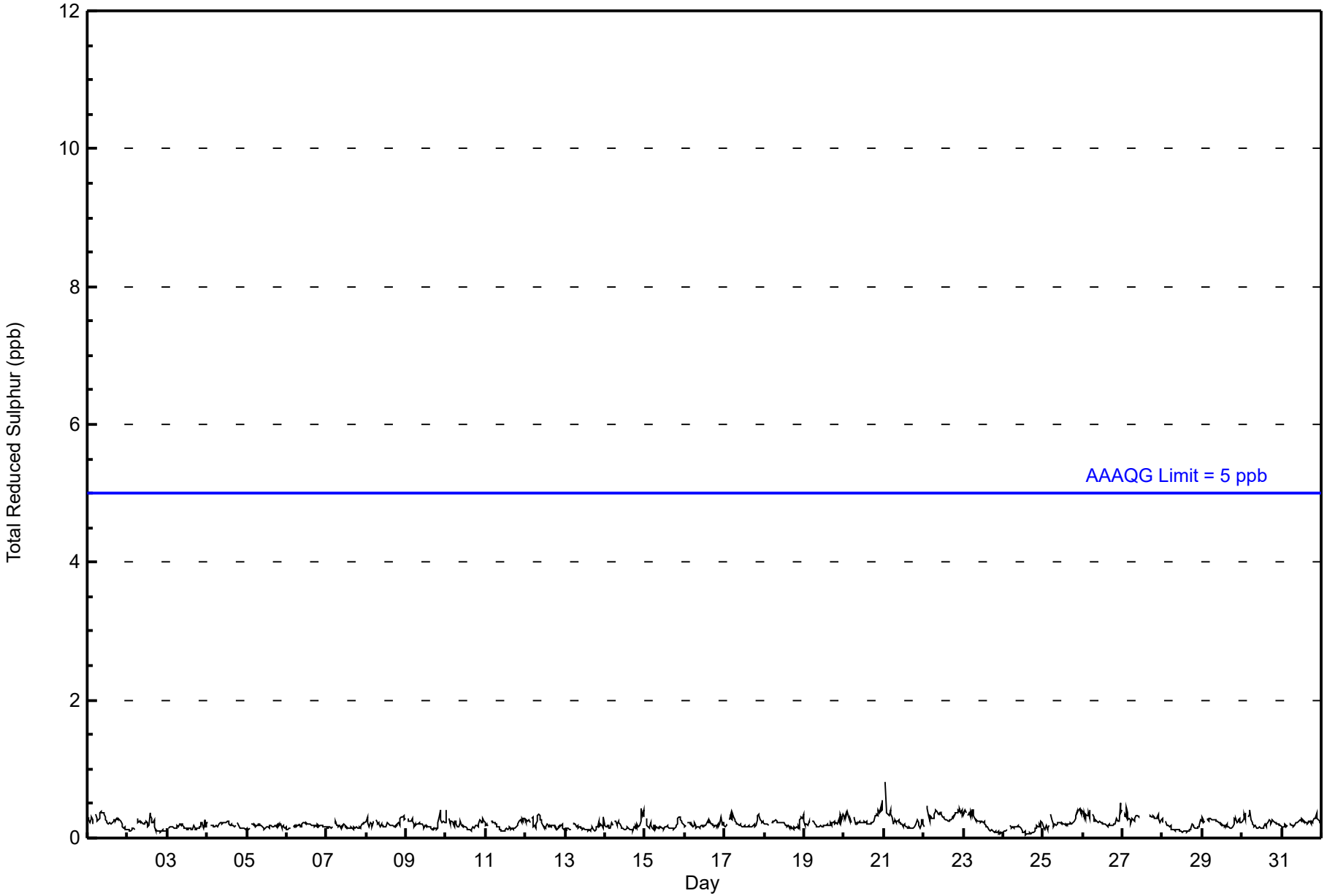
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Conklin - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 708 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Conklin - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 117 | 38 | 21 | 10 | 16 | 22 | 29 | 51 | 44 | 30 | 39 | 37 | 18 | 34 | 68 | 130 | 704 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 117 | 38 | 21 | 10 | 16 | 22 | 29 | 51 | 44 | 30 | 39 | 37 | 18 | 34 | 68 | 130 | 704 |

Total Number of Valid Hours: 704

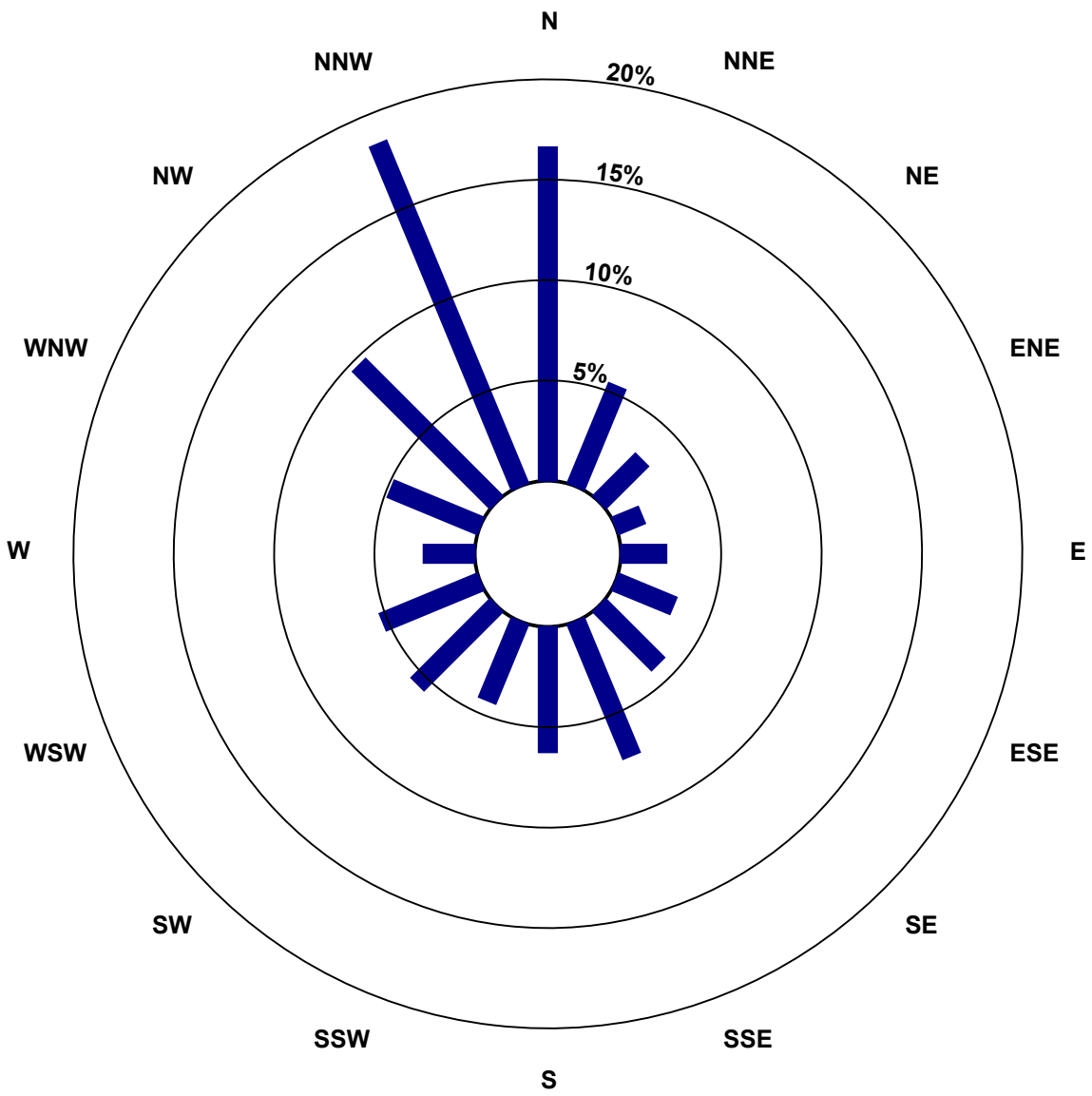
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Reduced Sulphur (TRS) - ppb**

**Conklin**




**Classes (ppb)**

- 0 - 2
- 3 - 4
- 5 - 7
- 8 - 11
- > 11

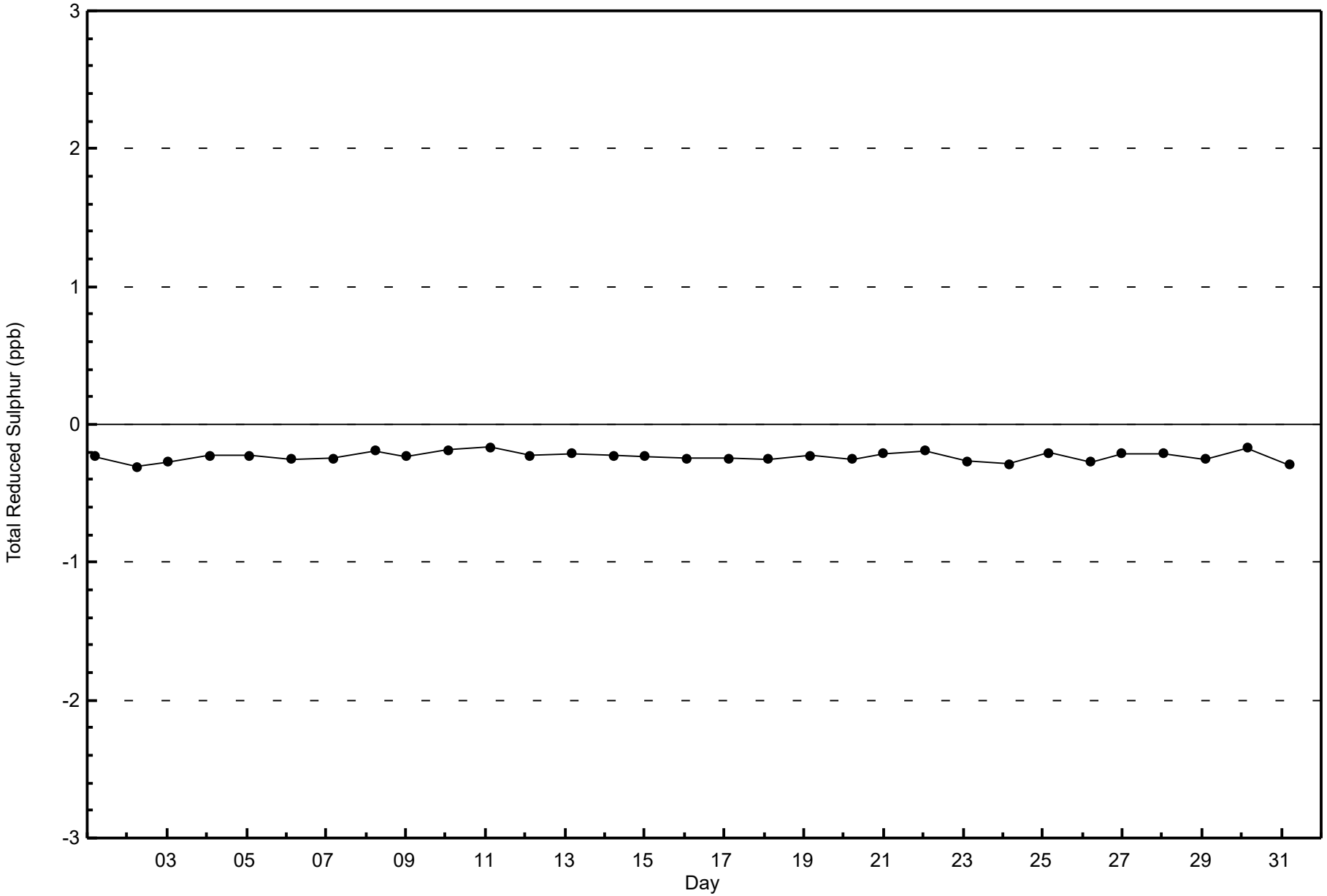
**Total Number of Valid Hours: 704**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Conklin - August 2026**

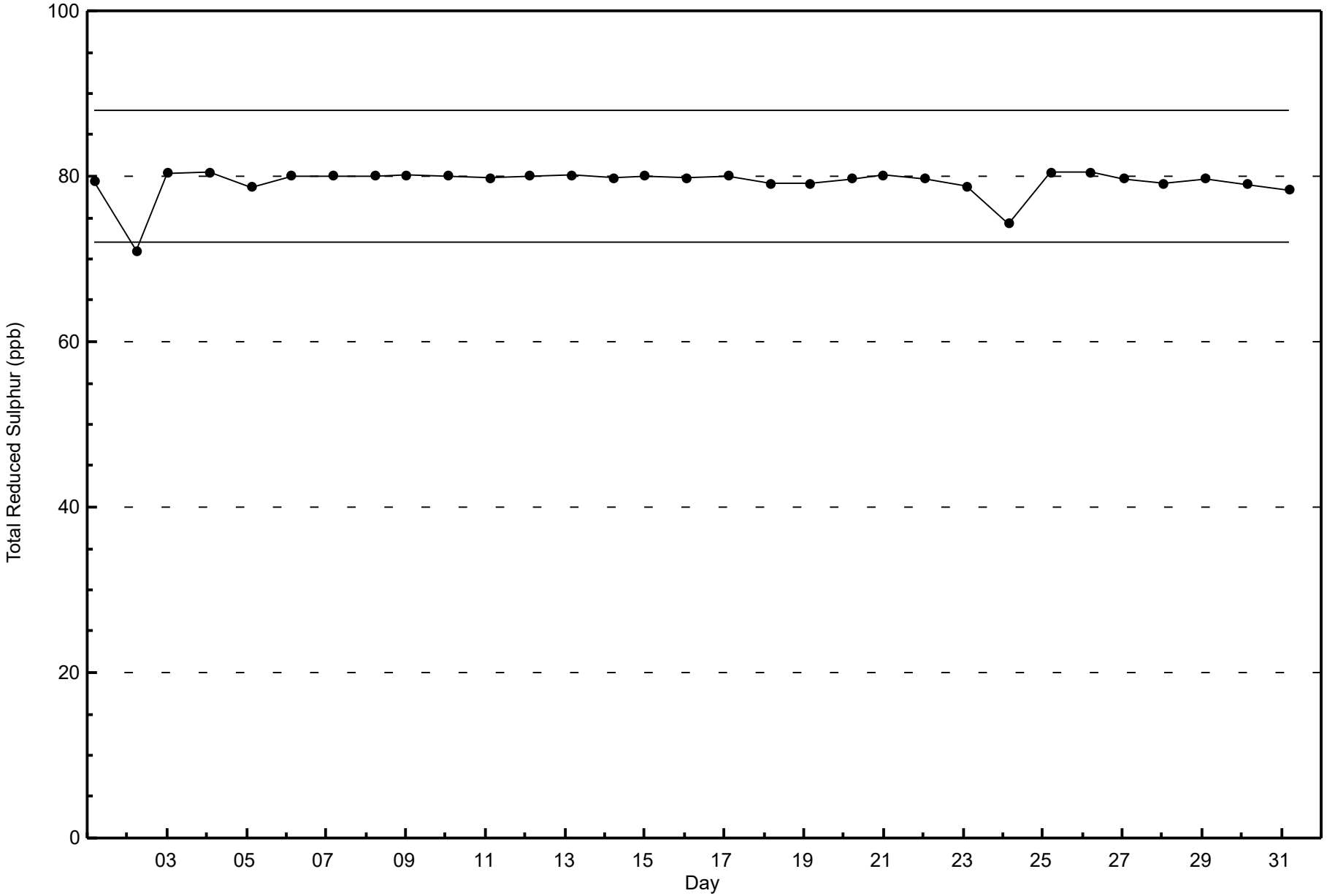


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Conklin - August 2026

Maximum Value: 5.2 ppm on Aug 23 07:00

Maximum Daily Average: 2.8 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 28 15:00

Minimum Daily Average: 2.1 ppm on Aug 5

Maximum Diurnal Average: 2.6 ppm at hour 3

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.30 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.1 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.4 $P_{90}$ = 2.7 $P_{99}$ = 3.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.9 | 2.8 | 3.3 | Z | 3.2 | 3.6 | 3.6 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.7 | 2.7 | 2.1 | 2.2 | 2.5 | 3.6 |
| 2-Aug | 2.2 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 3-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.4 | 2.4 | 2.1 | 2.4 |
| 4-Aug | Z | 2.5 | 2.4 | 2.3 | 2.4 | 2.6 | 2.5 | 2.5 | 2.6 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 |
| 5-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 |
| 6-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 7-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 2.1 | 2.5 |
| 8-Aug | 2.7 | 2.5 | 2.5 | 2.4 | Z | 3.1 | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 2.9 | 3.1 | 2.9 | 2.4 | 3.1 |
| 9-Aug | 2.8 | 2.6 | 2.7 | 3.0 | 2.6 | Z | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.6 | 2.8 | 2.3 | 3.0 |
| 10-Aug | Z | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.4 | 2.5 | 2.3 | 2.6 |
| 11-Aug | 2.4 | Z | 2.4 | 2.4 | 2.6 | 2.7 | 2.5 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.5 | 2.3 | 2.7 |
| 12-Aug | 2.5 | 2.6 | Z | 2.6 | 2.6 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.6 |
| 13-Aug | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.4 | 2.4 | 2.5 | 2.2 | 2.5 |
| 14-Aug | 2.4 | 2.4 | 2.5 | 2.4 | Z | 2.5 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.7 | 2.8 | 2.3 | 2.8 |
| 15-Aug | 2.6 | 2.5 | 2.3 | 2.4 | 2.5 | Z | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.6 | 2.3 | 2.3 | 2.3 | 2.6 |
| 16-Aug | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.7 | 2.6 | 2.3 | 2.2 | 2.7 |
| 17-Aug | 2.2 | Z | 2.4 | 2.7 | 2.5 | 2.9 | 2.6 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 | 2.6 | 2.3 | 2.3 | 2.3 | 2.9 |
| 18-Aug | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.5 | 3.4 | 3.6 | 2.3 | 3.6 |
| 19-Aug | 2.8 | 2.5 | 2.4 | Z | 2.7 | 2.6 | 2.6 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 3.4 | 3.1 | 2.3 | 3.4 |
| 20-Aug | 2.9 | 3.0 | 2.8 | 2.7 | Z | 2.7 | 2.6 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 2.6 | 2.7 | 2.7 | 2.4 | 3.0 |
| 21-Aug | 2.7 | 2.7 | 2.8 | 2.7 | 2.9 | Z | 2.7 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.9 |
| 22-Aug | Z | 2.4 | 4.0 | 2.9 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.6 | 2.9 | 3.0 | 2.8 | 2.4 | 4.0 |
| 23-Aug | 2.9 | Z | 4.3 | 3.3 | 3.6 | 4.3 | 5.2 | 3.8 | 2.7 | 2.6 | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.8 | 5.2 |
| 24-Aug | 2.1 | 2.3 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | C | C | C | C | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.4 | 2.6 | 2.7 | 2.8 | 2.2 | 2.8 |
| 25-Aug | 2.9 | 2.7 | 2.7 | Z | 2.7 | 2.9 | 2.7 | 2.5 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 | 3.1 | 3.3 | 3.3 | 2.4 | 3.3 |
| 26-Aug | 3.1 | 3.1 | 2.9 | 2.8 | Z | 3.3 | 3.1 | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.5 | 2.5 | 2.8 | 2.4 | 3.3 |
| 27-Aug | 2.9 | 3.0 | 3.4 | 3.8 | 3.9 | Z | 3.2 | 2.9 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 3.9 |
| 28-Aug | Z | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.5 |
| 29-Aug | 2.2 | Z | 2.7 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 3.2 | 2.4 | 2.5 | 2.9 | 2.3 | 3.2 |
| 30-Aug | 2.9 | 2.9 | Z | 2.7 | 2.9 | 3.6 | 2.9 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.5 | 2.8 | 2.7 | 2.2 | 2.5 | 3.6 |
| 31-Aug | 2.2 | 2.2 | 2.3 | Z | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 3.3 | 3.2 | 3.0 | 2.4 | 2.3 | 3.3 |
| | 2.5 | 2.5 | 2.6 | 2.5 | 2.6 | 2.6 | 2.6 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.4 | 2.5 | 2.5 | Diurnal Average | |
| | 3.1 | 3.1 | 4.3 | 3.8 | 3.9 | 4.3 | 5.2 | 3.8 | 2.7 | 2.6 | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 3.3 | 3.2 | 3.4 | 3.6 | Diurnal Maximum | |

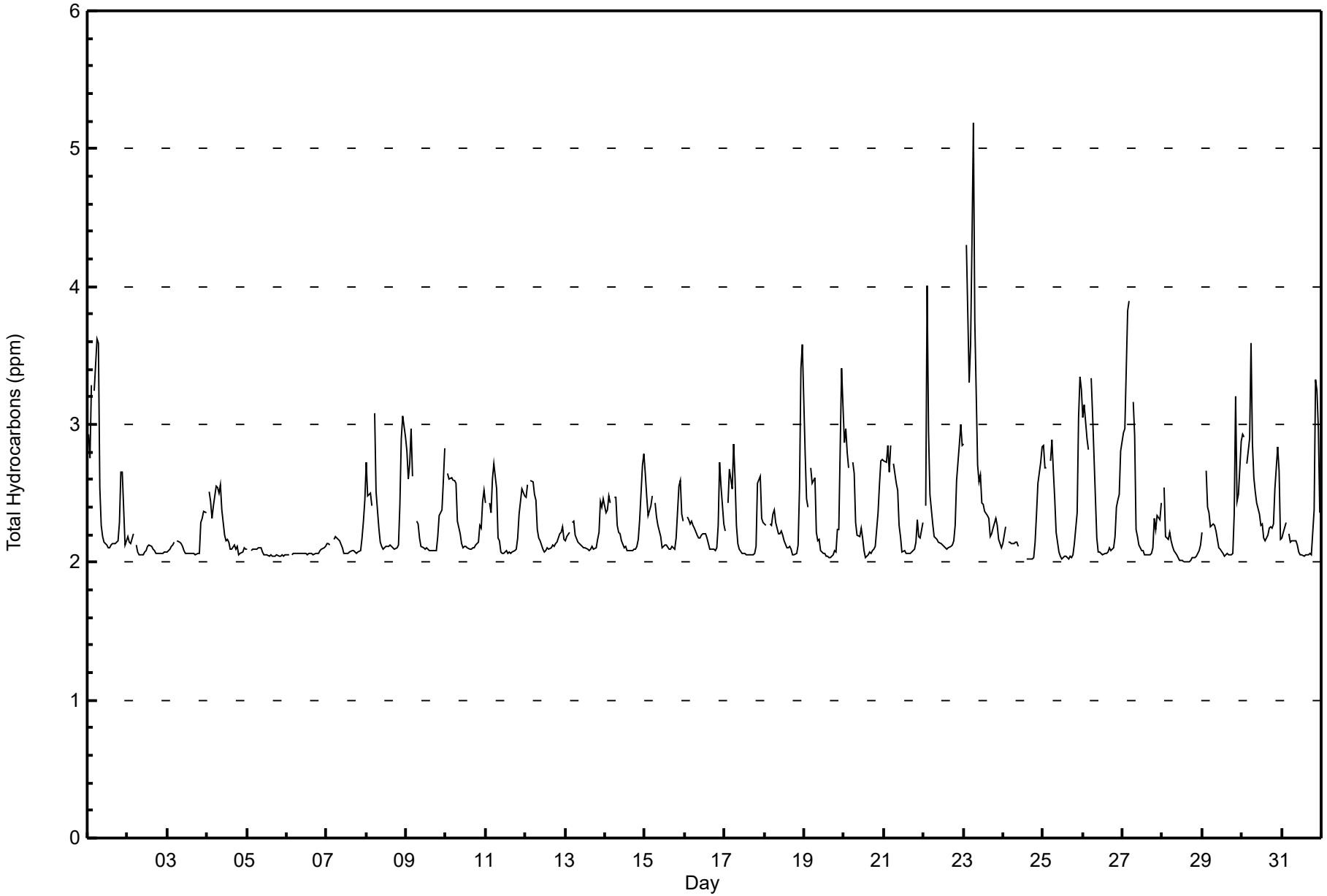
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Conklin - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 43 | 6.06 | 6.06 |
| 2.1 - 3.0 | 634 | 89.42 | 95.49 |
| 3.1 - 10.0 | 32 | 4.51 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Conklin - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 11 | 1 | 6 | 13 | 8 | 43 |
| 2.1 - 3.0 | 118 | 40 | 18 | 10 | 15 | 17 | 25 | 39 | 43 | 27 | 38 | 28 | 17 | 26 | 56 | 112 | 629 |
| 3.1 - 10.0 | 2 | 1 | 2 | 0 | 1 | 4 | 5 | 14 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 32 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 121 | 41 | 20 | 10 | 16 | 21 | 30 | 53 | 45 | 27 | 41 | 39 | 18 | 33 | 69 | 120 | 704 |

Total Number of Valid Hours: 704

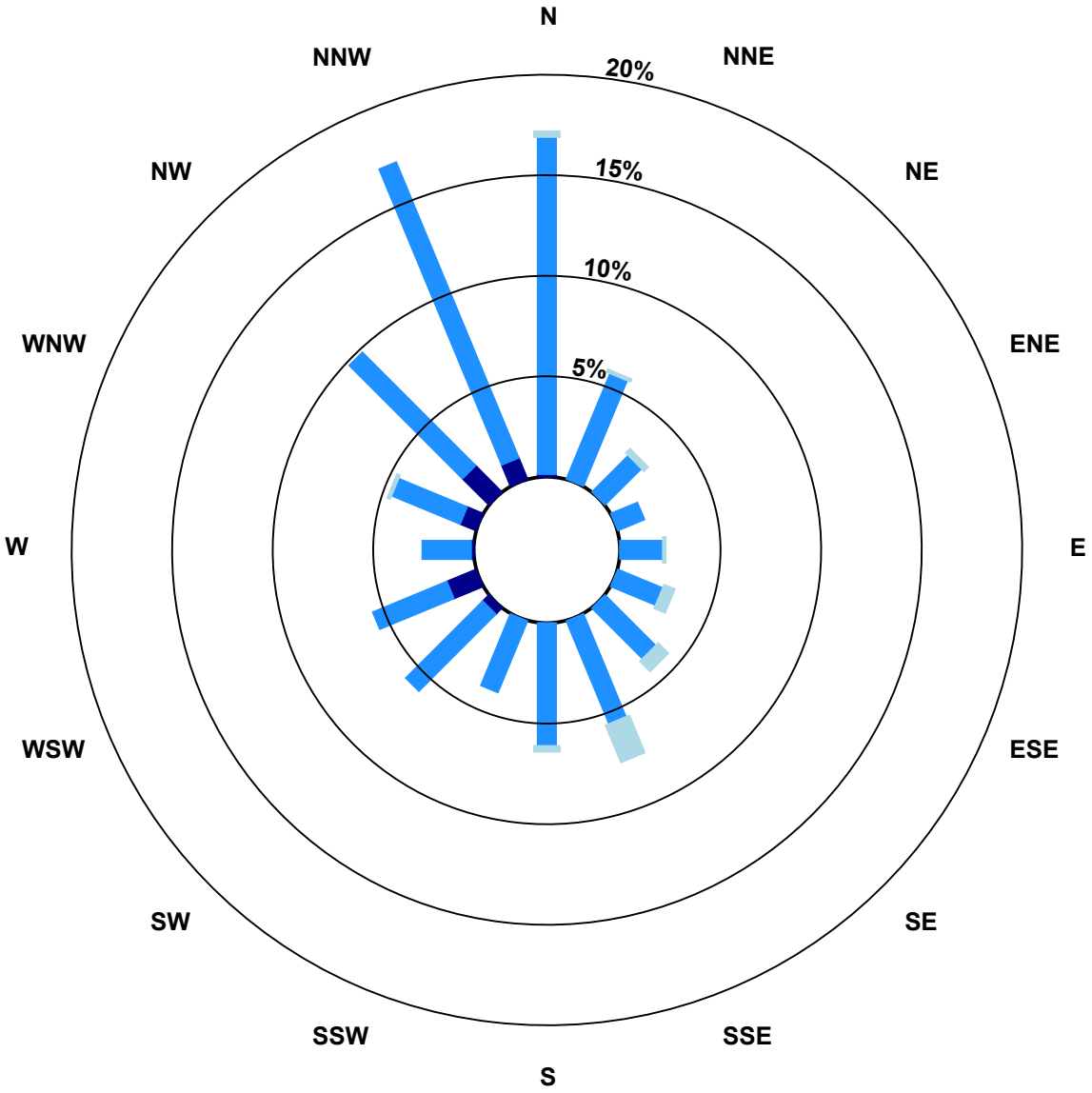
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Conklin




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

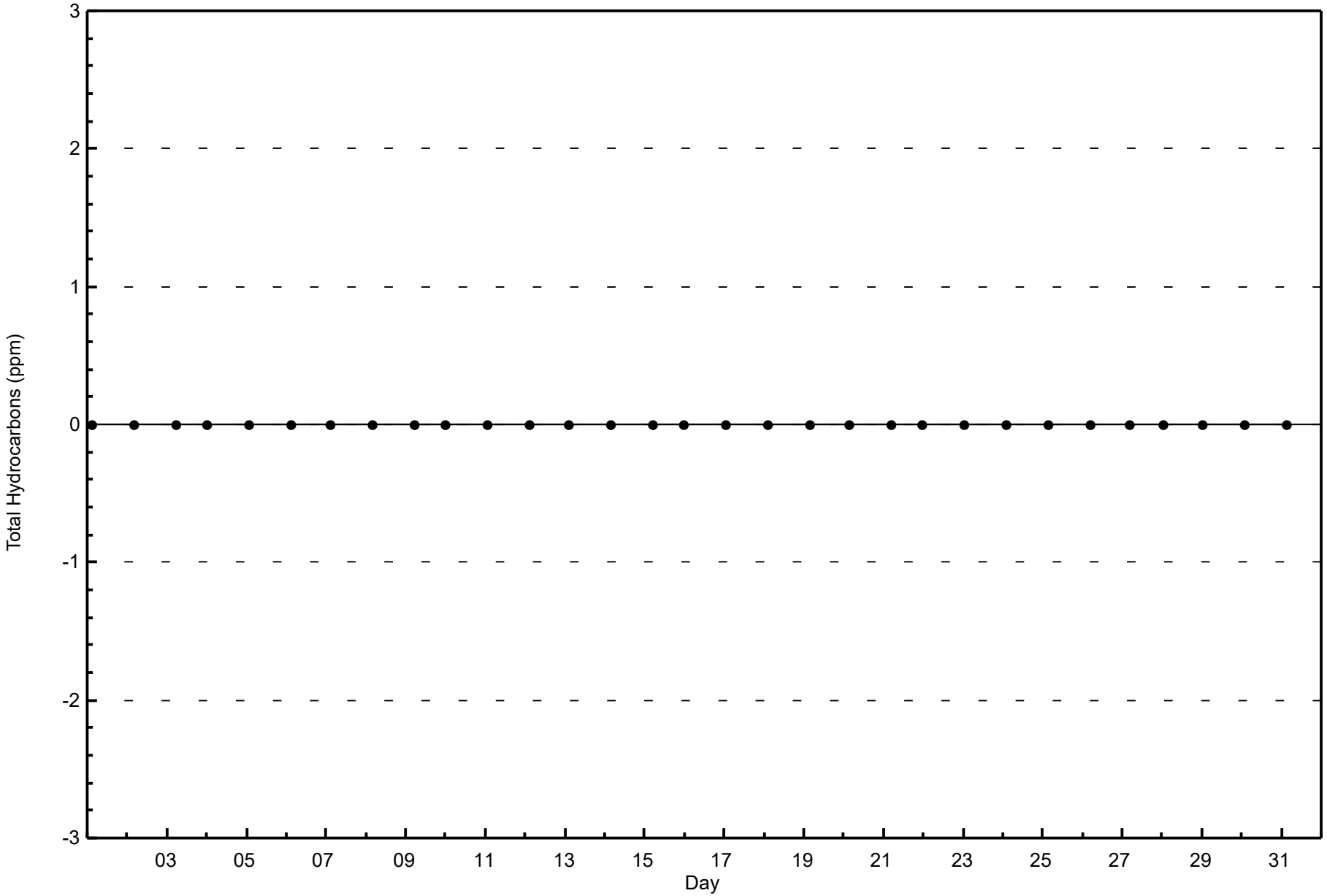
Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Conklin - August 2026**

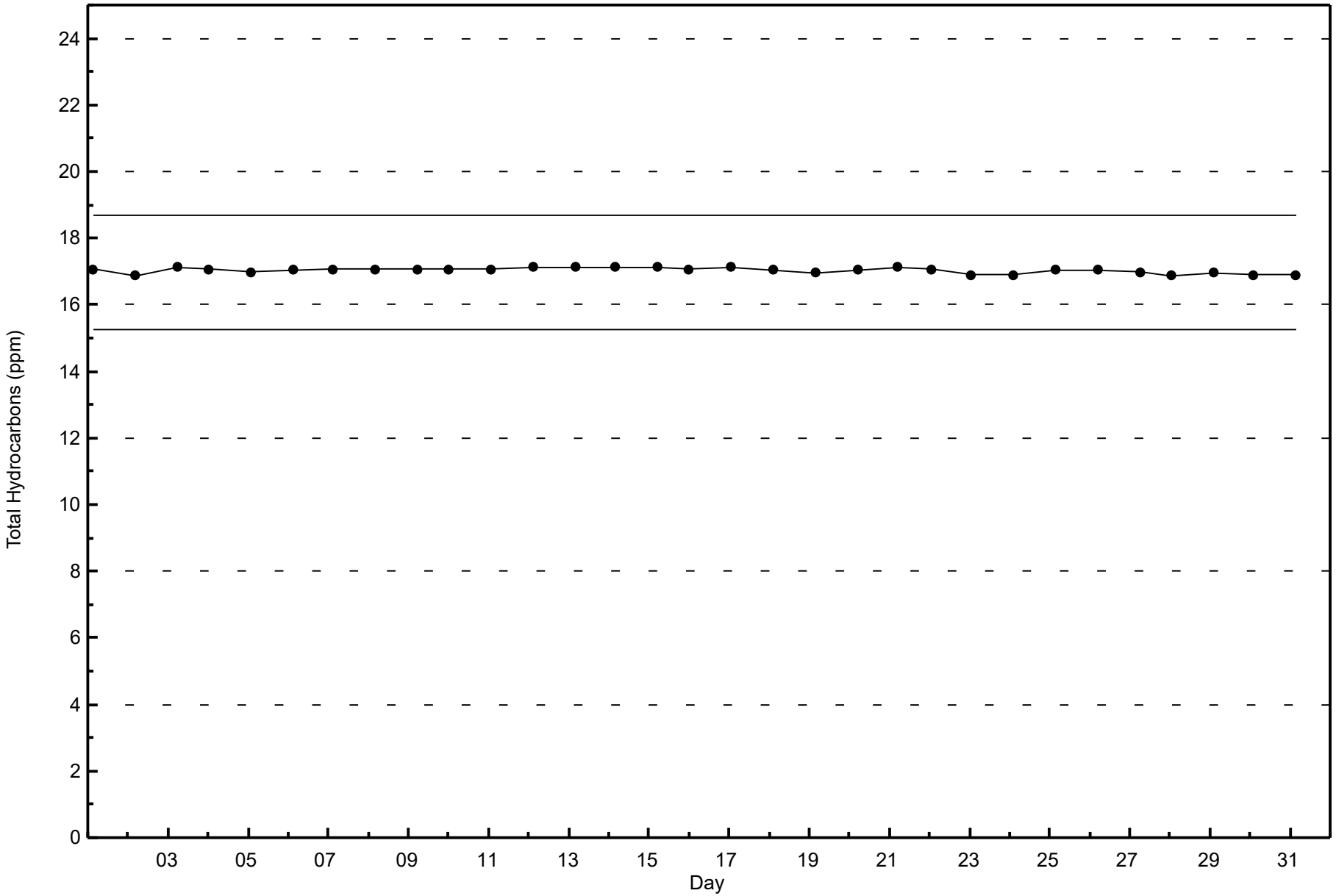


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Conklin - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Non Methane Hydrocarbons (NMHC) - ppm

## Conklin - August 2026

Maximum Value: 0.077 ppm on Aug 29 20:00

Maximum Daily Average: 0.010 ppm on Aug 24

Minimum Value: 0.000 ppm on Aug 1 02:00

Minimum Daily Average: 0.000 ppm on Aug 2

Maximum Diurnal Average: 0.005 ppm at hour 21

Minimum Diurnal Average: 0.000 ppm at hour 2

Monthly Average: 0.001 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.016 | 0.000 | 0.026 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.026 |
| 2-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 |
| 7-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 11-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.018 | 0.002 | 0.000 | 0.000 | 0.001 | 0.018 |
| 16-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.048 | 0.020 | 0.000 | 0.000 | 0.003 | 0.048 |
| 17-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 18-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19-Aug | 0.000 | 0.000 | 0.000 | Z | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.007 | 0.041 | 0.002 | 0.041 |
| 20-Aug | 0.011 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 |
| 21-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 22-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.008 | 0.037 | 0.000 | 0.000 | 0.000 | 0.002 | 0.037 |
| 23-Aug | 0.003 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 |
| 24-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.063 | 0.052 | 0.073 | 0.001 | 0.010 | 0.073 |
| 25-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.032 | 0.001 | 0.032 |
| 26-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 28-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 29-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.077 | 0.002 | 0.000 | 0.000 | 0.002 | 0.003 | 0.077 |
| 30-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.005 | 0.004 | 0.003 | 0.002 | Diurnal Average | |
| | 0.016 | 0.000 | 0.026 | 0.000 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.077 | 0.063 | 0.052 | 0.073 | 0.041 | Diurnal Maximum | |

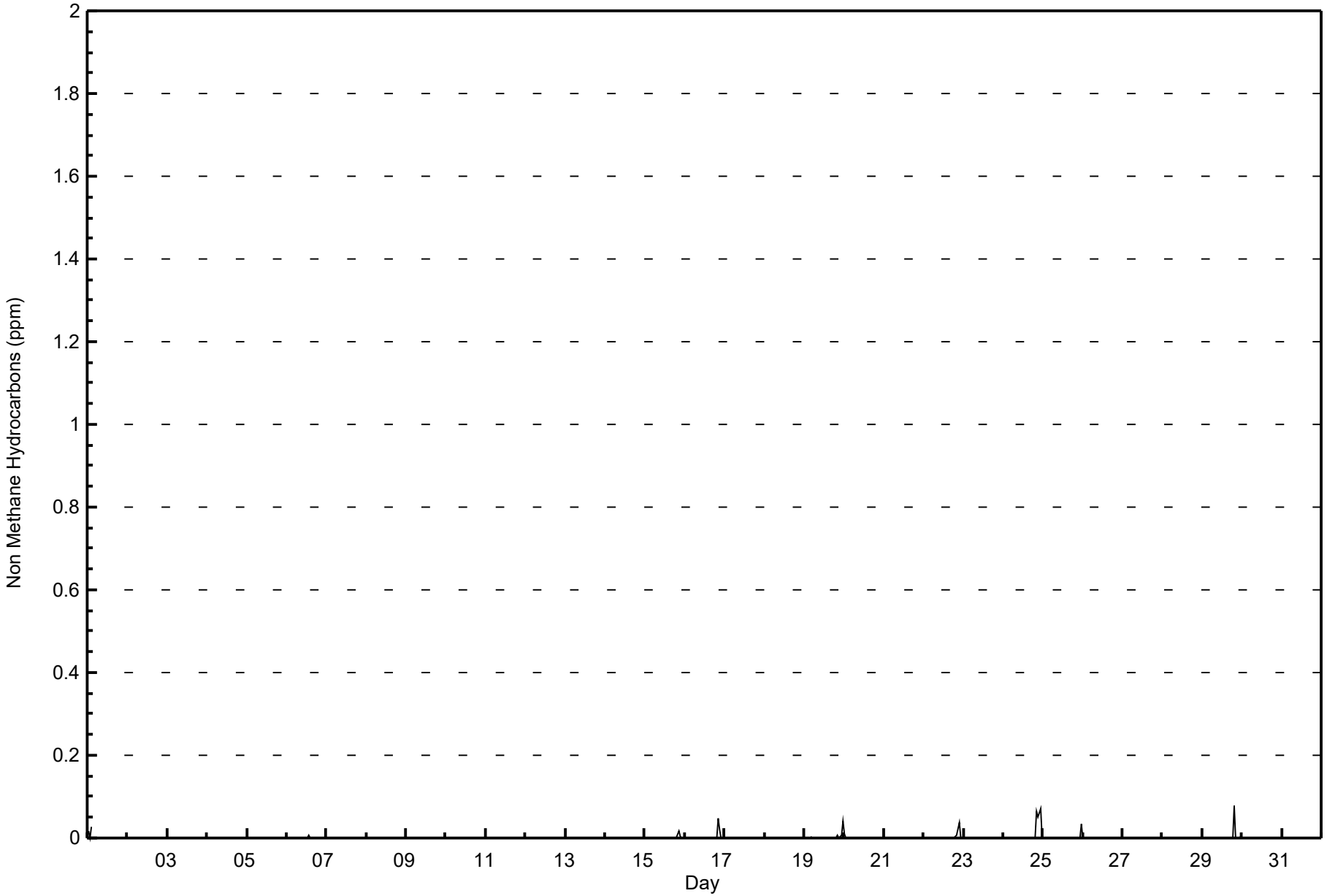
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Conklin - August 2026**



# Non Methane Hydrocarbons (NMHC) - ppm

## Conklin - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 692 | 97.60 | 97.60 |
| 0.006 - 0.05 | 14 | 1.97 | 99.58 |
| 0.06 - 0.1 | 3 | 0.42 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Conklin - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 119 | 40 | 19 | 10 | 14 | 20 | 30 | 48 | 43 | 27 | 41 | 38 | 18 | 33 | 68 | 120 | 688 |
| 0.006 - 0.05 | 2 | 1 | 1 | 0 | 2 | 1 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 13 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 121 | 41 | 20 | 10 | 16 | 21 | 30 | 53 | 45 | 27 | 41 | 39 | 18 | 33 | 69 | 120 | 704 |

Total Number of Valid Hours: 704

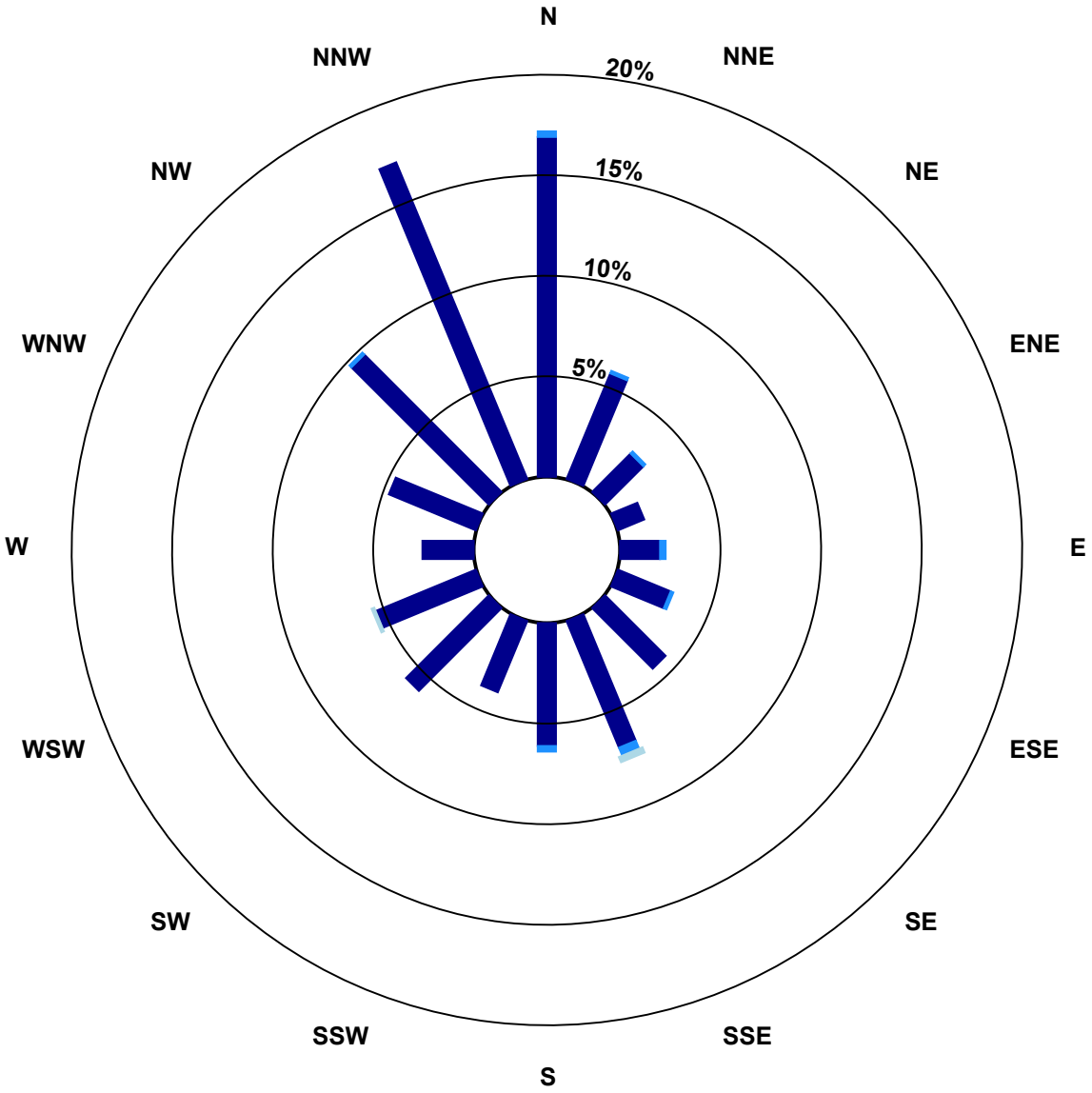
Total Number of Hours: 744

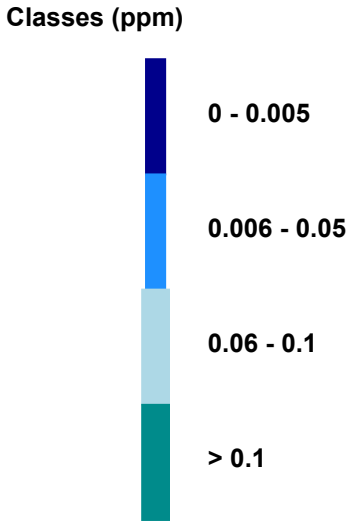
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Conklin



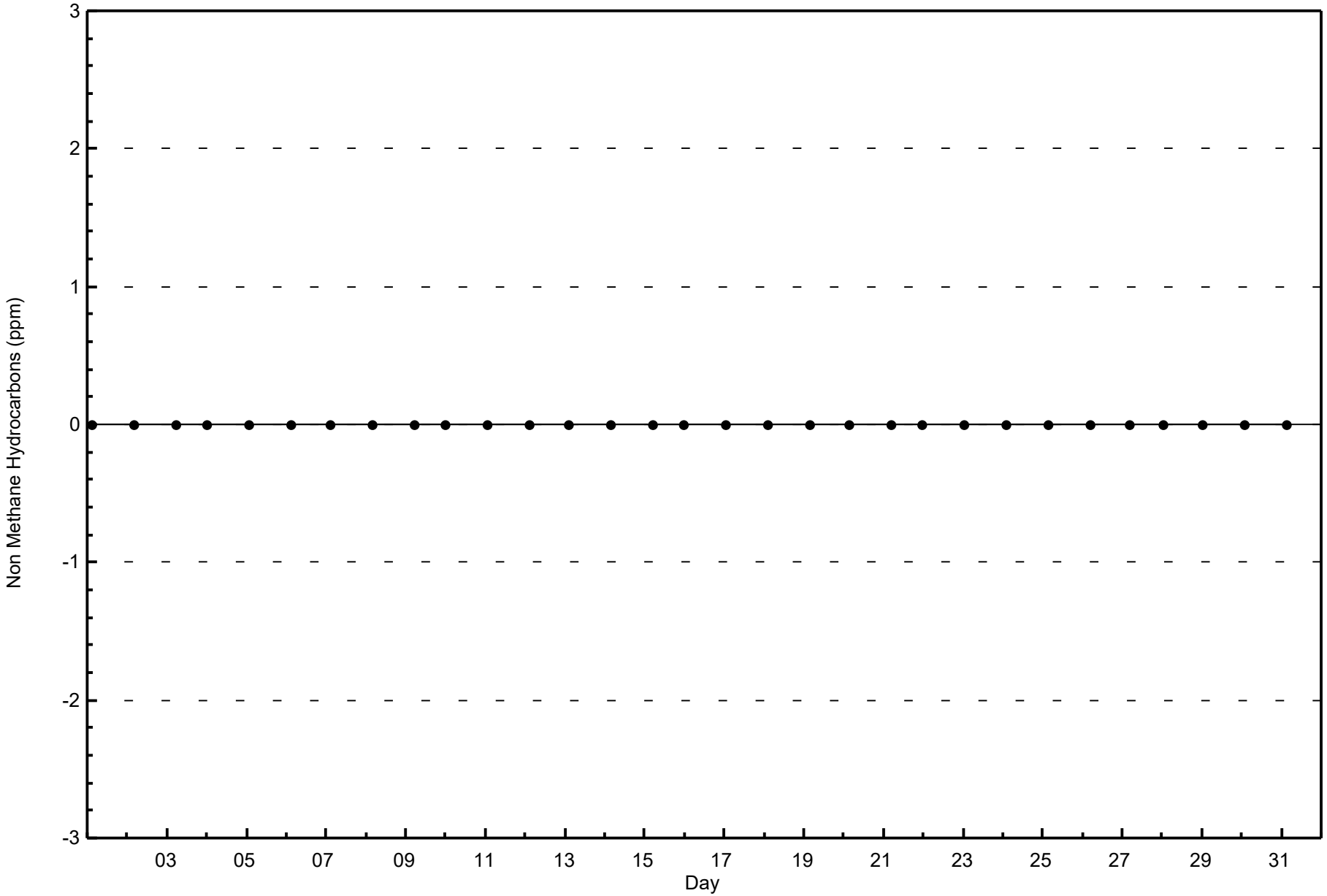

Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Conklin - August 2026**

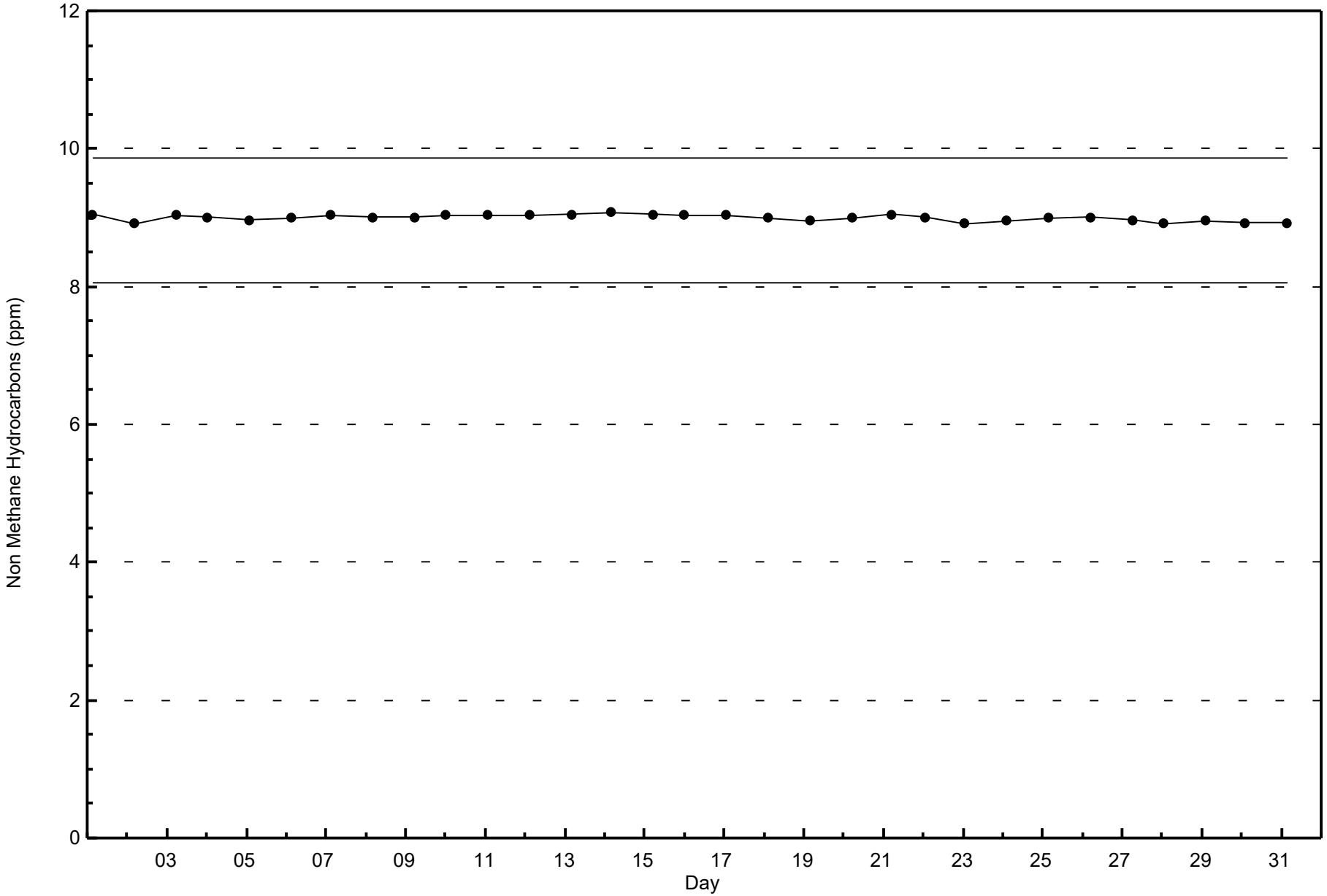


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Conklin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 5.2 ppm on Aug 23 07:00

Maximum Daily Average: 2.8 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 28 15:00

Minimum Daily Average: 2.1 ppm on Aug 5

Maximum Diurnal Average: 2.6 ppm at hour 3

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.30 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.1 $Q_1$ = 2.1 Median = 2.2 $Q_3$ = 2.4 $P_{90}$ = 2.7 $P_{99}$ = 3.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.9 | 2.8 | 3.3 | Z | 3.2 | 3.6 | 3.6 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.7 | 2.7 | 2.1 | 2.2 | 2.5 | 3.6 |
| 2-Aug | 2.2 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 3-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.4 | 2.4 | 2.1 | 2.4 |
| 4-Aug | Z | 2.5 | 2.4 | 2.3 | 2.4 | 2.6 | 2.5 | 2.5 | 2.6 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 |
| 5-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 |
| 6-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 7-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 2.1 | 2.5 |
| 8-Aug | 2.7 | 2.5 | 2.5 | 2.4 | Z | 3.1 | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 2.9 | 3.1 | 2.9 | 2.4 | 3.1 |
| 9-Aug | 2.8 | 2.6 | 2.7 | 3.0 | 2.6 | Z | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.6 | 2.8 | 2.3 | 3.0 |
| 10-Aug | Z | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.4 | 2.5 | 2.3 | 2.6 |
| 11-Aug | 2.4 | Z | 2.4 | 2.4 | 2.6 | 2.7 | 2.5 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.5 | 2.3 | 2.7 |
| 12-Aug | 2.5 | 2.6 | Z | 2.6 | 2.6 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.6 |
| 13-Aug | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.4 | 2.4 | 2.5 | 2.2 | 2.5 |
| 14-Aug | 2.4 | 2.4 | 2.5 | 2.4 | Z | 2.5 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.7 | 2.8 | 2.3 | 2.8 |
| 15-Aug | 2.6 | 2.5 | 2.3 | 2.4 | 2.5 | Z | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.6 | 2.3 | 2.3 | 2.3 | 2.6 |
| 16-Aug | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.7 | 2.6 | 2.3 | 2.2 | 2.7 |
| 17-Aug | 2.2 | Z | 2.4 | 2.7 | 2.5 | 2.9 | 2.6 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 | 2.6 | 2.3 | 2.3 | 2.3 | 2.9 |
| 18-Aug | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.5 | 3.4 | 3.6 | 2.3 | 3.6 |
| 19-Aug | 2.8 | 2.5 | 2.4 | Z | 2.7 | 2.6 | 2.6 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 3.4 | 3.1 | 2.3 | 3.4 |
| 20-Aug | 2.9 | 3.0 | 2.8 | 2.7 | Z | 2.7 | 2.6 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 2.6 | 2.7 | 2.7 | 2.4 | 3.0 |
| 21-Aug | 2.7 | 2.7 | 2.8 | 2.7 | 2.9 | Z | 2.7 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.9 |
| 22-Aug | Z | 2.4 | 4.0 | 2.9 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.6 | 2.8 | 3.0 | 2.8 | 2.4 | 4.0 |
| 23-Aug | 2.9 | Z | 4.3 | 3.3 | 3.6 | 4.3 | 5.2 | 3.8 | 2.7 | 2.6 | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.8 | 5.2 |
| 24-Aug | 2.1 | 2.3 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | C | C | C | C | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.5 | 2.7 | 2.8 | 2.2 | 2.8 |
| 25-Aug | 2.9 | 2.7 | 2.7 | Z | 2.7 | 2.9 | 2.7 | 2.5 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 | 3.1 | 3.3 | 3.2 | 2.4 | 3.3 |
| 26-Aug | 3.1 | 3.1 | 2.9 | 2.8 | Z | 3.3 | 3.1 | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 2.5 | 2.5 | 2.8 | 2.4 | 3.3 |
| 27-Aug | 2.9 | 3.0 | 3.4 | 3.8 | 3.9 | Z | 3.2 | 2.9 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 3.9 |
| 28-Aug | Z | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.5 |
| 29-Aug | 2.2 | Z | 2.7 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 3.2 | 2.4 | 2.5 | 2.9 | 2.3 | 3.2 |
| 30-Aug | 2.9 | 2.9 | Z | 2.7 | 2.9 | 3.6 | 2.9 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.5 | 2.8 | 2.7 | 2.2 | 2.5 | 3.6 |
| 31-Aug | 2.2 | 2.2 | 2.3 | Z | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 3.3 | 3.2 | 3.0 | 2.4 | 2.3 | 3.3 |
| | 2.5 | 2.5 | 2.6 | 2.5 | 2.6 | 2.6 | 2.6 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.5 | Diurnal Average | |
| | 3.1 | 3.1 | 4.3 | 3.8 | 3.9 | 4.3 | 5.2 | 3.8 | 2.7 | 2.6 | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 | 3.3 | 3.2 | 3.4 | 3.6 | Diurnal Maximum | |

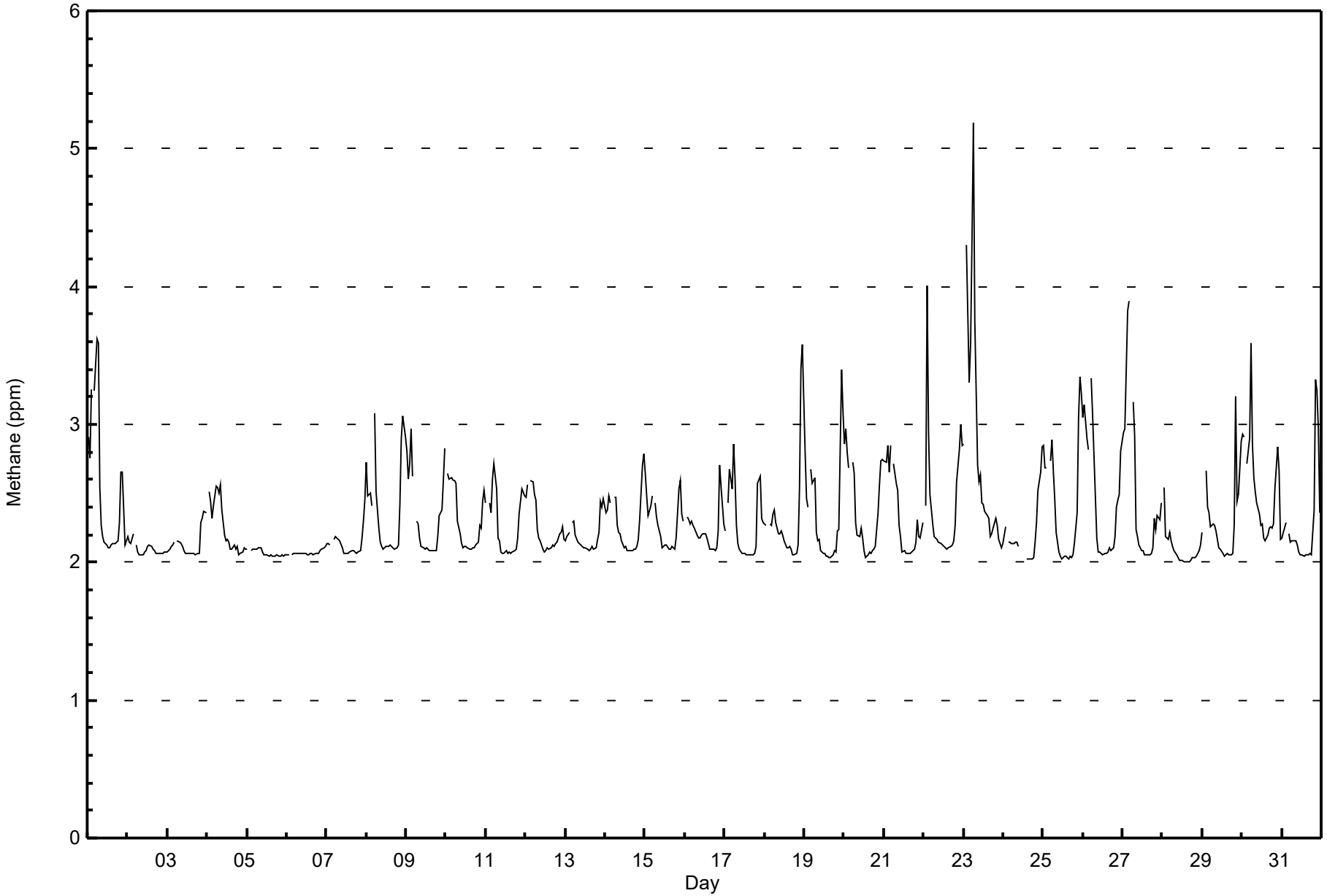
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Conklin - August 2026**



**Methane ($CH_4$) - ppm**

**Conklin - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 43 | 6.06 | 6.06 |
| 2.1 - 3.0 | 634 | 89.42 | 95.49 |
| 3.1 - 10.0 | 32 | 4.51 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

# Methane ($CH_4$) - ppm
## Conklin - August 2026

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 11 | 1 | 6 | 13 | 8 | 43 |
| 2.1 - 3.0 | 118 | 40 | 18 | 10 | 15 | 17 | 25 | 39 | 43 | 27 | 38 | 28 | 17 | 26 | 56 | 112 | 629 |
| 3.1 - 10.0 | 2 | 1 | 2 | 0 | 1 | 4 | 5 | 14 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 32 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 121 | 41 | 20 | 10 | 16 | 21 | 30 | 53 | 45 | 27 | 41 | 39 | 18 | 33 | 69 | 120 | 704 |

Total Number of Valid Hours: 704

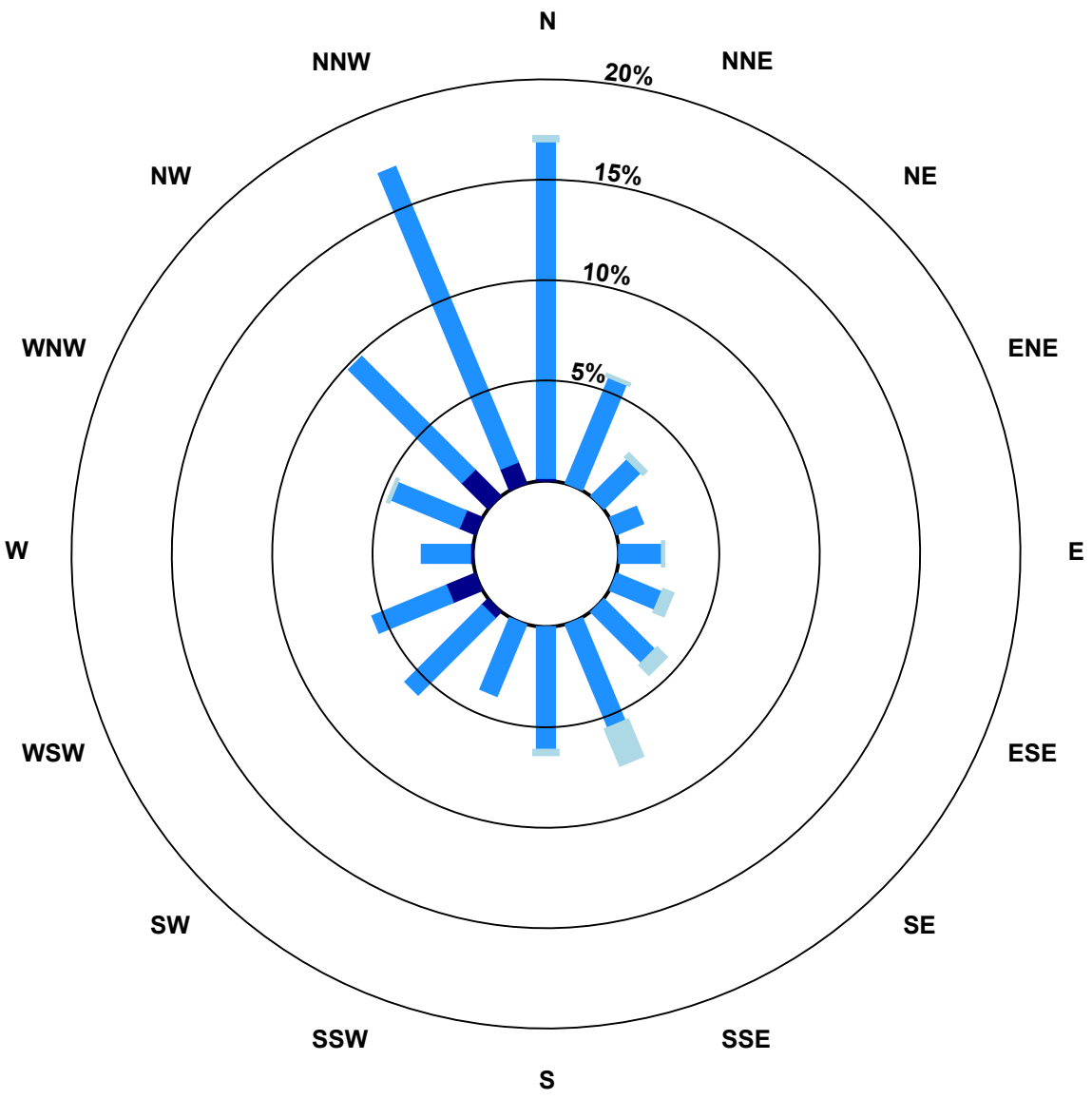
Total Number of Hours: 744

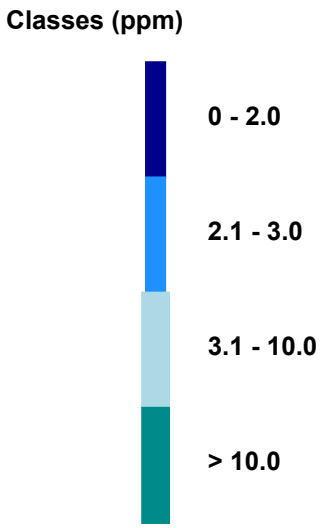
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Conklin



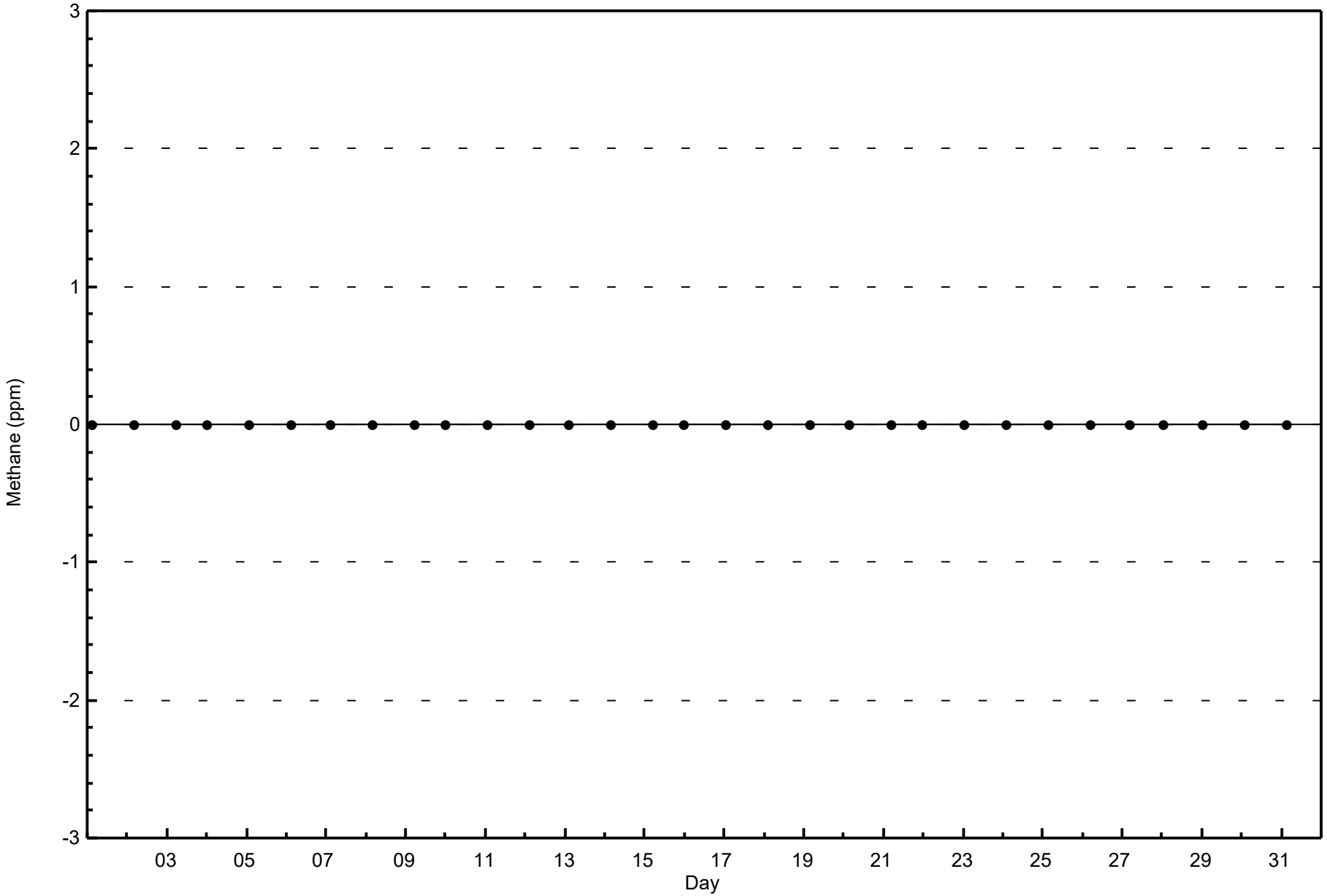

Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Conklin - August 2026**

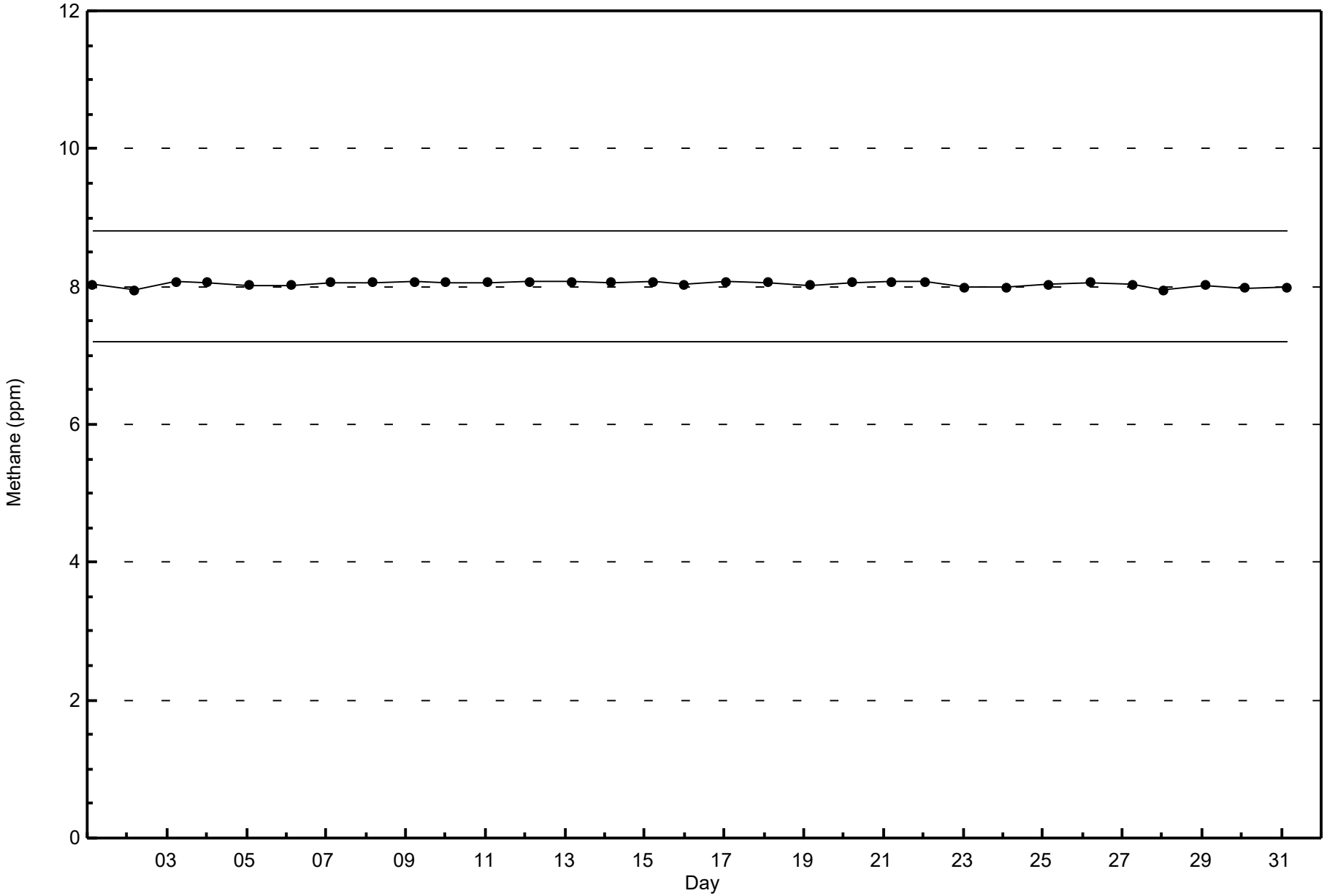


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Conklin - August 2026

Maximum Value: 40.8 ppb on Aug 21 02:00

Maximum Daily Average: 6.6 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 1 11:00

Minimum Daily Average: 0.2 ppb on Aug 7

Maximum Diurnal Average: 6.1 ppb at hour 2

Minimum Diurnal Average: 0.0 ppb at hour 18

Monthly Average: 1.87 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 1.0 $P_{90}$ = 6.7 $P_{99}$ = 19.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 13.7 | Z | 25.5 | 9.4 | 18.1 | 7.4 | 1.7 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 25.5 |
| 2-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 | 0.0 | 0.0 | 1.8 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 4.2 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.8 | 0.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 | 0.0 | 0.0 | 0.0 | 1.9 | 1.0 | 10.9 | 5.7 | 1.0 | 10.9 |
| 4-Aug | 9.3 | 3.6 | 3.8 | 8.2 | Z | 1.5 | 2.4 | 0.4 | 0.2 | 0.8 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 9.3 |
| 5-Aug | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 5.0 | 0.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 5.0 |
| 6-Aug | Z | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 3.4 |
| 7-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 1.3 | 0.1 | 0.1 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.3 |
| 8-Aug | 3.1 | 2.0 | Z | 0.0 | 0.0 | 0.3 | 6.7 | 1.0 | 0.5 | 0.6 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 8.8 | 11.7 | 1.5 | 11.7 |
| 9-Aug | 5.9 | 7.3 | 5.6 | Z | 7.4 | 3.9 | 6.8 | 3.1 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.1 | 5.6 | 2.3 | 7.4 |
| 10-Aug | 5.6 | 9.1 | 8.6 | 13.6 | Z | 16.9 | 18.4 | 4.1 | 2.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.2 | 0.2 | 3.6 | 18.4 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | Z | 8.9 | 0.5 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 8.9 |
| 12-Aug | Z | 1.0 | 6.7 | 7.1 | 4.8 | 4.8 | 3.5 | 0.5 | 0.7 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.7 | 0.0 | 1.4 | 7.1 |
| 13-Aug | 5.8 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 1.5 | 1.3 | 3.5 | 0.6 | 5.8 |
| 14-Aug | 7.1 | 11.1 | Z | 6.8 | 5.9 | 7.8 | 7.2 | 0.4 | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 0.5 | 0.0 | 0.0 | 6.0 | 5.9 | 2.7 | 11.1 |
| 15-Aug | 6.4 | 7.9 | 5.0 | Z | 6.5 | 8.9 | 5.2 | 4.3 | 1.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 1.1 | 5.1 | 9.6 | 2.3 | 2.0 | 2.9 | 9.6 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 2.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 12.3 | 10.1 | 12.8 | 1.7 | 12.8 |
| 17-Aug | 6.2 | 1.9 | 0.0 | 0.6 | 0.1 | Z | 3.1 | 2.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 10.0 | 5.7 | 1.5 | 1.4 | 1.5 | 10.0 |
| 18-Aug | Z | 2.9 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.5 | 0.6 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 3.5 | 0.4 | 3.5 |
| 19-Aug | 6.1 | Z | 0.0 | 0.6 | 18.3 | 8.3 | 5.2 | 0.7 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.4 | 2.1 | 18.3 |
| 20-Aug | 12.3 | 14.0 | Z | 11.0 | 14.0 | 4.2 | 7.4 | 3.5 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.7 | 0.7 | 3.0 | 14.0 |
| 21-Aug | 24.7 | 40.8 | 16.4 | Z | 5.6 | 6.7 | 11.0 | 2.1 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 4.8 | 40.8 |
| 22-Aug | 0.0 | 0.5 | 4.2 | 0.2 | Z | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 4.2 |
| 23-Aug | 10.5 | 11.8 | 9.8 | 0.7 | 0.1 | Z | 8.0 | 2.6 | 2.4 | 1.6 | 1.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 11.8 |
| 24-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.1 | 0.1 | 0.3 | 0.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 4.2 | 2.5 | 29.8 | 1.8 | 29.8 |
| 25-Aug | 9.9 | Z | 3.4 | 1.3 | 0.7 | 5.1 | 7.2 | 7.1 | 1.0 | 0.2 | C | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 5.2 | 9.4 | 14.3 | -- | 14.3 |
| 26-Aug | 7.0 | 8.4 | Z | 4.3 | 2.5 | 6.1 | 3.7 | 1.8 | 1.8 | 0.3 | 0.4 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5 | 19.4 | 3.7 | 27.5 |
| 27-Aug | 16.9 | 17.2 | 30.7 | Z | 19.6 | 17.7 | 36.4 | 11.7 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 | 36.4 |
| 28-Aug | 0.0 | 4.4 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 | 0.5 | 6.5 |
| 29-Aug | 1.0 | 6.2 | 8.7 | 3.7 | 9.5 | Z | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 2.1 | 7.1 | 2.4 | 0.9 | 1.5 | 1.9 | 9.5 |
| 30-Aug | Z | 3.1 | 4.9 | 6.6 | 6.1 | 3.1 | 0.6 | 0.7 | 1.0 | 0.7 | 0.4 | 0.8 | 1.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 3.3 | 1.5 | 1.5 | 6.6 |
| 31-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 3.4 | 8.2 | 2.4 | 0.7 | 8.2 |
| | 5.8 | 6.1 | 5.1 | 2.9 | 4.7 | 4.1 | 4.8 | 1.8 | 0.7 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 1.0 | 1.5 | 3.4 | 4.4 | Diurnal Average | |
| | 24.7 | 40.8 | 30.7 | 13.6 | 19.6 | 17.7 | 36.4 | 11.7 | 4.2 | 1.6 | 3.4 | 1.8 | 1.2 | 0.3 | 1.0 | 0.2 | 1.3 | 0.1 | 2.8 | 2.1 | 10.0 | 12.3 | 27.5 | 29.8 | Diurnal Maximum | |

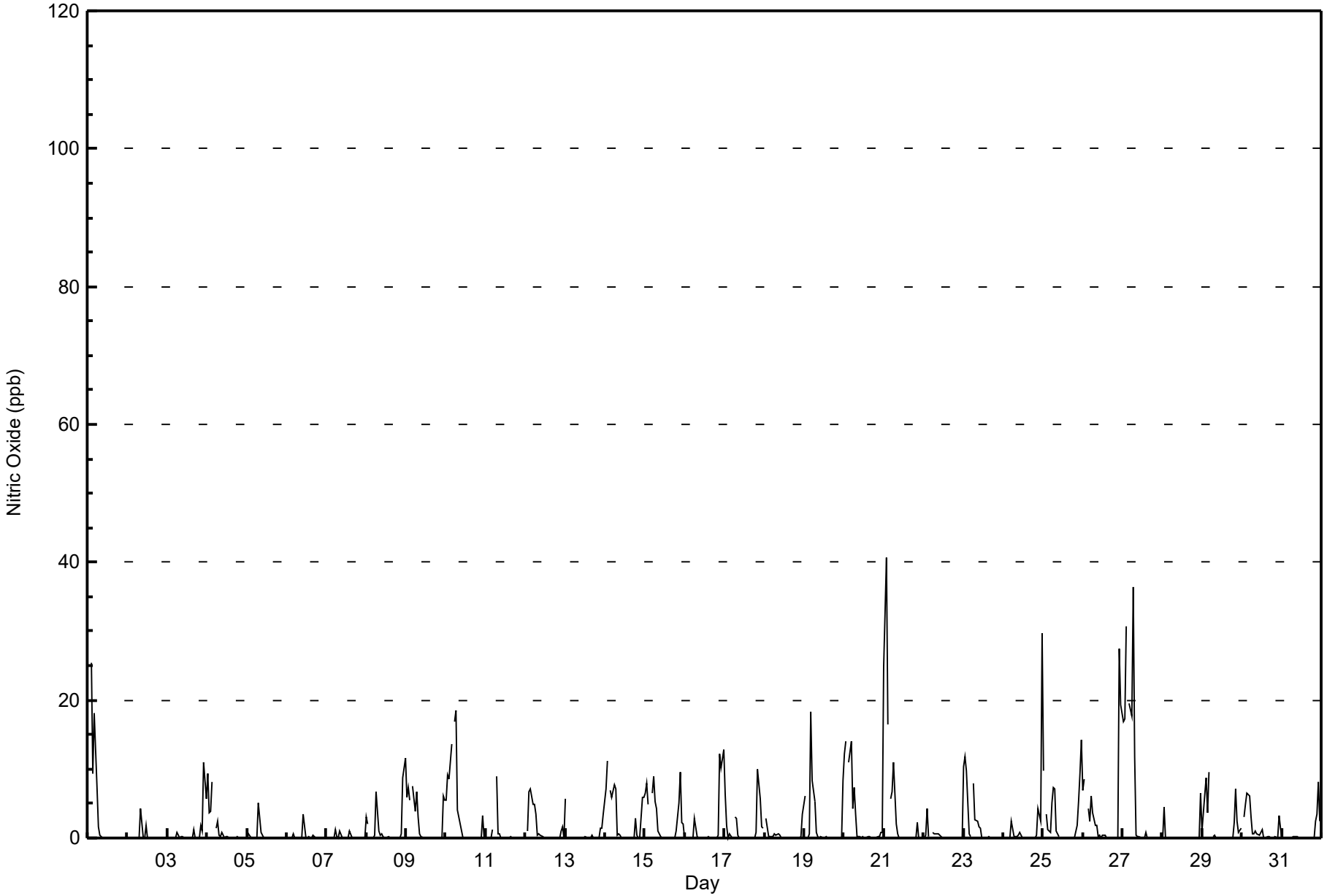
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Conklin - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 700 | 99.01 | 99.01 |
| 21 - 40 | 6 | 0.85 | 99.86 |
| 11 - 80 | 1 | 0.14 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Conklin - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 119 | 40 | 21 | 9 | 15 | 21 | 28 | 48 | 41 | 31 | 40 | 39 | 17 | 31 | 66 | 129 | 695 |
| 21 - 40 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 119 | 40 | 21 | 9 | 17 | 21 | 28 | 51 | 43 | 31 | 40 | 39 | 17 | 31 | 66 | 129 | 702 |

Total Number of Valid Hours: 702

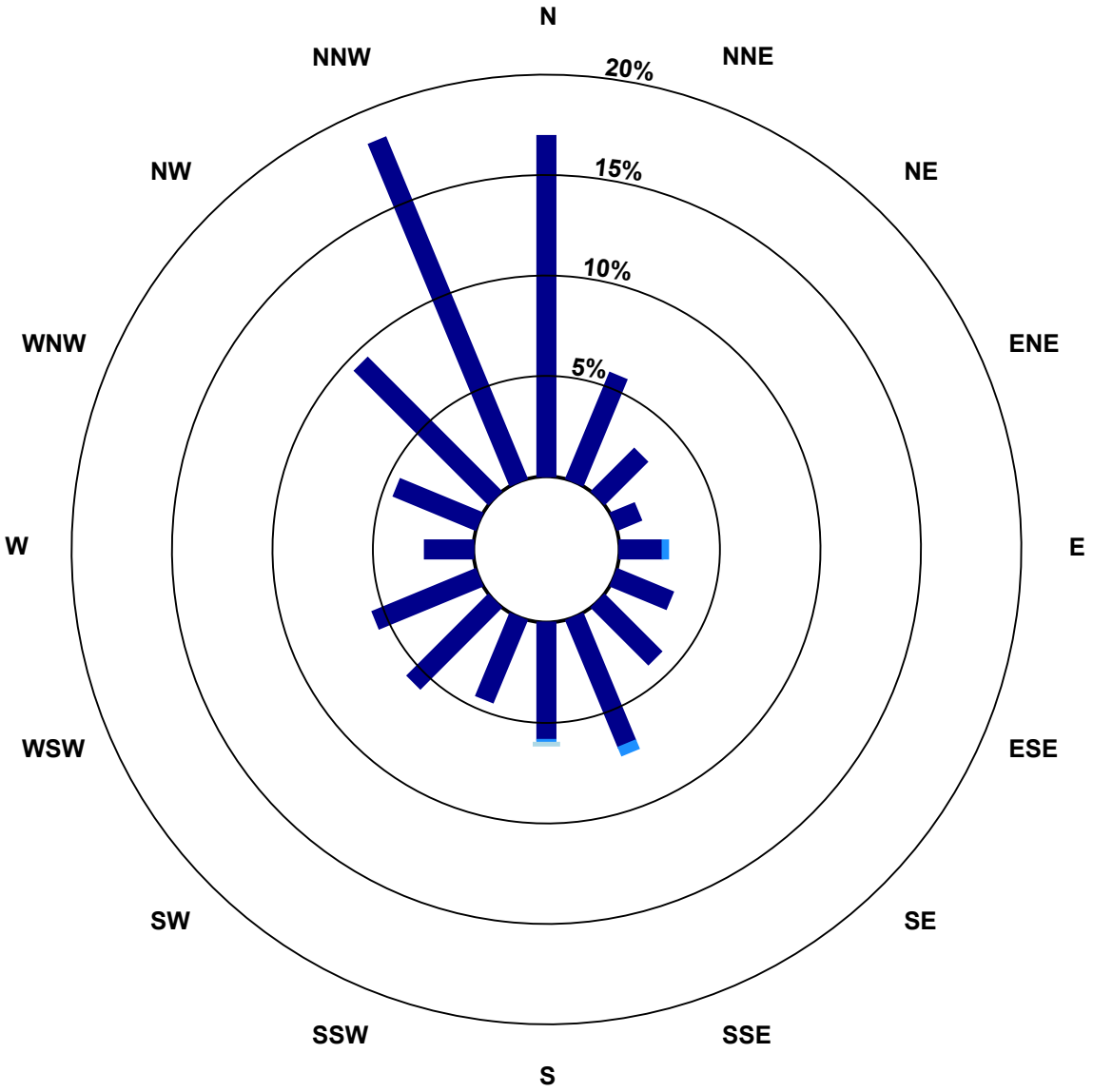
Total Number of Hours: 744

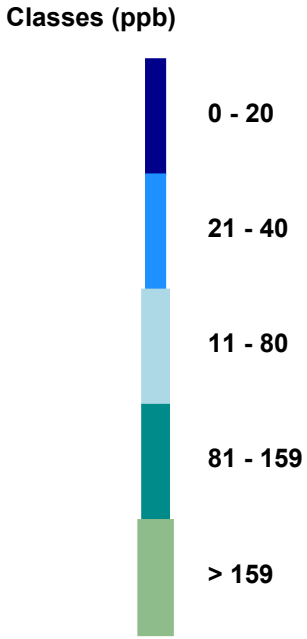
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Conklin



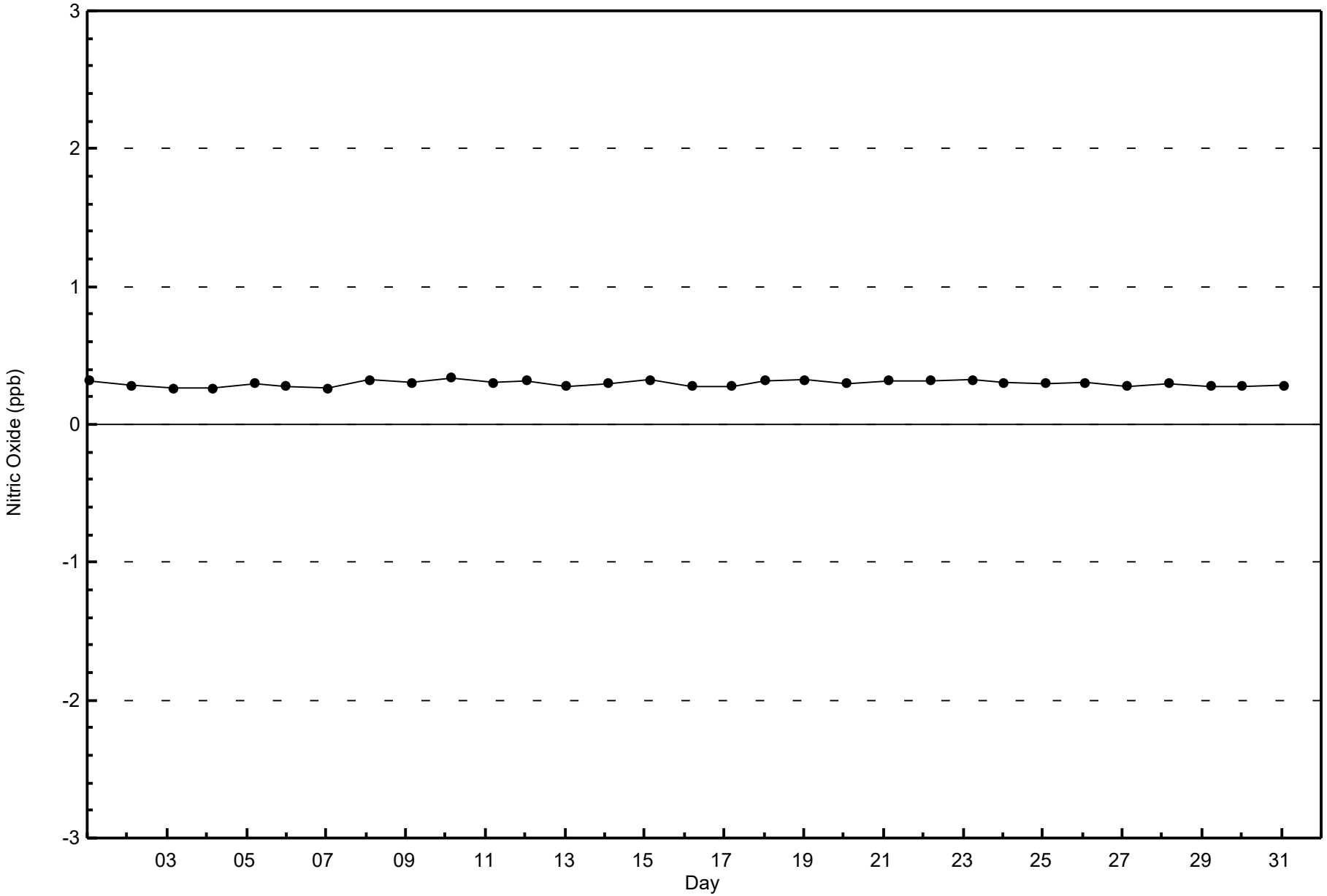

Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Conklin - August 2026**

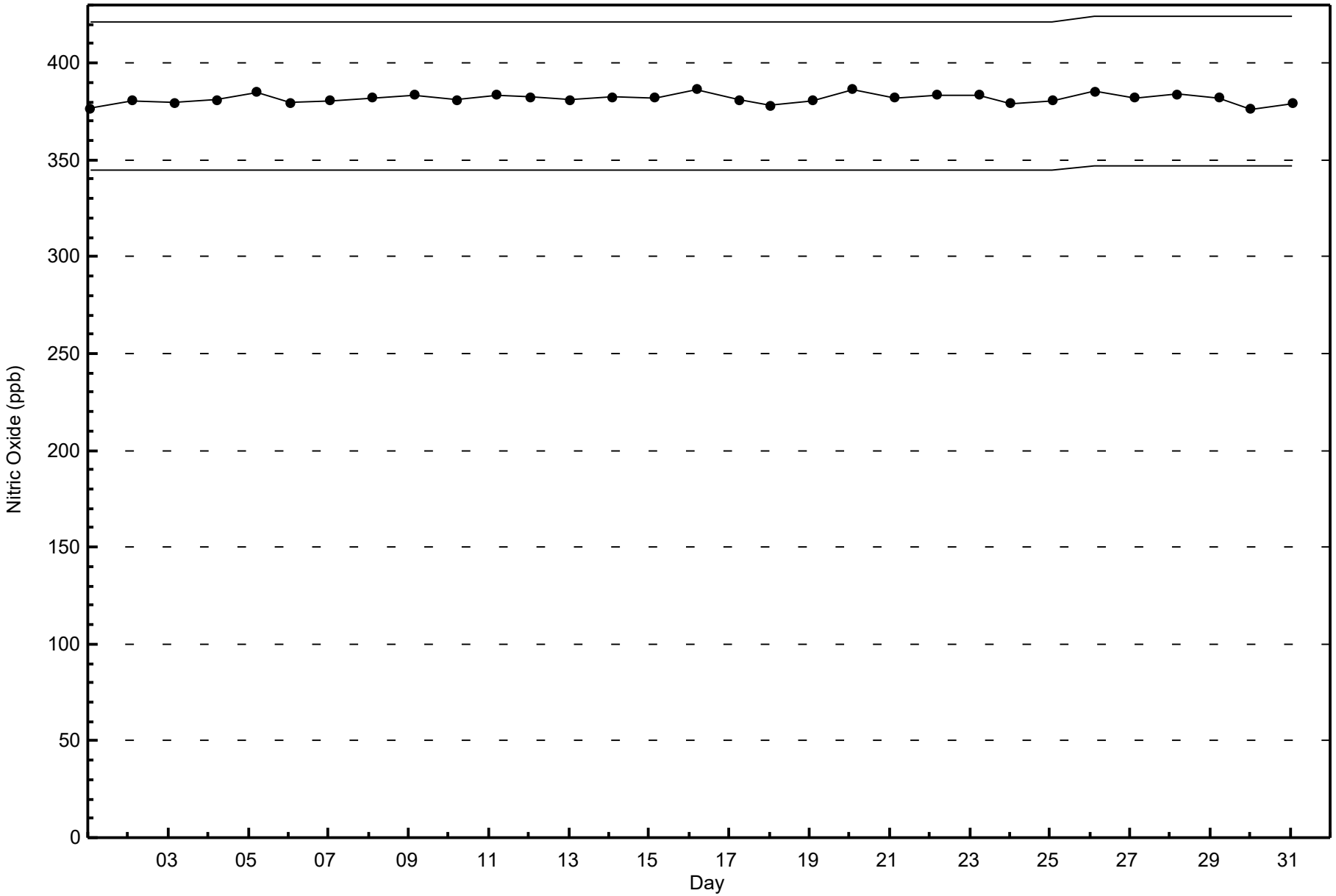


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Conklin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 13.7 ppb on Aug 1 01:00

Maximum Daily Average: 3.2 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 13 15:00

Minimum Daily Average: 0.4 ppb on Aug 6

Maximum Diurnal Average: 3.4 ppb at hour 1

Minimum Diurnal Average: 0.6 ppb at hour 14

Monthly Average: 1.73 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 1.0 $Q_3 = 2.2$ $P_{90} = 4.1$ $P_{99} = 8.9$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 13.7 | Z | 12.2 | 7.1 | 8.7 | 4.5 | 2.1 | 1.9 | 2.0 | 1.2 | 1.3 | 1.1 | 0.9 | 0.8 | 1.0 | 0.8 | 1.2 | 1.2 | 0.9 | 2.2 | 3.3 | 2.0 | 2.1 | 1.0 | 3.2 | 13.7 |
| 2-Aug | 1.4 | 1.2 | Z | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 2.5 | 0.5 | 0.5 | 1.1 | 0.8 | 1.2 | 0.7 | 1.1 | 0.9 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.7 | 2.5 |
| 3-Aug | 0.1 | 0.3 | 0.5 | Z | 0.8 | 1.1 | 1.3 | 0.7 | 0.8 | 0.7 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.2 | 0.1 | 0.2 | 0.2 | 1.9 | 3.4 | 4.0 | 3.6 | 1.0 | 4.0 |
| 4-Aug | 3.9 | 1.9 | 1.7 | 3.6 | Z | 1.2 | 2.3 | 1.1 | 0.6 | 1.1 | 0.6 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 3.2 | 0.6 | 0.7 | 0.4 | 0.3 | 0.3 | 1.2 | 3.9 |
| 5-Aug | 0.4 | 0.7 | 0.4 | 0.5 | 0.4 | Z | 0.6 | 3.2 | 1.3 | 0.9 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.8 | 0.6 | 0.6 | 3.2 |
| 6-Aug | Z | 0.6 | 0.4 | 0.3 | 0.9 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 1.0 | 0.2 | 0.2 | 0.5 | 0.2 | 0.2 | 0.6 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.4 | 1.0 |
| 7-Aug | 0.3 | Z | 0.5 | 0.4 | 0.5 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.2 | 0.7 | 0.2 | 0.4 | 0.3 | 0.4 | 0.9 | 0.6 | 0.7 | 0.2 | 0.4 | 0.5 | 0.9 |
| 8-Aug | 2.5 | 3.5 | Z | 1.0 | 0.8 | 0.9 | 2.9 | 2.0 | 1.2 | 1.5 | 0.9 | 0.9 | 1.0 | 1.5 | 1.3 | 1.4 | 1.3 | 0.9 | 0.8 | 1.7 | 2.7 | 1.6 | 2.9 | 3.7 | 1.7 | 3.7 |
| 9-Aug | 2.6 | 2.6 | 1.9 | Z | 1.9 | 1.9 | 3.4 | 2.2 | 1.7 | 1.5 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.7 | 0.5 | 4.9 | 3.5 | 1.5 | 4.9 |
| 10-Aug | 1.6 | 1.3 | 1.5 | 1.6 | Z | 1.0 | 1.9 | 2.9 | 3.1 | 2.2 | 0.9 | 0.9 | 0.8 | 0.5 | 0.4 | 0.6 | 1.1 | 0.6 | 0.9 | 2.1 | 0.8 | 0.8 | 4.1 | 1.7 | 1.4 | 4.1 |
| 11-Aug | 0.9 | 0.5 | 0.6 | 0.7 | 2.8 | Z | 4.5 | 2.0 | 1.8 | 0.7 | 0.5 | 0.6 | 0.7 | 0.5 | 1.0 | 0.9 | 0.3 | 0.5 | 0.9 | 2.5 | 0.7 | 0.8 | 0.5 | 0.2 | 1.1 | 4.5 |
| 12-Aug | Z | 1.6 | 3.4 | 3.6 | 2.3 | 2.9 | 2.6 | 1.4 | 1.8 | 1.5 | 0.9 | 0.3 | 0.5 | 0.6 | 0.4 | 0.5 | 0.9 | 0.6 | 0.5 | 0.7 | 0.6 | 1.0 | 1.9 | 0.5 | 1.3 | 3.6 |
| 13-Aug | 2.1 | Z | 0.6 | 0.5 | 0.4 | 0.7 | 1.0 | 0.4 | 0.4 | 0.4 | 0.3 | 0.1 | 0.3 | 0.4 | 0.0 | 0.4 | 1.3 | 0.2 | 0.0 | 1.0 | 1.4 | 1.3 | 1.0 | 1.4 | 0.7 | 2.1 |
| 14-Aug | 1.9 | 2.2 | Z | 2.1 | 1.4 | 2.0 | 1.5 | 1.0 | 1.7 | 1.0 | 0.4 | 0.2 | 0.6 | 0.2 | 0.3 | 0.2 | 0.3 | 0.8 | 2.5 | 2.5 | 2.4 | 1.2 | 4.1 | 2.8 | 1.4 | 4.1 |
| 15-Aug | 2.2 | 3.0 | 2.9 | Z | 3.2 | 3.3 | 2.5 | 2.6 | 1.2 | 0.6 | 0.3 | 0.3 | 0.9 | 0.5 | 0.3 | 0.5 | 0.4 | 0.4 | 0.8 | 4.2 | 7.5 | 7.8 | 5.4 | 1.1 | 2.3 | 7.8 |
| 16-Aug | 0.5 | 0.5 | 0.5 | 0.6 | Z | 0.6 | 2.3 | 1.1 | 0.9 | 0.8 | 0.7 | 0.4 | 0.5 | 0.7 | 1.4 | 0.8 | 0.9 | 0.6 | 0.6 | 1.0 | 1.9 | 4.6 | 5.3 | 7.2 | 1.5 | 7.2 |
| 17-Aug | 9.2 | 3.5 | 0.6 | 2.9 | 2.8 | Z | 2.4 | 3.2 | 0.9 | 0.6 | 0.4 | 0.3 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 | 0.8 | 5.3 | 10.6 | 8.2 | 5.4 | 3.6 | 2.7 | 10.6 |
| 18-Aug | Z | 5.2 | 3.0 | 2.3 | 2.3 | 1.4 | 1.6 | 1.7 | 2.2 | 1.9 | 1.4 | 1.1 | 1.1 | 0.6 | 0.4 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.8 | 1.3 | 1.4 | 4.0 | 1.6 | 5.2 |
| 19-Aug | 7.5 | Z | 2.3 | 2.6 | 8.8 | 9.0 | 6.4 | 2.4 | 1.0 | 0.7 | 0.9 | 0.6 | 0.6 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 1.1 | 0.5 | 0.6 | 0.4 | 0.5 | 4.6 | 2.3 | 9.0 |
| 20-Aug | 6.4 | 7.8 | Z | 3.5 | 5.1 | 2.2 | 2.9 | 2.7 | 0.8 | 1.1 | 1.1 | 0.9 | 0.8 | 0.8 | 1.6 | 1.0 | 0.4 | 0.8 | 1.3 | 2.2 | 5.2 | 5.2 | 2.7 | 1.6 | 2.5 | 7.8 |
| 21-Aug | 4.1 | 6.0 | 7.1 | Z | 1.3 | 2.6 | 4.5 | 2.6 | 1.9 | 1.3 | 0.8 | 0.7 | 0.8 | 0.6 | 0.7 | 0.4 | 0.6 | 0.8 | 2.4 | 4.7 | 8.9 | 3.3 | 1.3 | 2.1 | 2.6 | 8.9 |
| 22-Aug | 2.6 | 2.2 | 4.8 | 2.2 | Z | 5.7 | 3.1 | 2.1 | 1.9 | 1.9 | 1.7 | 1.5 | 1.3 | 1.2 | 1.4 | 1.5 | 1.5 | 1.9 | 1.7 | 3.4 | 5.2 | 2.1 | 1.3 | 0.9 | 2.3 | 5.7 |
| 23-Aug | 4.0 | 3.5 | 3.6 | 2.3 | 0.7 | Z | 2.1 | 1.9 | 2.7 | 2.5 | 1.9 | 1.3 | 1.2 | 1.5 | 1.2 | 2.6 | 0.9 | 1.4 | 0.7 | 0.6 | 0.4 | 0.3 | 0.4 | 0.3 | 1.7 | 4.0 |
| 24-Aug | Z | 0.4 | 1.0 | 1.4 | 1.0 | 2.5 | 1.3 | 1.2 | 1.8 | 2.5 | 2.1 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 1.5 | 3.8 | 5.7 | 3.6 | 6.3 | 1.6 | 6.3 |
| 25-Aug | 4.2 | Z | 2.0 | 0.8 | 0.7 | 2.1 | 4.0 | 4.8 | 1.6 | 0.7 | C | C | C | C | C | C | 0.2 | 0.2 | 0.4 | 2.7 | 7.0 | 8.0 | 6.2 | 6.5 | -- | 8.0 |
| 26-Aug | 3.4 | 3.6 | Z | 1.8 | 1.3 | 2.2 | 1.0 | 1.6 | 2.8 | 1.4 | 1.6 | 0.9 | 1.5 | 1.6 | 1.1 | 1.5 | 1.6 | 1.3 | 1.8 | 1.2 | 4.5 | 1.1 | 8.3 | 9.2 | 2.4 | 9.2 |
| 27-Aug | 8.1 | 7.8 | 8.7 | Z | 5.1 | 6.0 | 8.4 | 4.6 | 1.8 | 1.5 | 1.3 | 1.0 | 0.9 | 0.9 | 1.6 | 0.9 | 0.9 | 1.0 | 1.1 | 1.7 | 1.7 | 1.8 | 1.1 | 0.9 | 3.0 | 8.7 |
| 28-Aug | 1.0 | 6.8 | 0.8 | 3.1 | Z | 2.9 | 3.0 | 1.1 | 0.8 | 0.6 | 0.9 | 0.4 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.4 | 0.3 | 1.4 | 3.1 | 1.3 | 6.8 |
| 29-Aug | 3.8 | 8.9 | 6.8 | 4.4 | 6.1 | Z | 1.0 | 1.0 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.6 | 0.7 | 0.7 | 1.2 | 0.8 | 5.6 | 7.9 | 4.7 | 5.9 | 5.3 | 3.0 | 8.9 |
| 30-Aug | Z | 6.3 | 3.9 | 6.5 | 4.7 | 1.6 | 1.4 | 1.8 | 2.8 | 1.6 | 1.1 | 1.8 | 2.4 | 0.8 | 1.2 | 2.0 | 2.7 | 2.7 | 2.1 | 1.0 | 1.3 | 0.7 | 1.6 | 1.6 | 2.3 | 6.5 |
| 31-Aug | 0.4 | Z | 0.5 | 0.5 | 0.7 | 0.5 | 0.8 | 0.8 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 0.3 | 0.1 | 0.2 | 0.6 | 1.2 | 3.1 | 3.1 | 4.2 | 3.1 | 1.0 | 4.2 |
| | 3.4 | 3.3 | 2.8 | 2.2 | 2.5 | 2.3 | 2.4 | 1.8 | 1.5 | 1.1 | 0.9 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.9 | 1.7 | 2.8 | 2.4 | 2.7 | 2.6 | Diurnal Average | |
| | 13.7 | 8.9 | 12.2 | 7.1 | 8.8 | 9.0 | 8.4 | 4.8 | 3.1 | 2.5 | 2.1 | 1.8 | 2.4 | 1.6 | 1.6 | 2.6 | 2.7 | 2.7 | 3.2 | 5.6 | 10.6 | 8.2 | 8.3 | 9.2 | Diurnal Maximum | |

Z - zerospan C - Calibration

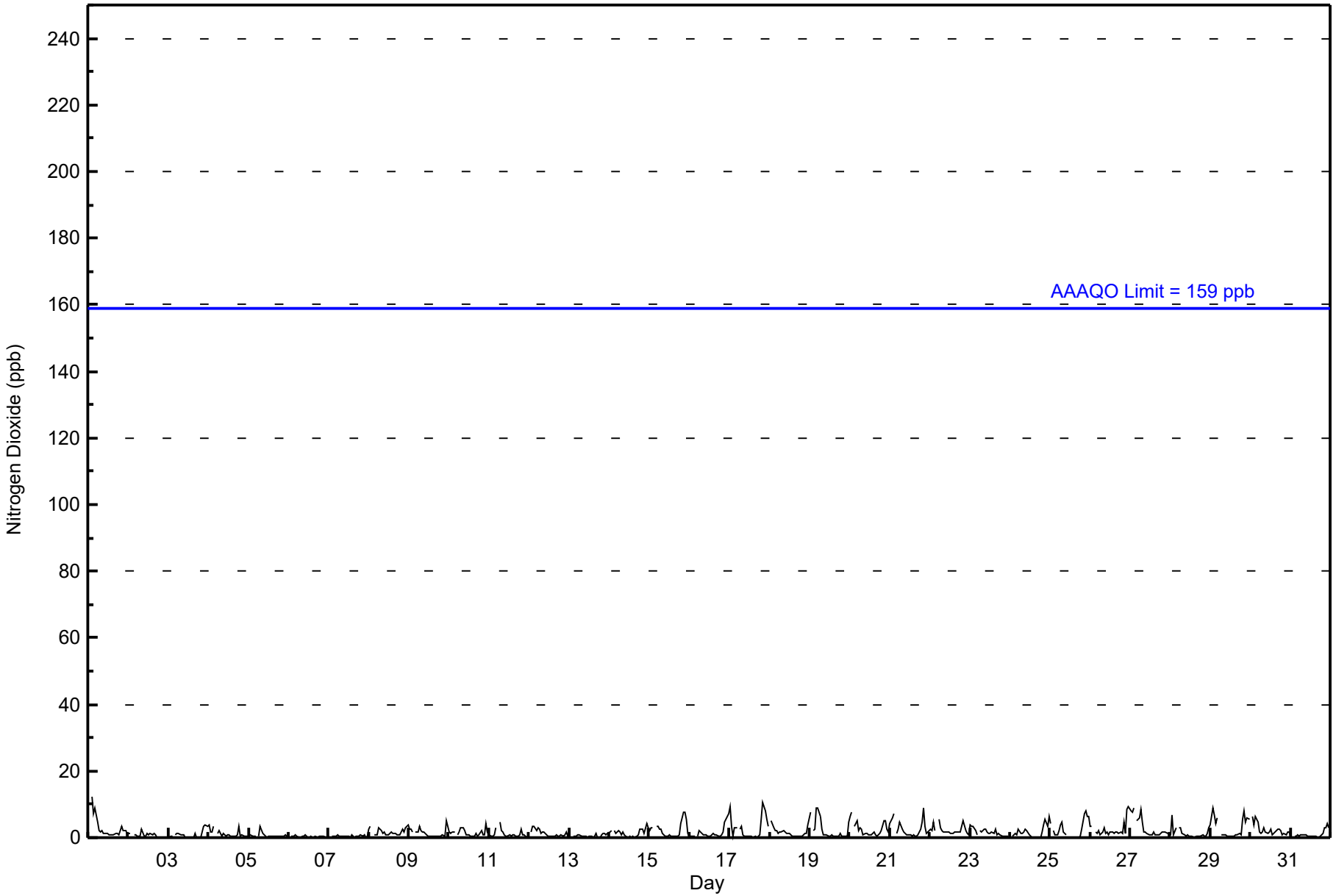
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Conklin - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Conklin - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 707 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Conklin - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 119 | 40 | 21 | 9 | 17 | 21 | 28 | 51 | 43 | 31 | 40 | 39 | 17 | 31 | 66 | 129 | 702 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 119 | 40 | 21 | 9 | 17 | 21 | 28 | 51 | 43 | 31 | 40 | 39 | 17 | 31 | 66 | 129 | 702 |

Total Number of Valid Hours: 702

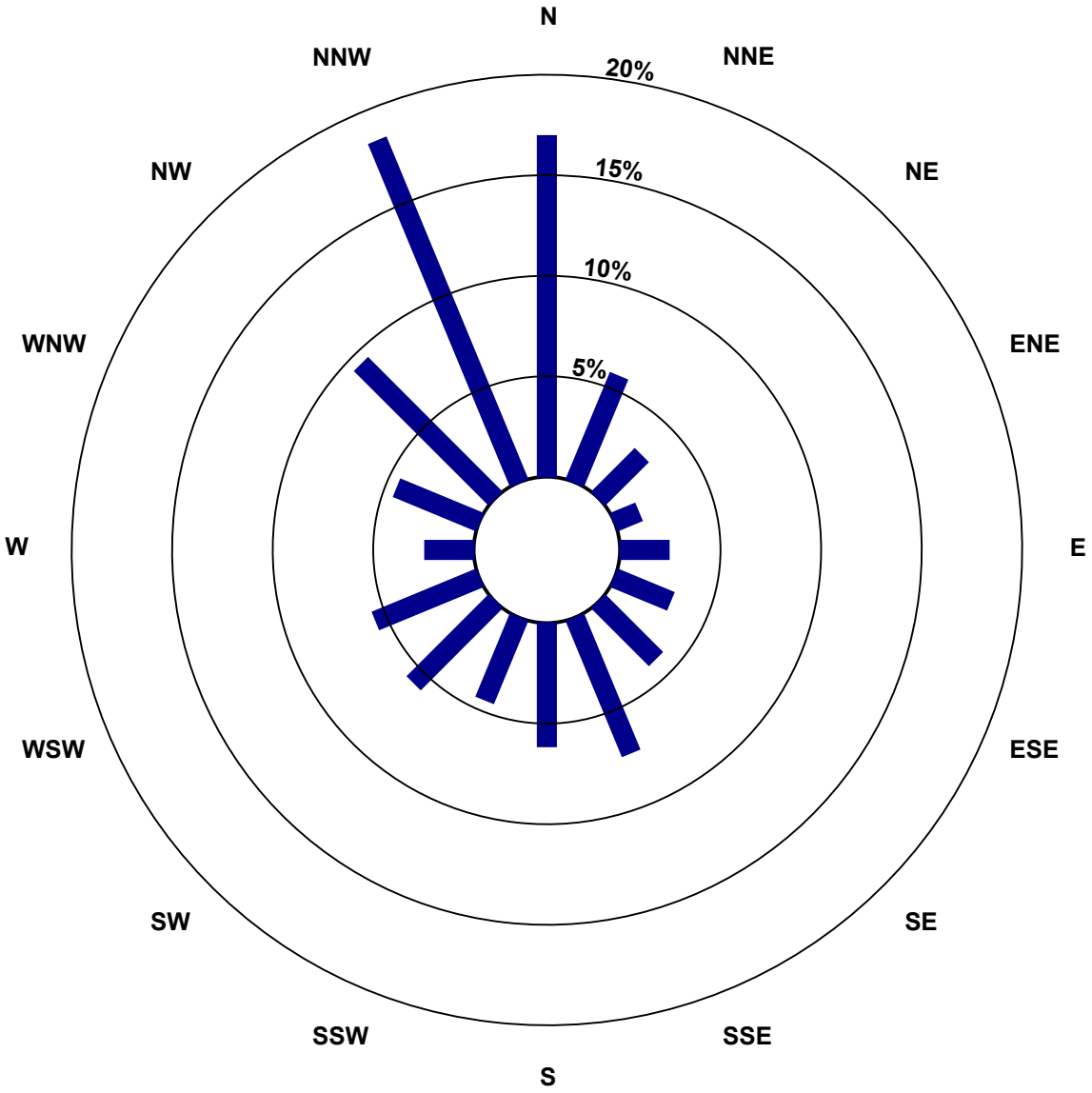
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Conklin




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

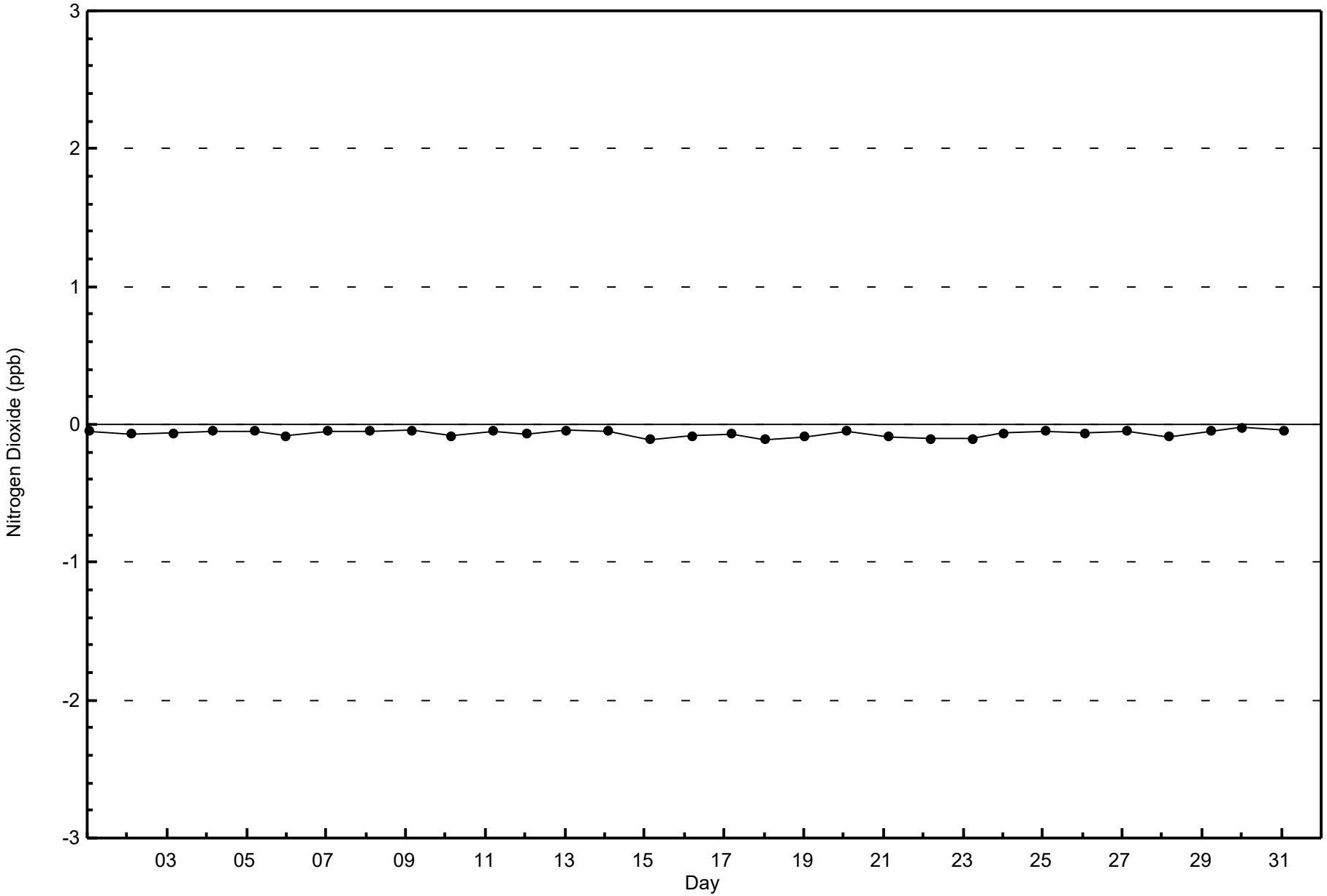
Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Conklin - August 2026**

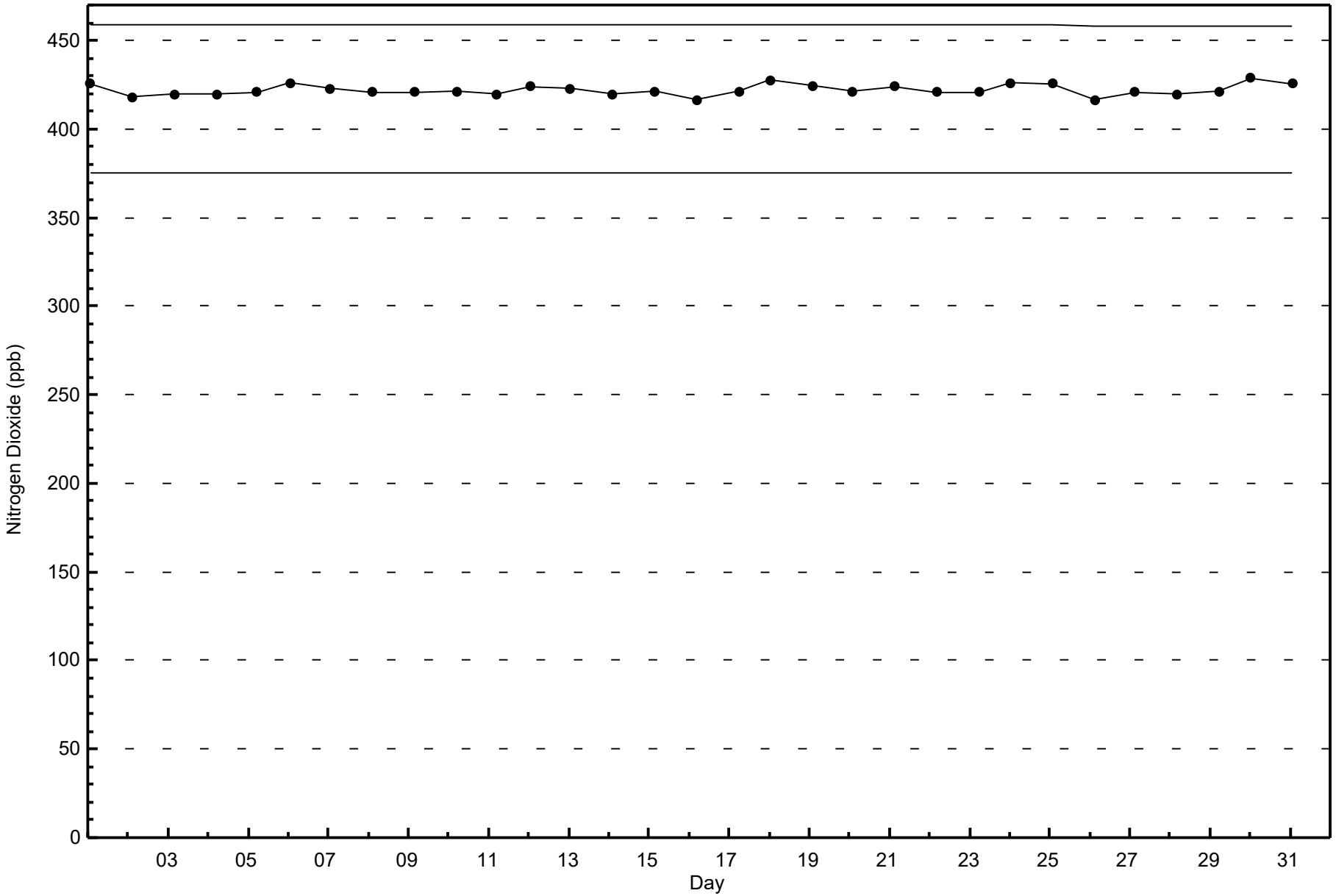


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Conklin - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxides ($NO_X$) - ppb

## Conklin - August 2026

Maximum Value: 46.8 ppb on Aug 21 02:00

Maximum Daily Average: 9.6 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 13 19:00

Minimum Daily Average: 0.6 ppb on Aug 6

Maximum Diurnal Average: 9.4 ppb at hour 2

Minimum Diurnal Average: 0.7 ppb at hour 14

Monthly Average: 3.60 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.3 $Q_1$ = 0.5 Median = 1.1 $Q_3$ = 3.4 $P_{90}$ = 10.3 $P_{99}$ = 28.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 27.4 | Z | 37.7 | 16.5 | 26.8 | 11.9 | 3.8 | 2.3 | 2.2 | 1.2 | 1.3 | 1.1 | 0.9 | 0.8 | 1.0 | 0.8 | 1.2 | 1.2 | 0.9 | 2.2 | 3.3 | 2.0 | 2.1 | 1.0 | 6.5 | 37.7 |
| 2-Aug | 1.4 | 1.2 | Z | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 6.7 | 0.5 | 0.5 | 2.9 | 0.8 | 1.3 | 0.7 | 1.1 | 0.9 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 1.0 | 6.7 |
| 3-Aug | 0.1 | 0.3 | 0.5 | Z | 0.8 | 1.1 | 2.1 | 0.8 | 1.0 | 1.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 2.5 | 0.1 | 0.2 | 0.2 | 3.8 | 4.4 | 14.9 | 9.3 | 1.9 | 14.9 |
| 4-Aug | 13.2 | 5.5 | 5.5 | 11.8 | Z | 2.7 | 4.7 | 1.5 | 0.8 | 1.9 | 0.7 | 1.0 | 0.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 3.4 | 0.6 | 0.7 | 0.4 | 0.3 | 0.3 | 2.5 | 13.2 |
| 5-Aug | 0.4 | 1.3 | 0.4 | 0.5 | 0.4 | Z | 0.6 | 8.2 | 2.2 | 1.2 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.8 | 0.6 | 0.9 | 8.2 |
| 6-Aug | Z | 0.6 | 0.4 | 0.3 | 1.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 4.4 | 0.2 | 0.2 | 0.6 | 0.3 | 0.3 | 1.0 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.6 | 4.4 |
| 7-Aug | 0.3 | Z | 0.5 | 0.4 | 0.5 | 2.0 | 0.6 | 0.5 | 1.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.2 | 1.7 | 0.2 | 0.4 | 0.3 | 0.4 | 0.9 | 0.6 | 0.7 | 0.2 | 0.4 | 0.6 | 2.0 |
| 8-Aug | 5.6 | 5.5 | Z | 1.0 | 0.8 | 1.2 | 9.6 | 3.0 | 1.7 | 2.1 | 1.1 | 0.9 | 1.0 | 1.6 | 1.3 | 1.4 | 1.3 | 0.9 | 0.8 | 1.7 | 2.7 | 2.1 | 11.7 | 15.4 | 3.2 | 15.4 |
| 9-Aug | 8.5 | 9.9 | 7.5 | Z | 9.3 | 5.8 | 10.2 | 5.3 | 2.3 | 1.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.7 | 0.5 | 11.0 | 9.1 | 3.8 | 11.0 |
| 10-Aug | 7.2 | 10.4 | 10.1 | 15.2 | Z | 17.9 | 20.3 | 7.0 | 5.1 | 3.2 | 0.9 | 0.9 | 0.8 | 0.5 | 0.4 | 0.6 | 1.1 | 0.6 | 0.9 | 2.1 | 0.8 | 0.8 | 7.3 | 1.9 | 5.0 | 20.3 |
| 11-Aug | 0.9 | 0.5 | 0.6 | 0.7 | 3.9 | Z | 13.4 | 2.5 | 2.4 | 0.7 | 0.5 | 0.6 | 0.7 | 0.5 | 1.0 | 1.0 | 0.3 | 0.5 | 0.9 | 2.5 | 0.7 | 0.8 | 0.5 | 0.2 | 1.6 | 13.4 |
| 12-Aug | Z | 2.6 | 10.1 | 10.7 | 7.1 | 7.7 | 6.1 | 1.9 | 2.5 | 2.0 | 1.0 | 0.3 | 0.5 | 0.6 | 0.4 | 0.5 | 1.0 | 0.6 | 0.5 | 0.7 | 0.6 | 2.1 | 3.6 | 0.5 | 2.8 | 10.7 |
| 13-Aug | 7.9 | Z | 0.6 | 0.5 | 0.4 | 0.7 | 1.1 | 0.4 | 0.4 | 0.4 | 0.3 | 0.1 | 0.4 | 0.4 | 0.0 | 0.4 | 1.7 | 0.2 | 0.0 | 1.1 | 1.5 | 2.8 | 2.3 | 4.9 | 1.2 | 7.9 |
| 14-Aug | 9.0 | 13.3 | Z | 8.9 | 7.3 | 9.8 | 8.7 | 1.4 | 2.3 | 1.3 | 0.5 | 0.2 | 0.6 | 0.2 | 0.3 | 0.2 | 0.3 | 0.8 | 5.3 | 3.0 | 2.4 | 1.2 | 10.1 | 8.7 | 4.2 | 13.3 |
| 15-Aug | 8.6 | 10.9 | 7.9 | Z | 9.7 | 12.2 | 7.7 | 6.9 | 2.3 | 0.8 | 0.3 | 0.3 | 0.9 | 0.5 | 0.3 | 0.6 | 0.4 | 0.4 | 0.8 | 5.3 | 12.6 | 17.4 | 7.7 | 3.1 | 5.1 | 17.4 |
| 16-Aug | 0.5 | 0.5 | 0.5 | 0.6 | Z | 0.6 | 5.1 | 1.3 | 0.9 | 0.8 | 0.7 | 0.4 | 0.5 | 0.7 | 1.6 | 0.8 | 0.9 | 0.6 | 0.6 | 1.0 | 2.2 | 16.9 | 15.4 | 20.0 | 3.2 | 20.0 |
| 17-Aug | 15.4 | 5.4 | 0.6 | 3.5 | 2.9 | Z | 5.5 | 6.1 | 1.2 | 0.6 | 0.4 | 0.3 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 | 0.8 | 6.0 | 20.6 | 13.9 | 6.9 | 5.0 | 4.2 | 20.6 |
| 18-Aug | Z | 8.1 | 3.2 | 2.5 | 2.5 | 1.6 | 2.2 | 2.2 | 2.8 | 2.2 | 1.5 | 1.1 | 1.2 | 0.6 | 0.4 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.8 | 1.3 | 1.6 | 7.5 | 2.0 | 8.1 |
| 19-Aug | 13.6 | Z | 2.3 | 3.2 | 27.1 | 17.3 | 11.6 | 3.1 | 1.1 | 0.7 | 1.0 | 0.6 | 0.7 | 0.8 | 0.7 | 0.4 | 0.5 | 0.6 | 1.1 | 0.5 | 0.6 | 0.4 | 0.5 | 13.0 | 4.4 | 27.1 |
| 20-Aug | 18.7 | 21.8 | Z | 14.5 | 19.1 | 6.4 | 10.3 | 6.2 | 1.0 | 1.2 | 1.2 | 1.1 | 0.8 | 0.8 | 1.8 | 1.1 | 0.4 | 0.8 | 1.3 | 2.2 | 5.4 | 5.3 | 3.4 | 2.3 | 5.5 | 21.8 |
| 21-Aug | 28.8 | 46.8 | 23.5 | Z | 6.9 | 9.3 | 15.5 | 4.7 | 2.6 | 1.4 | 0.8 | 0.7 | 0.8 | 0.6 | 0.7 | 0.4 | 0.6 | 0.8 | 2.4 | 4.7 | 11.1 | 3.3 | 1.3 | 2.1 | 7.4 | 46.8 |
| 22-Aug | 2.6 | 2.7 | 9.0 | 2.4 | Z | 6.5 | 3.7 | 2.7 | 2.4 | 2.4 | 2.0 | 1.6 | 1.3 | 1.2 | 1.4 | 1.5 | 1.5 | 1.9 | 1.7 | 3.4 | 5.2 | 2.1 | 1.3 | 0.9 | 2.7 | 9.0 |
| 23-Aug | 14.5 | 15.3 | 13.4 | 3.0 | 0.8 | Z | 10.1 | 4.5 | 5.1 | 4.1 | 3.4 | 1.3 | 1.2 | 1.6 | 1.2 | 2.8 | 0.9 | 1.4 | 0.7 | 0.6 | 0.4 | 0.3 | 0.4 | 0.3 | 3.8 | 15.3 |
| 24-Aug | Z | 0.4 | 1.0 | 1.4 | 1.0 | 5.0 | 1.4 | 1.3 | 2.1 | 2.9 | 2.8 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 1.5 | 4.1 | 9.9 | 6.1 | 36.1 | 3.4 | 36.1 |
| 25-Aug | 14.1 | Z | 5.4 | 2.1 | 1.4 | 7.2 | 11.2 | 11.9 | 2.6 | 0.9 | C | C | C | C | C | C | 0.2 | 0.2 | 0.4 | 2.7 | 8.8 | 13.2 | 15.6 | 20.8 | -- | 20.8 |
| 26-Aug | 10.4 | 12.0 | Z | 6.1 | 3.8 | 8.3 | 4.7 | 3.4 | 4.6 | 1.7 | 2.0 | 1.0 | 1.8 | 1.9 | 1.2 | 1.6 | 1.7 | 1.4 | 1.8 | 1.2 | 4.5 | 1.1 | 35.8 | 28.6 | 6.1 | 35.8 |
| 27-Aug | 25.0 | 25.0 | 39.4 | Z | 24.7 | 23.7 | 44.8 | 16.3 | 2.1 | 1.6 | 1.4 | 1.0 | 0.9 | 0.9 | 2.4 | 0.9 | 0.9 | 1.0 | 1.1 | 1.7 | 1.7 | 1.8 | 1.1 | 0.9 | 9.6 | 44.8 |
| 28-Aug | 1.0 | 11.2 | 0.8 | 3.1 | Z | 3.0 | 3.1 | 1.1 | 0.8 | 0.6 | 0.9 | 0.4 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.4 | 0.3 | 1.4 | 9.6 | 1.8 | 11.2 |
| 29-Aug | 4.8 | 15.1 | 15.5 | 8.1 | 15.6 | Z | 1.1 | 1.4 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.7 | 0.8 | 0.7 | 1.2 | 0.8 | 7.7 | 15.0 | 7.1 | 6.8 | 6.8 | 4.9 | 15.6 |
| 30-Aug | Z | 9.4 | 8.8 | 13.1 | 10.8 | 4.7 | 2.0 | 2.5 | 3.8 | 2.3 | 1.5 | 2.6 | 3.6 | 0.8 | 1.2 | 2.1 | 2.8 | 2.8 | 2.1 | 1.0 | 1.4 | 0.7 | 4.9 | 3.1 | 3.8 | 13.1 |
| 31-Aug | 0.4 | Z | 0.5 | 0.5 | 0.7 | 0.5 | 0.8 | 1.0 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 0.3 | 0.1 | 0.2 | 0.6 | 1.2 | 5.5 | 6.5 | 12.4 | 5.5 | 1.8 | 12.4 |
| | 9.2 | 9.4 | 7.9 | 5.1 | 7.2 | 6.5 | 7.2 | 3.6 | 2.2 | 1.4 | 1.1 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 1.0 | 1.9 | 3.8 | 3.9 | 6.1 | 7.0 | Diurnal Average | |
| | 28.8 | 46.8 | 39.4 | 16.5 | 27.1 | 23.7 | 44.8 | 16.3 | 6.7 | 4.1 | 4.4 | 2.9 | 3.6 | 1.9 | 2.4 | 2.8 | 2.8 | 2.8 | 5.3 | 7.7 | 20.6 | 17.4 | 35.8 | 36.1 | Diurnal Maximum | |

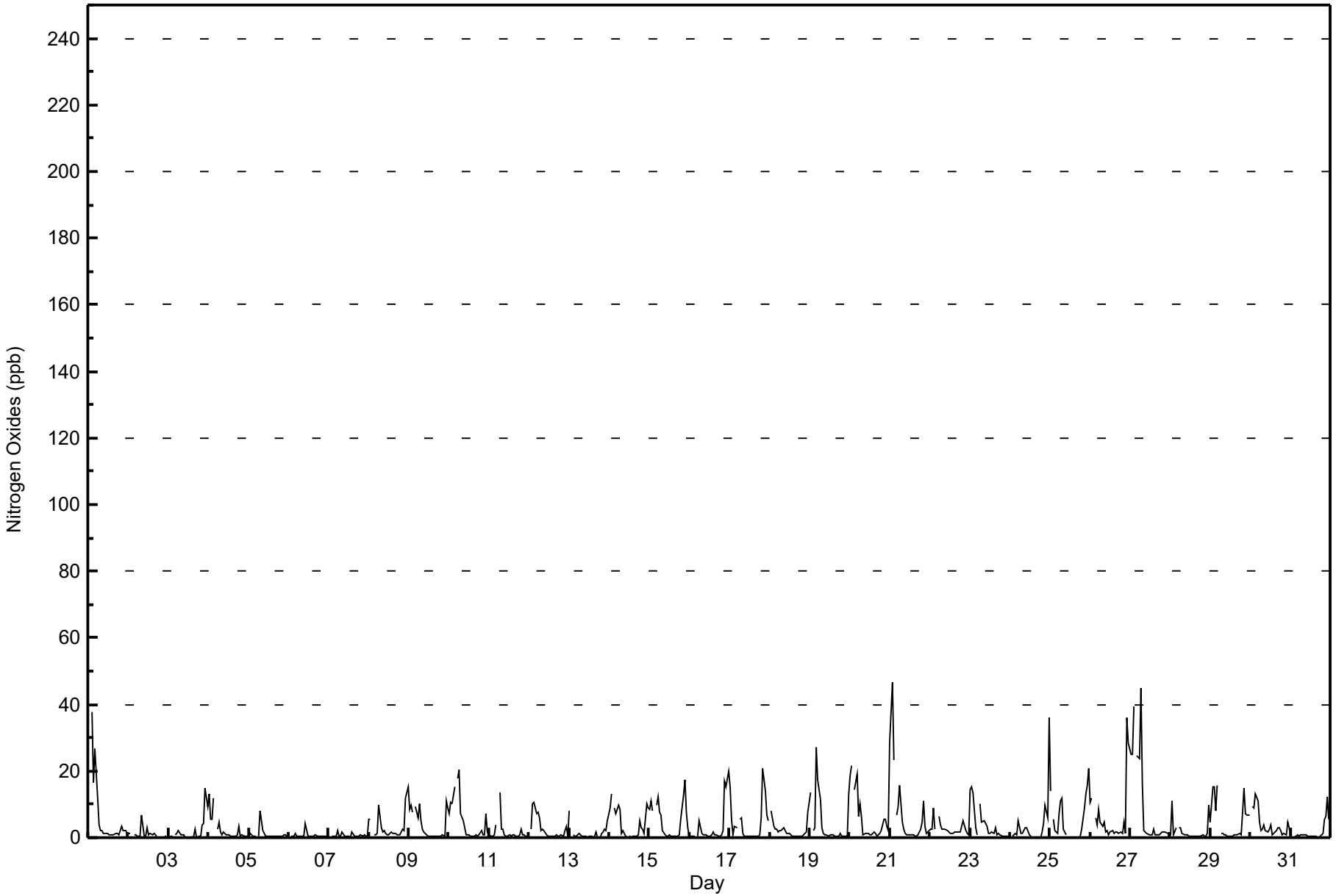
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Conklin - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Conklin - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 688 | 97.31 | 97.31 |
| 21 - 40 | 17 | 2.40 | 99.72 |
| 11 - 80 | 2 | 0.28 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Conklin - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 119 | 40 | 21 | 9 | 15 | 20 | 28 | 42 | 40 | 30 | 40 | 39 | 17 | 31 | 66 | 128 | 685 |
| 21 - 40 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 15 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 119 | 40 | 21 | 9 | 17 | 21 | 28 | 51 | 43 | 31 | 40 | 39 | 17 | 31 | 66 | 129 | 702 |

Total Number of Valid Hours: 702

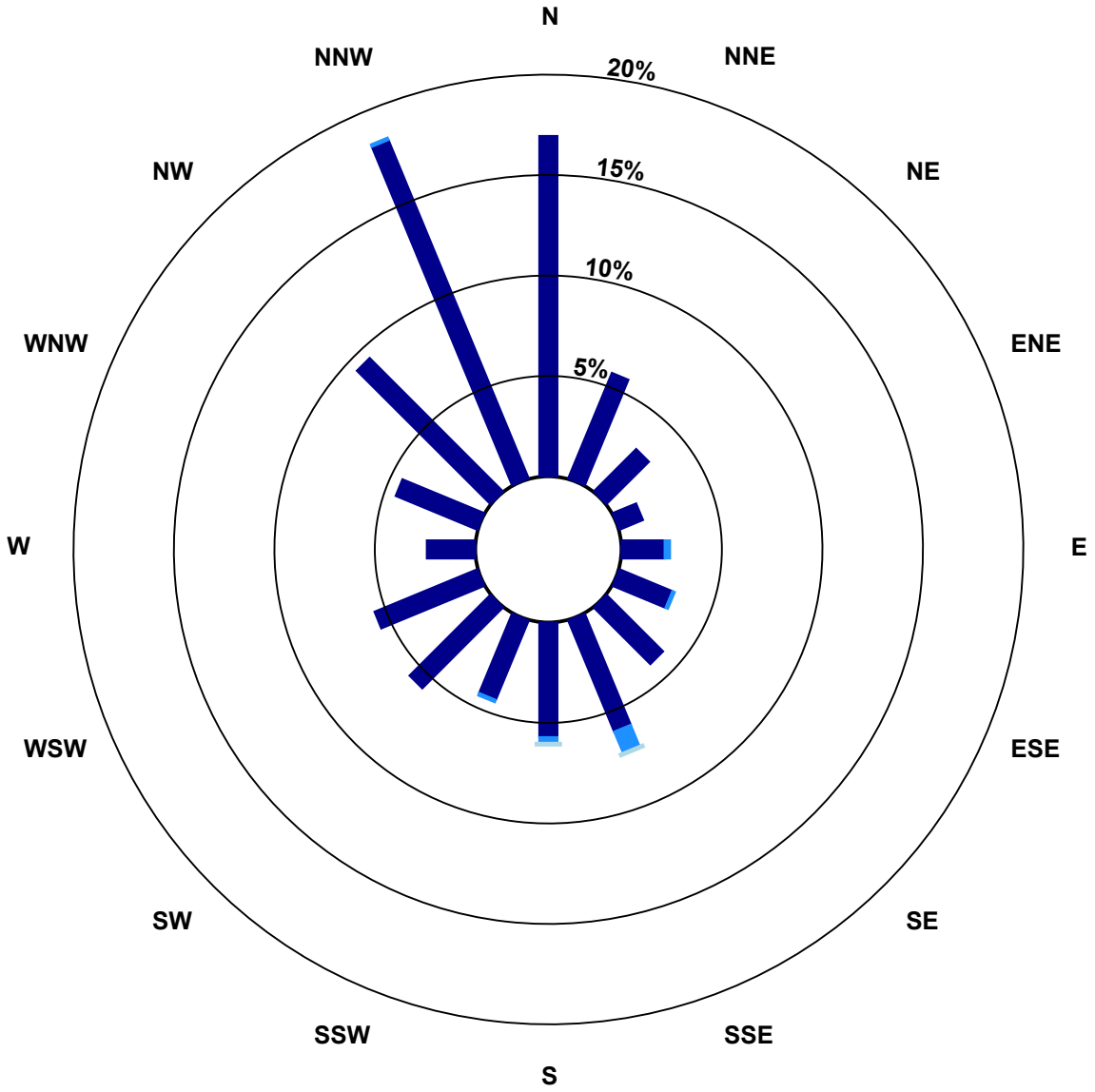
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Conklin




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

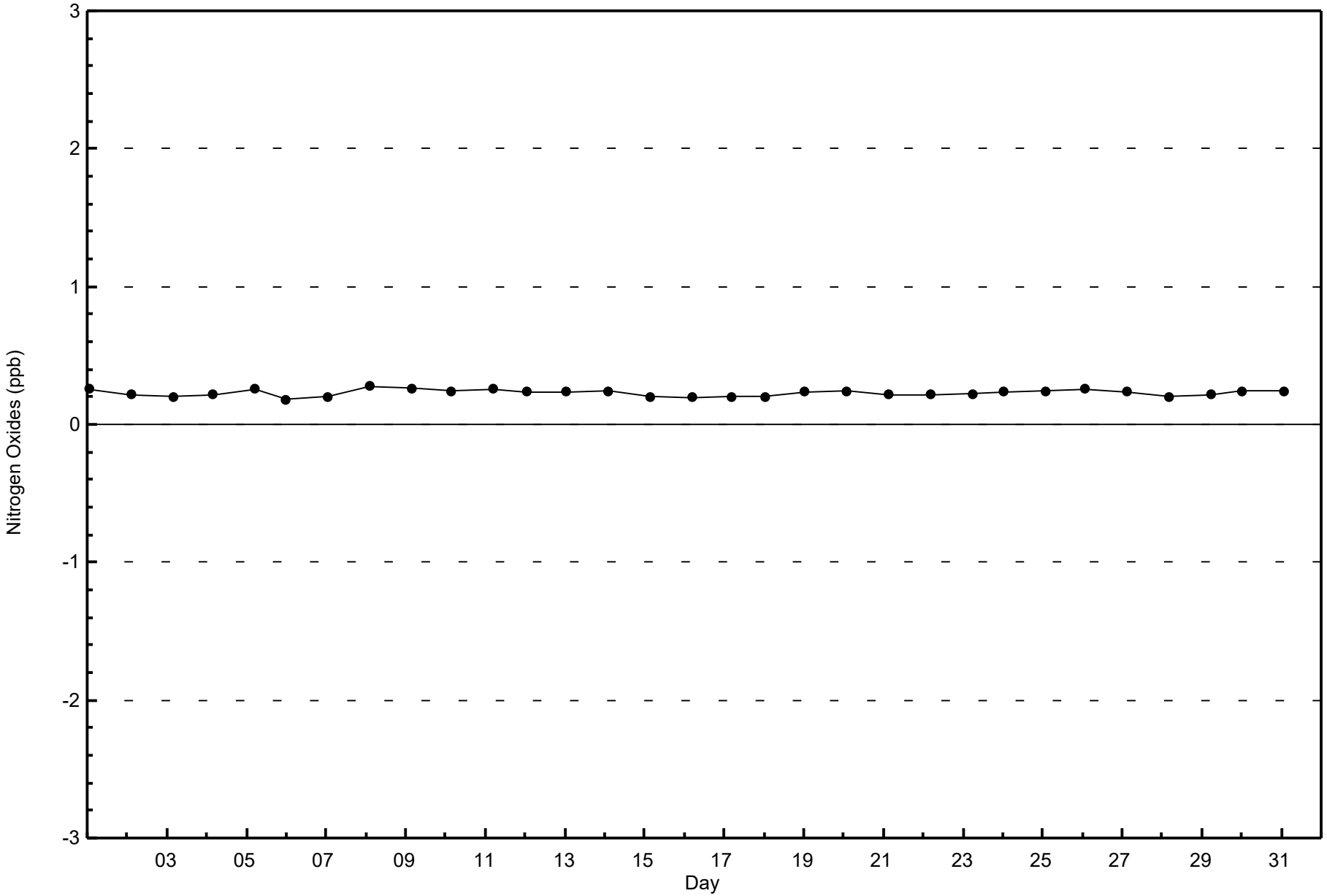
Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Conklin - August 2026**

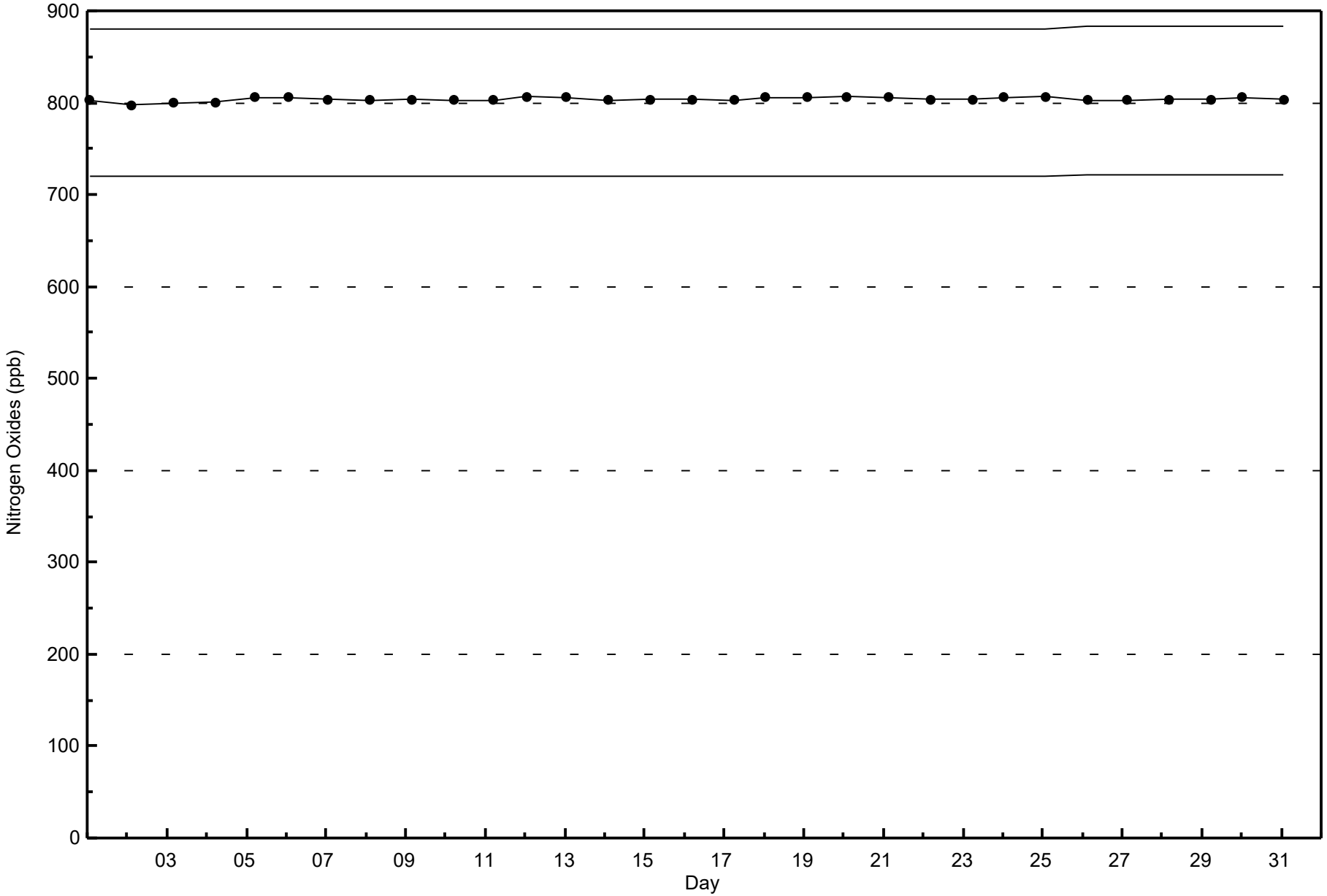


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Conklin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 46.2 ppb on Aug 26 17:00

Maximum Daily Average: 27.5 ppb on Aug 28

Minimum Value: 0.9 ppb on Aug 15 01:00

Minimum Daily Average: 9.1 ppb on Aug 23

Maximum Diurnal Average: 28.0 ppb at hour 17

Minimum Diurnal Average: 6.2 ppb at hour 5

Monthly Average: 17.34 ppb

Percentiles: $P_1$ = 1.1 $P_{10}$ = 1.8 $Q_1$ = 6.9 Median = 17.6 $Q_3$ = 25.6 $P_{90}$ = 32.4 $P_{99}$ = 43.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 4.0 | 6.4 | 1.7 | 1.4 | 1.3 | Z | 3.3 | 12.9 | 24.1 | 30.9 | 37.7 | 39.7 | 42.5 | 45.8 | 45.2 | 44.5 | 44.3 | 41.7 | 40.7 | 32.6 | 20.3 | 32.7 | 36.4 | 28.3 | 26.9 | 45.8 |
| 2-Aug | Z | 26.2 | 19.7 | 19.4 | 16.2 | 15.8 | 14.7 | 14.9 | 15.2 | 15.2 | 14.5 | 12.4 | 14.8 | 15.9 | 15.0 | 16.8 | 17.2 | 16.9 | 17.9 | 17.7 | 18.2 | 15.3 | 17.1 | 17.1 | 16.7 | 26.2 |
| 3-Aug | 16.5 | Z | 16.0 | 15.4 | 12.5 | 13.1 | 13.1 | 14.5 | 15.5 | 18.1 | 21.1 | 23.5 | 24.2 | 25.3 | 25.6 | 26.1 | 25.2 | 25.6 | 25.3 | 23.5 | 11.3 | 5.0 | 2.1 | 1.9 | 17.4 | 26.1 |
| 4-Aug | 1.6 | 1.4 | Z | 2.9 | 3.3 | 3.2 | 5.6 | 10.6 | 11.0 | 13.2 | 18.5 | 17.5 | 14.9 | 16.8 | 25.3 | 21.9 | 17.8 | 24.5 | 25.6 | 27.3 | 21.5 | 22.9 | 19.3 | 20.8 | 15.1 | 27.3 |
| 5-Aug | 19.6 | 18.1 | 18.6 | Z | 17.6 | 16.6 | 16.0 | 14.2 | 15.9 | 19.3 | 22.5 | 23.9 | 25.2 | 25.4 | 24.5 | 25.7 | 25.6 | 24.8 | 24.8 | 24.4 | 21.6 | 33.4 | 38.2 | 37.2 | 23.2 | 38.2 |
| 6-Aug | 33.9 | 23.6 | 21.8 | 20.3 | Z | 18.1 | 15.8 | 14.6 | 13.7 | 13.0 | C | C | C | C | 14.1 | 15.6 | 16.1 | 17.3 | 17.8 | 17.6 | 13.9 | 13.5 | 12.9 | 11.7 | 17.1 | 33.9 |
| 7-Aug | 11.5 | 11.2 | 11.5 | 10.7 | 7.4 | Z | 10.6 | 11.0 | 12.8 | 16.4 | 20.7 | 22.7 | 25.1 | 27.4 | 26.9 | 27.2 | 27.0 | 27.1 | 25.4 | 22.8 | 24.1 | 18.7 | 16.6 | 11.7 | 18.5 | 27.4 |
| 8-Aug | Z | 4.0 | 2.7 | 5.2 | 3.6 | 2.9 | 4.8 | 13.2 | 17.8 | 21.0 | 25.7 | 24.6 | 22.4 | 23.4 | 24.2 | 26.2 | 28.5 | 29.6 | 26.9 | 23.5 | 10.1 | 3.7 | 1.4 | 1.1 | 15.1 | 29.6 |
| 9-Aug | 1.3 | Z | 1.7 | 1.1 | 1.3 | 1.8 | 3.0 | 7.0 | 16.7 | 25.5 | 26.5 | 25.9 | 22.8 | 24.9 | 27.3 | 29.2 | 28.6 | 29.8 | 29.9 | 18.9 | 7.3 | 4.4 | 2.1 | 1.3 | 14.7 | 29.9 |
| 10-Aug | 1.2 | 1.2 | Z | 1.6 | 1.2 | 1.2 | 1.8 | 9.5 | 17.4 | 27.1 | 34.2 | 36.7 | 37.8 | 36.6 | 34.0 | 30.0 | 26.8 | 24.9 | 22.2 | 18.0 | 12.1 | 8.9 | 3.9 | 4.4 | 17.1 | 37.8 |
| 11-Aug | 7.2 | 8.0 | 9.1 | Z | 4.0 | 2.6 | 5.0 | 20.8 | 26.0 | 32.5 | 34.9 | 33.1 | 33.2 | 34.2 | 33.0 | 32.5 | 34.1 | 32.6 | 34.3 | 19.5 | 8.9 | 4.5 | 2.2 | 1.8 | 19.7 | 34.9 |
| 12-Aug | 2.1 | 1.9 | 1.5 | 1.3 | Z | 2.1 | 2.9 | 13.6 | 18.5 | 19.8 | 23.1 | 24.3 | 22.7 | 18.3 | 20.5 | 19.4 | 18.6 | 20.3 | 17.1 | 13.8 | 7.3 | 5.2 | 4.0 | 7.8 | 12.4 | 24.3 |
| 13-Aug | 6.3 | 7.4 | 5.6 | 5.7 | 3.9 | Z | 10.2 | 12.7 | 13.7 | 15.5 | 18.2 | 19.9 | 20.2 | 20.0 | 20.2 | 20.1 | 17.8 | 20.7 | 17.6 | 10.1 | 3.1 | 1.2 | 1.4 | 1.2 | 11.9 | 20.7 |
| 14-Aug | Z | 1.5 | 1.1 | 1.1 | 1.1 | 1.4 | 2.0 | 6.8 | 11.3 | 13.5 | 18.4 | 23.8 | 25.3 | 22.4 | 24.0 | 25.5 | 26.9 | 26.9 | 23.8 | 21.1 | 12.9 | 4.0 | 1.3 | 1.2 | 12.9 | 26.9 |
| 15-Aug | 0.9 | Z | 2.3 | 1.6 | 1.3 | 1.4 | 4.3 | 7.1 | 13.2 | 18.8 | 23.9 | 26.0 | 20.8 | 19.5 | 21.4 | 21.4 | 22.8 | 23.6 | 23.5 | 10.7 | 3.0 | 4.5 | 9.9 | 18.1 | 13.0 | 26.0 |
| 16-Aug | 21.3 | 23.6 | Z | 23.2 | 20.2 | 21.6 | 21.4 | 21.9 | 21.4 | 19.8 | 18.0 | 15.2 | 14.6 | 16.6 | 22.7 | 25.7 | 27.8 | 25.8 | 25.7 | 16.7 | 4.4 | 1.2 | 2.6 | 2.5 | 18.0 | 27.8 |
| 17-Aug | 2.3 | 4.1 | 3.5 | Z | 5.4 | 5.2 | 5.3 | 12.5 | 22.0 | 27.1 | 31.1 | 33.3 | 32.4 | 34.0 | 34.5 | 34.3 | 33.9 | 32.1 | 30.5 | 16.1 | 3.5 | 6.0 | 9.9 | 11.0 | 18.7 | 34.5 |
| 18-Aug | 10.9 | 11.6 | 14.4 | 15.8 | Z | 15.1 | 15.1 | 18.9 | 27.1 | 31.4 | 31.2 | 31.6 | 31.1 | 29.6 | 29.7 | 30.2 | 31.1 | 31.9 | 30.8 | 28.6 | 23.1 | 18.0 | 8.5 | 5.0 | 22.6 | 31.9 |
| 19-Aug | 6.1 | 8.6 | 6.2 | 3.5 | 2.0 | Z | 5.9 | 13.2 | 16.5 | 17.2 | 20.1 | 21.2 | 22.7 | 24.5 | 22.9 | 22.7 | 22.9 | 21.7 | 21.8 | 24.1 | 15.8 | 13.1 | 7.0 | 3.1 | 14.9 | 24.5 |
| 20-Aug | Z | 2.0 | 1.8 | 1.3 | 1.5 | 1.6 | 2.4 | 8.0 | 16.7 | 19.4 | 15.9 | 22.0 | 25.0 | 26.2 | 25.8 | 26.1 | 31.4 | 33.8 | 37.7 | 29.8 | 10.8 | 3.5 | 1.9 | 1.4 | 15.1 | 37.7 |
| 21-Aug | 1.3 | Z | 1.6 | 1.7 | 1.1 | 1.5 | 3.7 | 10.7 | 16.9 | 30.8 | 31.8 | 31.1 | 32.7 | 32.5 | 32.1 | 32.3 | 32.4 | 33.8 | 31.6 | 20.3 | 7.7 | 23.0 | 25.2 | 18.4 | 19.7 | 33.8 |
| 22-Aug | 15.2 | 7.3 | Z | 8.6 | 11.8 | 17.9 | 20.9 | 22.4 | 24.7 | 28.0 | 31.6 | 33.2 | 37.0 | 40.7 | 43.5 | 43.1 | 40.0 | 39.2 | 38.1 | 26.0 | 10.7 | 5.4 | 2.6 | 2.1 | 23.9 | 43.5 |
| 23-Aug | 1.7 | 1.2 | 2.5 | Z | 1.8 | 1.4 | 1.5 | 2.0 | 3.0 | 3.3 | 3.4 | 12.0 | 14.9 | 19.3 | 22.1 | 18.3 | 24.4 | 17.0 | 10.1 | 6.8 | 7.8 | 9.9 | 10.8 | 13.0 | 9.1 | 24.4 |
| 24-Aug | 12.0 | 9.9 | 10.3 | 11.4 | Z | 10.1 | 10.1 | 8.7 | 11.7 | 12.0 | 14.5 | 22.2 | 30.2 | 30.6 | 29.9 | 29.5 | 28.9 | 28.0 | 24.4 | 15.7 | 6.9 | 2.0 | 1.6 | 1.5 | 15.7 | 30.6 |
| 25-Aug | 1.4 | 1.4 | 1.2 | 1.2 | 1.1 | Z | 4.8 | 7.5 | 17.9 | 24.7 | 25.9 | 26.3 | 26.8 | 26.6 | 26.5 | 25.7 | 24.6 | 25.7 | 28.6 | 21.7 | 6.8 | 2.7 | 1.8 | 1.9 | 14.5 | 28.6 |
| 26-Aug | Z | 2.4 | 1.2 | 1.1 | 1.2 | 1.3 | 1.4 | 9.2 | 22.3 | 32.4 | 35.0 | 36.8 | 37.8 | 39.0 | 42.0 | 44.6 | 46.2 | 43.5 | 42.6 | 34.7 | 16.5 | 11.2 | 4.0 | 1.6 | 22.1 | 46.2 |
| 27-Aug | 2.1 | Z | 2.4 | 1.3 | 1.2 | 1.5 | 1.7 | 8.5 | 25.4 | 28.0 | 31.7 | 34.3 | 35.5 | 38.4 | 39.5 | 40.2 | 40.6 | 41.3 | 37.3 | 28.6 | 29.2 | 27.5 | 30.9 | 18.9 | 23.7 | 41.3 |
| 28-Aug | 11.0 | 15.6 | Z | 26.7 | 23.8 | 23.7 | 25.4 | 27.4 | 31.9 | 34.2 | 36.2 | 33.8 | 33.1 | 32.1 | 32.2 | 30.6 | 32.2 | 32.4 | 29.9 | 25.7 | 26.5 | 26.3 | 23.1 | 19.2 | 27.5 | 36.2 |
| 29-Aug | 12.1 | 2.4 | 2.1 | Z | 4.2 | 6.6 | 9.6 | 11.4 | 14.3 | 18.6 | 23.5 | 23.4 | 24.6 | 25.8 | 26.4 | 26.6 | 29.5 | 29.8 | 26.1 | 9.2 | 2.2 | 10.7 | 7.5 | 4.0 | 15.3 | 29.8 |
| 30-Aug | 1.7 | 1.6 | 2.9 | 1.5 | Z | 1.6 | 1.5 | 2.5 | 4.6 | 8.8 | 11.7 | 15.9 | 18.4 | 21.2 | 24.5 | 26.8 | 24.0 | 22.6 | 17.0 | 11.2 | 4.2 | 1.7 | 4.4 | 12.4 | 10.6 | 26.8 |
| 31-Aug | 16.5 | 12.5 | 9.8 | 12.3 | 11.9 | Z | 11.3 | 12.4 | 14.8 | 16.8 | 19.4 | 21.8 | 21.7 | 22.3 | 20.6 | 21.1 | 20.3 | 21.8 | 20.1 | 11.4 | 2.4 | 2.1 | 2.5 | 5.1 | 14.4 | 22.3 |
| | 8.5 | 8.3 | 6.7 | 7.6 | 6.2 | 7.6 | 8.2 | 12.3 | 17.2 | 21.0 | 24.0 | 25.6 | 26.4 | 27.2 | 27.6 | 27.7 | 28.0 | 28.0 | 26.6 | 20.3 | 12.1 | 11.0 | 10.1 | 9.3 | Diurnal Average | |
| | 33.9 | 26.2 | 21.8 | 26.7 | 23.8 | 23.7 | 25.4 | 27.4 | 31.9 | 34.2 | 37.7 | 39.7 | 42.5 | 45.8 | 45.2 | 44.6 | 46.2 | 43.5 | 42.6 | 34.7 | 29.2 | 33.4 | 38.2 | 37.2 | Diurnal Maximum | |

Z - zerospan C - Calibration

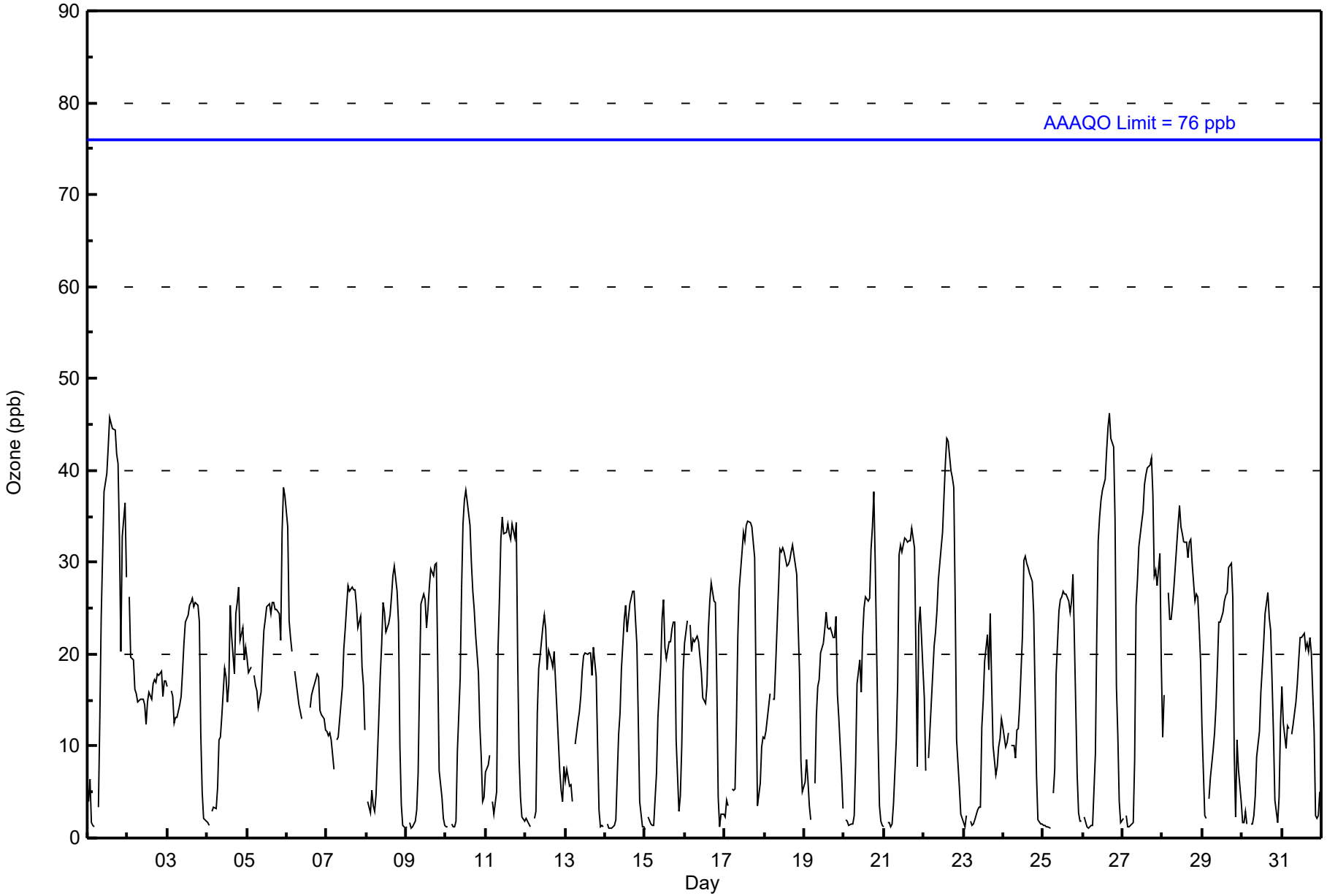
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Conklin - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 415 | 58.53 | 58.53 |
| 21 - 50 | 294 | 41.47 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

| Concentration | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ranges (ppb)** | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 89 | 32 | 15 | 6 | 12 | 10 | 20 | 34 | 24 | 15 | 20 | 6 | 6 | 14 | 33 | 76 | 412 |
| 21 - 50 | 30 | 7 | 6 | 2 | 5 | 12 | 10 | 20 | 19 | 15 | 20 | 33 | 12 | 19 | 34 | 49 | 293 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 119 | 39 | 21 | 8 | 17 | 22 | 30 | 54 | 43 | 30 | 40 | 39 | 18 | 33 | 67 | 125 | 705 |

Total Number of Valid Hours: 705

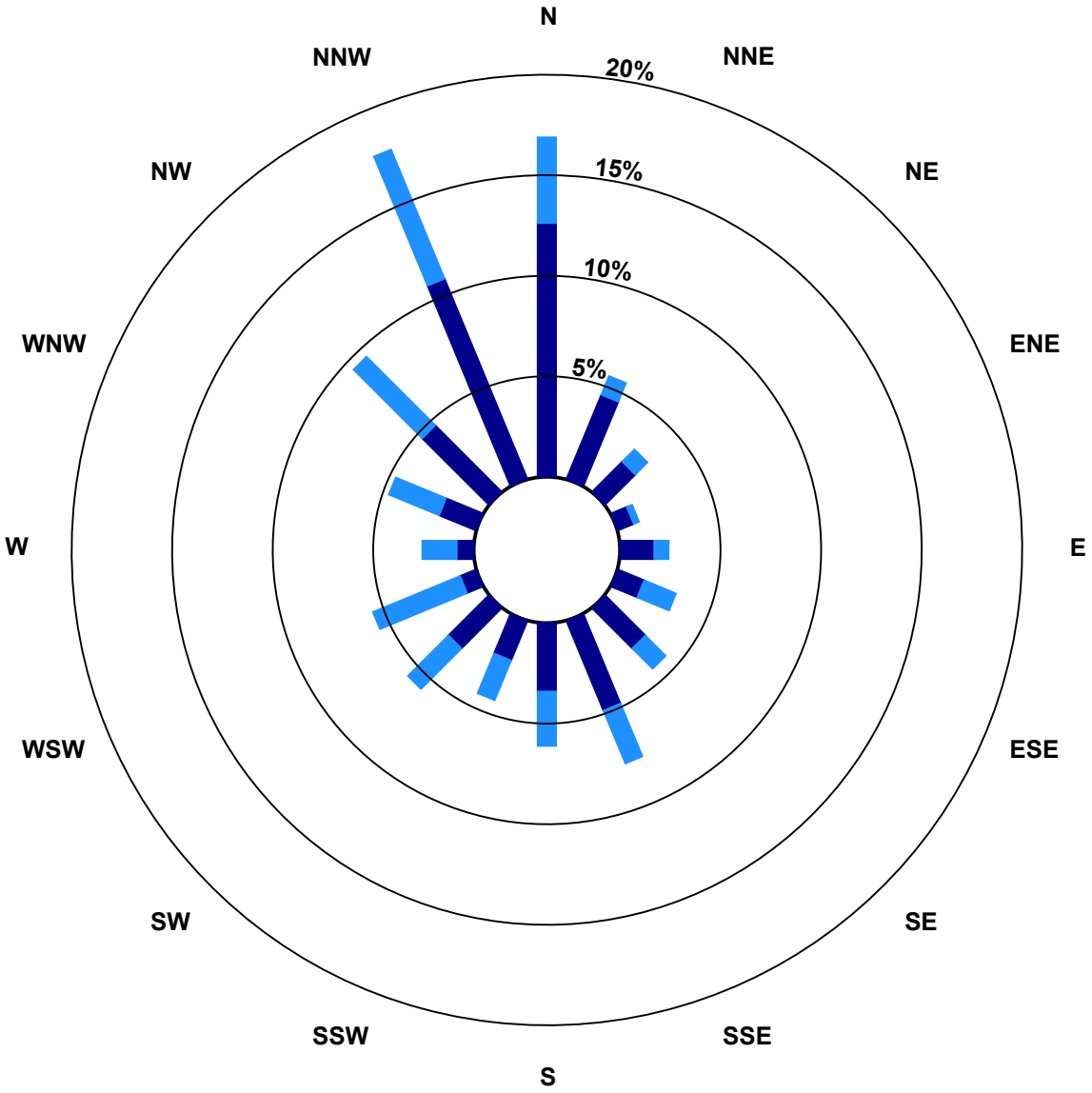
Total Number of Hours: 744

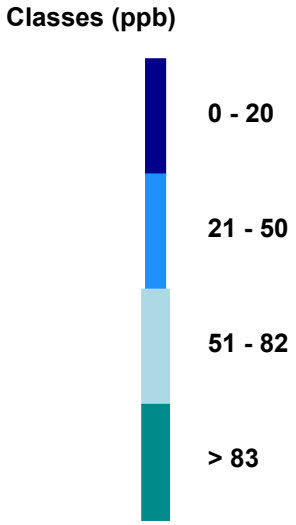
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Ozone ($O_3$) - ppb

Conklin



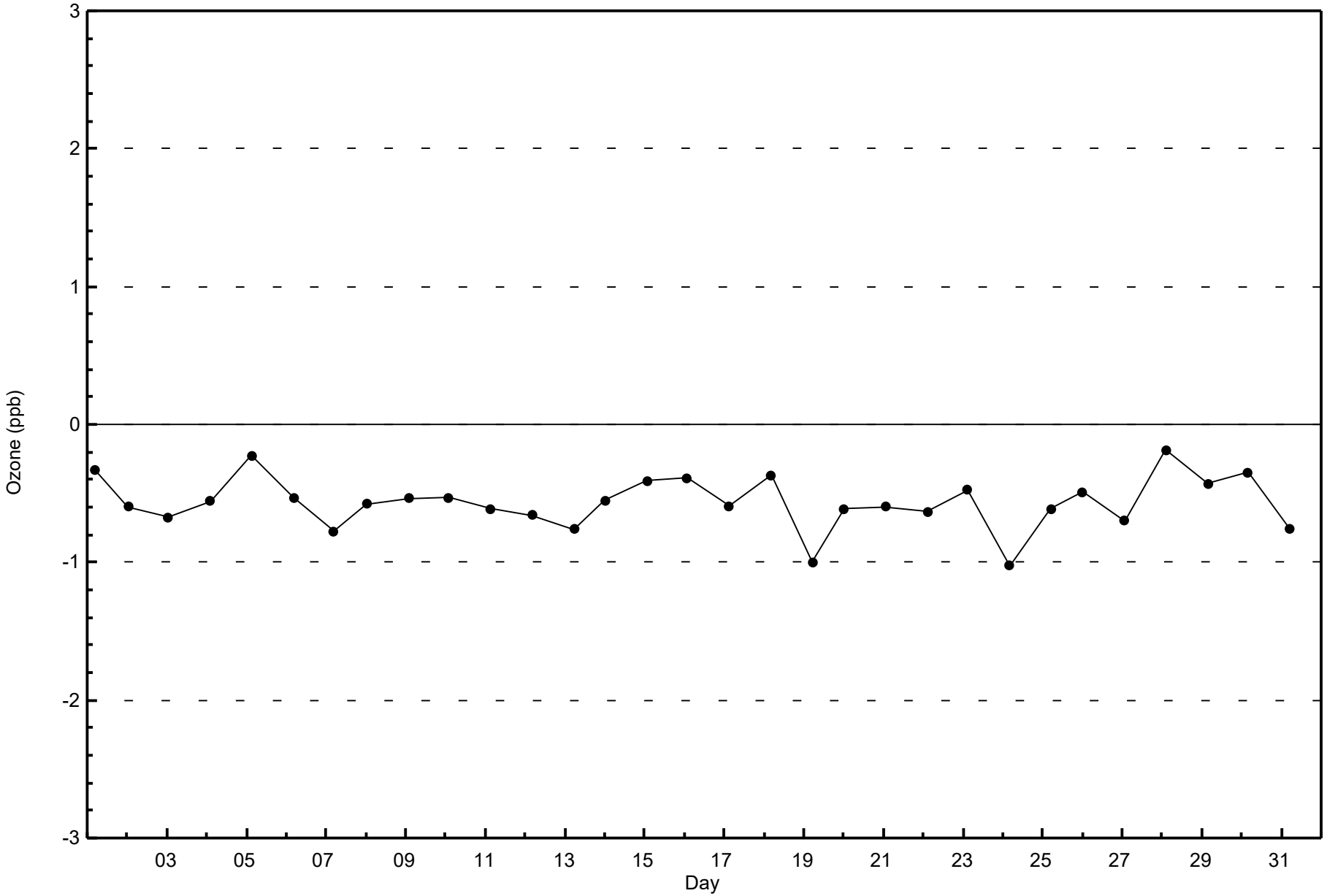

Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Conklin - August 2026**

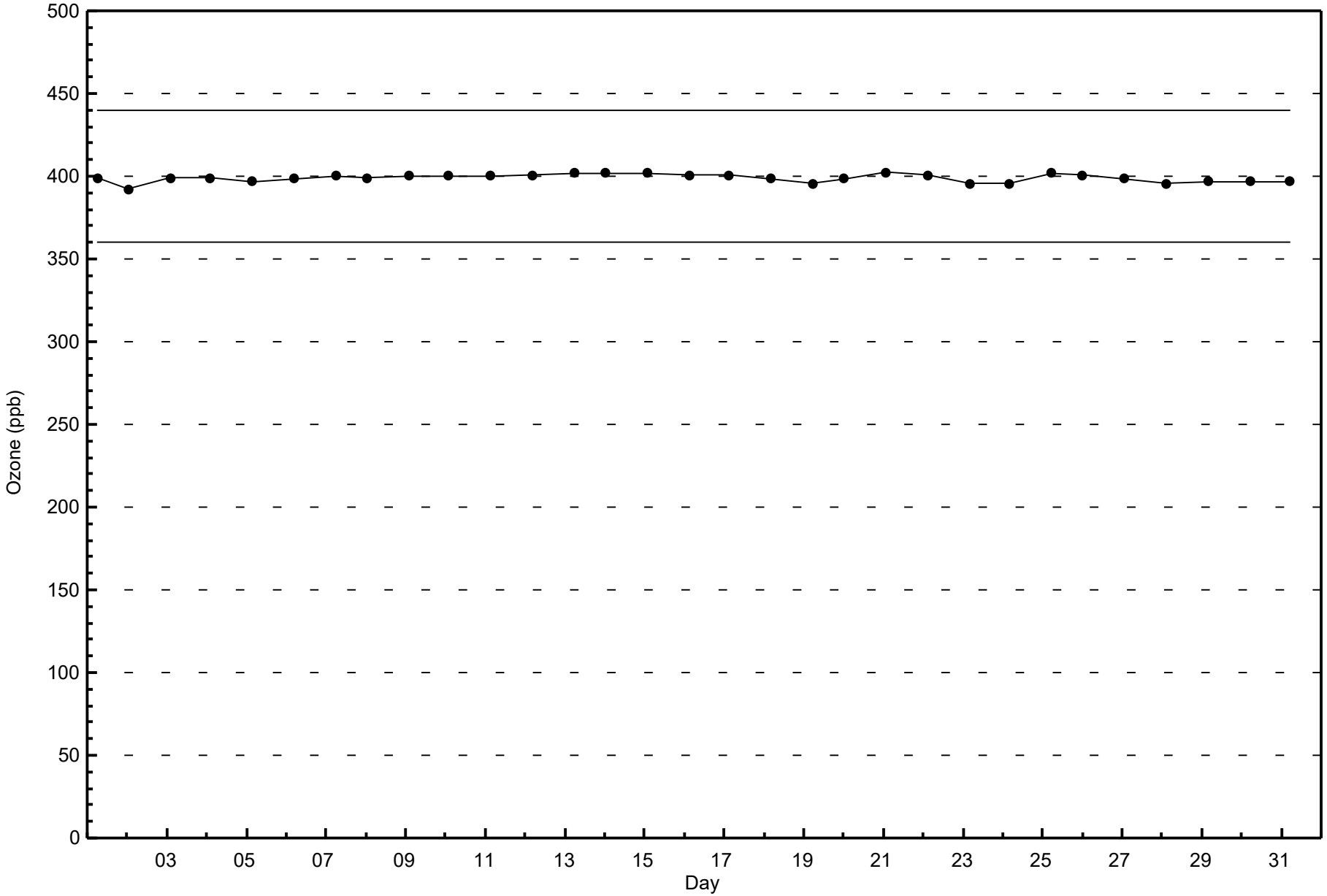


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Conklin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 43.8 $\mu g/m^3$ on Aug 29 01:00

Maximum Daily Average: 20.3 $\mu g/m^3$ on Aug 29

Minimum Value: 0.8 $\mu g/m^3$ on Aug 6 13:00

Minimum Daily Average: 1.5 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 12.3 $\mu g/m^3$ at hour 2

Minimum Diurnal Average: 6.9 $\mu g/m^3$ at hour 13

Monthly Average: 9.26 $\mu g/m^3$

Percentiles: $P_1$ = 1.1 $P_{10}$ = 2.5 $Q_1$ = 3.9 Median = 6.7 $Q_3$ = 13.2 $P_{90}$ = 19.5 $P_{99}$ = 32.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 11.9 | 10.6 | 10.6 | 11.0 | 10.7 | 10.5 | 9.8 | 10.0 | 12.0 | 12.3 | 13.5 | 13.9 | 14.6 | 16.9 | 19.4 | 17.1 | 16.6 | 17.1 | 16.3 | 17.2 | 16.9 | 16.0 | 15.8 | 25.0 | 14.4 | 25.0 |
| 2-Aug | 36.5 | 38.8 | 36.3 | 32.5 | 26.6 | 22.6 | 11.8 | 5.6 | 3.6 | 2.7 | 1.1 | 1.0 | 1.7 | 4.0 | 3.0 | 4.5 | 4.4 | 3.3 | 3.3 | 3.2 | 2.8 | 2.5 | 1.9 | 1.8 | 10.6 | 38.8 |
| 3-Aug | 1.9 | 1.7 | 1.6 | 1.7 | 1.9 | 2.0 | 2.2 | 2.3 | 2.7 | 3.1 | 2.7 | 2.0 | 2.6 | 2.8 | 3.6 | 3.6 | 2.1 | 1.8 | 2.0 | 2.0 | 3.1 | 4.8 | 7.1 | 8.4 | 2.9 | 8.4 |
| 4-Aug | 5.7 | 4.3 | 4.6 | 3.4 | 3.3 | 3.2 | 3.4 | 4.8 | 6.8 | 8.8 | 7.9 | 7.2 | 6.7 | 6.2 | 4.1 | 5.4 | 6.2 | 6.4 | 7.1 | 4.6 | 5.0 | 4.9 | 5.2 | 5.3 | 5.4 | 8.8 |
| 5-Aug | 6.3 | 9.4 | 13.3 | 14.7 | 17.5 | 20.4 | 23.9 | 25.9 | 25.4 | 18.5 | 11.6 | 9.9 | 11.0 | 12.4 | 12.4 | 10.8 | 8.7 | 9.8 | 13.7 | 11.5 | 10.1 | 3.1 | 2.3 | 2.3 | 12.7 | 25.9 |
| 6-Aug | 1.8 | 1.5 | 1.6 | 1.6 | 1.2 | 1.2 | 1.2 | 1.1 | 0.9 | 1.1 | 1.0 | 0.9 | 0.8 | 1.3 | 1.5 | 1.4 | 1.3 | 1.4 | 1.4 | 1.6 | 2.0 | 2.3 | 2.3 | 2.6 | 1.5 | 2.6 |
| 7-Aug | 2.9 | 3.2 | 3.2 | 3.4 | 3.7 | 3.9 | 3.8 | 3.6 | 3.4 | 5.2 | 9.3 | 6.9 | 4.2 | 3.4 | 4.7 | 5.9 | 8.0 | 6.9 | 6.4 | 7.4 | 10.2 | 10.8 | 11.2 | 12.0 | 6.0 | 12.0 |
| 8-Aug | 12.5 | 21.7 | 14.9 | 14.2 | 13.8 | 13.3 | 13.4 | 6.8 | 4.8 | 4.9 | 4.9 | 4.9 | 5.2 | 5.0 | 4.8 | 5.1 | 5.6 | 6.0 | 5.7 | 6.5 | 7.3 | 7.1 | 8.2 | 8.6 | 8.6 | 21.7 |
| 9-Aug | 10.0 | 10.0 | 8.5 | 7.4 | 8.9 | 7.7 | 7.6 | 6.7 | 5.5 | 5.2 | 4.6 | 3.6 | 3.6 | 3.7 | 3.9 | 4.6 | 4.8 | 3.5 | 3.8 | 4.1 | 4.6 | 4.5 | 10.6 | 8.7 | 6.1 | 10.6 |
| 10-Aug | 6.2 | 6.2 | 5.6 | 5.4 | 5.0 | 4.8 | 4.5 | 4.6 | 5.1 | 3.7 | 4.2 | 4.5 | 4.3 | 3.9 | 3.9 | 3.4 | 3.5 | 3.9 | 3.9 | 9.8 | 6.7 | 7.1 | 7.3 | 6.1 | 5.1 | 9.8 |
| 11-Aug | 6.0 | 6.0 | 5.6 | 5.3 | 5.3 | 5.4 | 5.5 | 4.8 | 3.9 | 3.9 | 4.0 | 5.4 | 5.4 | 4.9 | 4.6 | 4.3 | 4.7 | 4.7 | 5.4 | 6.3 | 7.9 | 7.2 | 7.4 | 6.3 | 5.4 | 7.9 |
| 12-Aug | 6.6 | 6.5 | 6.3 | 6.0 | 5.8 | 5.6 | 5.1 | 4.8 | 3.9 | 3.5 | 2.5 | 2.4 | 2.2 | 1.8 | 1.4 | 2.2 | 2.7 | 2.5 | 1.5 | 5.7 | 13.4 | 2.6 | 2.8 | 1.6 | 4.2 | 13.4 |
| 13-Aug | 1.8 | 1.8 | 1.8 | 1.8 | 1.9 | 1.9 | 2.4 | 2.7 | 2.7 | 2.6 | 2.2 | 1.8 | 1.8 | 1.7 | 1.6 | 1.5 | 1.8 | 1.6 | 1.6 | 3.3 | 12.0 | 6.3 | 4.6 | 3.8 | 2.8 | 12.0 |
| 14-Aug | 3.4 | 3.6 | 3.5 | 3.6 | 3.8 | 3.6 | 3.4 | 3.2 | 3.5 | 3.3 | 3.0 | 2.7 | 2.6 | 2.8 | 2.5 | 2.8 | 2.8 | 2.8 | 3.0 | 3.1 | 3.3 | 3.5 | 3.9 | 4.1 | 3.3 | 4.1 |
| 15-Aug | 3.9 | 4.6 | 3.9 | 3.9 | 3.7 | 3.6 | 3.3 | 2.7 | 2.6 | 2.7 | 2.9 | 3.4 | 3.6 | 3.4 | 3.0 | 2.7 | 2.7 | 2.5 | 2.7 | 3.3 | 4.4 | 5.8 | 10.2 | 4.0 | 3.7 | 10.2 |
| 16-Aug | 4.1 | 4.4 | 4.8 | 5.2 | 7.0 | 5.3 | 5.0 | 4.3 | 4.3 | 4.6 | 4.9 | 4.2 | 3.8 | 4.4 | 8.5 | 14.9 | 17.5 | 15.8 | 16.3 | 17.0 | 18.8 | 20.0 | 17.1 | 19.8 | 9.7 | 20.0 |
| 17-Aug | 23.5 | 17.6 | 16.9 | 16.6 | 16.6 | 16.0 | 15.6 | 16.0 | 17.9 | 19.5 | 21.1 | 18.1 | 17.4 | 16.3 | 15.6 | 14.4 | 13.2 | 14.3 | 15.4 | 15.7 | 16.5 | 13.4 | 13.4 | 13.2 | 16.4 | 23.5 |
| 18-Aug | 13.0 | 12.8 | 12.1 | 11.8 | 11.5 | 10.8 | 10.7 | 9.3 | 7.4 | 7.2 | 7.4 | 7.2 | 7.3 | 7.0 | 6.6 | 6.9 | 6.6 | 6.2 | 5.7 | 5.0 | 5.9 | 5.1 | 8.5 | 5.6 | 8.2 | 13.0 |
| 19-Aug | 6.5 | 6.5 | 5.9 | 8.4 | 8.1 | 6.1 | 5.9 | 5.1 | 4.4 | 4.0 | 3.8 | 3.9 | 5.0 | 4.3 | 4.3 | 6.3 | 11.6 | 19.6 | 24.3 | 23.8 | 23.8 | 22.8 | 22.0 | 26.4 | 10.9 | 26.4 |
| 20-Aug | 26.5 | 25.5 | 24.0 | 29.9 | 27.5 | 24.9 | 23.5 | 24.4 | 17.8 | 13.6 | 11.7 | 12.0 | 10.4 | 11.8 | 12.3 | 18.3 | 16.3 | 18.2 | 19.2 | 21.6 | 24.1 | 23.9 | 21.3 | 19.7 | 19.9 | 29.9 |
| 21-Aug | 20.1 | 20.6 | 19.2 | 19.0 | 16.0 | 17.3 | 19.5 | 17.3 | 17.2 | 17.6 | 14.1 | 9.4 | 12.1 | 12.0 | 11.7 | 11.4 | 10.7 | 10.7 | 10.3 | 10.4 | 11.3 | 10.7 | 7.7 | 7.0 | 13.9 | 20.6 |
| 22-Aug | 6.5 | 8.4 | 7.5 | 6.1 | 5.8 | 7.0 | 6.9 | 7.3 | 8.1 | 9.9 | 10.8 | 11.9 | 14.3 | 14.3 | 14.9 | 14.4 | 13.6 | 13.6 | 13.4 | 13.6 | 13.8 | 13.3 | 13.2 | 12.7 | 10.9 | 14.9 |
| 23-Aug | 16.1 | 16.5 | 18.6 | 15.1 | 12.0 | 15.8 | 13.4 | 12.4 | 15.1 | 34.7 | 30.5 | 23.7 | 22.4 | 22.7 | 22.8 | 22.8 | 27.0 | 26.5 | 25.7 | 25.5 | 21.0 | 14.9 | 12.5 | 9.7 | 19.9 | 34.7 |
| 24-Aug | 8.2 | 7.6 | 6.8 | 6.4 | 6.7 | 5.7 | 4.3 | 4.0 | 3.9 | 4.1 | 3.6 | 3.0 | 1.9 | 2.4 | 2.7 | 3.2 | 2.9 | 2.7 | 2.7 | 6.5 | 14.1 | 9.8 | 9.9 | 13.9 | 5.7 | 14.1 |
| 25-Aug | 7.0 | 7.9 | 5.3 | 4.8 | 4.7 | 4.9 | 5.1 | 5.2 | 5.1 | 11.8 | 11.9 | 7.3 | 4.9 | 5.3 | 4.4 | 4.5 | 4.5 | 4.0 | 6.4 | 10.3 | 15.9 | 13.1 | 9.7 | 10.1 | 7.3 | 15.9 |
| 26-Aug | 11.3 | 11.6 | 8.3 | 8.0 | 7.4 | 10.8 | 7.7 | 5.9 | 5.0 | 4.2 | 4.4 | 4.5 | 4.8 | 4.6 | 4.6 | 4.4 | 5.6 | 6.1 | 7.2 | 11.6 | 13.4 | 11.7 | 14.4 | 16.7 | 8.1 | 16.7 |
| 27-Aug | 22.4 | 39.3 | 22.2 | 12.7 | 11.8 | 13.9 | 18.4 | 20.0 | 21.7 | 20.1 | 16.8 | 13.6 | 12.8 | 11.1 | 12.5 | C | 12.3 | 15.4 | 14.7 | 16.7 | 16.3 | 17.6 | 19.6 | 19.9 | 17.5 | 39.3 |
| 28-Aug | 21.1 | 20.6 | 15.3 | 15.0 | 15.8 | 15.9 | 15.2 | 13.7 | 11.8 | 11.0 | 9.7 | 5.8 | 4.3 | 3.9 | 4.0 | 3.9 | 4.2 | 11.8 | 20.7 | 9.6 | 10.9 | 15.3 | 20.0 | 32.6 | 13.0 | 32.6 |
| 29-Aug | 43.8 | 31.9 | 30.7 | 36.7 | 32.7 | 28.7 | 31.3 | 28.5 | 25.7 | 23.4 | 18.7 | 15.6 | 12.6 | 10.1 | 10.8 | 11.9 | 10.9 | 10.2 | 10.2 | 12.2 | 15.8 | 12.8 | 11.6 | 11.2 | 20.3 | 43.8 |
| 30-Aug | 14.6 | 13.2 | 9.6 | 12.0 | 10.5 | 9.0 | 8.0 | 9.0 | 8.1 | 7.5 | 7.3 | 7.1 | 7.6 | 8.0 | 8.7 | 9.2 | 9.3 | 9.2 | 8.4 | 8.1 | 8.1 | 8.1 | 8.3 | 7.1 | 9.0 | 14.6 |
| 31-Aug | 5.7 | 5.8 | 5.0 | 3.7 | 3.7 | 3.6 | 3.6 | 3.6 | 3.6 | 3.5 | 3.2 | 3.1 | 3.1 | 3.1 | 2.9 | 2.5 | 2.1 | 1.9 | 1.7 | 2.5 | 5.7 | 5.9 | 5.4 | 8.5 | 3.9 | 8.5 |
| | 11.9 | 12.3 | 10.8 | 10.6 | 10.0 | 9.9 | 9.5 | 8.9 | 8.5 | 9.0 | 8.2 | 7.1 | 6.9 | 7.0 | 7.1 | 7.5 | 7.9 | 8.4 | 9.0 | 9.7 | 11.1 | 9.9 | 10.2 | 10.8 | Diurnal Average | |
| | 43.8 | 39.3 | 36.3 | 36.7 | 32.7 | 28.7 | 31.3 | 28.5 | 25.7 | 34.7 | 30.5 | 23.7 | 22.4 | 22.7 | 22.8 | 22.8 | 27.0 | 26.5 | 25.7 | 25.5 | 24.1 | 23.9 | 22.0 | 32.6 | Diurnal Maximum | |

C - Calibration

Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Conklin - August 2026**



## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

### Conklin - August 2026

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 309 | 41.59 | 41.59 |
| 6 - 15 | 299 | 40.24 | 81.83 |
| 16 - 25 | 108 | 14.54 | 96.37 |
| 26 - 80 | 27 | 3.63 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Conklin - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 70 | 22 | 11 | 4 | 6 | 7 | 2 | 6 | 8 | 4 | 9 | 12 | 8 | 13 | 39 | 88 | 309 |
| 6 - 15 | 43 | 19 | 5 | 2 | 6 | 11 | 15 | 32 | 29 | 21 | 23 | 19 | 6 | 18 | 18 | 32 | 299 |
| 16 - 25 | 10 | 1 | 6 | 4 | 5 | 5 | 14 | 15 | 7 | 3 | 4 | 6 | 3 | 1 | 10 | 10 | 104 |
| 26 - 80 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 6 | 2 | 1 | 2 | 3 | 3 | 26 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 125 | 42 | 22 | 10 | 17 | 23 | 31 | 54 | 47 | 31 | 42 | 39 | 18 | 34 | 70 | 133 | 738 |

Total Number of Valid Hours: 738

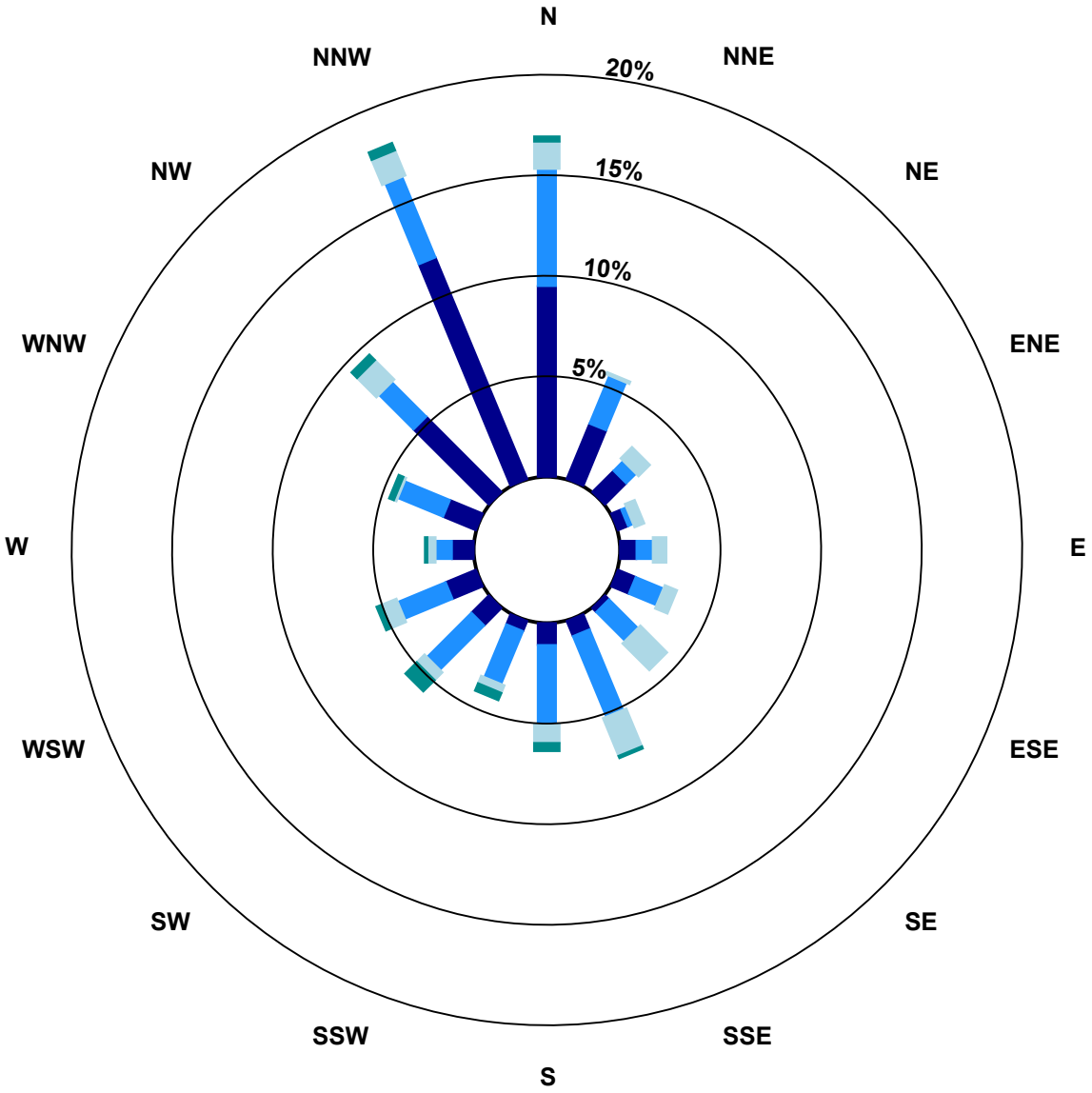
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Conklin




Classes ($\mu g/m^3$)

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 81.0

Total Number of Valid Hours: 738

Maximum Value: 29.8 C on Aug 27 15:00

Maximum Daily Average: 21.6 C on Aug 1

Minimum Value: 3.7 C on Aug 4 03:00

Minimum Daily Average: 11.1 C on Aug 3

Maximum Diurnal Average: 20.9 C at hour 16

Minimum Diurnal Average: 8.8 C at hour 5

Monthly Average: 14.88 C

Percentiles: $P_1$ = 4.3 $P_{10}$ = 7.7 $Q_1$ = 10.5 Median = 14.3 $Q_3$ = 19.0 $P_{90}$ = 22.7 $P_{99}$ = 28.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

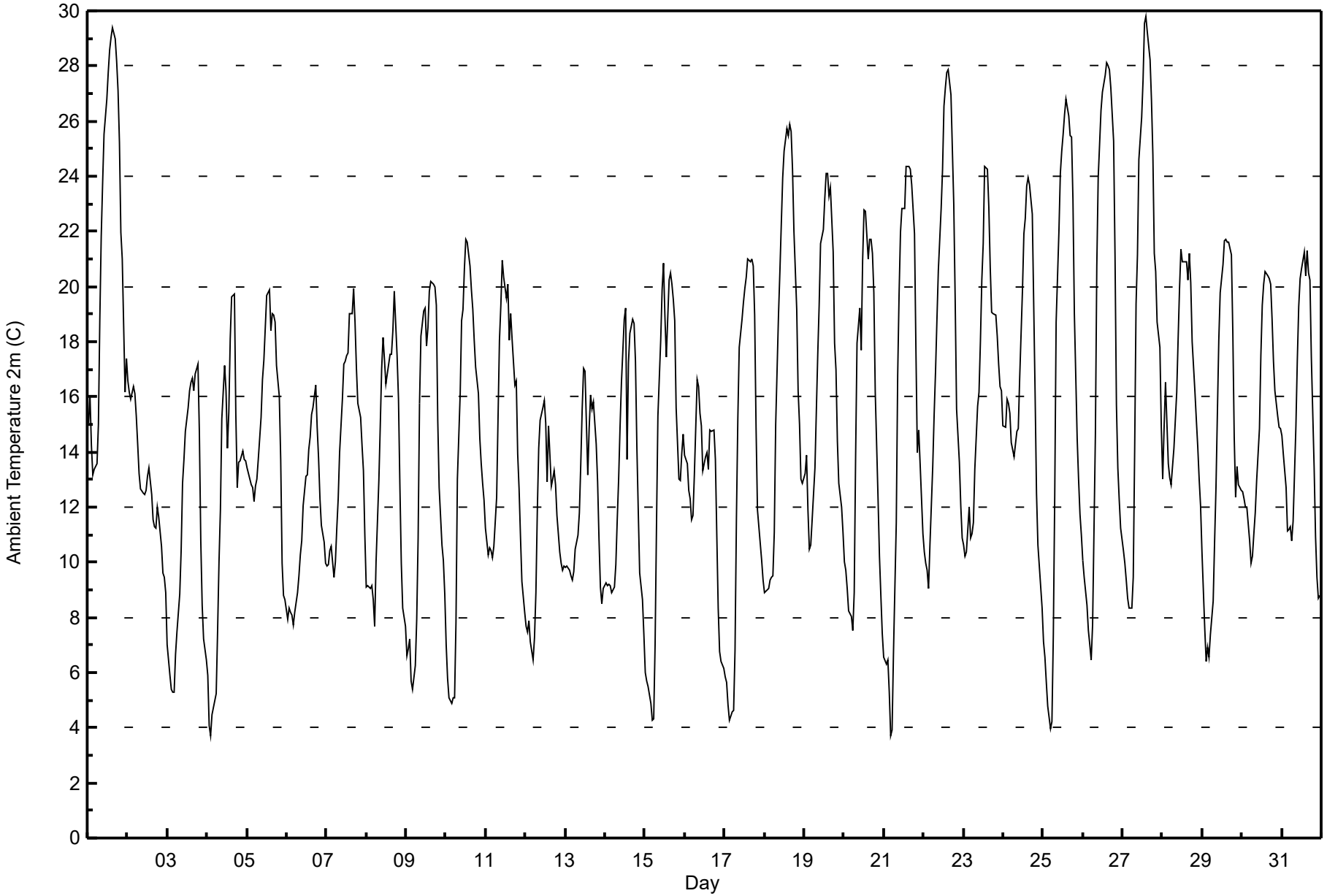
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.1 | 16.0 | 14.2 | 13.2 | 13.4 | 13.6 | 15.0 | 18.8 | 21.8 | 23.7 | 25.5 | 26.8 | 27.8 | 28.6 | 29.0 | 29.4 | 29.0 | 28.1 | 27.1 | 25.2 | 22.0 | 21.0 | 16.2 | 17.4 | 21.6 | 29.4 |
| 2-Aug | 16.6 | 16.1 | 15.9 | 16.4 | 16.1 | 15.3 | 14.3 | 13.2 | 12.7 | 12.5 | 12.5 | 12.6 | 13.1 | 13.4 | 12.5 | 11.5 | 11.3 | 11.3 | 12.0 | 11.6 | 10.6 | 9.6 | 9.4 | 8.9 | 12.9 | 16.6 |
| 3-Aug | 7.0 | 5.9 | 5.4 | 5.3 | 5.3 | 6.6 | 7.5 | 8.8 | 10.4 | 12.9 | 13.7 | 14.8 | 15.6 | 16.2 | 16.5 | 16.7 | 16.2 | 16.8 | 17.2 | 14.7 | 10.8 | 8.4 | 7.2 | 6.4 | 11.1 | 17.2 |
| 4-Aug | 5.9 | 4.1 | 3.7 | 4.5 | 4.7 | 5.3 | 7.5 | 10.0 | 11.9 | 15.2 | 17.1 | 16.2 | 14.1 | 15.4 | 18.1 | 19.6 | 19.7 | 15.3 | 12.7 | 13.6 | 13.7 | 14.0 | 13.7 | 13.7 | 12.1 | 19.7 |
| 5-Aug | 13.4 | 13.2 | 12.8 | 12.7 | 12.2 | 12.8 | 13.0 | 13.8 | 15.3 | 16.6 | 17.3 | 18.5 | 19.7 | 19.9 | 18.4 | 19.0 | 19.0 | 18.7 | 17.1 | 16.0 | 13.7 | 10.0 | 8.8 | 8.7 | 15.0 | 19.9 |
| 6-Aug | 7.9 | 8.3 | 8.2 | 8.1 | 7.7 | 8.2 | 8.9 | 9.5 | 10.3 | 10.8 | 12.0 | 13.1 | 13.2 | 14.1 | 14.6 | 15.4 | 15.6 | 16.4 | 14.9 | 13.8 | 12.3 | 11.3 | 10.7 | 9.9 | 11.5 | 16.4 |
| 7-Aug | 9.9 | 9.9 | 10.4 | 10.6 | 9.5 | 10.0 | 11.2 | 12.3 | 14.0 | 15.9 | 17.2 | 17.3 | 17.5 | 17.6 | 19.0 | 19.0 | 19.9 | 18.7 | 17.0 | 15.8 | 15.2 | 14.2 | 13.3 | 11.0 | 14.4 | 19.9 |
| 8-Aug | 9.1 | 9.1 | 9.0 | 9.2 | 8.7 | 7.7 | 10.0 | 13.0 | 14.9 | 17.0 | 18.2 | 17.4 | 16.4 | 17.2 | 17.5 | 17.6 | 18.4 | 19.8 | 17.5 | 15.9 | 12.7 | 10.0 | 8.3 | 7.7 | 13.4 | 19.8 |
| 9-Aug | 6.6 | 6.8 | 7.2 | 5.7 | 5.4 | 6.2 | 8.0 | 10.9 | 15.8 | 18.2 | 19.1 | 19.2 | 17.9 | 18.5 | 19.9 | 20.2 | 20.1 | 20.0 | 19.3 | 15.1 | 12.7 | 10.6 | 10.0 | 8.8 | 13.4 | 20.2 |
| 10-Aug | 7.0 | 5.8 | 5.1 | 4.9 | 5.1 | 5.1 | 7.8 | 13.0 | 16.1 | 18.7 | 19.2 | 20.6 | 21.7 | 21.6 | 20.8 | 19.9 | 19.2 | 18.1 | 17.1 | 16.1 | 14.5 | 13.6 | 12.9 | 12.3 | 14.0 | 21.7 |
| 11-Aug | 11.2 | 10.3 | 10.5 | 10.4 | 10.2 | 10.6 | 12.3 | 15.3 | 18.1 | 19.3 | 20.9 | 20.3 | 19.6 | 20.1 | 18.1 | 19.0 | 18.1 | 16.4 | 16.6 | 13.9 | 12.7 | 10.9 | 9.3 | 8.2 | 14.7 | 20.9 |
| 12-Aug | 7.7 | 7.5 | 7.9 | 7.1 | 6.5 | 7.3 | 8.9 | 11.9 | 14.1 | 15.1 | 15.6 | 15.9 | 15.0 | 12.9 | 14.9 | 12.7 | 13.0 | 13.3 | 12.8 | 11.7 | 10.4 | 10.0 | 9.7 | 9.9 | 11.3 | 15.9 |
| 13-Aug | 9.8 | 9.9 | 9.7 | 9.5 | 9.3 | 9.6 | 10.5 | 11.0 | 11.8 | 13.6 | 15.6 | 17.0 | 16.9 | 13.2 | 14.9 | 16.1 | 15.5 | 15.8 | 14.3 | 12.9 | 10.8 | 9.1 | 8.5 | 9.1 | 12.3 | 17.0 |
| 14-Aug | 9.3 | 9.2 | 9.2 | 9.2 | 8.9 | 9.1 | 9.9 | 11.5 | 13.0 | 14.9 | 16.5 | 18.8 | 19.2 | 13.7 | 17.2 | 18.3 | 18.8 | 18.7 | 17.3 | 14.2 | 11.9 | 9.6 | 8.7 | 7.4 | 13.1 | 19.2 |
| 15-Aug | 6.0 | 5.7 | 5.5 | 4.9 | 4.3 | 4.3 | 7.0 | 11.3 | 15.3 | 18.1 | 19.9 | 20.8 | 18.9 | 17.4 | 20.2 | 20.5 | 20.1 | 19.5 | 18.7 | 15.6 | 13.0 | 12.9 | 14.0 | 14.6 | 13.7 | 20.8 |
| 16-Aug | 13.9 | 13.6 | 12.6 | 12.3 | 11.6 | 11.7 | 13.2 | 16.6 | 16.4 | 15.4 | 15.0 | 13.3 | 13.8 | 14.0 | 13.4 | 14.8 | 14.8 | 14.8 | 13.7 | 11.0 | 8.3 | 6.8 | 6.4 | 6.2 | 12.6 | 16.6 |
| 17-Aug | 5.8 | 5.6 | 4.8 | 4.3 | 4.6 | 4.6 | 6.8 | 11.6 | 15.2 | 17.8 | 18.8 | 19.4 | 19.9 | 20.3 | 21.0 | 20.9 | 21.0 | 20.8 | 19.0 | 14.9 | 11.9 | 10.7 | 10.1 | 9.4 | 13.3 | 21.0 |
| 18-Aug | 8.9 | 8.9 | 9.0 | 9.4 | 9.4 | 9.5 | 11.1 | 15.0 | 19.0 | 20.5 | 22.3 | 23.9 | 24.9 | 25.7 | 25.5 | 25.9 | 25.6 | 24.2 | 22.0 | 19.2 | 16.2 | 15.0 | 13.0 | 12.9 | 17.4 | 25.9 |
| 19-Aug | 13.2 | 13.9 | 11.9 | 10.5 | 10.6 | 11.5 | 13.4 | 15.5 | 17.5 | 19.3 | 21.6 | 22.1 | 23.2 | 24.1 | 24.1 | 23.3 | 23.6 | 21.3 | 18.0 | 17.0 | 14.4 | 12.9 | 12.0 | 11.1 | 16.9 | 24.1 |
| 20-Aug | 10.0 | 9.7 | 9.1 | 8.2 | 8.0 | 7.5 | 8.9 | 13.8 | 17.9 | 19.2 | 17.7 | 20.9 | 22.8 | 22.7 | 21.0 | 21.7 | 21.7 | 21.2 | 19.8 | 16.2 | 12.3 | 10.2 | 8.8 | 7.4 | 14.9 | 22.8 |
| 21-Aug | 6.6 | 6.3 | 6.5 | 5.3 | 3.7 | 3.9 | 6.7 | 11.4 | 16.8 | 19.7 | 22.0 | 22.8 | 22.8 | 24.3 | 24.3 | 24.4 | 24.2 | 23.7 | 21.9 | 17.7 | 14.0 | 14.8 | 13.6 | 11.0 | 15.4 | 24.4 |
| 22-Aug | 10.4 | 10.0 | 9.7 | 9.1 | 10.6 | 13.5 | 15.3 | 16.9 | 18.8 | 20.6 | 22.8 | 24.3 | 26.5 | 27.2 | 27.7 | 27.9 | 27.0 | 25.0 | 23.0 | 19.5 | 15.6 | 13.6 | 12.1 | 10.9 | 18.2 | 27.9 |
| 23-Aug | 10.6 | 10.2 | 10.4 | 12.0 | 10.9 | 11.0 | 11.4 | 13.3 | 15.7 | 16.2 | 18.0 | 20.2 | 21.6 | 24.3 | 24.3 | 22.9 | 20.7 | 19.1 | 19.0 | 19.0 | 18.2 | 17.2 | 16.4 | 16.2 | 16.6 | 24.3 |
| 24-Aug | 14.9 | 14.9 | 15.9 | 15.7 | 15.4 | 14.4 | 13.8 | 14.3 | 14.7 | 14.9 | 16.7 | 19.9 | 21.9 | 22.5 | 23.6 | 24.0 | 23.7 | 22.6 | 19.4 | 16.1 | 12.5 | 10.6 | 9.1 | 8.4 | 16.7 | 24.0 |
| 25-Aug | 7.1 | 6.5 | 5.6 | 4.8 | 4.0 | 4.2 | 7.4 | 12.4 | 18.7 | 22.0 | 24.1 | 24.9 | 25.5 | 26.2 | 26.8 | 26.2 | 25.5 | 25.4 | 23.1 | 19.0 | 14.5 | 13.0 | 11.7 | 11.0 | 16.2 | 26.8 |
| 26-Aug | 10.1 | 9.4 | 8.4 | 7.5 | 7.0 | 6.5 | 7.7 | 14.6 | 20.7 | 23.9 | 25.2 | 26.4 | 27.1 | 27.7 | 28.1 | 28.0 | 27.9 | 27.2 | 25.3 | 21.1 | 15.7 | 13.4 | 12.2 | 11.2 | 18.0 | 28.1 |
| 27-Aug | 10.4 | 10.0 | 9.4 | 8.7 | 8.4 | 8.3 | 9.5 | 14.0 | 19.4 | 21.1 | 24.6 | 26.2 | 27.5 | 29.6 | 29.8 | 29.3 | 28.2 | 26.7 | 24.8 | 21.2 | 20.5 | 18.7 | 17.8 | 14.9 | 19.1 | 29.8 |
| 28-Aug | 13.0 | 14.9 | 16.5 | 13.6 | 13.1 | 12.8 | 13.5 | 14.1 | 16.2 | 18.1 | 19.9 | 21.4 | 20.9 | 20.9 | 20.9 | 20.3 | 21.2 | 20.1 | 18.0 | 16.2 | 15.1 | 14.2 | 13.0 | 12.1 | 16.7 | 21.4 |
| 29-Aug | 10.4 | 7.6 | 6.4 | 6.9 | 6.5 | 7.4 | 8.6 | 10.7 | 12.7 | 15.4 | 18.1 | 19.8 | 20.8 | 21.7 | 21.7 | 21.6 | 21.6 | 21.1 | 18.3 | 14.6 | 12.4 | 13.5 | 12.8 | 12.6 | 14.3 | 21.7 |
| 30-Aug | 12.5 | 12.3 | 12.0 | 12.0 | 10.8 | 10.0 | 10.2 | 11.0 | 11.8 | 13.0 | 14.9 | 17.5 | 19.3 | 20.1 | 20.5 | 20.4 | 20.3 | 20.1 | 18.8 | 17.3 | 16.2 | 15.3 | 14.9 | 14.9 | 15.2 | 20.5 |
| 31-Aug | 14.6 | 13.9 | 12.7 | 11.1 | 11.2 | 11.3 | 10.8 | 11.5 | 15.0 | 17.3 | 19.3 | 20.3 | 20.7 | 21.3 | 20.4 | 21.3 | 20.5 | 20.2 | 17.4 | 13.4 | 10.9 | 9.5 | 8.7 | 8.8 | 15.1 | 21.3 |
| | 10.2 | 9.9 | 9.5 | 9.1 | 8.8 | 9.0 | 10.3 | 12.9 | 15.5 | 17.3 | 18.7 | 19.8 | 20.2 | 20.4 | 20.8 | 20.9 | 20.7 | 20.0 | 18.5 | 16.1 | 13.7 | 12.4 | 11.4 | 10.7 | Diurnal Average | |
| | 16.6 | 16.1 | 16.5 | 16.4 | 16.1 | 15.3 | 15.3 | 18.8 | 21.8 | 23.9 | 25.5 | 26.8 | 27.8 | 29.6 | 29.8 | 29.4 | 29.0 | 28.1 | 27.1 | 25.2 | 22.0 | 21.0 | 17.8 | 17.4 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Conklin - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 166 | 22.31 | 22.31 |
| 10 - 20 | 430 | 57.80 | 80.11 |
| > 20 | 148 | 19.89 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Conklin - August 2026

Maximum Value: 100.0 % on Aug 2 12:00

Maximum Daily Average: 96.2 % on Aug 2

Minimum Value: 31.8 % on Aug 26 16:00

Minimum Daily Average: 66.7 % on Aug 26

Maximum Diurnal Average: 96.7 % at hour 5

Minimum Diurnal Average: 56.8 % at hour 16

Monthly Average: 77.72 %

Percentiles: $P_1$ = 35.3 $P_{10}$ = 47.4 $Q_1$ = 60.0 Median = 84.7 $Q_3$ = 96.4 $P_{90}$ = 99.6 $P_{99}$ = 100.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 95.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 87.0 | 85.5 | 91.3 | 95.0 | 95.3 | 95.6 | 93.5 | 83.9 | 73.7 | 65.8 | 56.5 | 50.2 | 45.7 | 40.7 | 39.6 | 42.4 | 46.1 | 50.7 | 54.5 | 63.8 | 79.5 | 77.2 | 97.0 | 98.1 | 71.2 | 98.1 |
| 2-Aug | 98.6 | 98.2 | 98.3 | 97.1 | 97.1 | 96.9 | 96.4 | 98.6 | 99.8 | 99.9 | 99.9 | 100.0 | 100.0 | 100.0 | 99.6 | 99.8 | 99.0 | 96.5 | 91.7 | 89.2 | 87.2 | 90.6 | 87.1 | 86.4 | 96.2 | 100.0 |
| 3-Aug | 89.6 | 91.7 | 93.7 | 93.4 | 96.8 | 94.0 | 90.3 | 85.4 | 80.3 | 71.4 | 67.5 | 59.8 | 56.4 | 53.2 | 52.0 | 50.4 | 51.6 | 52.3 | 52.6 | 63.1 | 87.6 | 96.6 | 98.7 | 98.7 | 76.1 | 98.7 |
| 4-Aug | 99.0 | 99.7 | 100.0 | 99.6 | 99.2 | 99.8 | 97.0 | 89.2 | 83.8 | 74.4 | 69.6 | 79.1 | 94.4 | 89.1 | 72.0 | 67.1 | 69.5 | 86.8 | 100.0 | 96.8 | 98.1 | 96.4 | 98.7 | 98.2 | 89.9 | 100.0 |
| 5-Aug | 98.6 | 98.4 | 98.4 | 98.0 | 98.0 | 96.6 | 95.5 | 92.5 | 85.9 | 76.1 | 67.7 | 62.5 | 57.9 | 57.3 | 61.1 | 57.4 | 57.6 | 61.2 | 69.9 | 75.7 | 95.0 | 98.7 | 99.9 | 100.0 | 81.7 | 100.0 |
| 6-Aug | 99.3 | 98.1 | 97.2 | 96.0 | 96.4 | 94.0 | 92.5 | 88.9 | 86.2 | 85.0 | 81.3 | 77.7 | 78.3 | 76.5 | 76.2 | 73.7 | 72.8 | 67.3 | 73.2 | 78.7 | 86.7 | 90.8 | 93.1 | 95.5 | 85.6 | 99.3 |
| 7-Aug | 96.1 | 95.9 | 93.8 | 92.3 | 96.9 | 95.9 | 90.5 | 87.3 | 81.2 | 73.2 | 64.4 | 62.3 | 59.9 | 56.9 | 53.6 | 52.6 | 50.8 | 53.6 | 61.3 | 67.6 | 68.0 | 77.2 | 83.1 | 93.0 | 75.3 | 96.9 |
| 8-Aug | 98.3 | 98.9 | 99.1 | 99.2 | 99.3 | 99.6 | 94.2 | 82.2 | 73.1 | 64.4 | 57.4 | 63.1 | 68.2 | 65.7 | 64.4 | 63.7 | 59.5 | 53.4 | 63.2 | 71.9 | 91.1 | 98.1 | 99.2 | 99.8 | 80.3 | 99.8 |
| 9-Aug | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | OR | 99.6 | 93.4 | 75.4 | 63.0 | 57.9 | 56.1 | 65.2 | 59.8 | 53.1 | 51.1 | 52.7 | 50.3 | 51.4 | 77.6 | 91.7 | 97.2 | 97.6 | 98.5 | 77.9 | 100.0 |
| 10-Aug | 99.4 | 100.0 | 100.0 | OR | OR | OR | OR | 84.4 | 69.7 | 54.4 | 49.7 | 45.5 | 43.3 | 44.0 | 47.8 | 54.3 | 58.5 | 66.2 | 71.5 | 76.6 | 86.1 | 90.7 | 94.1 | 96.3 | 71.6 | 100.0 |
| 11-Aug | 97.4 | 97.9 | 96.4 | 95.2 | 98.0 | 98.1 | 90.5 | 68.6 | 57.7 | 49.6 | 43.7 | 49.6 | 52.6 | 51.4 | 64.8 | 60.0 | 58.8 | 66.9 | 64.1 | 83.6 | 93.6 | 98.1 | 99.7 | 100.0 | 76.5 | 100.0 |
| 12-Aug | 100.0 | 100.0 | OR | OR | OR | OR | 100.0 | 90.7 | 75.9 | 71.7 | 66.9 | 63.5 | 69.7 | 92.6 | 82.7 | 90.3 | 91.1 | 87.5 | 88.7 | 95.1 | 100.0 | 100.0 | 100.0 | 100.0 | 88.3 | 100.0 |
| 13-Aug | OR | OR | OR | OR | OR | OR | OR | 99.8 | 96.6 | 88.1 | 76.4 | 67.5 | 67.2 | 91.6 | 86.9 | 76.0 | 78.0 | 73.2 | 84.7 | 93.7 | 98.9 | 99.9 | 100.0 | OR | -- | 100.0 |
| 14-Aug | OR | 100.0 | OR | 100.0 | OR | OR | OR | 98.5 | 91.2 | 82.0 | 71.0 | 55.2 | 55.1 | 90.6 | 74.9 | 64.5 | 54.2 | 54.5 | 62.8 | 84.5 | 96.4 | 99.7 | 100.0 | 100.0 | 80.8 | 100.0 |
| 15-Aug | OR | OR | OR | OR | OR | OR | OR | 88.7 | 74.1 | 62.1 | 55.0 | 48.8 | 61.3 | 78.6 | 64.9 | 57.4 | 55.9 | 56.5 | 57.0 | 78.3 | 90.4 | 87.3 | 82.5 | 76.9 | -- | 90.4 |
| 16-Aug | 78.5 | 79.5 | 83.3 | 84.9 | 88.3 | 87.8 | 82.7 | 70.0 | 72.4 | 76.2 | 80.5 | 96.0 | 94.8 | 92.9 | 95.2 | 87.8 | 82.2 | 79.2 | 79.7 | 92.5 | 98.6 | 99.7 | 99.1 | 97.9 | 86.7 | 99.7 |
| 17-Aug | 97.3 | 99.5 | 99.2 | 100.0 | 100.0 | 100.0 | 100.0 | 87.2 | 72.1 | 61.2 | 54.0 | 47.5 | 46.5 | 42.1 | 39.4 | 38.8 | 37.4 | 40.3 | 48.8 | 72.3 | 86.1 | 87.4 | 88.0 | 90.3 | 72.3 | 100.0 |
| 18-Aug | 90.5 | 89.8 | 88.9 | 87.3 | 89.1 | 91.2 | 89.5 | 80.1 | 68.1 | 62.8 | 59.8 | 54.6 | 49.7 | 44.1 | 42.7 | 41.6 | 42.2 | 41.8 | 48.8 | 61.9 | 74.3 | 79.1 | 89.0 | 90.8 | 69.1 | 91.2 |
| 19-Aug | 88.5 | 86.4 | 95.2 | 98.7 | 98.1 | 96.4 | 93.1 | 84.0 | 76.9 | 71.0 | 62.7 | 62.0 | 53.8 | 46.0 | 47.6 | 51.0 | 51.6 | 63.5 | 77.6 | 77.9 | 88.6 | 93.3 | 95.4 | 97.0 | 77.3 | 98.7 |
| 20-Aug | 98.6 | 98.9 | 99.6 | 100.0 | 100.0 | 100.0 | 100.0 | 86.8 | 73.0 | 67.1 | 79.2 | 60.9 | 52.8 | 48.8 | 52.2 | 53.0 | 48.6 | 53.5 | 56.5 | 75.0 | 93.1 | 98.2 | 99.4 | 100.0 | 79.0 | 100.0 |
| 21-Aug | 100.0 | 100.0 | 99.7 | 100.0 | 100.0 | OR | OR | 88.3 | 72.4 | 58.2 | 48.2 | 41.6 | 43.4 | 38.4 | 38.0 | 38.9 | 39.0 | 40.4 | 47.6 | 70.4 | 88.1 | 75.1 | 77.9 | 89.1 | 67.9 | 100.0 |
| 22-Aug | 90.8 | 93.8 | 94.8 | 97.2 | 88.5 | 72.5 | 66.8 | 62.6 | 59.0 | 55.5 | 51.9 | 51.0 | 46.8 | 44.8 | 43.4 | 43.2 | 46.3 | 50.7 | 57.7 | 74.5 | 92.7 | 97.0 | 99.2 | 99.9 | 70.0 | 99.9 |
| 23-Aug | 99.9 | 99.4 | 100.0 | 99.7 | 100.0 | 100.0 | 100.0 | 99.9 | 97.4 | 96.4 | 93.7 | 86.7 | 80.7 | 70.6 | 67.9 | 75.5 | 82.5 | 93.7 | 96.9 | 97.5 | 96.0 | 94.1 | 94.8 | 92.0 | 92.3 | 100.0 |
| 24-Aug | 95.2 | 96.6 | 91.3 | 91.0 | 93.7 | 97.0 | 97.0 | 96.7 | 90.9 | 88.6 | 79.2 | 61.5 | 42.3 | 40.4 | 38.0 | 38.1 | 38.8 | 40.9 | 54.6 | 73.5 | 91.3 | 96.4 | 98.8 | 98.1 | 76.2 | 98.8 |
| 25-Aug | 99.6 | 100.0 | 100.0 | 100.0 | OR | OR | 97.0 | 82.3 | 59.3 | 46.9 | 41.5 | 39.0 | 36.6 | 36.0 | 35.3 | 37.7 | 41.3 | 39.6 | 47.1 | 66.2 | 88.2 | 91.3 | 94.9 | 95.5 | 67.1 | 100.0 |
| 26-Aug | 96.7 | 97.0 | 99.1 | 99.9 | 100.0 | 100.0 | OR | 84.7 | 60.2 | 46.7 | 41.1 | 38.1 | 36.2 | 34.7 | 33.5 | 31.8 | 33.9 | 35.5 | 40.9 | 57.9 | 83.4 | 90.4 | 95.0 | 97.1 | 66.7 | 100.0 |
| 27-Aug | 98.2 | 98.2 | 97.9 | 96.8 | 97.3 | 96.7 | 95.2 | 84.1 | 60.6 | 54.7 | 45.2 | 42.4 | 40.6 | 34.0 | 33.1 | 35.1 | 36.7 | 39.5 | 47.2 | 62.7 | 67.7 | 75.6 | 76.0 | 88.8 | 66.8 | 98.2 |
| 28-Aug | 95.1 | 87.0 | 79.3 | 94.9 | 93.8 | 92.7 | 90.2 | 88.4 | 77.6 | 67.1 | 58.0 | 49.1 | 51.4 | 51.8 | 50.9 | 58.0 | 49.5 | 50.8 | 59.8 | 69.0 | 69.5 | 72.5 | 77.0 | 82.5 | 71.5 | 95.1 |
| 29-Aug | 89.7 | 96.1 | 98.3 | 97.7 | 97.2 | 96.8 | 94.0 | 85.2 | 77.1 | 65.8 | 53.8 | 50.6 | 48.2 | 46.1 | 46.5 | 48.4 | 47.4 | 49.2 | 64.9 | 85.0 | 91.7 | 85.6 | 88.6 | 89.7 | 74.7 | 98.3 |
| 30-Aug | 93.2 | 98.7 | 100.0 | 100.0 | 100.0 | 100.0 | OR | OR | OR | 99.1 | 90.4 | 80.3 | 74.8 | 69.2 | 68.2 | 70.9 | 76.3 | 78.0 | 86.1 | 93.8 | 97.8 | 98.8 | 98.8 | 93.1 | 88.9 | 100.0 |
| 31-Aug | 87.5 | 91.6 | 96.4 | 96.5 | 94.9 | 92.8 | 94.1 | 89.7 | 76.5 | 68.2 | 61.1 | 56.3 | 52.6 | 50.5 | 53.3 | 49.8 | 53.2 | 52.0 | 62.2 | 85.1 | 93.8 | 95.5 | 95.6 | 94.1 | 76.8 | 96.5 |
| | 95.1 | 95.7 | 96.0 | 96.7 | 96.7 | 95.4 | 93.3 | 86.7 | 76.6 | 69.9 | 64.0 | 60.0 | 58.9 | 59.3 | 57.4 | 56.8 | 56.9 | 58.9 | 65.3 | 77.8 | 88.7 | 91.2 | 93.5 | 94.6 | Diurnal Average | |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.9 | 99.8 | 99.9 | 99.9 | 100.0 | 100.0 | 100.0 | 99.6 | 99.8 | 99.0 | 96.5 | 100.0 | 97.5 | 100.0 | 100.0 | 100.0 | 100.0 | Diurnal Maximum | |

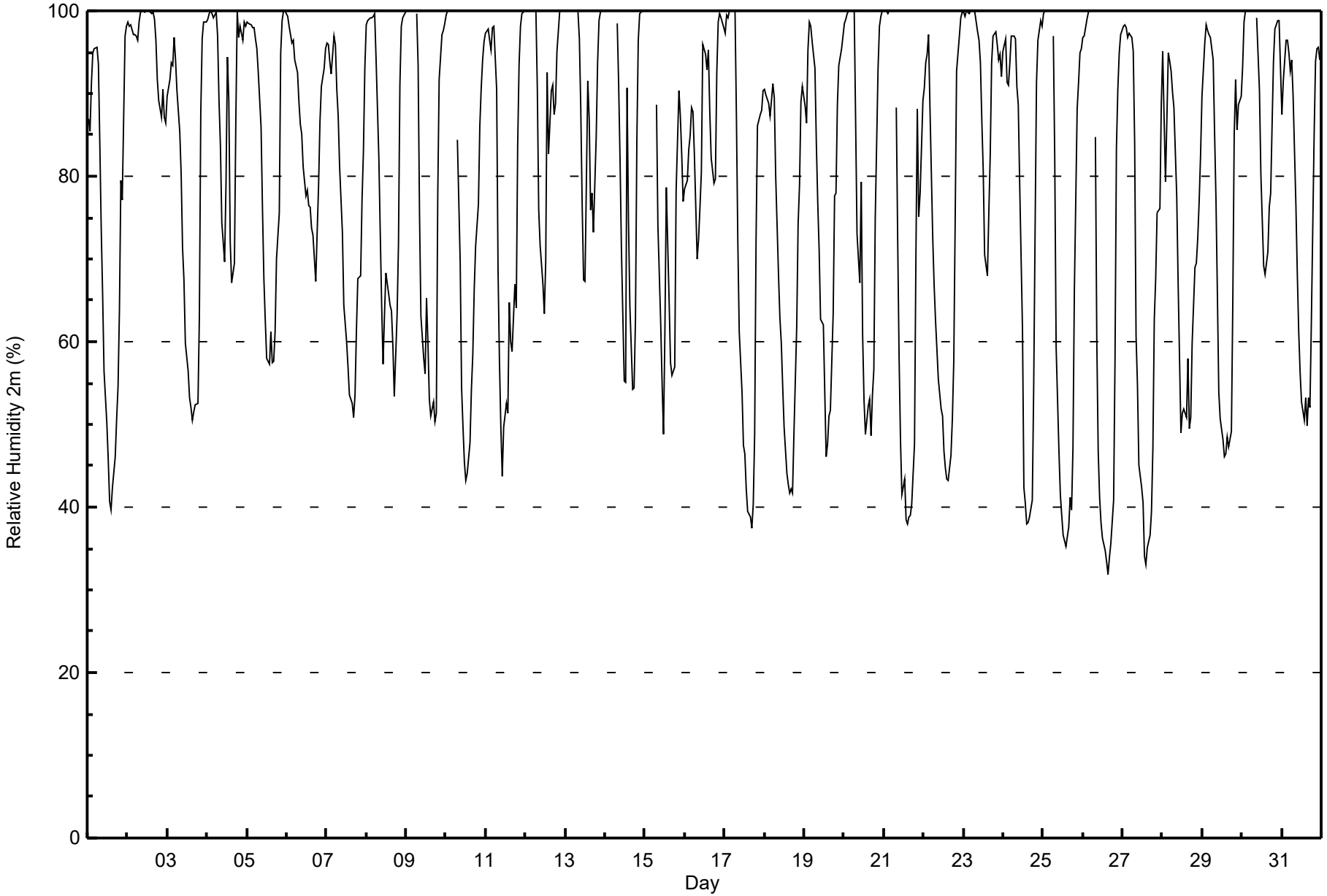
OR - Out of Range

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Conklin - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Conklin - August 2026

Maximum Speed: 16 km/h on Aug 1 16:00

Maximum Daily Speed Average: 7.5 km/h on Aug 28

Minimum Speed Value: 0 km/h on Aug 30 06:00

Minimum Daily Speed Average: 0.9 km/h on Aug 23

Maximum Diurnal Speed Average: 2.9 km/h at hour 12

Minimum Diurnal Speed Average: 0.4 km/h at hour 5

Monthly Average Velocity: 1.3 km/h 293.3 deg

Percentiles: $P_1 = 0$ $P_{10} = 1$ $Q_1 = 2$ Median = 4 $Q_3 = 6$ $P_{90} = 9$ $P_{99} = 15$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Aug | SSE4 | SSE4 | E3 | SSW0 | ESE1 | NE2 | NE2 | E4 | SE9 | SSE12 | SSE13 | SSE14 | SSE14 | SE16 | SE16 | SSE16 | SSE16 | SSE12 | SSE10 | E3 | ENE2 | WSW4 | NNW5 | NNW9 | SE6.2 | SSE16 |
| 2-Aug | N4 | SW2 | W2 | WNW4 | NNW5 | NW7 | WNW7 | WNW7 | NW6 | NW6 | NW7 | N5 | NNW6 | NNW11 | NNW13 | NNW12 | NNW9 | NNW9 | NNW8 | NNW7 | NNW6 | NNW5 | NNW6 | NNW6 | NNW6.3 | NNW13 |
| 3-Aug | NNW5 | N3 | N3 | N3 | N3 | NNW4 | NNW5 | NNW6 | NNW6 | NNW7 | NNW11 | NNW11 | NNW9 | NNW9 | NNW9 | NNW9 | NNW9 | NNW6 | NNW4 | NW3 | N2 | N2 | E1 | NNE2 | NNW5.4 | NNW11 |
| 4-Aug | NE2 | N2 | NNE1 | SSE3 | ESE3 | ENE2 | S3 | SW2 | SW6 | SW5 | WNW7 | WNW6 | SW10 | SW9 | SW12 | WSW9 | SW8 | W4 | E0 | W6 | W4 | NW5 | NNW5 | NW5 | WSW3.2 | SW12 |
| 5-Aug | NNW4 | NNW4 | NNW3 | NNW4 | NW5 | NW6 | NW6 | NW6 | NNW7 | NW8 | NW9 | NNW9 | NW9 | NW10 | NW9 | NNW8 | NNW6 | WNW5 | WSW9 | W5 | NW5 | NNW12 | NNW4 | NNW7 | NW6.3 | NNW12 |
| 6-Aug | NNW7 | NNW7 | NNW7 | NNW8 | NNW8 | NNW9 | NNW8 | NNW9 | NNW9 | NNW9 | NNW10 | NNW8 | NNW8 | NW8 | NNW8 | NW7 | WNW6 | NW6 | NW5 | NW6 | NW4 | NNW4 | NNW5 | N3 | NNW7.0 | NNW10 |
| 7-Aug | NNW4 | NNW5 | NNW4 | NNW5 | N3 | NNW3 | NNW4 | NNW4 | NNW4 | NNW6 | NNW8 | NNW7 | NW5 | NW6 | NNW6 | WNW6 | NW6 | NW5 | WNW4 | WNW4 | WNW4 | NNW4 | N3 | N2 | NNW4.5 | NNW8 |
| 8-Aug | NNE2 | ESE0 | N3 | NNW2 | NNW3 | N2 | NNE2 | N2 | NNE4 | N4 | NE4 | NNW4 | NW3 | NNE4 | N3 | N4 | N3 | N3 | N2 | N2 | NNE2 | N2 | NNE2 | NE1 | N2.3 | NNW4 |
| 9-Aug | NNE2 | NNW1 | NNE2 | NNE2 | NNE1 | NNW0 | NNE0 | N2 | NNE2 | N3 | N5 | NNE4 | N4 | NE3 | N2 | NNW3 | N3 | NE7 | NE4 | N1 | N2 | N2 | NNE1 | NNE2 | NNE2.4 | NE7 |
| 10-Aug | N1 | NNE1 | NNE1 | NNE1 | N2 | NNE1 | NNE1 | NNE2 | E3 | ESE6 | ESE3 | ESE3 | ENE3 | NNE5 | N4 | N5 | N6 | N4 | N2 | NW2 | N2 | N2 | N1 | N2 | NNE1.9 | NNW6 |
| 11-Aug | N2 | N2 | N2 | N2 | N2 | NNE2 | N2 | N3 | N3 | N6 | N3 | NNW5 | NE4 | N5 | N4 | E3 | NNW8 | NNW3 | N2 | N2 | N1 | N1 | N1 | N2 | N2.7 | NNW8 |
| 12-Aug | N1 | N2 | NNE2 | N1 | N2 | NNE1 | N1 | N3 | N4 | NNW6 | NNW8 | NNW8 | NNW7 | N4 | NNW4 | N5 | N5 | N5 | N4 | N3 | N2 | N3 | N2 | N3 | N3.6 | NNW8 |
| 13-Aug | N3 | N3 | N3 | N2 | N2 | N2 | N4 | NNE5 | NNE7 | NNE6 | NE6 | NE8 | NNE8 | NE7 | NNE5 | E6 | NE2 | NNE5 | N3 | NNE2 | N2 | N1 | N2 | N2 | NNE3.7 | NE8 |
| 14-Aug | N2 | N1 | N2 | NNE2 | N2 | N2 | N2 | N2 | N3 | N2 | E2 | E2 | NNE4 | NNE7 | ESE6 | ESE11 | ESE6 | S3 | WSW5 | NNW5 | WNW1 | N1 | NE1 | NE1 | NE1.4 | ESE11 |
| 15-Aug | NNE2 | ENE0 | SW1 | NE2 | N1 | NW0 | WSW1 | SSE3 | SSW4 | WSW5 | NNW5 | W5 | NNW3 | N3 | NW3 | W4 | WNW6 | WSW5 | WNW4 | NNE2 | S4 | S5 | SSW6 | SW9 | WSW1.8 | SW9 |
| 16-Aug | SW10 | SW11 | SW8 | WSW8 | SW7 | SW7 | SW7 | W4 | NNW6 | NNW5 | NNW6 | NNW5 | NNW4 | NNW6 | N6 | NNW4 | N7 | N4 | N3 | N1 | NNE1 | NE2 | E1 | ESE3 | WNW2.7 | SW11 |
| 17-Aug | E2 | NE2 | NE2 | ENE3 | NE3 | ENE3 | NE2 | ENE3 | NNW4 | NNW6 | NW6 | WNW5 | C | WSW7 | WSW4 | W5 | W5 | WNW2 | WSW3 | SSW3 | S4 | SSW6 | SSW6 | S5 | W1.1 | WSW7 |
| 18-Aug | S5 | S5 | S5 | S6 | S6 | SE5 | SE4 | S5 | S7 | SSW9 | WSW7 | WSW5 | SW8 | WSW8 | WSW8 | WSW8 | WSW7 | WSW7 | WNW5 | WNW3 | WSW3 | W0 | SE3 | SSE3 | SW4.3 | SSW9 |
| 19-Aug | SSE4 | SSE3 | ESE1 | SSW1 | SSW3 | S2 | S1 | SSW4 | W3 | WNW4 | WNW5 | WNW6 | NW8 | NW7 | NW7 | WNW6 | WNW6 | NNW6 | NW4 | NW2 | E1 | N2 | ESE1 | S2 | WNW2.2 | NW8 |
| 20-Aug | UO | SSE2 | ESE0 | S2 | SSE2 | SE2 | SE2 | SSE2 | NNW3 | NW5 | NNW2 | W4 | WNW6 | NW6 | NW5 | NW6 | N9 | NNW5 | N6 | E0 | SSW0 | UO | W1 | W1 | NW1.9 | N9 |
| 21-Aug | S1 | S2 | SSE2 | SE2 | N1 | S2 | S3 | SSE4 | SE3 | SW8 | WSW6 | WSW5 | SW5 | SW7 | SSW9 | SW9 | SW8 | SSW8 | SSW5 | S1 | S2 | SSW5 | SW4 | SW2 | SSW3.8 | SSW9 |
| 22-Aug | ESE1 | E1 | ESE1 | NNE0 | S4 | S7 | S8 | S11 | SSW10 | S11 | S9 | S9 | S7 | S8 | S10 | S10 | S11 | S12 | SSE9 | SSE2 | N1 | N1 | N1 | NW2 | S5.6 | S12 |
| 23-Aug | SSE1 | SE1 | SSE3 | S2 | WNW1 | SSE2 | SE3 | SSE2 | NNW2 | NW3 | N2 | NNW4 | N3 | N3 | SE5 | SW5 | WSW4 | WNW2 | NNW3 | NW4 | NW4 | NNW4 | NNW3 | NW5 | NW0.9 | SE5 |
| 24-Aug | NNW2 | NNW1 | SSW1 | SW3 | SW7 | WNW2 | NNW5 | NW4 | NW5 | NW3 | NW4 | NNW8 | NNW13 | NNW14 | NNW15 | NW12 | NNW13 | NNW9 | NW4 | S1 | WSW1 | SSE1 | SSE1 | SSE2 | NW4.4 | NNW15 |
| 25-Aug | SSE2 | S2 | SE1 | E0 | N1 | SSE1 | S2 | SE2 | NW1 | NW5 | NW5 | NNW6 | NW5 | WNW4 | WNW5 | NW5 | NNW5 | N4 | ENE4 | ESE1 | S1 | SSE3 | SSE3 | SSE3 | NW1.0 | NNW6 |
| 26-Aug | SE3 | SE3 | SE2 | SE1 | ESE1 | SSE1 | ESE1 | SE4 | SSW6 | S9 | S12 | SSE11 | S11 | S11 | SSE11 | SSW10 | S10 | SSE11 | S9 | SSE4 | NNW1 | NNW2 | E0 | UO | S5.4 | S12 |
| 27-Aug | UO | NNW0 | SSE2 | SSE4 | SSE4 | SSE4 | SSE3 | SE4 | SE7 | SE6 | SSE8 | WSW7 | NNE2 | SE10 | SSE14 | SSE16 | SSE16 | SSE15 | SSE8 | SE4 | ESE7 | SE4 | SE4 | NE1 | SSE5.9 | SSE16 |
| 28-Aug | NNW2 | WSW7 | WNW10 | NW2 | S6 | SSW6 | SSW4 | WSW7 | W8 | WSW12 | WSW11 | WSW13 | WSW13 | WSW13 | WSW14 | WSW9 | WSW11 | WSW9 | WSW5 | SW5 | SW8 | SW9 | SW7 | WSW4 | WSW7.5 | WSW14 |
| 29-Aug | SW3 | SSW4 | S3 | SSW6 | SSW5 | SW7 | SW7 | SW8 | SW9 | SW8 | W8 | WSW8 | SW10 | SW11 | SSW10 | SSW11 | SW9 | SSW6 | SW1 | SSE1 | SSE3 | SSW4 | SE3 | SE3 | SW5.7 | SSW11 |
| 30-Aug | SE1 | N1 | NNW3 | SW1 | NW1 | N0 | NNW3 | NNW3 | NNW3 | ENE1 | SW0 | N2 | N1 | ESE5 | NE2 | ESE5 | ESE2 | ESE1 | N2 | NNW1 | NNW1 | NW1 | NNW2 | NW4 | N0.9 | ESE5 |
| 31-Aug | N3 | WNW1 | NW2 | NNW1 | NW2 | NW3 | NW3 | NW3 | NW6 | NW5 | NW6 | NW7 | WNW6 | NW8 | NW5 | NW6 | NNW5 | NW4 | W3 | WSW2 | SE2 | SSE3 | SSE3 | SSE4 | NW2.9 | NW8 |
| Diurnal Average | NNW0.6 | W0.5 | NW0.7 | WNW0.5 | W0.4 | WNW0.6 | WNW0.7 | WNW0.9 | WNW1.5 | WNW2.2 | WNW2.6 | WNW2.9 | WNW2.5 | WNW2.4 | W2.1 | W2.0 | WNW2.1 | W1.5 | WNW1.1 | NW1.1 | WNW0.7 | NW1.0 | NW0.4 | NW0.9 | | |
| Diurnal Maximum | SW10 | SW11 | WNW10 | NNW8 | NNW8 | NNW9 | S8 | S11 | SSW10 | SSE12 | SSE13 | SSE14 | SSE14 | SE16 | SE16 | SSE16 | SSE16 | SSE15 | SSE10 | NNW7 | SW8 | NNW12 | SW7 | SW9 | | |

C - Calibration UO - Unstable Operation

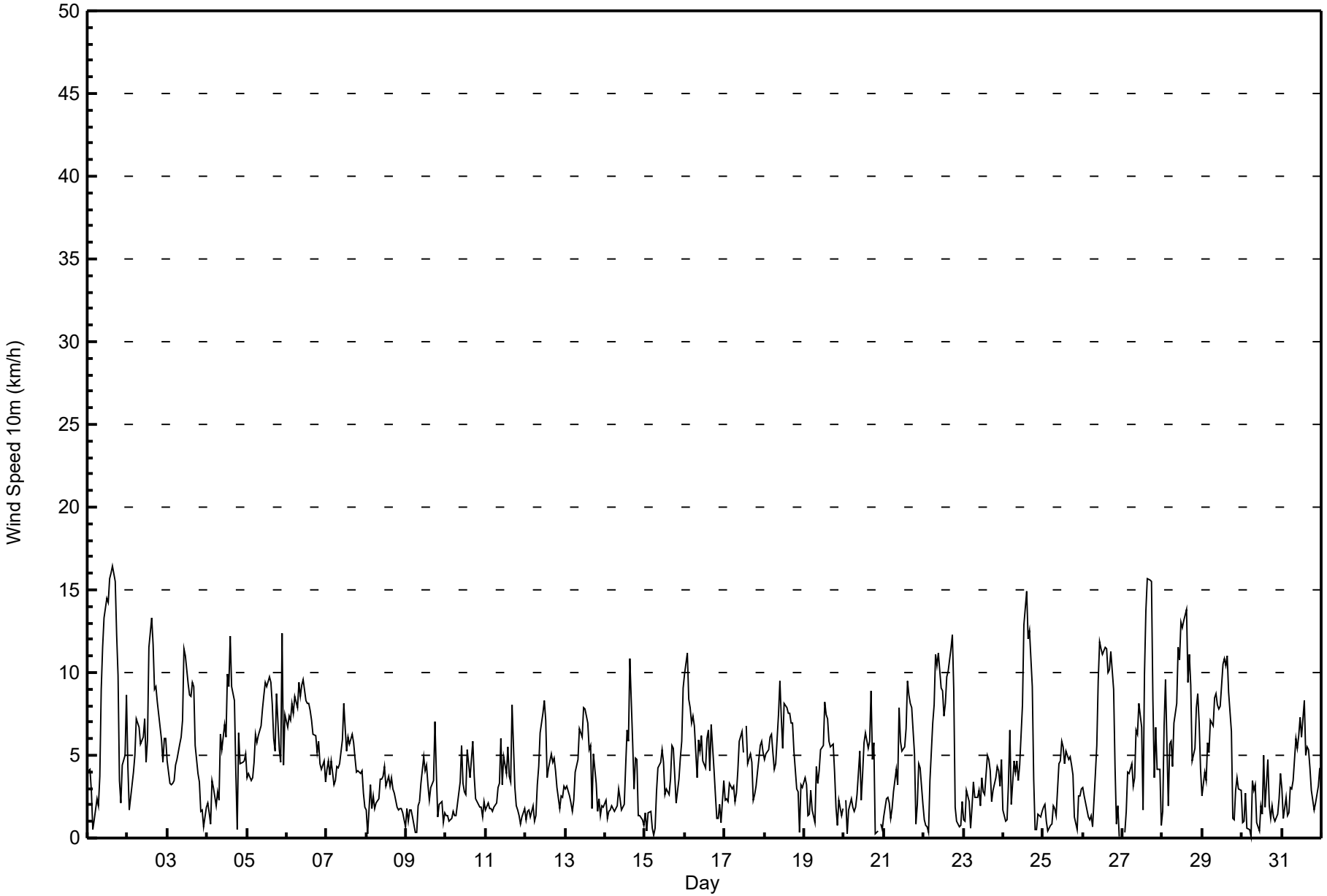
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Conklin - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 496 | 67.12 | 67.12 |
| 6 - 11 | 214 | 28.96 | 96.08 |
| 12 - 19 | 29 | 3.92 | 100.00 |
| 20 - 28 | 0 | 0.00 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 739

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Conklin - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 120 | 38 | 18 | 10 | 16 | 18 | 25 | 37 | 26 | 15 | 14 | 15 | 15 | 21 | 40 | 68 | 496 |
| 6 - 11 | 5 | 4 | 4 | 0 | 1 | 5 | 4 | 7 | 19 | 16 | 27 | 19 | 3 | 13 | 29 | 58 | 214 |
| 12 - 19 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 2 | 0 | 1 | 5 | 0 | 0 | 1 | 7 | 29 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 125 | 42 | 22 | 10 | 17 | 23 | 31 | 55 | 47 | 31 | 42 | 39 | 18 | 34 | 70 | 133 | 739 |

Total Number of Valid Hours: 739

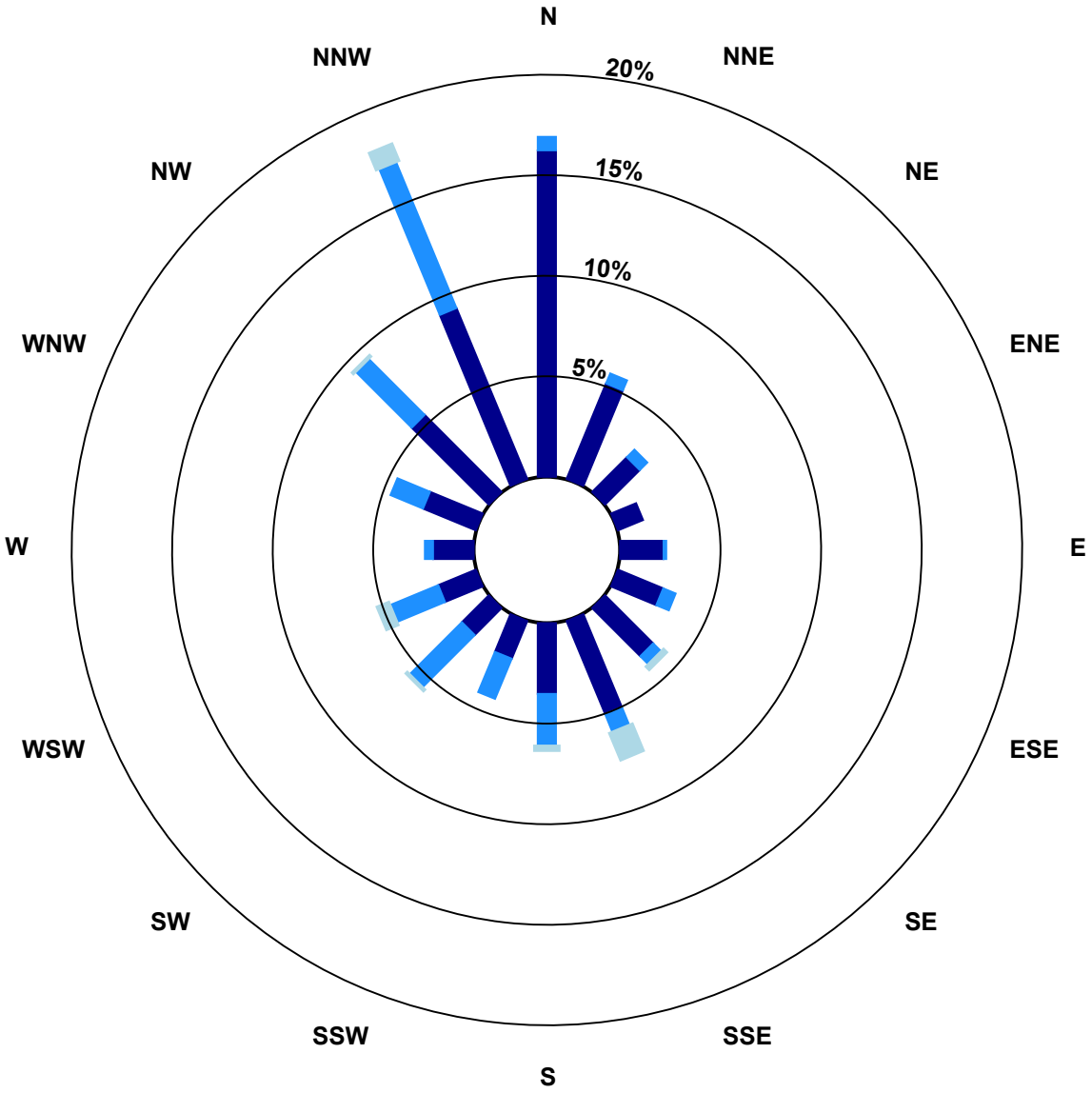
Total Number of Hours: 744

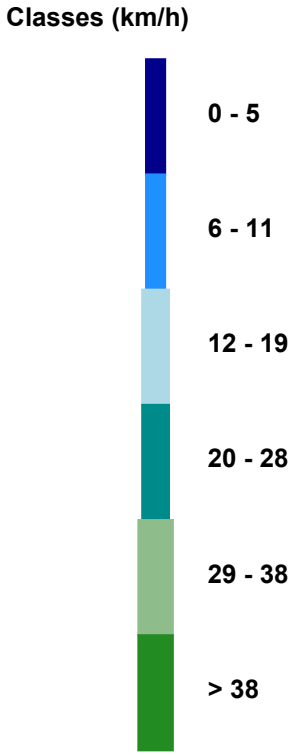
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Conklin




Total Number of Valid Hours: 739

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Conklin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Aug 1 22:00

Minimum Value: 1 km/h on Aug 8 07:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 2 | 1 | 8 | 3 | 4 | 8 |
| 2-Aug | 3 | 3 | 2 | 2 | 2 | 4 | 3 | 4 | 3 | 3 | 4 | 2 | 2 | 6 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 6 |
| 3-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 5 |
| 4-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 4 | 3 | 3 | 2 | 3 | 2 | 3 | 4 |
| 5-Aug | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 6 | 3 | 4 | 6 |
| 6-Aug | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 4 |
| 7-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 3 | 1 | 1 | 3 |
| 8-Aug | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 9-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 3 |
| 10-Aug | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 3 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 3 | 5 | 1 | 5 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 5 |
| 12-Aug | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 2 | 3 | 4 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 4 |
| 13-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 1 | 1 | 2 | 2 | 2 | 1 | 3 |
| 14-Aug | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 4 | 2 | 1 | 1 | 2 | 4 |
| 15-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 16-Aug | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | C | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 18-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 19-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 20-Aug | UO | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 1 | 2 | UO | 3 | 1 | 4 |
| 21-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 22-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 4 |
| 23-Aug | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 1 | 2 | 3 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 3 |
| 24-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 2 | 1 | 2 | 2 | 1 | 2 | 6 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 3 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | UO | 4 |
| 27-Aug | UO | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 4 | 4 | 4 | 5 | 6 | 3 | 2 | 2 | 1 | 2 | 1 | 6 |
| 28-Aug | 1 | 6 | 5 | 2 | 3 | 3 | 2 | 3 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 2 | 2 | 3 | 2 | 2 | 2 | 6 |
| 29-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 4 |
| 30-Aug | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 2 |
| 31-Aug | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 2 | 3 | 4 | 3 | 4 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 4 |
| | 3 | 6 | 5 | 4 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | 4 | 4 | 4 | 8 | 3 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration UO - Unstable Operation

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Conklin - August 2026

Direction of Maximum Speed: 154 deg on Aug 1 16:00
Direction of Maximum Daily Speed Average: 242.7 deg on Aug 28

Direction of Minimum Speed: 10 deg on Aug 30 06:00

Direction of Minimum Daily Speed Average: 0.9 deg on Aug 23

Monthly Average Direction: 293.3 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 166 | 151 | 95 | 196 | 115 | 39 | 42 | 94 | 138 | 147 | 151 | 152 | 147 | 140 | 144 | 154 | 167 | 160 | 155 | 101 | 63 | 238 | 346 | 338 | 146.2 |
| 2-Aug | 359 | 218 | 268 | 297 | 342 | 320 | 287 | 292 | 309 | 318 | 310 | 349 | 344 | 342 | 340 | 334 | 333 | 332 | 336 | 337 | 337 | 345 | 339 | 338 | 328.4 |
| 3-Aug | 344 | 350 | 352 | 349 | 352 | 344 | 342 | 339 | 334 | 334 | 339 | 339 | 335 | 332 | 334 | 341 | 344 | 339 | 334 | 321 | 10 | 10 | 83 | 30 | 340.6 |
| 4-Aug | 38 | 6 | 33 | 149 | 110 | 58 | 171 | 224 | 219 | 236 | 283 | 295 | 227 | 234 | 225 | 247 | 227 | 272 | 80 | 262 | 272 | 325 | 341 | 318 | 250.5 |
| 5-Aug | 347 | 339 | 346 | 340 | 319 | 320 | 312 | 325 | 331 | 324 | 322 | 330 | 322 | 325 | 325 | 331 | 331 | 289 | 256 | 278 | 312 | 341 | 345 | 336 | 322.9 |
| 6-Aug | 335 | 334 | 333 | 332 | 333 | 333 | 334 | 330 | 335 | 333 | 336 | 334 | 332 | 325 | 330 | 315 | 298 | 313 | 323 | 310 | 316 | 334 | 339 | 351 | 329.0 |
| 7-Aug | 344 | 342 | 346 | 342 | 355 | 344 | 329 | 339 | 327 | 332 | 331 | 330 | 324 | 311 | 327 | 301 | 322 | 319 | 300 | 300 | 301 | 348 | 1 | 4 | 328.4 |
| 8-Aug | 16 | 106 | 356 | 341 | 333 | 354 | 20 | 5 | 12 | 9 | 44 | 328 | 320 | 16 | 0 | 351 | 350 | 360 | 355 | 7 | 12 | 4 | 13 | 47 | 0.4 |
| 9-Aug | 22 | 340 | 14 | 18 | 32 | 340 | 23 | 5 | 17 | 4 | 358 | 16 | 3 | 44 | 10 | 347 | 8 | 36 | 45 | 3 | 360 | 354 | 18 | 30 | 14.6 |
| 10-Aug | 359 | 15 | 25 | 12 | 359 | 14 | 22 | 24 | 81 | 104 | 120 | 108 | 71 | 19 | 9 | 354 | 349 | 353 | 354 | 315 | 3 | 3 | 9 | 1 | 23.8 |
| 11-Aug | 1 | 0 | 3 | 6 | 6 | 33 | 8 | 354 | 10 | 353 | 8 | 345 | 40 | 353 | 351 | 96 | 341 | 341 | 351 | 360 | 5 | 5 | 4 | 360 | 1.3 |
| 12-Aug | 11 | 7 | 16 | 3 | 10 | 18 | 2 | 351 | 353 | 347 | 343 | 345 | 348 | 7 | 343 | 358 | 352 | 9 | 358 | 2 | 3 | 359 | 357 | 353 | 354.6 |
| 13-Aug | 353 | 353 | 356 | 359 | 4 | 359 | 8 | 16 | 15 | 18 | 41 | 44 | 32 | 37 | 19 | 80 | 46 | 18 | 6 | 17 | 1 | 9 | 5 | 5 | 22.4 |
| 14-Aug | 3 | 6 | 356 | 13 | 2 | 7 | 3 | 360 | 0 | 3 | 99 | 88 | 27 | 13 | 104 | 115 | 105 | 173 | 244 | 344 | 301 | 5 | 41 | 56 | 44.8 |
| 15-Aug | 14 | 75 | 232 | 36 | 357 | 304 | 258 | 165 | 209 | 242 | 334 | 272 | 335 | 1 | 326 | 274 | 302 | 249 | 286 | 23 | 179 | 190 | 209 | 226 | 257.8 |
| 16-Aug | 228 | 233 | 231 | 240 | 217 | 235 | 230 | 262 | 332 | 331 | 329 | 344 | 329 | 333 | 349 | 347 | 353 | 351 | 355 | 360 | 15 | 38 | 91 | 118 | 285.9 |
| 17-Aug | 86 | 55 | 40 | 76 | 56 | 70 | 53 | 64 | 344 | 329 | 314 | 302 | C | 247 | 244 | 263 | 261 | 282 | 253 | 198 | 190 | 198 | 194 | 190 | 260.9 |
| 18-Aug | 187 | 187 | 185 | 178 | 177 | 145 | 141 | 179 | 190 | 213 | 245 | 246 | 217 | 237 | 244 | 241 | 257 | 258 | 287 | 295 | 245 | 277 | 134 | 156 | 215.0 |
| 19-Aug | 168 | 168 | 111 | 209 | 199 | 181 | 191 | 210 | 268 | 294 | 300 | 296 | 310 | 306 | 311 | 298 | 291 | 332 | 325 | 315 | 94 | 353 | 112 | 170 | 289.5 |
| 20-Aug | UO | 162 | 113 | 171 | 167 | 145 | 145 | 161 | 335 | 318 | 332 | 276 | 300 | 314 | 312 | 314 | 351 | 348 | 2 | 94 | 205 | UO | 277 | 274 | 320.2 |
| 21-Aug | 171 | 171 | 154 | 136 | 7 | 187 | 177 | 163 | 137 | 227 | 252 | 249 | 219 | 214 | 210 | 232 | 214 | 211 | 205 | 186 | 190 | 207 | 225 | 216 | 210.0 |
| 22-Aug | 110 | 97 | 110 | 24 | 175 | 172 | 174 | 183 | 193 | 191 | 181 | 190 | 171 | 178 | 185 | 174 | 169 | 186 | 166 | 160 | 352 | 359 | 356 | 326 | 179.3 |
| 23-Aug | 154 | 133 | 159 | 173 | 300 | 165 | 139 | 150 | 342 | 324 | 353 | 347 | 350 | 2 | 138 | 229 | 239 | 303 | 333 | 326 | 324 | 328 | 327 | 322 | 310.6 |
| 24-Aug | 334 | 329 | 201 | 234 | 221 | 289 | 328 | 319 | 322 | 321 | 323 | 331 | 333 | 333 | 327 | 324 | 331 | 330 | 322 | 176 | 252 | 164 | 160 | 161 | 321.1 |
| 25-Aug | 154 | 169 | 129 | 97 | 352 | 151 | 176 | 139 | 311 | 308 | 310 | 328 | 306 | 296 | 299 | 310 | 341 | 9 | 62 | 114 | 176 | 158 | 148 | 150 | 316.5 |
| 26-Aug | 143 | 139 | 127 | 135 | 119 | 158 | 108 | 142 | 194 | 187 | 185 | 163 | 182 | 180 | 163 | 200 | 173 | 167 | 170 | 149 | 342 | 328 | 91 | UO | 172.5 |
| 27-Aug | UO | 331 | 154 | 150 | 153 | 155 | 154 | 143 | 133 | 141 | 153 | 243 | 32 | 126 | 154 | 152 | 156 | 156 | 154 | 129 | 122 | 137 | 140 | 36 | 149.2 |
| 28-Aug | 327 | 244 | 300 | 307 | 178 | 210 | 205 | 239 | 264 | 253 | 249 | 238 | 238 | 240 | 248 | 253 | 242 | 252 | 238 | 225 | 230 | 232 | 219 | 246 | 242.7 |
| 29-Aug | 221 | 196 | 187 | 204 | 197 | 228 | 221 | 233 | 226 | 223 | 263 | 250 | 222 | 231 | 211 | 209 | 219 | 207 | 226 | 166 | 162 | 205 | 129 | 144 | 217.3 |
| 30-Aug | 133 | 5 | 337 | 224 | 306 | 10 | 339 | 340 | 337 | 72 | 226 | 350 | 356 | 110 | 53 | 109 | 117 | 111 | 354 | 346 | 336 | 325 | 338 | 320 | 9.7 |
| 31-Aug | 354 | 296 | 314 | 336 | 326 | 322 | 323 | 326 | 323 | 311 | 313 | 320 | 303 | 316 | 304 | 314 | 329 | 317 | 266 | 251 | 139 | 160 | 156 | 163 | 311.5 |
| | 339.6 | 262.5 | 315.9 | 286.5 | 261.0 | 285.5 | 286.5 | 281.5 | 300.6 | 287.8 | 302.0 | 302.8 | 299.3 | 302.0 | 278.7 | 266.7 | 282.2 | 278.9 | 286.1 | 307.9 | 299.1 | 306.0 | 319.4 | 316.2 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration UO - Unstable Operation

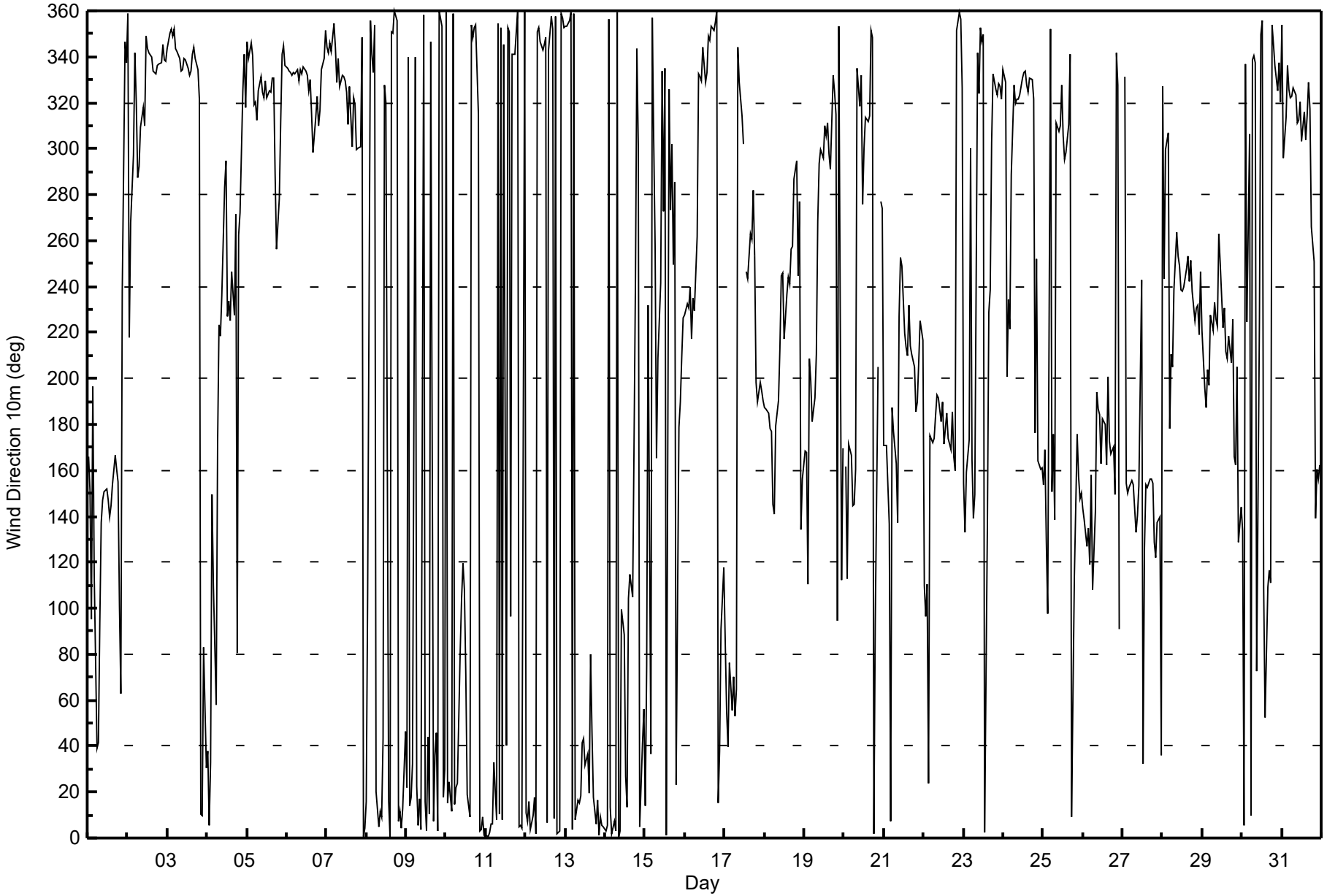
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Conklin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Conklin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 106 deg on Aug 4 08:00

Minimum Value: 3 deg on Aug 11 21:00

Percentiles: $P_1$ = 6 $P_{10}$ = 15 $Q_1$ = 25 Median = 38 $Q_3$ = 53 $P_{90}$ = 75 $P_{99}$ = 98

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 41 | 43 | 63 | 104 | 88 | 18 | 22 | 45 | 32 | 27 | 24 | 24 | 25 | 24 | 23 | 26 | 26 | 26 | 25 | 53 | 53 | 76 | 47 | 25 | 104 |
| 2-Aug | 25 | 99 | 88 | 55 | 41 | 55 | 53 | 58 | 53 | 57 | 58 | 38 | 29 | 26 | 24 | 28 | 29 | 32 | 26 | 25 | 25 | 22 | 27 | 32 | 99 |
| 3-Aug | 24 | 27 | 31 | 36 | 23 | 32 | 31 | 34 | 36 | 38 | 27 | 27 | 32 | 39 | 37 | 34 | 23 | 29 | 44 | 37 | 19 | 18 | 83 | 45 | 83 |
| 4-Aug | 24 | 33 | 80 | 62 | 47 | 35 | 78 | 106 | 41 | 75 | 51 | 55 | 32 | 34 | 30 | 43 | 38 | 64 | 96 | 49 | 57 | 52 | 39 | 49 | 106 |
| 5-Aug | 39 | 47 | 39 | 42 | 48 | 57 | 51 | 51 | 49 | 48 | 48 | 42 | 52 | 45 | 40 | 45 | 44 | 55 | 36 | 50 | 52 | 25 | 23 | 33 | 57 |
| 6-Aug | 36 | 38 | 39 | 38 | 40 | 39 | 44 | 40 | 36 | 33 | 32 | 33 | 38 | 46 | 42 | 52 | 61 | 53 | 48 | 51 | 49 | 45 | 41 | 32 | 61 |
| 7-Aug | 42 | 41 | 38 | 41 | 23 | 37 | 52 | 38 | 48 | 41 | 38 | 43 | 48 | 50 | 49 | 54 | 51 | 46 | 49 | 44 | 47 | 32 | 12 | 10 | 54 |
| 8-Aug | 35 | 96 | 15 | 44 | 50 | 40 | 28 | 21 | 46 | 61 | 65 | 53 | 59 | 24 | 15 | 24 | 27 | 39 | 58 | 11 | 20 | 10 | 20 | 87 | 96 |
| 9-Aug | 22 | 80 | 11 | 30 | 62 | 82 | 99 | 45 | 21 | 31 | 27 | 39 | 14 | 32 | 37 | 42 | 16 | 32 | 30 | 4 | 10 | 13 | 54 | 24 | 99 |
| 10-Aug | 13 | 48 | 63 | 9 | 9 | 7 | 18 | 15 | 46 | 38 | 71 | 79 | 83 | 43 | 21 | 14 | 15 | 16 | 16 | 55 | 10 | 5 | 5 | 6 | 83 |
| 11-Aug | 6 | 10 | 9 | 5 | 5 | 34 | 12 | 21 | 32 | 23 | 65 | 47 | 59 | 47 | 95 | 53 | 22 | 33 | 24 | 24 | 3 | 6 | 4 | 6 | 95 |
| 12-Aug | 9 | 18 | 18 | 53 | 8 | 42 | 25 | 19 | 25 | 23 | 25 | 24 | 43 | 15 | 37 | 21 | 23 | 18 | 12 | 14 | 13 | 9 | 12 | 13 | 53 |
| 13-Aug | 14 | 12 | 12 | 11 | 6 | 9 | 17 | 21 | 23 | 25 | 34 | 39 | 44 | 36 | 25 | 44 | 76 | 24 | 11 | 21 | 9 | 10 | 11 | 19 | 76 |
| 14-Aug | 18 | 17 | 36 | 20 | 7 | 9 | 8 | 9 | 14 | 20 | 78 | 87 | 72 | 26 | 43 | 26 | 43 | 66 | 52 | 68 | 53 | 6 | 63 | 77 | 87 |
| 15-Aug | 17 | 83 | 93 | 42 | 106 | 98 | 84 | 83 | 63 | 66 | 43 | 71 | 49 | 32 | 55 | 59 | 56 | 48 | 50 | 52 | 47 | 23 | 32 | 25 | 106 |
| 16-Aug | 24 | 24 | 25 | 32 | 31 | 35 | 30 | 69 | 41 | 46 | 43 | 32 | 47 | 50 | 20 | 28 | 21 | 18 | 15 | 17 | 11 | 41 | 93 | 51 | 93 |
| 17-Aug | 58 | 35 | 19 | 32 | 30 | 31 | 37 | 50 | 33 | 46 | 51 | 56 | C | 53 | 74 | 53 | 49 | 57 | 36 | 25 | 10 | 11 | 12 | 12 | 74 |
| 18-Aug | 13 | 14 | 15 | 16 | 16 | 24 | 26 | 38 | 24 | 26 | 43 | 56 | 39 | 44 | 35 | 48 | 46 | 42 | 57 | 50 | 39 | 105 | 13 | 14 | 105 |
| 19-Aug | 17 | 27 | 53 | 73 | 34 | 71 | 89 | 19 | 63 | 57 | 56 | 66 | 47 | 53 | 53 | 55 | 63 | 45 | 36 | 52 | 83 | 28 | 66 | 32 | 89 |
| 20-Aug | UO | 43 | 90 | 57 | 37 | 47 | 60 | 60 | 50 | 44 | 54 | 57 | 55 | 56 | 47 | 46 | 29 | 30 | 27 | 91 | 96 | UO | 93 | 80 | 96 |
| 21-Aug | 52 | 26 | 21 | 32 | 70 | 70 | 19 | 31 | 48 | 27 | 47 | 59 | 66 | 45 | 35 | 32 | 29 | 26 | 20 | 80 | 29 | 14 | 17 | 37 | 80 |
| 22-Aug | 50 | 56 | 28 | 42 | 49 | 18 | 25 | 21 | 24 | 22 | 30 | 25 | 32 | 41 | 31 | 29 | 24 | 25 | 18 | 32 | 62 | 52 | 81 | 33 | 81 |
| 23-Aug | 82 | 82 | 57 | 77 | 86 | 66 | 20 | 71 | 79 | 76 | 60 | 68 | 78 | 71 | 18 | 34 | 75 | 73 | 34 | 34 | 40 | 27 | 56 | 32 | 86 |
| 24-Aug | 45 | 78 | 82 | 62 | 20 | 69 | 34 | 30 | 40 | 45 | 44 | 30 | 28 | 28 | 31 | 33 | 30 | 27 | 32 | 77 | 86 | 60 | 72 | 86 | 86 |
| 25-Aug | 64 | 26 | 56 | 76 | 67 | 84 | 85 | 44 | 95 | 48 | 54 | 47 | 58 | 67 | 62 | 52 | 28 | 40 | 35 | 44 | 82 | 27 | 14 | 13 | 95 |
| 26-Aug | 23 | 18 | 40 | 55 | 66 | 52 | 48 | 18 | 27 | 25 | 27 | 28 | 33 | 33 | 28 | 28 | 25 | 22 | 19 | 12 | 84 | 29 | 72 | UO | 84 |
| 27-Aug | UO | 98 | 64 | 9 | 11 | 9 | 13 | 24 | 20 | 24 | 29 | 51 | 79 | 31 | 24 | 21 | 19 | 18 | 15 | 29 | 20 | 28 | 26 | 76 | 98 |
| 28-Aug | 60 | 53 | 58 | 76 | 33 | 34 | 38 | 27 | 50 | 41 | 38 | 32 | 36 | 32 | 34 | 47 | 37 | 38 | 31 | 19 | 20 | 19 | 20 | 54 | 76 |
| 29-Aug | 55 | 15 | 36 | 14 | 18 | 21 | 22 | 26 | 25 | 32 | 46 | 49 | 36 | 38 | 34 | 25 | 27 | 24 | 84 | 63 | 25 | 27 | 29 | 39 | 84 |
| 30-Aug | 75 | 98 | 42 | 93 | 84 | 90 | 17 | 27 | 49 | 92 | 101 | 82 | 89 | 42 | 70 | 43 | 41 | 68 | 44 | 33 | 49 | 77 | 56 | 33 | 101 |
| 31-Aug | 51 | 67 | 43 | 74 | 95 | 64 | 44 | 59 | 47 | 53 | 52 | 50 | 58 | 51 | 56 | 49 | 30 | 40 | 38 | 67 | 14 | 16 | 25 | 20 | 95 |
| | 82 | 99 | 93 | 104 | 106 | 98 | 99 | 106 | 95 | 92 | 101 | 87 | 89 | 71 | 95 | 59 | 76 | 73 | 96 | 91 | 96 | 105 | 93 | 87 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS22
## JANVIER
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 710 | 34 | 34 | 100 | - | - | 2.8 | 0 | 0.4 | 0 |
| TRS(ppb) Average | 704 | 36 | 40 | 99.46 | 0.5 | 0 | 0.3 | - | 0.2 | - |
| THC(ppm) Average | 710 | 34 | 34 | 100 | - | - | 2.9 | - | 2.2 | - |
| NMHC(ppm) Average | 710 | 34 | 34 | 100 | - | - | 0.026 | - | 0.002 | - |
| CH4(ppm) Average | 710 | 34 | 34 | 100 | - | - | 2.9 | - | 2.2 | - |
| O3 (ppb) Average | 709 | 35 | 35 | 100 | - | - | 45.1 | 0 | 28 | - |
| NO2 (ppb) Average | 709 | 35 | 35 | 100 | - | - | 3.6 | 0 | 1.5 | - |
| NO (ppb) Average | 709 | 35 | 35 | 100 | - | - | 3.3 | - | 0.7 | - |
| NOX (ppb) Average | 709 | 35 | 35 | 100 | - | - | 5.1 | - | 2.3 | - |
| PM2.5 (ug/m3) Average | 689 | 2 | 55 | 92.88 | - | - | 178.4 | 13 | 72.2 | 3 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 29.6 | - | 22 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 99.1 | - | 91.6 | - |
| Wind Speed 20 m (km/h) Average | 744 | 0 | 0 | 100 | - | - | 17 | - | 11 | - |
| Wind Direction 20 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 710 | 0.15 | 0.3 | - | 0 | 0 | 0 | 0.1 | 0.2 | 0.4 | 2.8 |
| TRS (ppb) Average | 704 | 0.12 | 0.1 | - | 0 | 0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 |
| THC (ppm) Average | 710 | 2.07 | 0.1 | - | 1.9 | 2 | 2 | 2 | 2.1 | 2.2 | 2.9 |
| NMHC(ppm) Average | 710 | 0 | 0.001 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.026 |
| CH4(ppm) Average | 710 | 2.06 | 0.1 | - | 1.9 | 2 | 2 | 2 | 2.1 | 2.2 | 2.9 |
| O3 (ppb) Average | 709 | 18.13 | 10.1 | - | 0.9 | 5.7 | 9.9 | 16.7 | 25.2 | 32 | 45.1 |
| NO2 (ppb) Average | 709 | 0.78 | 0.5 | - | 0 | 0.2 | 0.4 | 0.7 | 1.1 | 1.5 | 3.6 |
| NO (ppb) Average | 709 | 0.35 | 0.4 | - | 0 | 0 | 0.1 | 0.2 | 0.4 | 0.9 | 3.3 |
| NOX (ppb) Average | 709 | 1.13 | 0.9 | - | 0.1 | 0.3 | 0.5 | 0.9 | 1.5 | 2.3 | 5.1 |
| PM2.5 (ug/m3) Average | 689 | 15.41 | 22.1 | - | 0.6 | 2.6 | 3.8 | 7.2 | 19.6 | 34 | 178.4 |
| Temperature 2 m (C) Average | 744 | 15.82 | 5 | - | 6 | 9.9 | 11.8 | 15.2 | 19.4 | 22.8 | 29.6 |
| Relative Humidity (%) Average | 744 | 77.59 | 18.8 | - | 32.6 | 48.8 | 61.5 | 83 | 94.6 | 97.7 | 99.1 |
| Wind Speed 20 m (km/h) Average | 744 | 6.4 | 4 | - | 0 | 2 | 4 | 6 | 9 | 11 | 17 |
| Wind Direction 20 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| TRS | 02 Aug 2026 13:00 | 02 Aug 2026 13:00 | 1 | Maintenance - reinitiated daily QA check |
| TRS | 28 Aug 2026 10:00 | 28 Aug 2026 10:00 | 1 | Maintenance - reinitiated daily QA check |
| TRS | 30 Aug 2026 12:00 | 30 Aug 2026 13:00 | 2 | Maintenance - reinitiated daily QA check |
| PM2.5 | 04 Aug 2026 01:00 | 04 Aug 2026 11:00 | 11 | DAS Failure - data not recorded |
| PM2.5 | 22 Aug 2026 19:00 | 24 Aug 2026 11:00 | 41 | DAS Failure - data not recorded |
| PM2.5 | 24 Aug 2026 14:00 | 24 Aug 2026 14:00 | 1 | DAS Failure - data not recorded |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Janvier - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.8 ppb on Aug 8 10:00 Maximum Daily Average: 0.4 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 1 01:00 Minimum Daily Average: 0.0 ppb on Aug 5

Maximum Diurnal Average: 0.4 ppb at hour 10 Minimum Diurnal Average: 0.1 ppb at hour 23

Monthly Average: 0.15 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.4 $P_{99}$ = 1.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 0.5 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.5 |
| 2-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.2 | 0.5 | 0.3 | 0.3 | 0.6 | 0.2 | 0.6 |
| 3-Aug | 0.5 | 0.5 | 0.6 | Z | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 1.0 | 0.8 | 0.3 | 0.5 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 7-Aug | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 8-Aug | 0.1 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 1.4 | 2.8 | 1.1 | 1.0 | 0.5 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 2.8 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 1.6 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.6 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 |
| 11-Aug | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.4 | 0.7 | 1.0 | 2.1 | 1.3 | 0.8 | 0.3 | 0.4 | 0.4 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 | 2.1 |
| 12-Aug | Z | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.7 | 1.8 | 0.6 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.8 |
| 13-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 15-Aug | 0.0 | 0.1 | 0.0 | Z | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.4 | 0.6 | 0.7 | 0.6 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.7 |
| 17-Aug | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 18-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 1.0 | 1.5 | 1.0 | 0.7 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.4 | 1.5 |
| 19-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 20-Aug | 0.1 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 1.2 | 1.6 | 1.2 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.3 | 1.6 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.6 | 0.5 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.8 | 0.9 | 0.5 | 0.8 | 1.5 | 1.1 | 0.6 | 0.6 | 0.6 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 1.5 |
| 23-Aug | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.1 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 24-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.3 | 0.6 | C | C | C | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.6 |
| 25-Aug | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.8 | 0.7 | 0.6 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.8 |
| 26-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.5 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 |
| 27-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 |
| 28-Aug | 0.1 | 0.1 | 0.2 | 0.2 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 29-Aug | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 30-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 31-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.3 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.5 | 0.5 | 0.6 | 0.2 | 0.6 | 0.5 | 0.5 | 1.0 | 1.5 | 2.8 | 2.1 | 1.6 | 1.5 | 1.1 | 0.6 | 0.6 | 1.2 | 1.6 | 1.2 | 0.4 | 0.5 | 0.3 | 0.3 | 0.6 | Diurnal Maximum | |

Z - zerospan C - Calibration

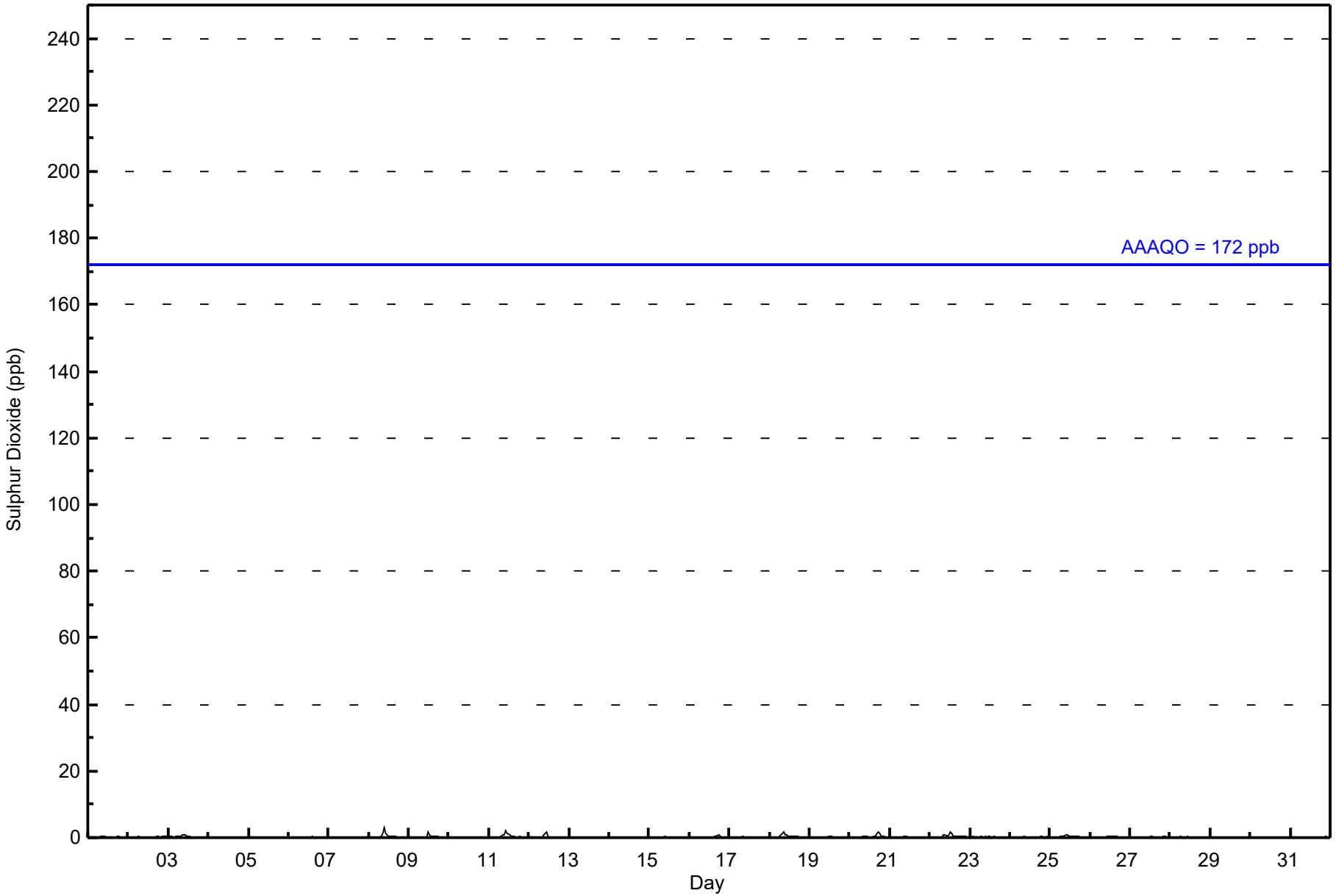
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Janvier - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Janvier - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 710 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Janvier - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 48 | 52 | 23 | 15 | 15 | 18 | 20 | 31 | 42 | 109 | 102 | 68 | 32 | 43 | 54 | 38 | 710 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 48 | 52 | 23 | 15 | 15 | 18 | 20 | 31 | 42 | 109 | 102 | 68 | 32 | 43 | 54 | 38 | 710 |

Total Number of Valid Hours: 710

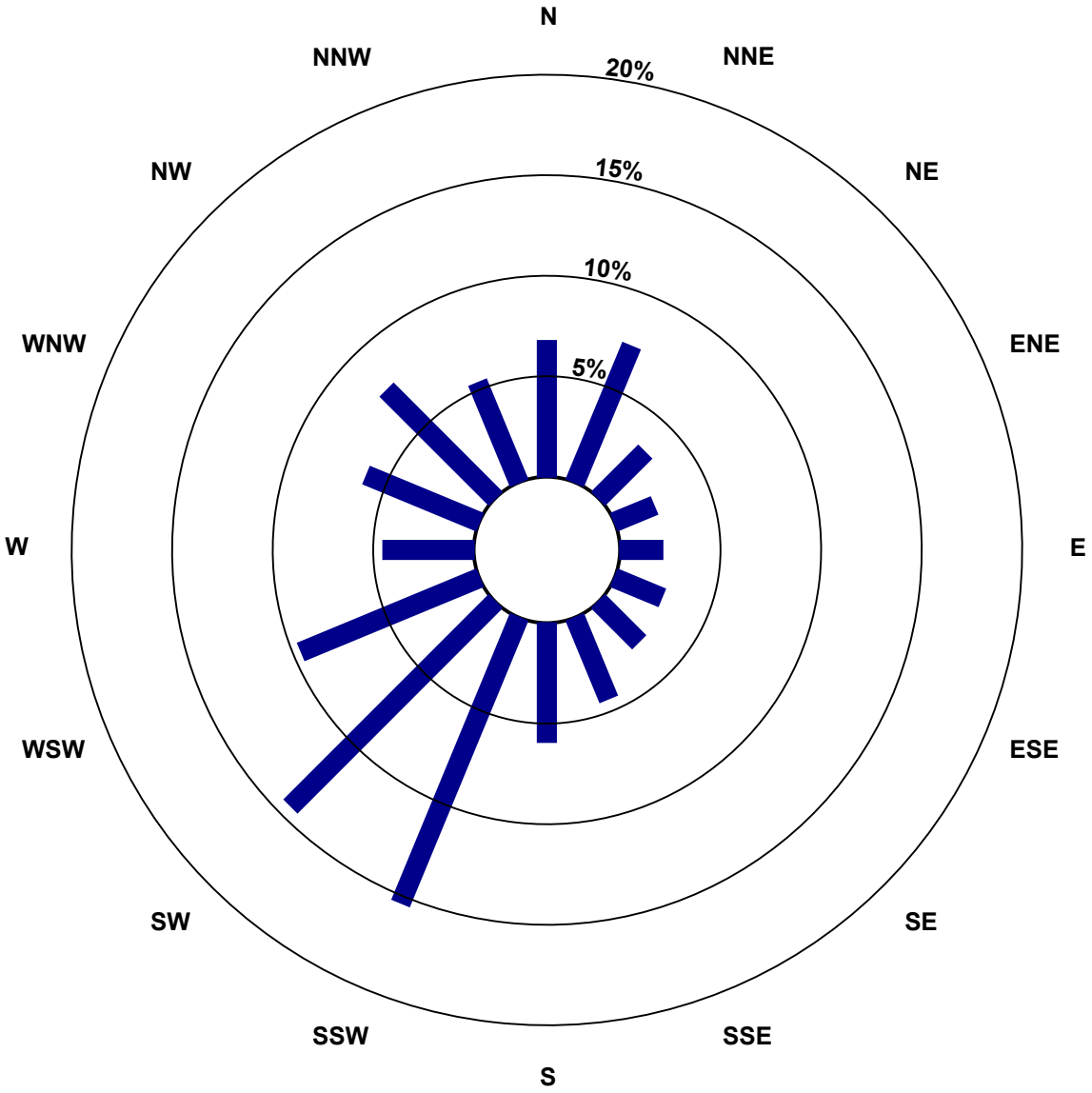
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Janvier




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

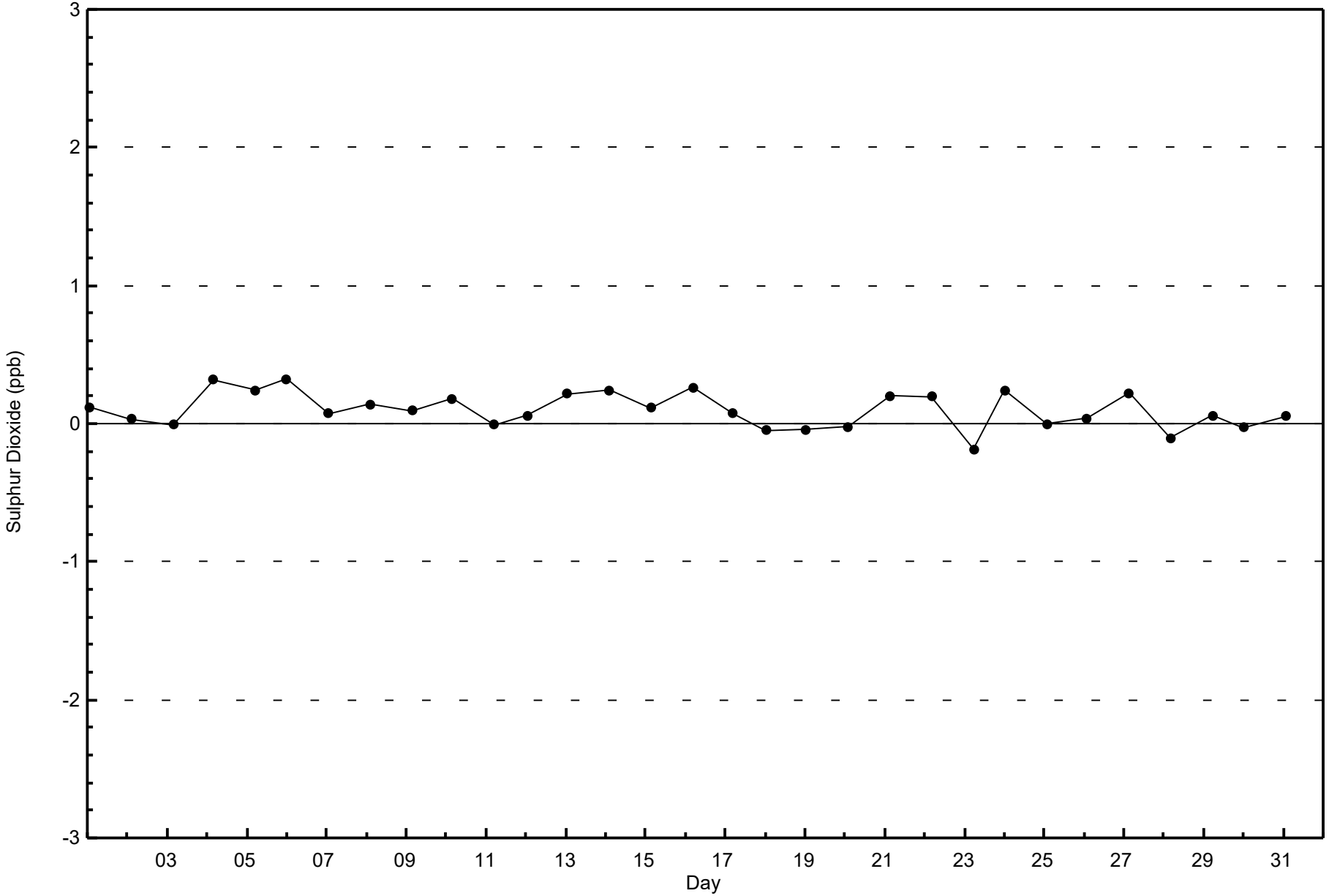
Total Number of Valid Hours: 710

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Janvier - August 2026**

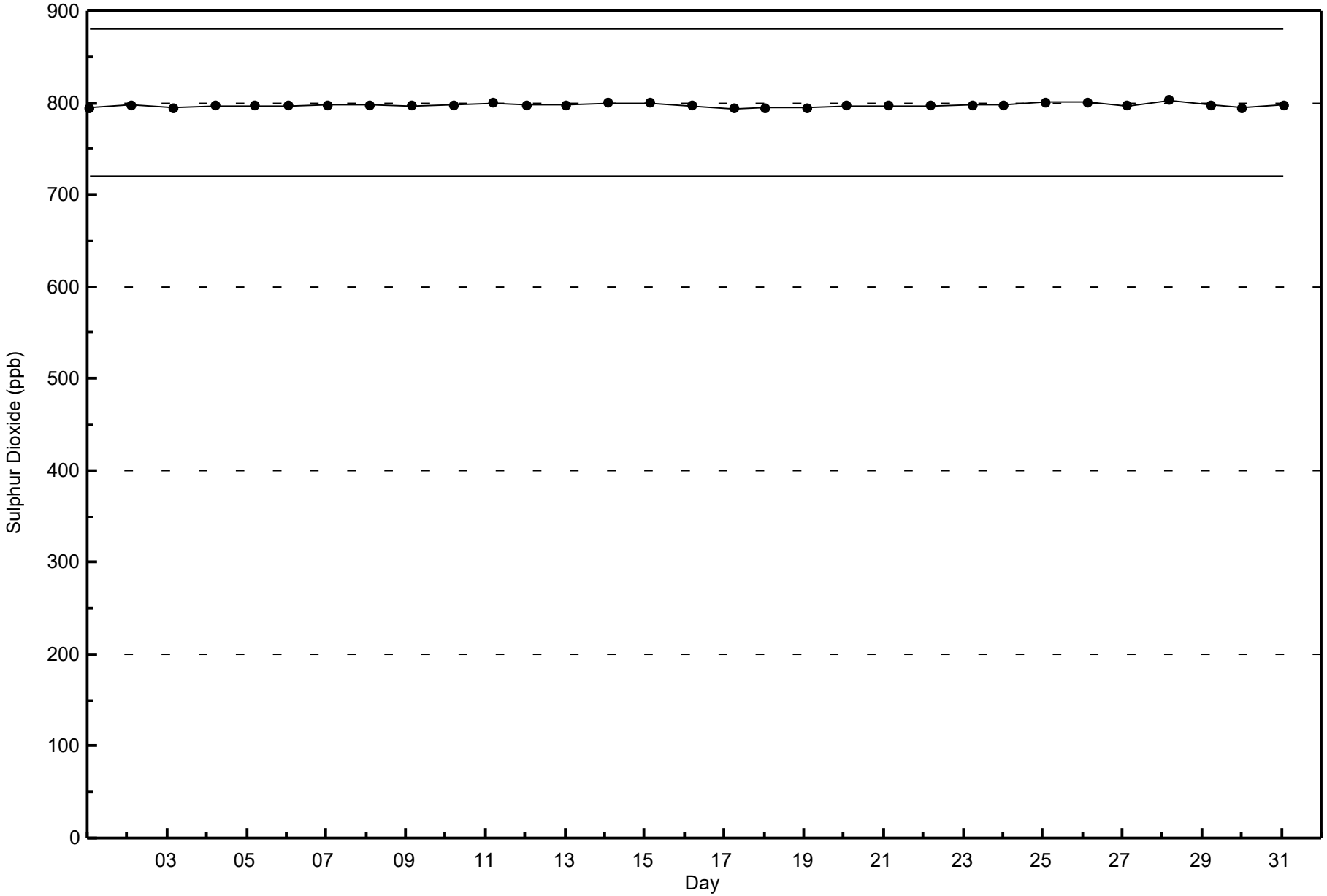


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Janvier - August 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.5 ppb on Aug 25 14:00 Maximum Daily Average: 0.2 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 1 00:30 Minimum Daily Average: 0.0 ppb on Aug 1

Maximum Diurnal Average: 0.1 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 1

Monthly Average: 0.12 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.2 $P_{99}$ = 0.3

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1409 |
| Periods of Invalid Data: | 79 |
| Periods of Calibration: | 71 |
| Percent Operational Time: | 99.5 |

Period Ending At (MST)

| Day | 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.0<br>0.0 | 0.0<br>0.0 | Z<br>SP | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0 | 0.0 |
| 2-Aug | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | Z<br>SP | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | M<br>M | M<br>0.1 | 0.1<br>0.1 | 0.2<br>0.2 | 0.1<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.1<br>0.2 | 0.1<br>0.1 | 0.1<br>0.0 | 0.1<br>0.0 | 0.0<br>0.0 | 0.1 | 0.2 |
| 3-Aug | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | Z<br>SP | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.2 |
| 4-Aug | 0.1<br>0.0 | 0.1<br>0.1 | 0.1<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | Z<br>SP | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.1 |
| 5-Aug | Z<br>SP | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.0 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.2 |
| 6-Aug | 0.0<br>0.0 | Z<br>SP | 0.0<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1<br>0.1 | 0.1<br>0.1 | Z<br>SP | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.0<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.1<br>0.1 | 0.1<br>0.2 | 0.1 | 0.2 |
| 8-Aug | 0.2<br>0.1 | 0.1<br>0.1 | 0.2<br>0.2 | Z<br>SP | 0.1<br>0.1 | 0.2<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.3<br>0.3 | 0.3<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.2 | 0.1<br>0.1 | 0.2 | 0.3 |
| 9-Aug | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | Z<br>SP | 0.1<br>0.1 | 0.1<br>0.2 | 0.1<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.2<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.2 |
| 10-Aug | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.0<br>0.1 | 0.0<br>0.0 | Z<br>SP | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.1 | 0.2 |
| 11-Aug | Z<br>SP | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.2 |
| 12-Aug | 0.1<br>0.1 | Z<br>SP | 0.1<br>0.1 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.2<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.2 |
| 13-Aug | 0.2<br>0.1 | 0.2<br>0.2 | Z<br>SP | 0.1<br>0.1 | 0.2<br>0.2 | 0.1<br>0.2 | 0.2<br>0.2 | 0.2<br>0.2 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.2<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.2 |
| 14-Aug | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | Z<br>SP | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.2 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.0<br>0.0 | 0.0<br>0.0 | 0.1<br>0.0 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.0 | 0.1 | 0.2 |
| 15-Aug | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | 0.0<br>0.0 | Z<br>SP | 0.0<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1<br>0.1 | 0.1 | 0.1 |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Janvier - August 2026

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | | |
| 17-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| | SP | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 18-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 19-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 20-Aug | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.1 | 0.1 | SP | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 21-Aug | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | DF | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| | 0.2 | 0.2 | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | SP | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 23-Aug | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| | SP | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 24-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | SP | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 25-Aug | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | C | C | C | C | C | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 |
| | 0.0 | 0.0 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | C | C | C | C | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 26-Aug | 0.2 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 0.2 | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 27-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 28-Aug | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | M | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | SP | 0.2 | 0.2 | 0.2 | M | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | | |
| 29-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 30-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | M | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 |
| | 0.2 | SP | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | M | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 31-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.0 | 0.0 | SP | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance DF - DAS Failure SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Reduced Sulphur (TRS) - ppb

## Janvier - August 2026

Maximum Value: 0.3 ppb on Aug 30 14:00

Maximum Daily Average: 0.2 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 1 01:00

Minimum Daily Average: 0.0 ppb on Aug 1

Maximum Diurnal Average: 0.1 ppb at hour 9

Minimum Diurnal Average: 0.1 ppb at hour 1

Monthly Average: 0.12 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.2 $P_{99}$ = 0.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 704 |
| Hours of Missing Data: | 40 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | M | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 4-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 5-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 6-Aug | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 8-Aug | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 9-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 10-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| 11-Aug | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 12-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 13-Aug | 0.1 | 0.2 | Z | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 14-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 17-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 18-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 19-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 20-Aug | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 21-Aug | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 23-Aug | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 24-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-Aug | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | C | C | C | C | C | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 26-Aug | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 27-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 28-Aug | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | M | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 29-Aug | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 30-Aug | 0.2 | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | M | M | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 |
| 31-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

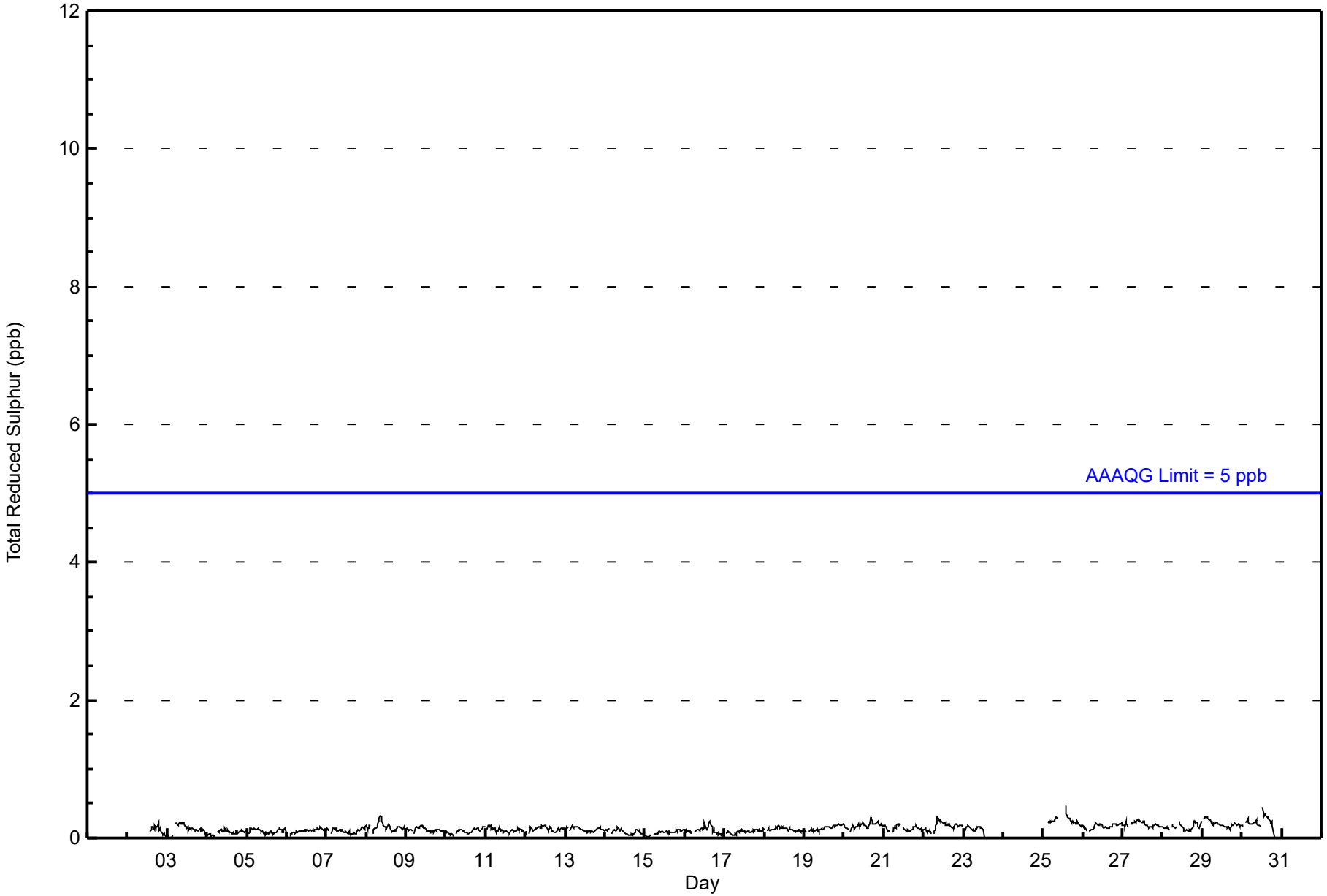
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Janvier - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 704 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 704

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Janvier - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 49 | 51 | 24 | 14 | 12 | 17 | 18 | 32 | 45 | 107 | 103 | 66 | 30 | 44 | 52 | 40 | 704 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 49 | 51 | 24 | 14 | 12 | 17 | 18 | 32 | 45 | 107 | 103 | 66 | 30 | 44 | 52 | 40 | 704 |

Total Number of Valid Hours: 704

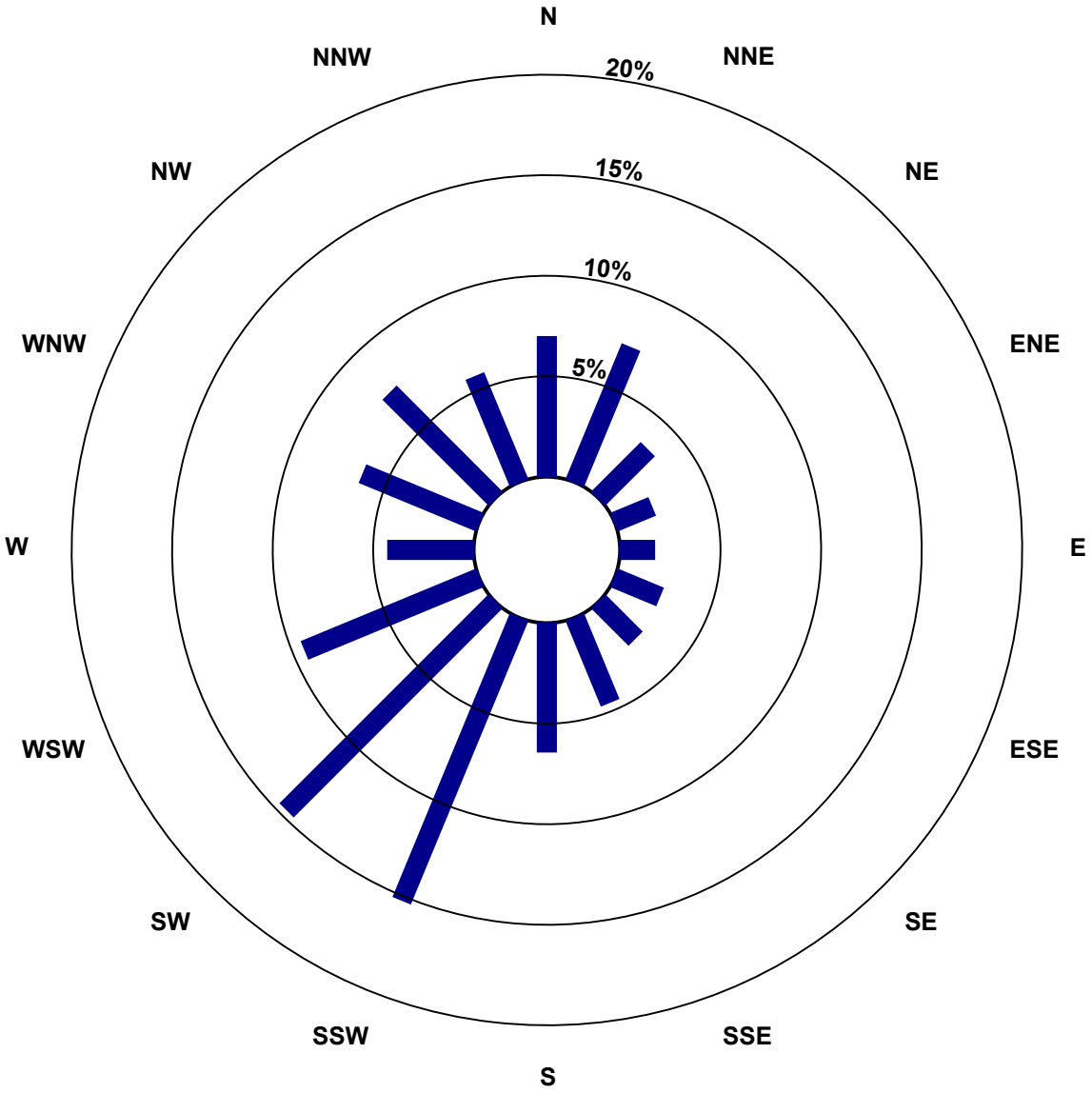
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Reduced Sulphur (TRS) - ppb**

**Janvier**




**Classes (ppb)**

- 0 - 2
- 3 - 4
- 5 - 7
- 8 - 11
- > 11

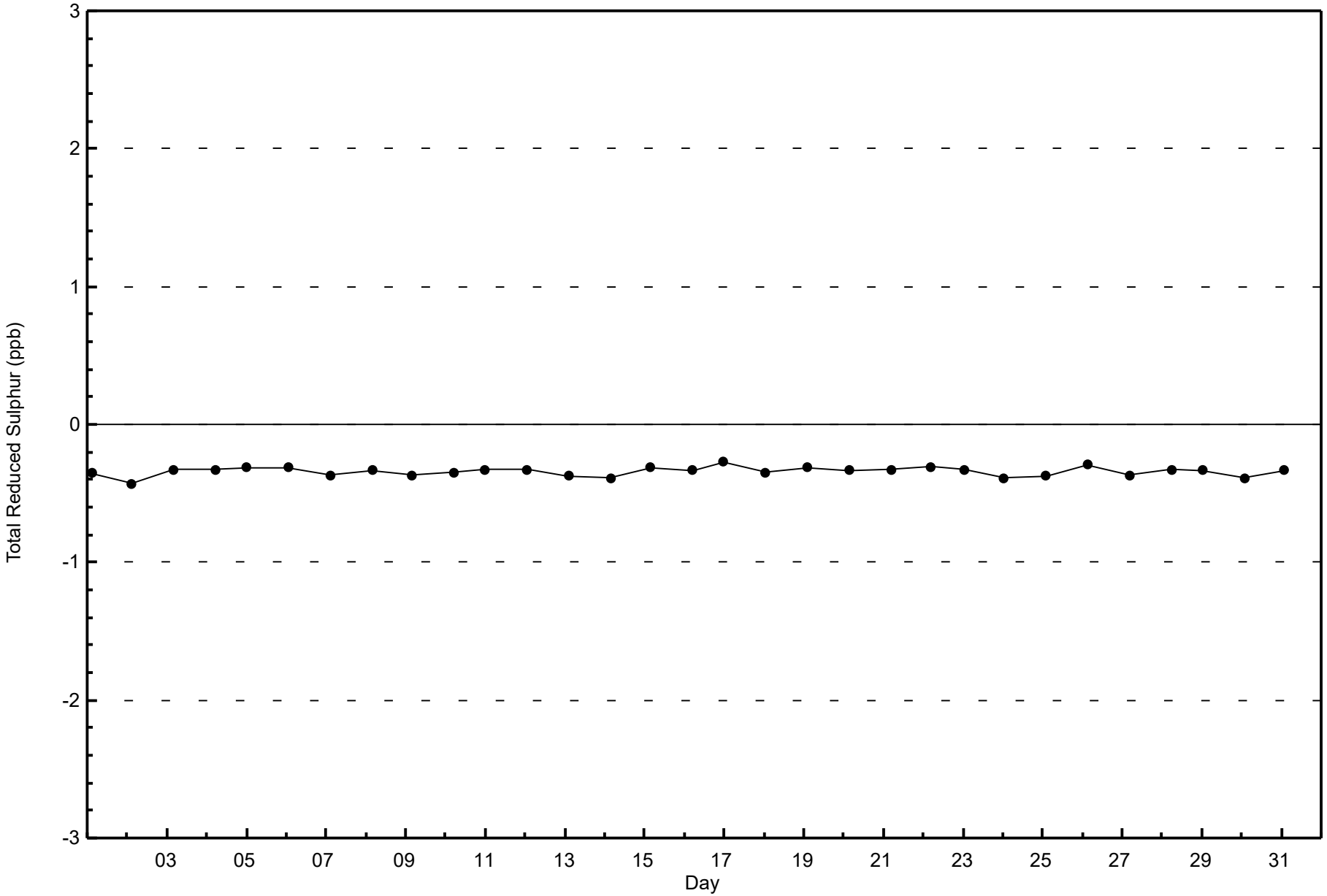
**Total Number of Valid Hours: 704**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Janvier - August 2026**

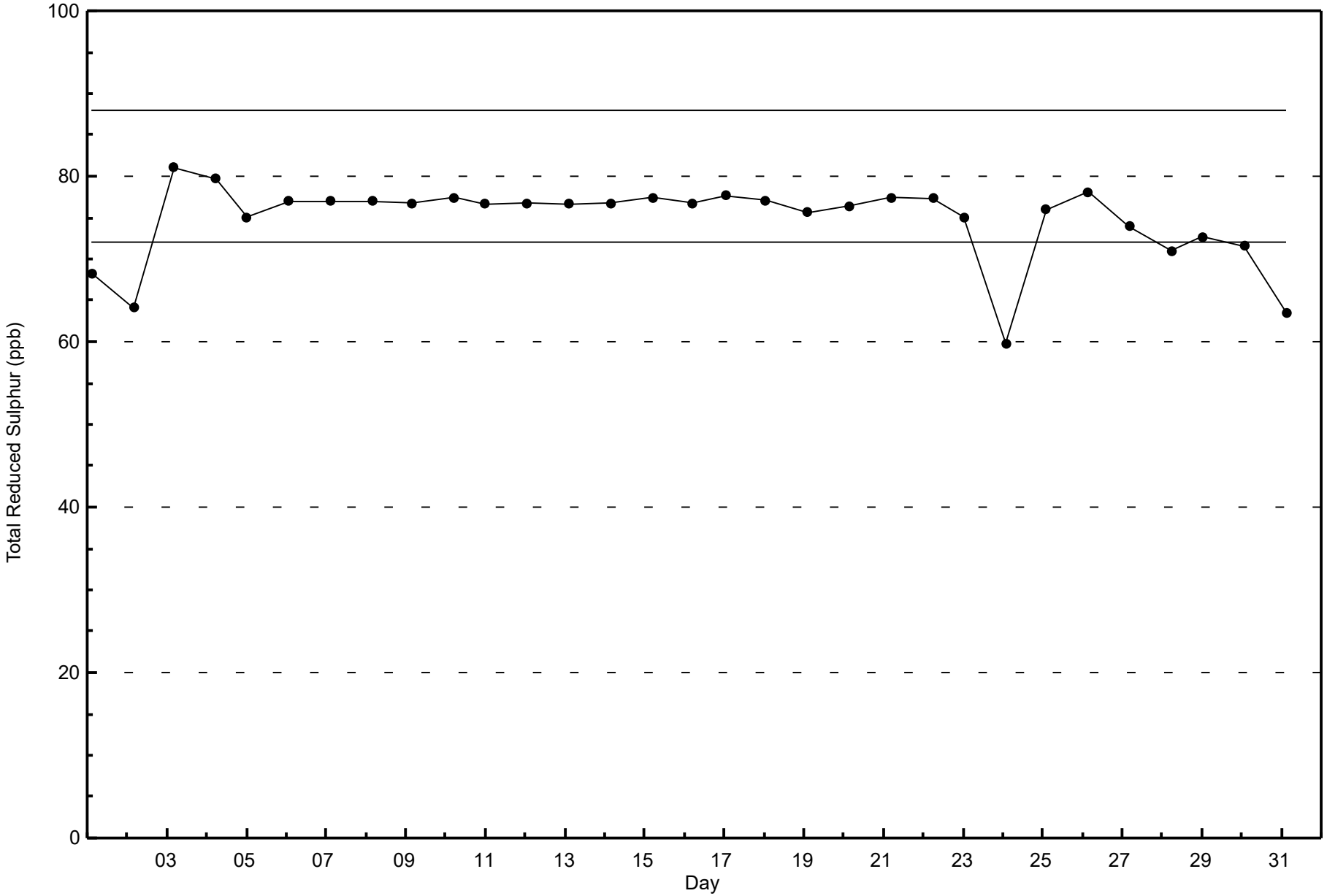


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Janvier - August 2026

Maximum Value: 2.9 ppm on Aug 27 08:00

Maximum Daily Average: 2.2 ppm on Aug 30

Minimum Value: 1.9 ppm on Aug 24 14:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.2 ppm at hour 8

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.07 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.0 $Q_3$ = 2.1 $P_{90}$ = 2.2 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.2 |
| 2-Aug | 2.0 | 2.0 | Z | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 3-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 |
| 4-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 5-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 6-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 |
| 8-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 9-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.2 |
| 10-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 11-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 |
| 12-Aug | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 13-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 14-Aug | 2.2 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 15-Aug | 2.0 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 16-Aug | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 17-Aug | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 18-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 19-Aug | 2.0 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 20-Aug | 2.0 | 2.0 | Z | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.2 |
| 21-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 22-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.6 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.6 |
| 23-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 24-Aug | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | C | C | C | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 25-Aug | 2.0 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 |
| 26-Aug | 2.1 | 2.1 | Z | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.1 | 2.5 |
| 27-Aug | 2.1 | 2.2 | 2.2 | Z | 2.1 | 2.2 | 2.8 | 2.9 | 2.7 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.9 |
| 28-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.2 |
| 29-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 30-Aug | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.4 |
| 31-Aug | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | Diurnal Average | |
| | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.8 | 2.9 | 2.7 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.5 | Diurnal Maximum | |

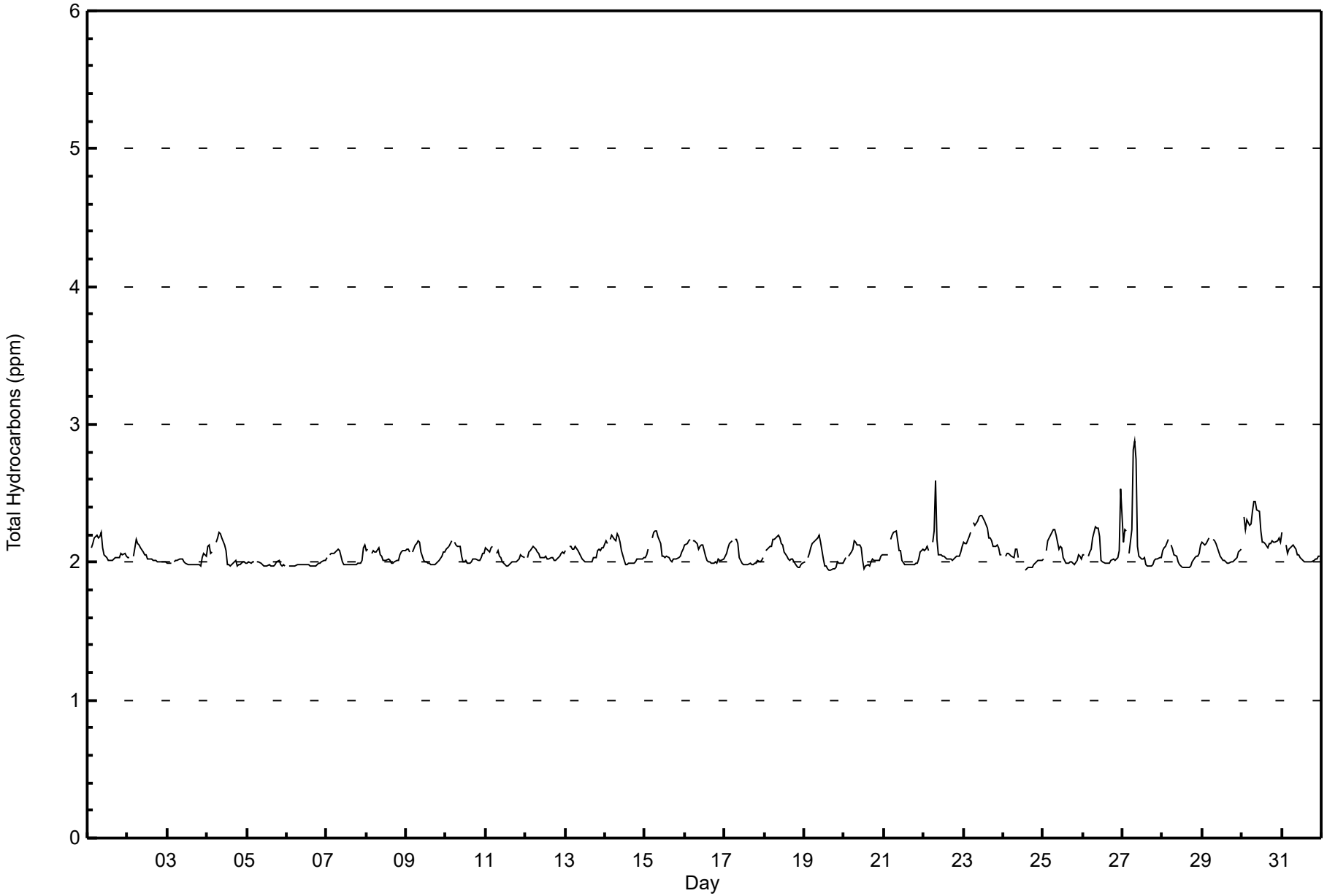
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Janvier - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Janvier - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 403 | 56.76 | 56.76 |
| 2.1 - 3.0 | 307 | 43.24 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Janvier - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 28 | 30 | 14 | 9 | 10 | 11 | 11 | 21 | 24 | 42 | 31 | 42 | 21 | 35 | 50 | 24 | 403 |
| 2.1 - 3.0 | 20 | 22 | 9 | 6 | 5 | 7 | 9 | 10 | 18 | 67 | 71 | 26 | 11 | 8 | 4 | 14 | 307 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 48 | 52 | 23 | 15 | 15 | 18 | 20 | 31 | 42 | 109 | 102 | 68 | 32 | 43 | 54 | 38 | 710 |

Total Number of Valid Hours: 710

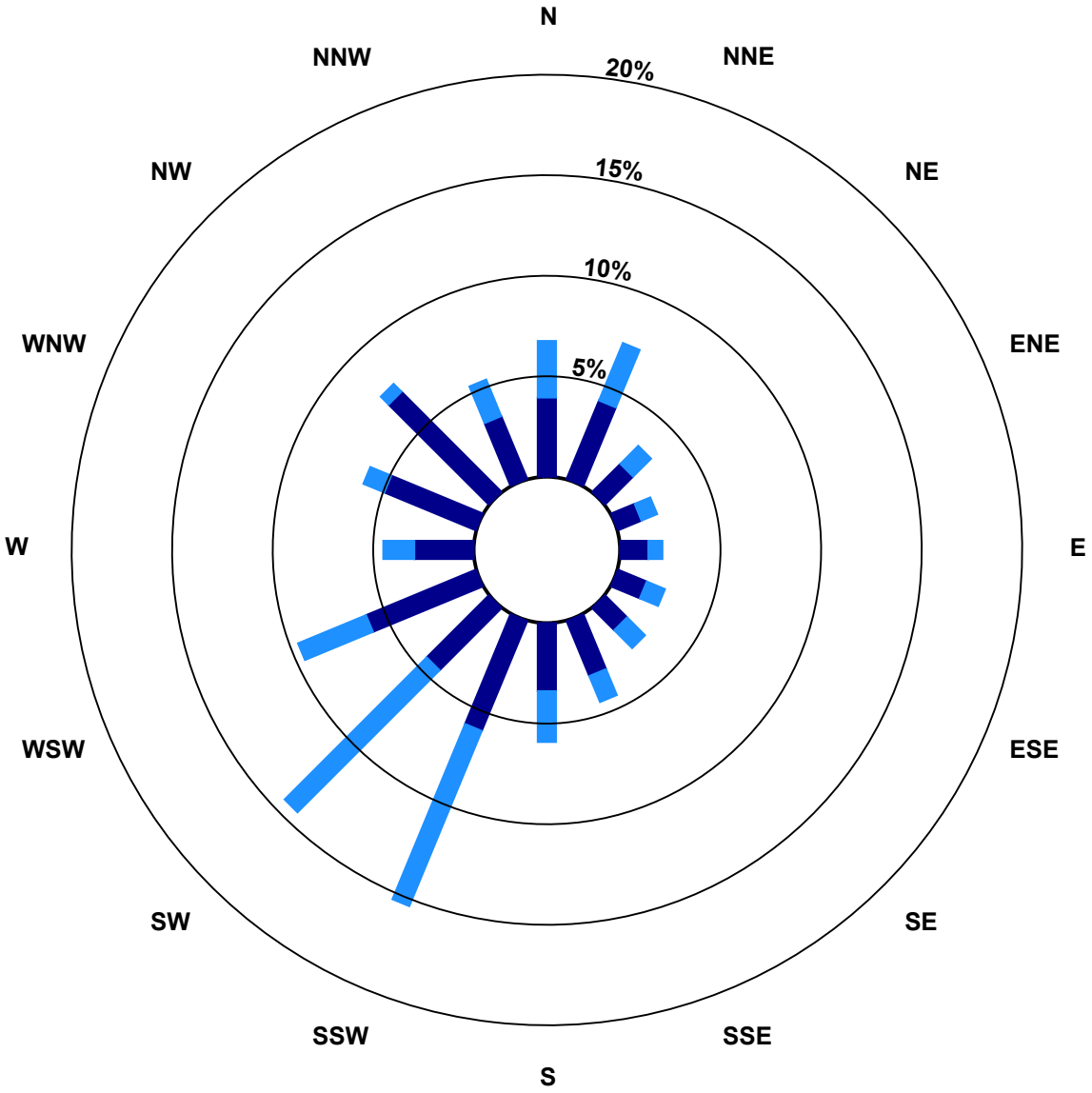
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Janvier




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

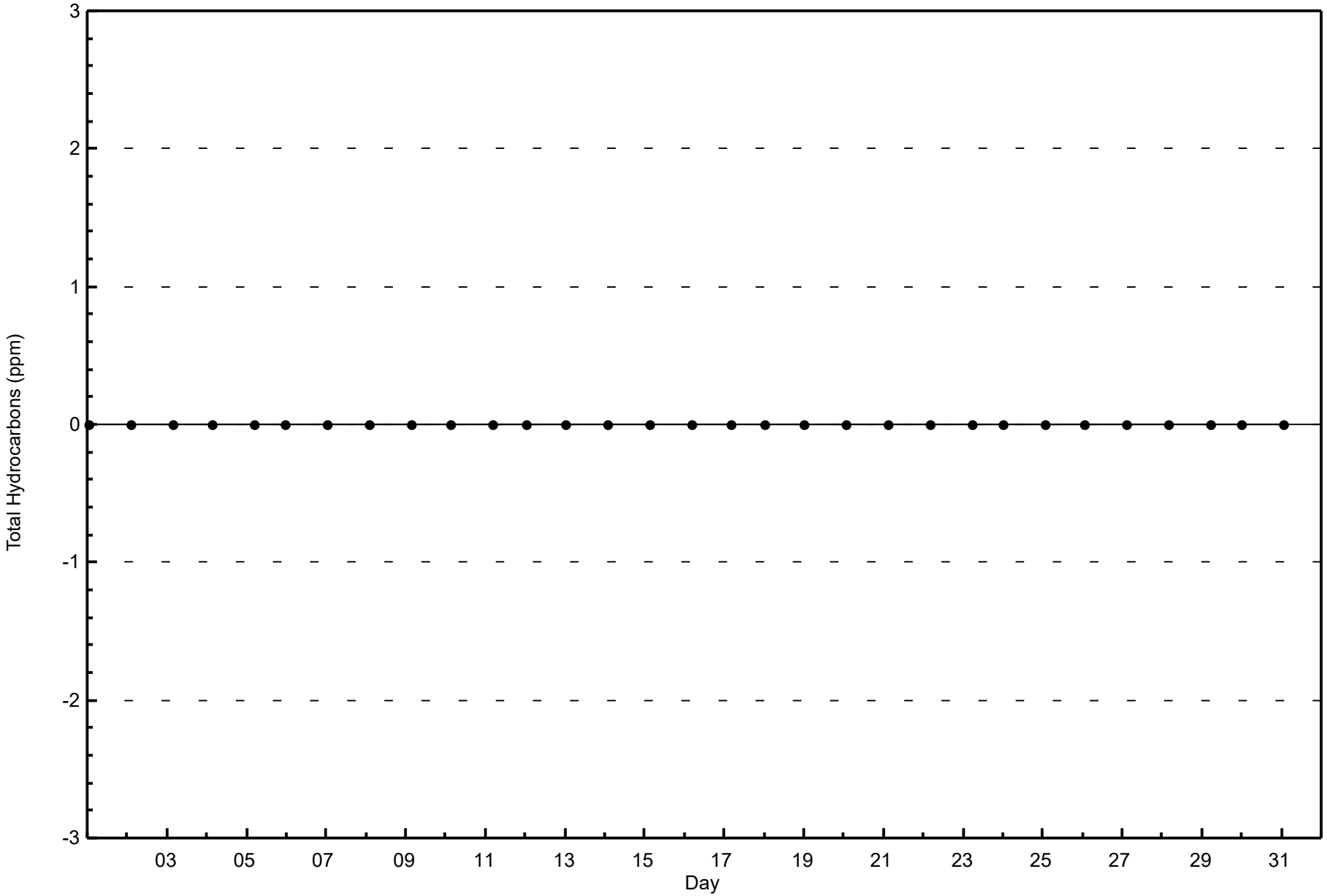
Total Number of Valid Hours: 710

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Janvier - August 2026**

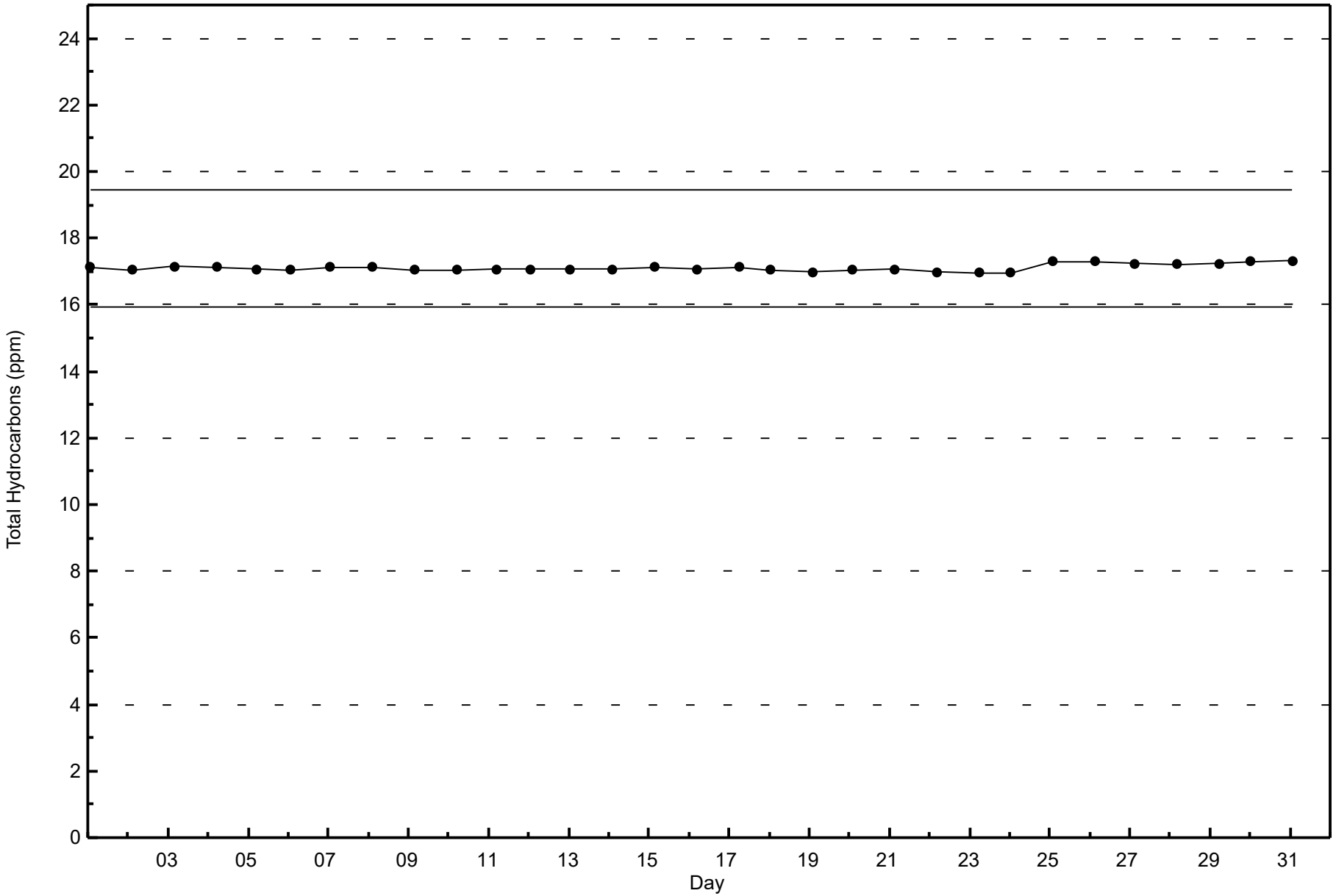


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Janvier - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Non Methane Hydrocarbons (NMHC) - ppm

## Janvier - August 2026

Maximum Value: 0.026 ppm on Aug 19 21:00

Maximum Daily Average: 0.002 ppm on Aug 23

Minimum Value: 0.000 ppm on Aug 1 01:00

Minimum Daily Average: 0.000 ppm on Aug 2

Maximum Diurnal Average: 0.001 ppm at hour 21

Minimum Diurnal Average: 0.000 ppm at hour 1

Monthly Average: 0.000 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.002 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.006 | 0.001 | 0.000 | 0.000 | 0.001 | 0.006 |
| 2-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 10-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 11-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 |
| 12-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 16-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 18-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 19-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.026 | 0.000 | 0.000 | 0.000 | 0.001 | 0.026 |
| 20-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 21-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 22-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 23-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.008 | 0.003 | 0.014 | 0.007 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.014 |
| 24-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 25-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 26-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 28-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 29-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 30-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | Diurnal Average | |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.001 | 0.002 | 0.001 | 0.008 | 0.003 | 0.014 | 0.007 | 0.001 | 0.002 | 0.026 | 0.001 | 0.000 | 0.000 | Diurnal Maximum | |

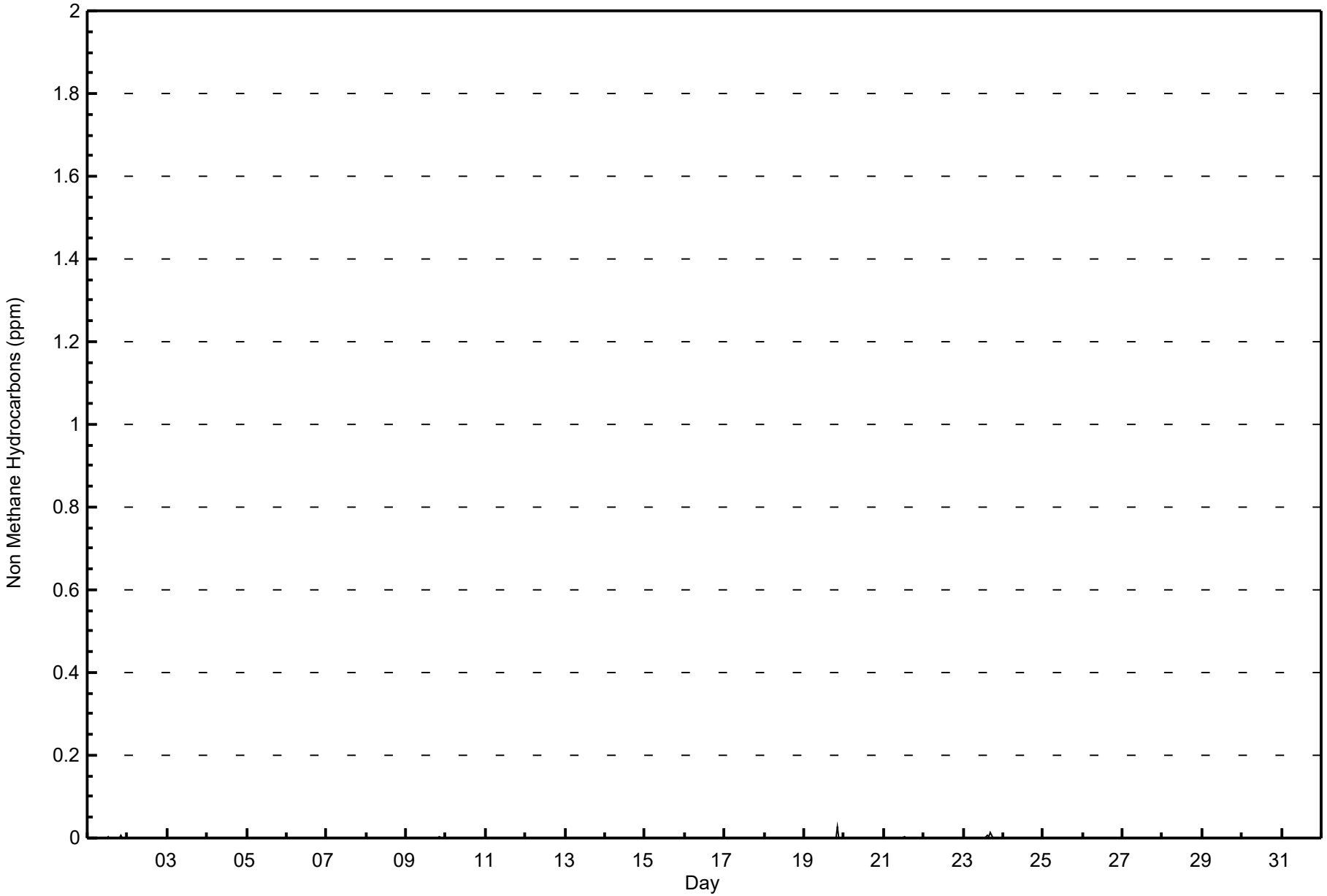
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Janvier - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Janvier - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 705 | 99.30 | 99.30 |
| 0.006 - 0.05 | 5 | 0.70 | 100.00 |
| 0.06 - 0.1 | 0 | 0.00 | 100.00 |
| > 0.1 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Janvier - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 48 | 52 | 23 | 15 | 14 | 18 | 20 | 30 | 42 | 108 | 101 | 67 | 32 | 43 | 54 | 38 | 705 |
| 0.006 - 0.05 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 5 |
| 0.06 - 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 48 | 52 | 23 | 15 | 15 | 18 | 20 | 31 | 42 | 109 | 102 | 68 | 32 | 43 | 54 | 38 | 710 |

Total Number of Valid Hours: 710

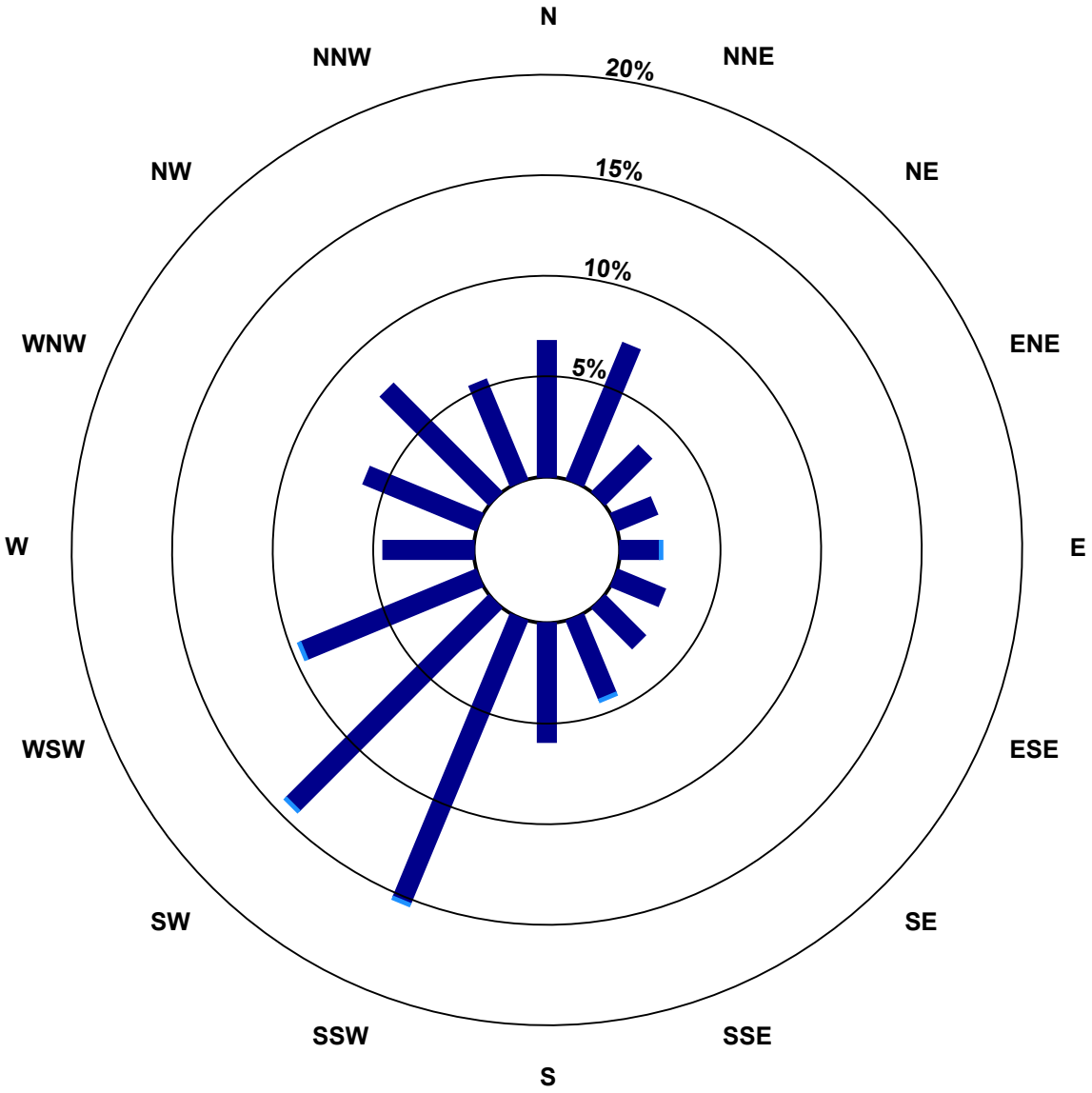
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Janvier




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

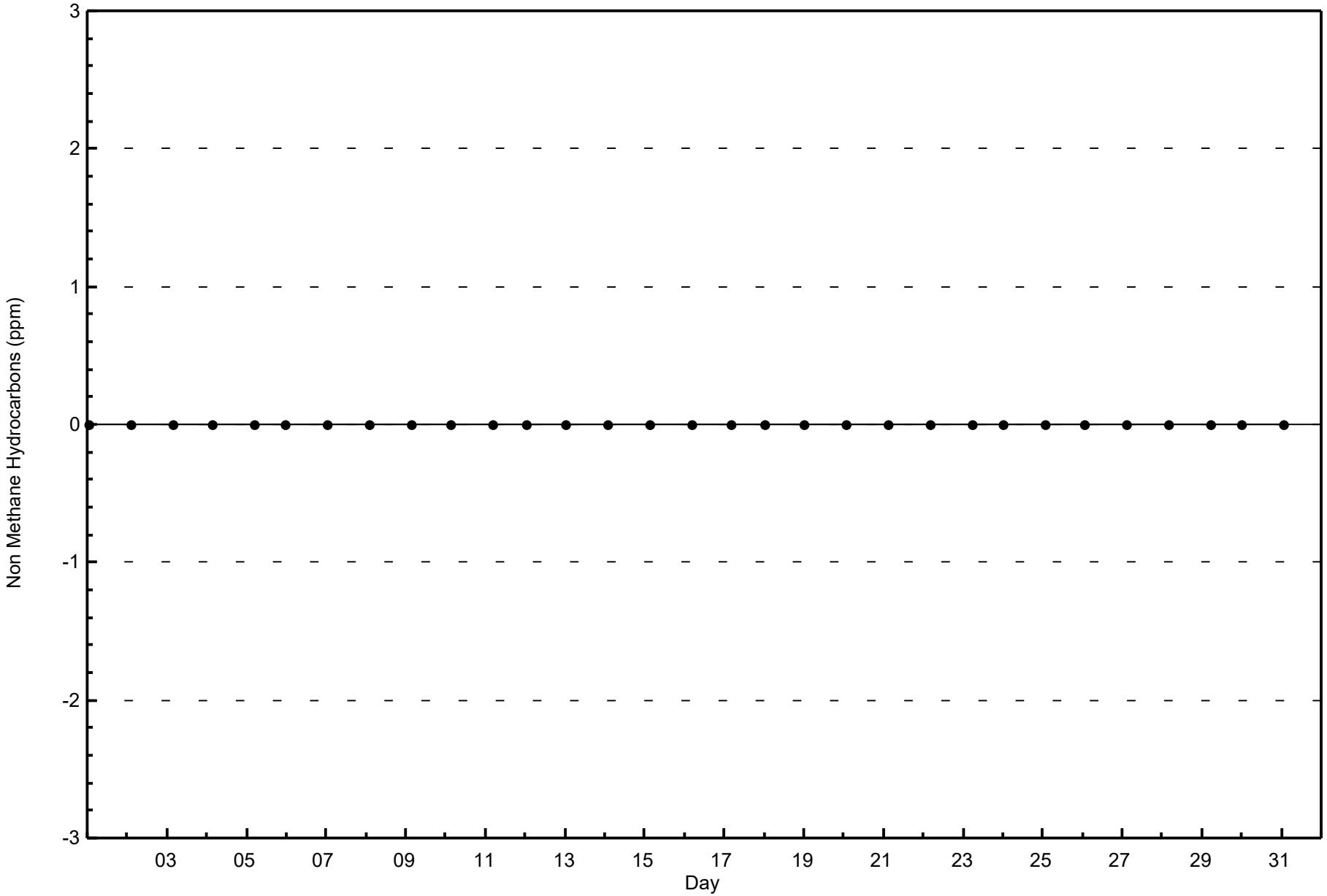
Total Number of Valid Hours: 710

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Janvier - August 2026**

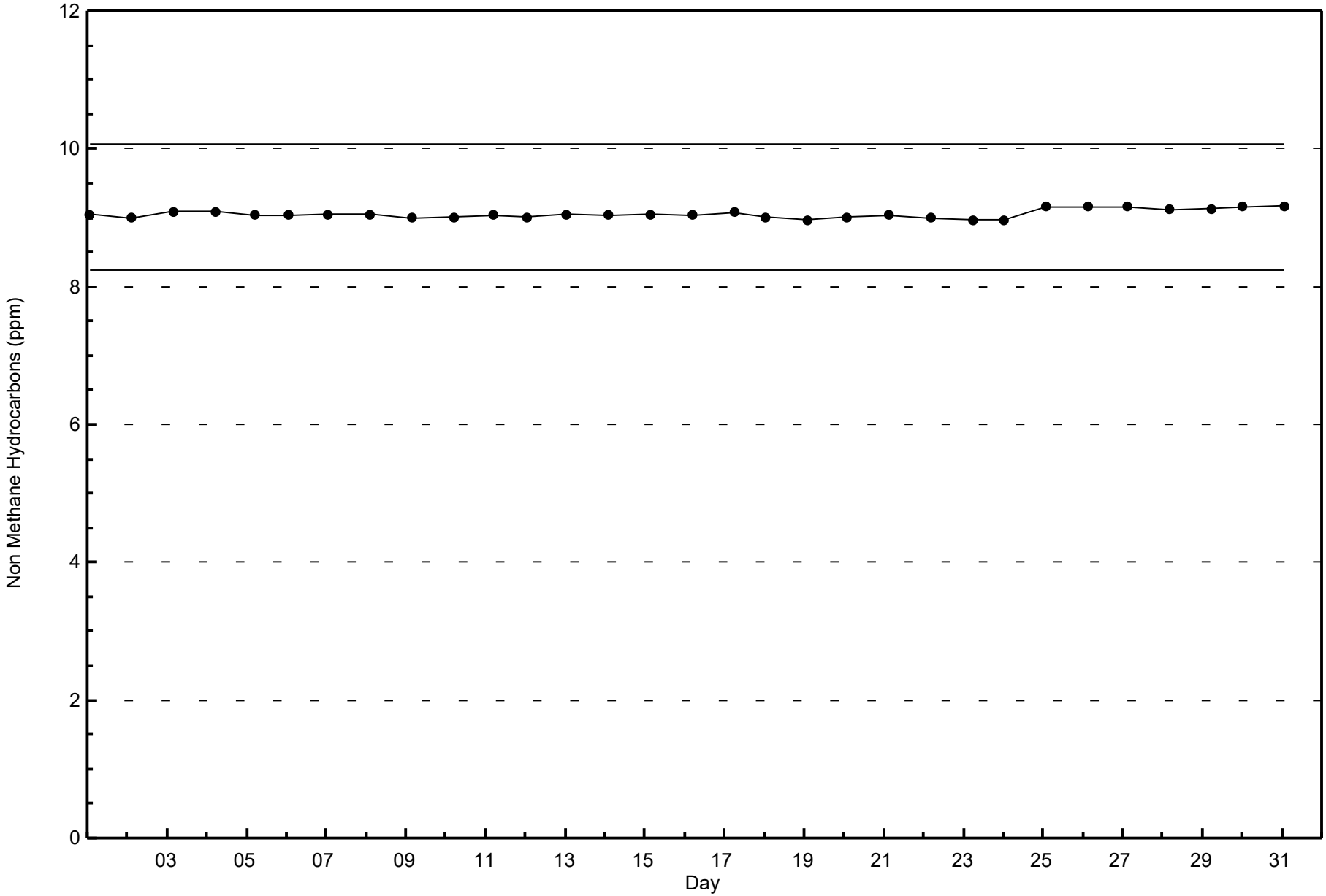


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

**Methane ($CH_4$) - ppm**

**Janvier - August 2026**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.9 ppm on Aug 27 08:00

Maximum Daily Average: 2.2 ppm on Aug 30

Minimum Value: 1.9 ppm on Aug 24 14:00

Minimum Daily Average: 2.0 ppm on Aug 6

Maximum Diurnal Average: 2.2 ppm at hour 8

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.06 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.0 $Q_3$ = 2.1 $P_{90}$ = 2.2 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.2 |
| 2-Aug | 2.0 | 2.0 | Z | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 3-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 |
| 4-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 5-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 6-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 7-Aug | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 |
| 8-Aug | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 |
| 9-Aug | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.2 |
| 10-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 11-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 |
| 12-Aug | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 13-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 14-Aug | 2.2 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 15-Aug | 2.0 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 16-Aug | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 17-Aug | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 18-Aug | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| 19-Aug | 2.0 | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 20-Aug | 2.0 | 2.0 | Z | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.2 |
| 21-Aug | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 22-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.6 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.6 |
| 23-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 24-Aug | Z | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | C | C | C | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 25-Aug | 2.0 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 |
| 26-Aug | 2.0 | 2.1 | Z | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.1 | 2.5 |
| 27-Aug | 2.1 | 2.2 | 2.2 | Z | 2.1 | 2.2 | 2.8 | 2.9 | 2.7 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.9 |
| 28-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.2 |
| 29-Aug | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| 30-Aug | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.4 |
| 31-Aug | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 |
| | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | Diurnal Average | |
| | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.8 | 2.9 | 2.7 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.5 | Diurnal Maximum | |

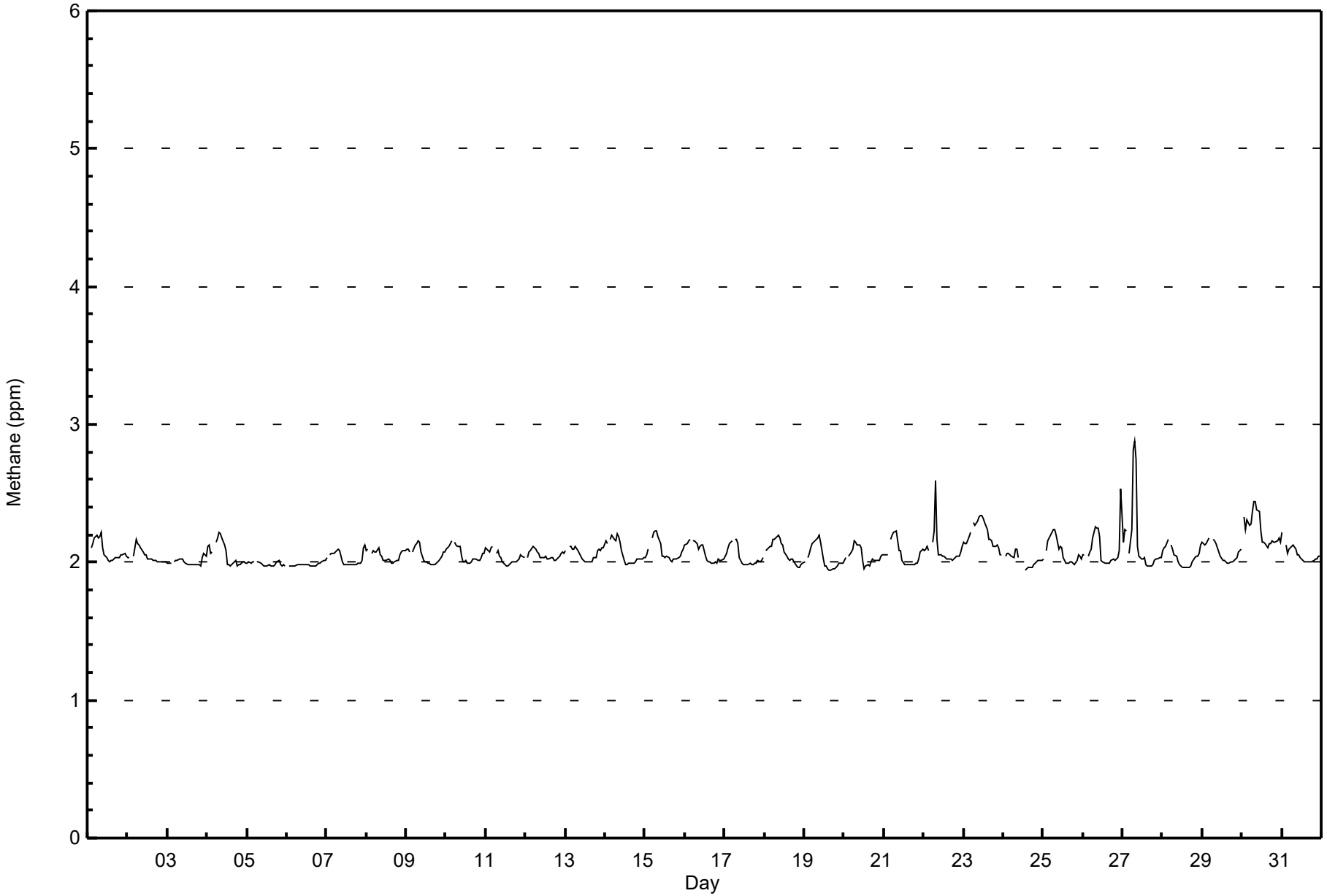
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Janvier - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Janvier - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 404 | 56.90 | 56.90 |
| 2.1 - 3.0 | 306 | 43.10 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Janvier - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 28 | 30 | 14 | 9 | 10 | 11 | 12 | 21 | 24 | 42 | 31 | 42 | 21 | 35 | 50 | 24 | 404 |
| 2.1 - 3.0 | 20 | 22 | 9 | 6 | 5 | 7 | 8 | 10 | 18 | 67 | 71 | 26 | 11 | 8 | 4 | 14 | 306 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 48 | 52 | 23 | 15 | 15 | 18 | 20 | 31 | 42 | 109 | 102 | 68 | 32 | 43 | 54 | 38 | 710 |

Total Number of Valid Hours: 710

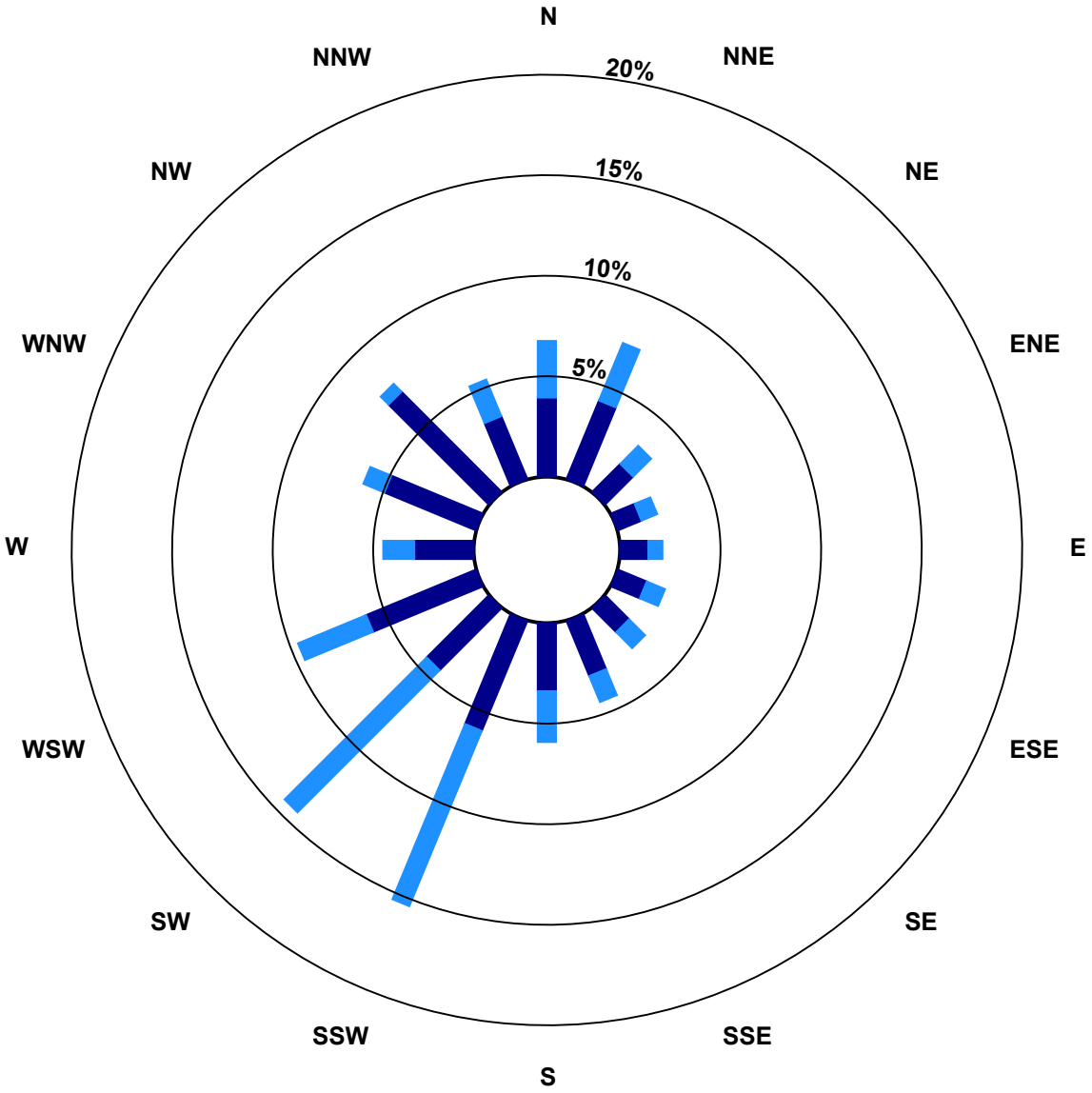
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Janvier




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

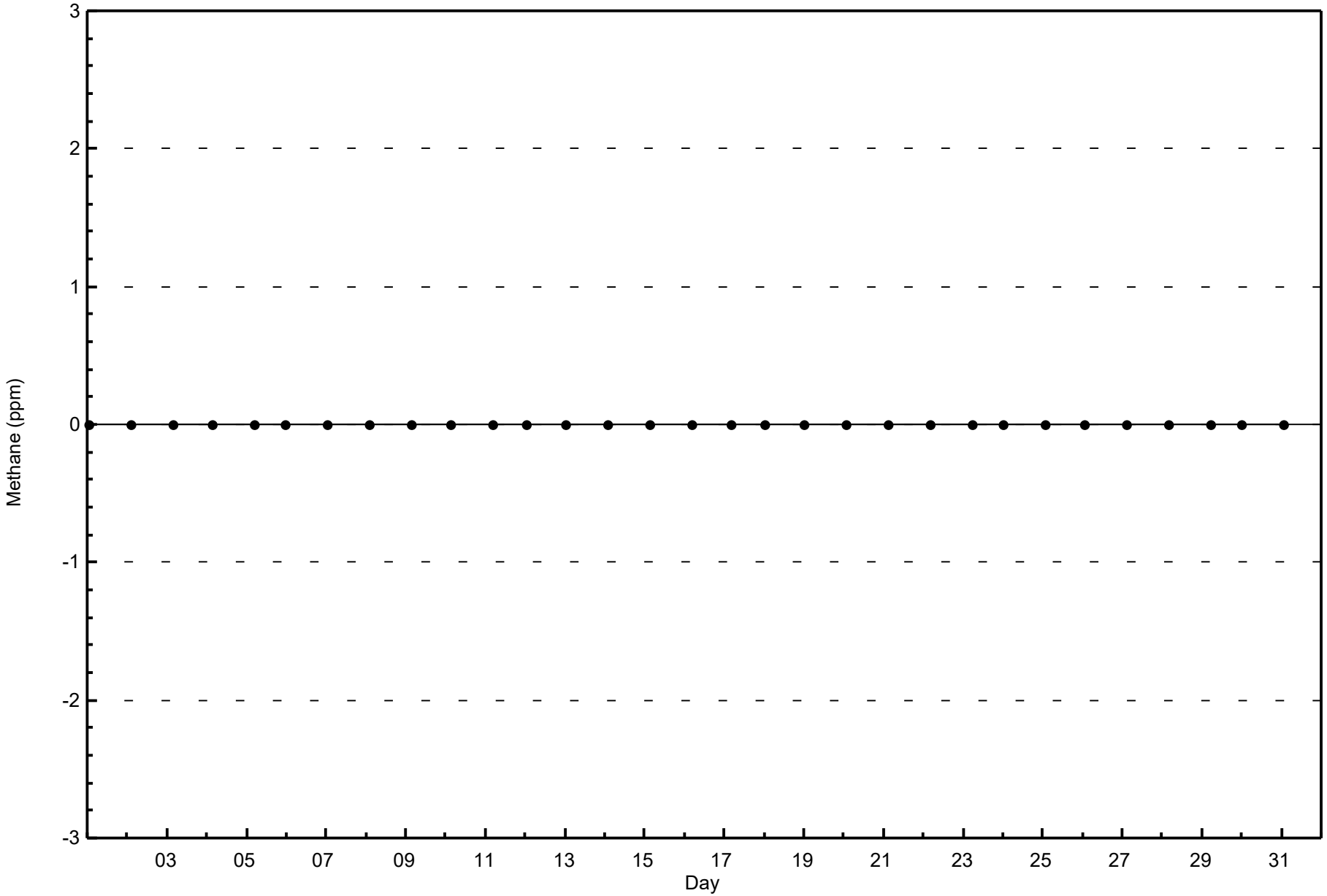
Total Number of Valid Hours: 710

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Janvier - August 2026**

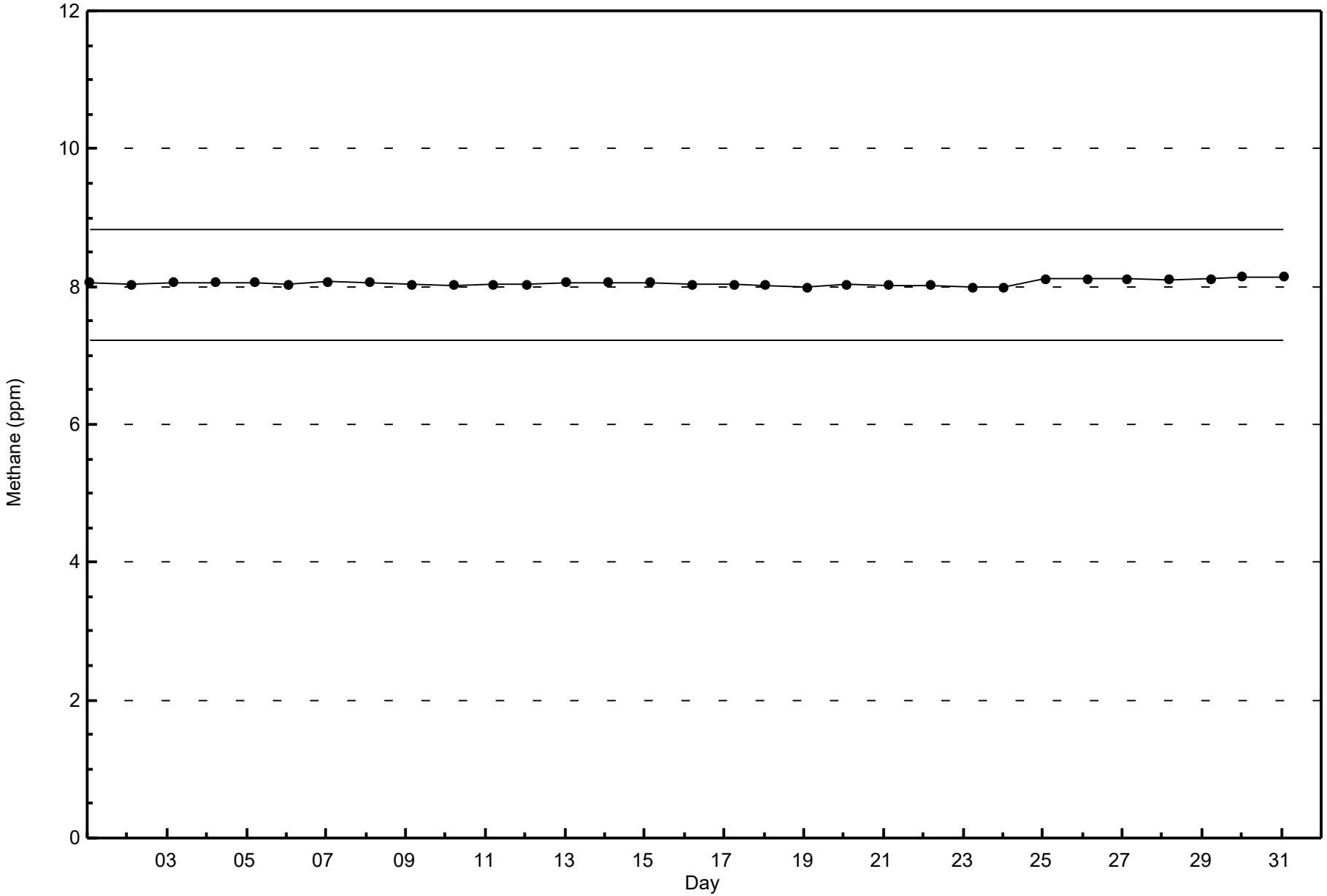


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Janvier - August 2026

Maximum Value: 3.3 ppb on Aug 14 20:00

Maximum Daily Average: 0.7 ppb on Aug 8

Minimum Value: 0.0 ppb on Aug 27 19:00

Minimum Daily Average: 0.1 ppb on Aug 2

Maximum Diurnal Average: 0.9 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 16

Monthly Average: 0.35 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.4 $P_{90}$ = 0.9 $P_{99}$ = 2.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | Z | 1.7 | 0.8 | 0.4 | 0.2 | 0.2 | 0.4 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.3 | 1.7 |
| 2-Aug | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 |
| 3-Aug | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.9 | 0.4 | 0.3 | 0.3 | 0.4 | 0.1 | 0.2 | 0.9 |
| 4-Aug | 0.4 | 0.1 | Z | 0.0 | 0.2 | 0.3 | 1.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 1.4 |
| 5-Aug | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.5 | 1.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.0 | 0.6 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 1.7 |
| 6-Aug | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.0 | 0.8 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.8 |
| 7-Aug | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.8 | 0.3 | 0.7 | 0.9 | 0.7 | 0.2 | 0.9 |
| 8-Aug | Z | 0.1 | 0.1 | 0.3 | 0.4 | 1.7 | 2.3 | 1.4 | 2.0 | 1.4 | 0.7 | 0.3 | 0.4 | 0.5 | 0.3 | 0.1 | 0.1 | 0.2 | 0.6 | 1.6 | 1.3 | 0.2 | 0.6 | 0.4 | 0.7 | 2.3 |
| 9-Aug | 0.3 | Z | 0.1 | 0.2 | 0.1 | 0.2 | 1.0 | 1.4 | 0.7 | 0.8 | 0.3 | 0.7 | 0.4 | 0.5 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.4 | 0.5 | 0.6 | 0.6 | 0.3 | 0.4 | 1.4 |
| 10-Aug | 0.4 | 0.2 | Z | 0.2 | 0.4 | 0.8 | 2.3 | 2.6 | 0.5 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.3 | 0.6 | 0.9 | 0.5 | 1.1 | 0.3 | 0.1 | 0.6 | 2.6 |
| 11-Aug | 0.1 | 0.1 | 0.1 | Z | 0.9 | 0.6 | 1.4 | 0.4 | 0.9 | 0.5 | 0.2 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.4 | 0.6 | 1.4 | 0.5 | 0.1 | 0.5 | 1.4 |
| 12-Aug | 0.1 | 0.1 | 0.1 | 1.0 | Z | 0.1 | 3.0 | 2.3 | 1.0 | 0.3 | 0.6 | 0.6 | 0.9 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 3.0 |
| 13-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.4 | 0.6 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.8 | 0.8 | 0.1 | 0.2 | 0.2 | 0.8 |
| 14-Aug | Z | 0.5 | 0.5 | 0.3 | 0.8 | 0.5 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.7 | 3.3 | 0.9 | 0.4 | 0.4 | 0.1 | 0.5 | 3.3 |
| 15-Aug | 0.3 | Z | 0.2 | 0.3 | 0.1 | 0.2 | 1.0 | 0.7 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.5 | 0.4 | 0.3 | 0.1 | 0.3 | 1.5 |
| 16-Aug | 0.2 | 0.0 | Z | 0.4 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.6 | 0.3 | 0.0 | 0.1 | 0.2 | 0.6 |
| 17-Aug | 0.1 | 0.2 | 0.0 | Z | 0.2 | 0.1 | 0.5 | 0.7 | 0.6 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.9 | 0.5 | 1.1 | 1.3 | 0.9 | 0.3 | 0.1 | 0.4 | 1.3 |
| 18-Aug | 0.1 | 0.0 | 0.1 | 0.4 | Z | 0.7 | 0.8 | 0.9 | 1.6 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.5 | 0.2 | 0.1 | 0.1 | 0.3 | 1.1 | 0.8 | 0.4 | 0.4 | 1.6 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.3 | 1.6 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.8 | 1.2 | 0.4 | 0.4 | 0.3 | 1.6 |
| 20-Aug | Z | 0.3 | 0.4 | 0.1 | 0.4 | 0.8 | 0.3 | 0.7 | 0.9 | 0.2 | 0.4 | 0.4 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.6 | 0.4 | 0.2 | 0.4 | 0.1 | 0.3 | 0.9 |
| 21-Aug | 0.2 | Z | 0.5 | 0.4 | 0.4 | 1.0 | 0.6 | 0.9 | 0.6 | 0.6 | 0.2 | 1.4 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.8 | 0.4 | 0.7 | 1.2 | 0.4 | 0.5 | 1.4 |
| 22-Aug | 0.2 | 0.9 | Z | 0.1 | 0.5 | 0.3 | 1.2 | 0.4 | 0.5 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.3 | 0.1 | 0.3 | 1.2 |
| 23-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 1.0 | 1.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.3 | 0.2 | 0.3 | 0.5 | 0.8 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.2 | 0.4 | 1.3 |
| 24-Aug | 0.3 | 0.4 | 0.1 | 0.1 | Z | 0.9 | 0.9 | 0.5 | 0.5 | 0.9 | 0.9 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.9 | 0.8 | 0.1 | 0.2 | 0.4 | 0.4 | 0.9 |
| 25-Aug | 0.3 | 0.1 | 0.0 | 0.0 | 0.4 | Z | 0.8 | 1.9 | 0.6 | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.5 | 0.1 | 0.1 | 0.2 | 0.4 | 1.0 | 0.5 | 0.3 | 0.2 | 0.1 | 0.4 | 1.9 |
| 26-Aug | Z | 0.1 | 0.1 | 0.2 | 0.5 | 1.8 | 2.0 | 2.3 | 2.2 | 0.7 | 0.3 | 0.4 | 0.2 | 0.8 | 0.2 | 0.1 | 0.4 | 0.5 | 0.2 | 0.3 | 0.5 | 0.4 | 0.2 | 0.1 | 0.6 | 2.3 |
| 27-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 | 0.6 | 0.7 | C | C | C | C | 0.5 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 |
| 28-Aug | 0.3 | 0.2 | Z | 0.0 | 0.1 | 3.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.2 | 0.0 | 0.0 | 0.2 | 3.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.6 | 0.2 | 0.9 | 0.3 | 0.2 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 1.0 | 0.8 | 0.8 | 0.3 | 0.2 | 0.6 | 0.3 | 1.0 |
| 30-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 1.4 | 1.7 | 0.7 | 0.5 | 0.6 | 0.2 | 0.2 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.9 | 1.0 | 1.0 | 0.3 | 1.0 | 0.5 | 1.7 |
| 31-Aug | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 1.1 | 1.6 | 0.2 | 0.5 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 1.3 | 2.5 | 0.7 | 0.4 | 0.3 | 0.1 | 0.5 | 2.5 |
| | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.7 | 0.9 | 0.9 | 0.7 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | Diurnal Average | |
| | 0.4 | 0.9 | 0.5 | 1.0 | 0.9 | 3.0 | 3.0 | 2.6 | 2.2 | 1.4 | 0.9 | 1.4 | 0.9 | 0.8 | 0.5 | 0.4 | 0.5 | 0.9 | 1.3 | 3.3 | 1.5 | 1.4 | 1.2 | 1.2 | Diurnal Maximum | |

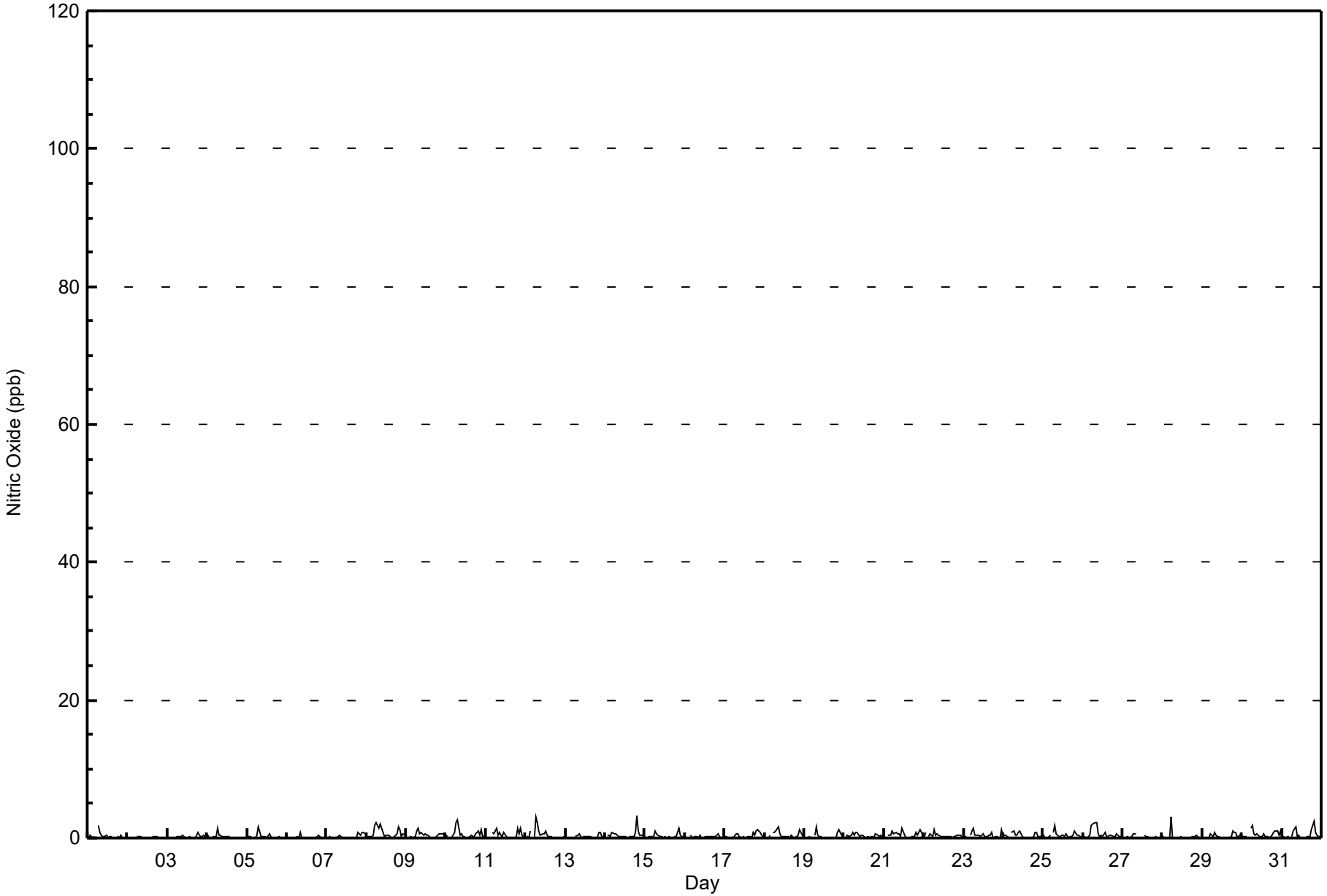
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Janvier - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 709 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Janvier - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 49 | 51 | 24 | 13 | 16 | 17 | 18 | 32 | 43 | 109 | 105 | 65 | 30 | 45 | 52 | 40 | 709 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 49 | 51 | 24 | 13 | 16 | 17 | 18 | 32 | 43 | 109 | 105 | 65 | 30 | 45 | 52 | 40 | 709 |

Total Number of Valid Hours: 709

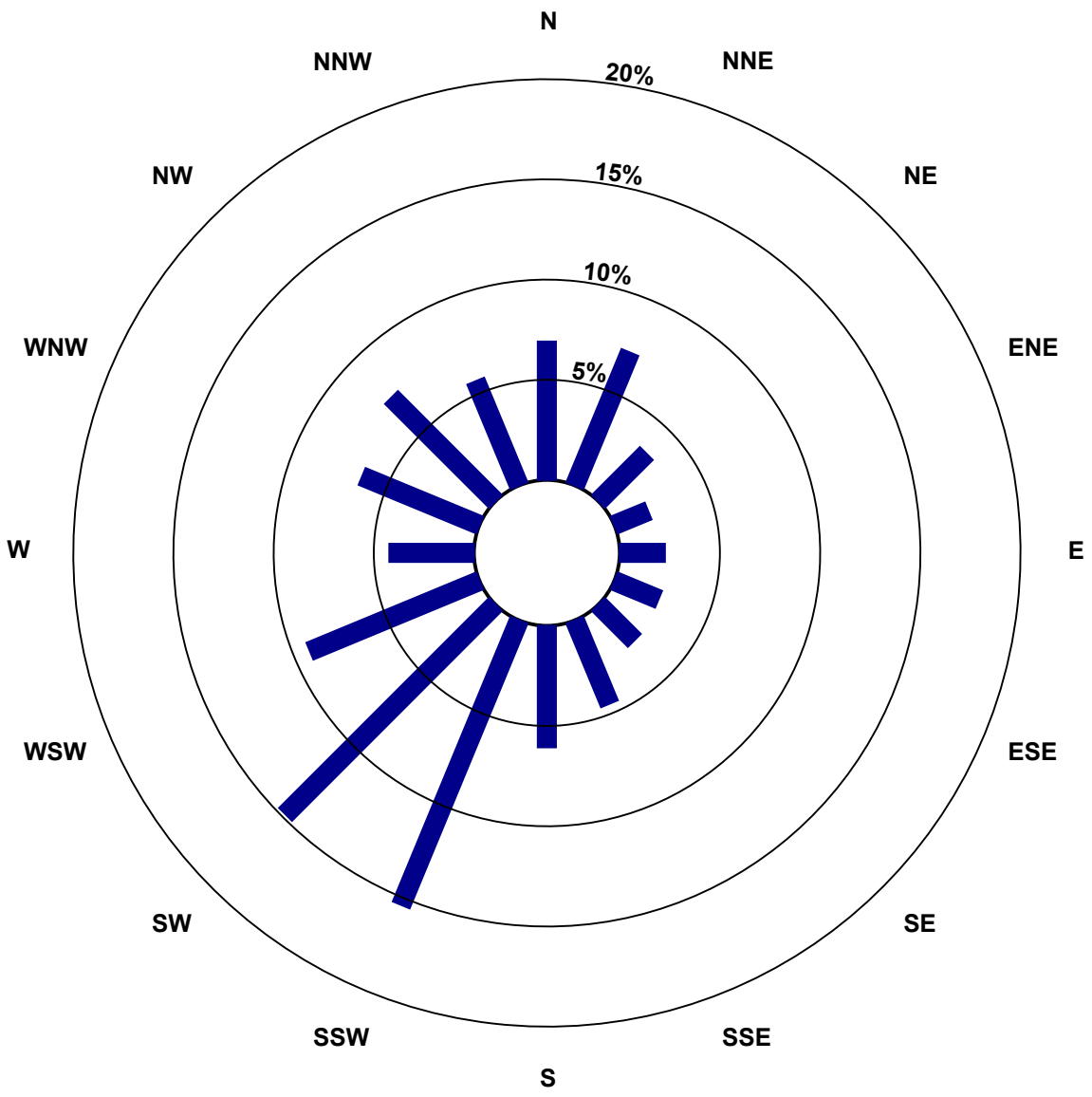
Total Number of Hours: 744

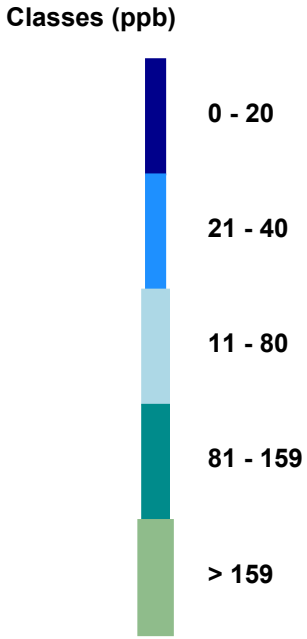
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Nitric Oxide (NO) - ppb**

**Janvier**



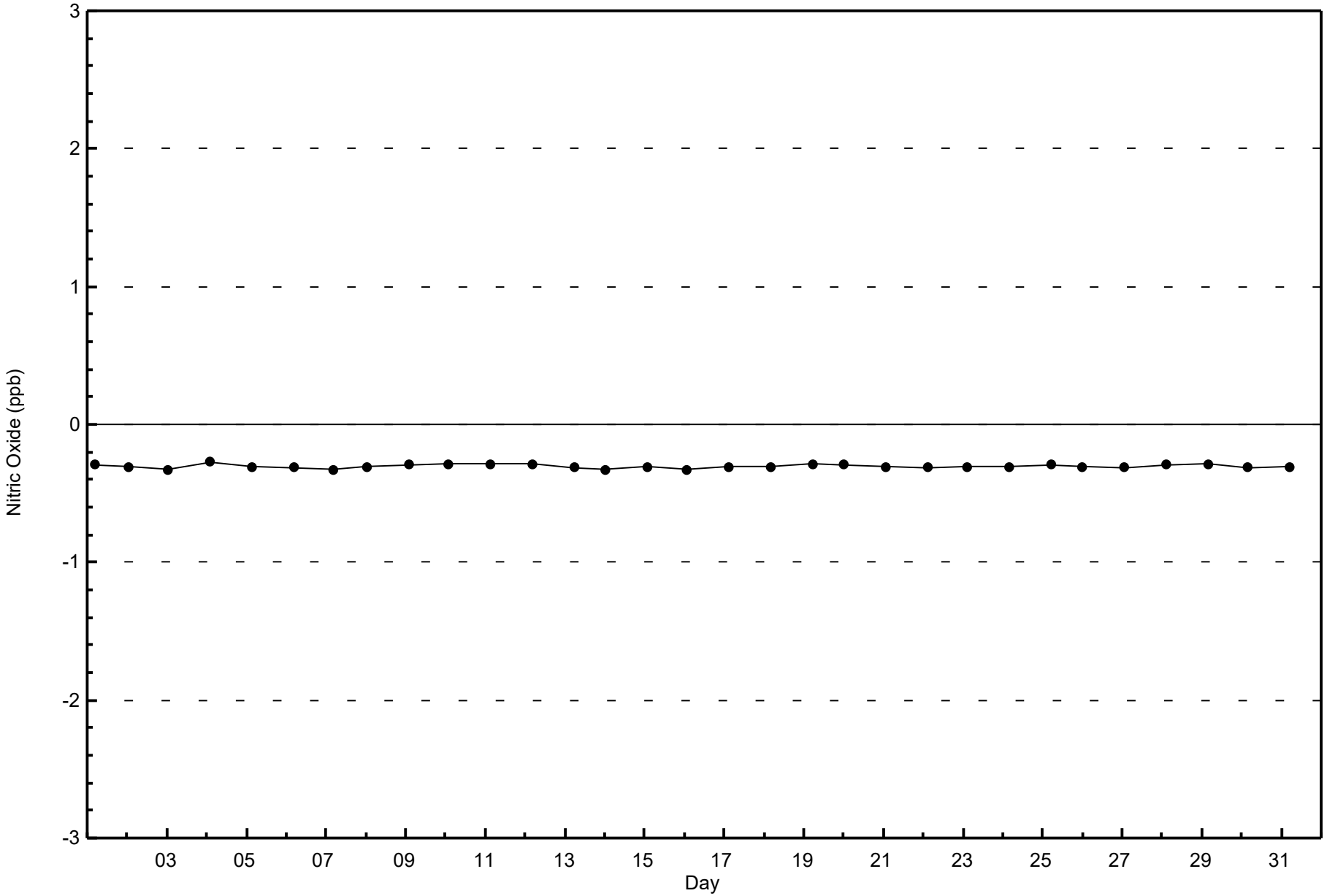

**Total Number of Valid Hours: 709**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Janvier - August 2026**

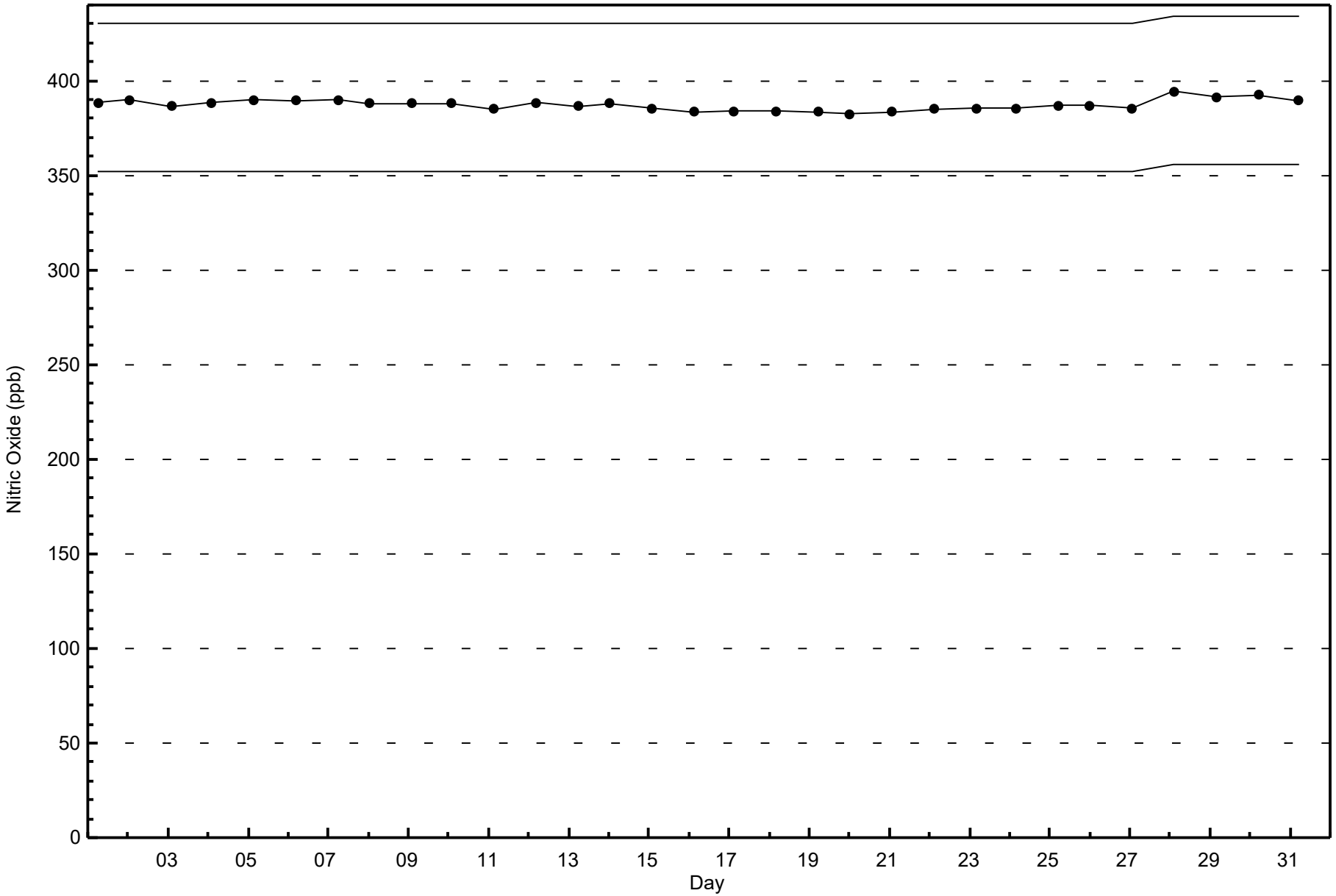


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Janvier - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 3.6 ppb on Aug 2 07:00 Maximum Daily Average: 1.5 ppb on Aug 8

Minimum Value: 0.0 ppb on Aug 13 11:00 Minimum Daily Average: 0.2 ppb on Aug 6

Maximum Diurnal Average: 1.1 ppb at hour 9 Minimum Diurnal Average: 0.5 ppb at hour 15

Monthly Average: 0.78 ppb Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.2 $Q_1$ = 0.4 Median = 0.7 $Q_3$ = 1.1 $P_{90}$ = 1.5 $P_{99}$ = 2.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.4 | 1.0 | 1.4 | 1.3 | 1.3 | Z | 1.9 | 2.1 | 1.7 | 1.1 | 0.7 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 1.1 | 0.9 | 0.9 | 0.6 | 0.8 | 0.7 | 0.9 | 2.1 |
| 2-Aug | Z | 1.2 | 1.0 | 0.7 | 0.6 | 1.1 | 3.6 | 3.3 | 2.2 | 0.9 | 1.0 | 1.0 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 | 0.9 | 1.1 | 0.9 | 1.2 | 3.6 |
| 3-Aug | 0.6 | Z | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 1.1 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 1.1 |
| 4-Aug | 0.5 | 0.3 | Z | 0.6 | 0.4 | 0.4 | 0.9 | 0.6 | 0.6 | 0.7 | 0.7 | 0.5 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.9 |
| 5-Aug | 0.3 | 0.5 | 0.4 | Z | 0.4 | 0.4 | 0.9 | 1.2 | 0.4 | 0.6 | 0.4 | 0.5 | 0.2 | 1.7 | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.4 | 0.7 | 0.9 | 0.5 | 0.8 | 0.5 | 1.7 |
| 6-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.2 | 0.9 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.9 |
| 7-Aug | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | Z | 0.7 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 1.1 | 0.9 | 1.9 | 2.6 | 1.6 | 0.6 | 2.6 |
| 8-Aug | Z | 1.3 | 1.5 | 1.3 | 1.0 | 1.3 | 1.7 | 1.9 | 2.9 | 3.0 | 1.7 | 1.5 | 1.6 | 2.1 | 1.3 | 0.7 | 0.7 | 1.1 | 1.5 | 2.1 | 1.6 | 1.1 | 1.5 | 1.0 | 1.5 | 3.0 |
| 9-Aug | 1.1 | Z | 0.8 | 1.0 | 0.9 | 0.9 | 1.4 | 1.6 | 1.3 | 1.6 | 1.0 | 1.6 | 1.2 | 1.4 | 0.8 | 0.6 | 0.6 | 0.7 | 1.0 | 0.7 | 1.0 | 1.0 | 1.4 | 0.8 | 1.1 | 1.6 |
| 10-Aug | 0.6 | 0.6 | Z | 0.8 | 0.6 | 0.5 | 1.4 | 1.6 | 0.8 | 0.8 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 1.3 | 0.6 | 1.1 | 1.4 | 1.5 | 1.0 | 1.4 | 1.3 | 1.1 | 0.9 | 1.6 |
| 11-Aug | 1.1 | 0.9 | 0.8 | Z | 1.6 | 0.9 | 1.0 | 0.6 | 1.3 | 1.0 | 0.8 | 1.7 | 0.7 | 0.3 | 0.4 | 0.5 | 0.4 | 0.6 | 1.2 | 1.5 | 1.2 | 1.5 | 0.9 | 0.6 | 0.9 | 1.7 |
| 12-Aug | 0.5 | 1.0 | 0.5 | 0.9 | Z | 0.5 | 1.4 | 1.7 | 1.4 | 1.1 | 1.5 | 1.7 | 1.4 | 0.9 | 1.0 | 1.2 | 0.4 | 0.3 | 0.1 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.8 | 1.7 |
| 13-Aug | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | Z | 0.4 | 0.6 | 0.6 | 0.2 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.7 | 0.9 | 0.2 | 0.3 | 0.3 | 0.9 |
| 14-Aug | Z | 0.7 | 0.9 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.8 | 1.8 | 1.3 | 1.0 | 0.9 | 0.3 | 0.5 | 1.8 |
| 15-Aug | 0.3 | Z | 0.4 | 0.4 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.5 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.4 | 0.4 | 1.0 | 0.5 | 0.4 | 0.3 | 0.4 | 1.0 |
| 16-Aug | 0.5 | 0.5 | Z | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.3 | 0.8 | 0.5 | 0.7 | 0.8 | 0.8 | 0.8 | 1.0 | 1.2 | 1.0 | 1.5 | 1.1 | 1.2 | 1.0 | 0.5 | 0.9 | 0.8 | 1.5 |
| 17-Aug | 0.5 | 0.5 | 0.6 | Z | 0.7 | 0.3 | 0.6 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 1.1 | 0.7 | 1.2 | 1.0 | 1.0 | 0.7 | 0.5 | 0.6 | 1.2 |
| 18-Aug | 0.5 | 0.8 | 0.6 | 0.8 | Z | 0.9 | 0.9 | 1.8 | 2.5 | 1.8 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.4 | 0.7 | 0.7 | 0.4 | 0.5 | 1.1 | 2.8 | 2.0 | 0.9 | 1.0 | 2.8 |
| 19-Aug | 0.3 | 0.3 | 0.4 | 0.6 | 0.9 | Z | 0.9 | 1.3 | 0.8 | 0.5 | 0.6 | 0.3 | 0.4 | 0.2 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 1.2 | 2.2 | 0.9 | 1.1 | 0.6 | 2.2 |
| 20-Aug | Z | 1.3 | 1.1 | 0.7 | 1.0 | 1.4 | 0.9 | 0.9 | 1.3 | 1.0 | 1.2 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 1.6 | 2.9 | 1.8 | 2.2 | 1.9 | 1.6 | 1.7 | 1.0 | 1.2 | 2.9 |
| 21-Aug | 1.1 | Z | 2.3 | 2.4 | 1.2 | 0.9 | 0.8 | 1.3 | 1.6 | 1.7 | 1.4 | 1.1 | 0.7 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 1.3 | 0.7 | 1.4 | 1.6 | 1.7 | 1.1 | 2.4 |
| 22-Aug | 1.2 | 1.1 | Z | 2.1 | 2.5 | 1.4 | 0.8 | 0.4 | 1.4 | 1.3 | 0.9 | 1.0 | 1.8 | 1.6 | 1.4 | 1.3 | 1.1 | 0.8 | 1.1 | 1.4 | 1.6 | 1.5 | 1.6 | 1.0 | 1.3 | 2.5 |
| 23-Aug | 0.9 | 0.9 | 0.7 | Z | 0.8 | 1.0 | 0.9 | 0.9 | 1.2 | 1.3 | 0.9 | 1.0 | 1.1 | 1.0 | 0.9 | 1.2 | 1.2 | 1.2 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 1.0 | 0.9 | 1.3 |
| 24-Aug | 0.6 | 0.6 | 0.5 | 0.6 | Z | 2.5 | 2.1 | 2.2 | 2.5 | 2.5 | 2.4 | 1.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 1.0 | 1.4 | 1.8 | 1.1 | 1.6 | 1.6 | 1.2 | 2.5 |
| 25-Aug | 0.8 | 1.5 | 0.7 | 0.5 | 0.5 | Z | 0.9 | 1.4 | 0.9 | 1.0 | 0.7 | 0.9 | 0.4 | 0.4 | 1.1 | 0.8 | 1.0 | 1.0 | 1.0 | 1.2 | 1.5 | 1.1 | 0.5 | 0.5 | 0.9 | 1.5 |
| 26-Aug | Z | 0.7 | 0.5 | 0.4 | 0.8 | 0.9 | 0.7 | 1.5 | 1.7 | 1.5 | 1.3 | 0.8 | 0.9 | 1.4 | 0.8 | 0.8 | 1.0 | 1.6 | 0.8 | 0.8 | 1.1 | 1.0 | 1.1 | 0.5 | 1.0 | 1.7 |
| 27-Aug | 0.9 | Z | 0.8 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | C | C | C | C | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.8 | 0.3 | 0.8 | 0.9 | 0.5 | 0.9 |
| 28-Aug | 2.2 | 0.7 | Z | 0.7 | 0.6 | 1.6 | 1.4 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 1.0 | 1.3 | 1.2 | 0.5 | 0.6 | 0.7 | 2.2 |
| 29-Aug | 0.6 | 0.5 | 0.5 | Z | 0.8 | 1.1 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.7 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 1.2 | 0.6 | 1.2 |
| 30-Aug | 0.6 | 0.4 | 0.4 | 0.4 | Z | 0.7 | 0.8 | 0.9 | 1.1 | 1.0 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.9 | 0.5 | 0.2 | 0.4 | 0.5 | 1.1 |
| 31-Aug | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | Z | 0.5 | 1.0 | 1.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.5 | 1.0 | 0.5 | 0.4 | 0.2 | 0.1 | 0.3 | 1.1 |
| | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 1.0 | 1.1 | 1.1 | 1.0 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 1.0 | 0.9 | 0.8 | Diurnal Average | |
| | 2.2 | 1.5 | 2.3 | 2.4 | 2.5 | 2.5 | 3.6 | 3.3 | 2.9 | 3.0 | 2.4 | 1.7 | 1.8 | 2.1 | 1.4 | 1.3 | 1.6 | 2.9 | 1.8 | 2.2 | 1.9 | 2.8 | 2.6 | 1.7 | Diurnal Maximum | |

Z - zerospan C - Calibration

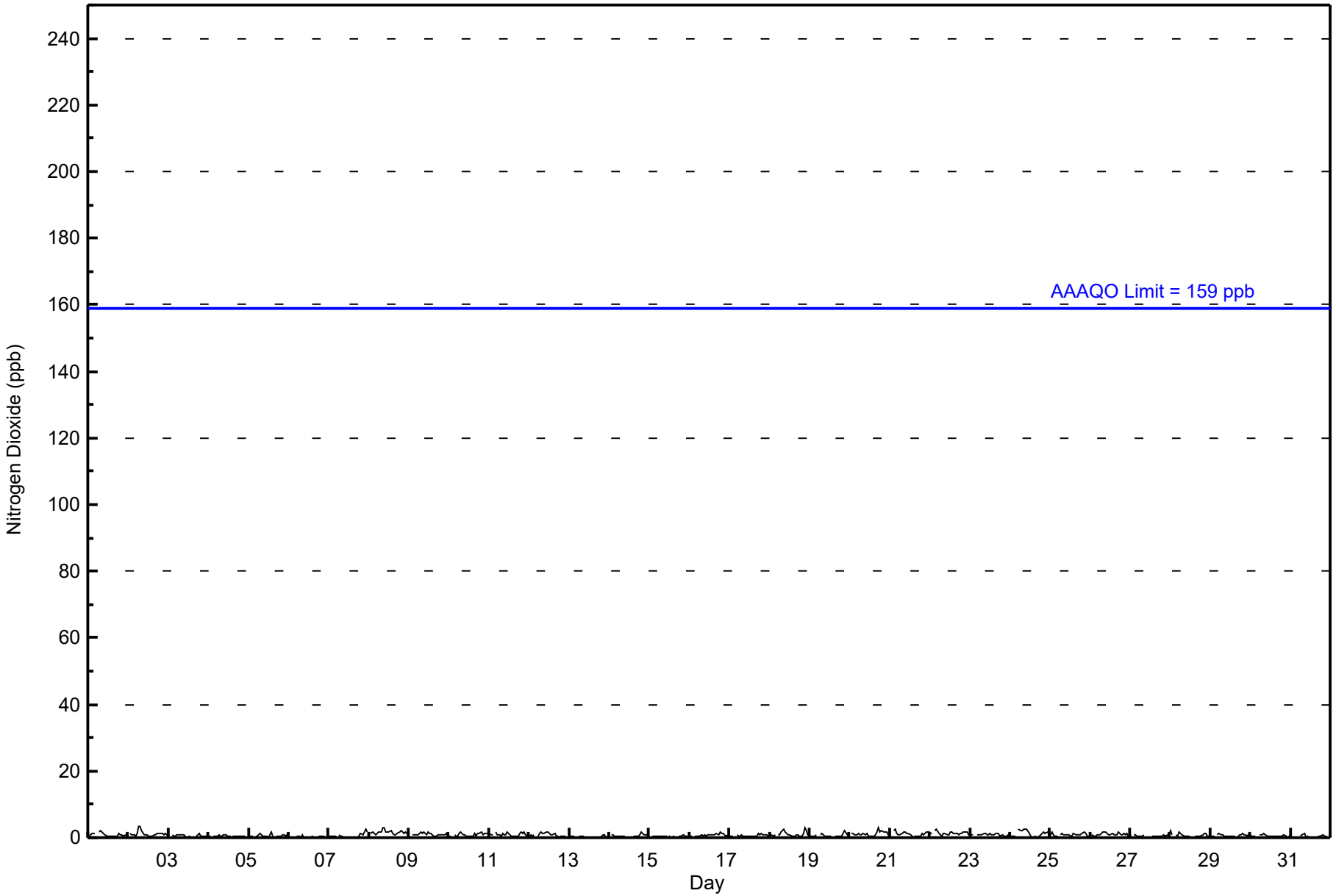
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Janvier - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb

## Janvier - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 709 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Janvier - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 49 | 51 | 24 | 13 | 16 | 17 | 18 | 32 | 43 | 109 | 105 | 65 | 30 | 45 | 52 | 40 | 709 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 49 | 51 | 24 | 13 | 16 | 17 | 18 | 32 | 43 | 109 | 105 | 65 | 30 | 45 | 52 | 40 | 709 |

Total Number of Valid Hours: 709

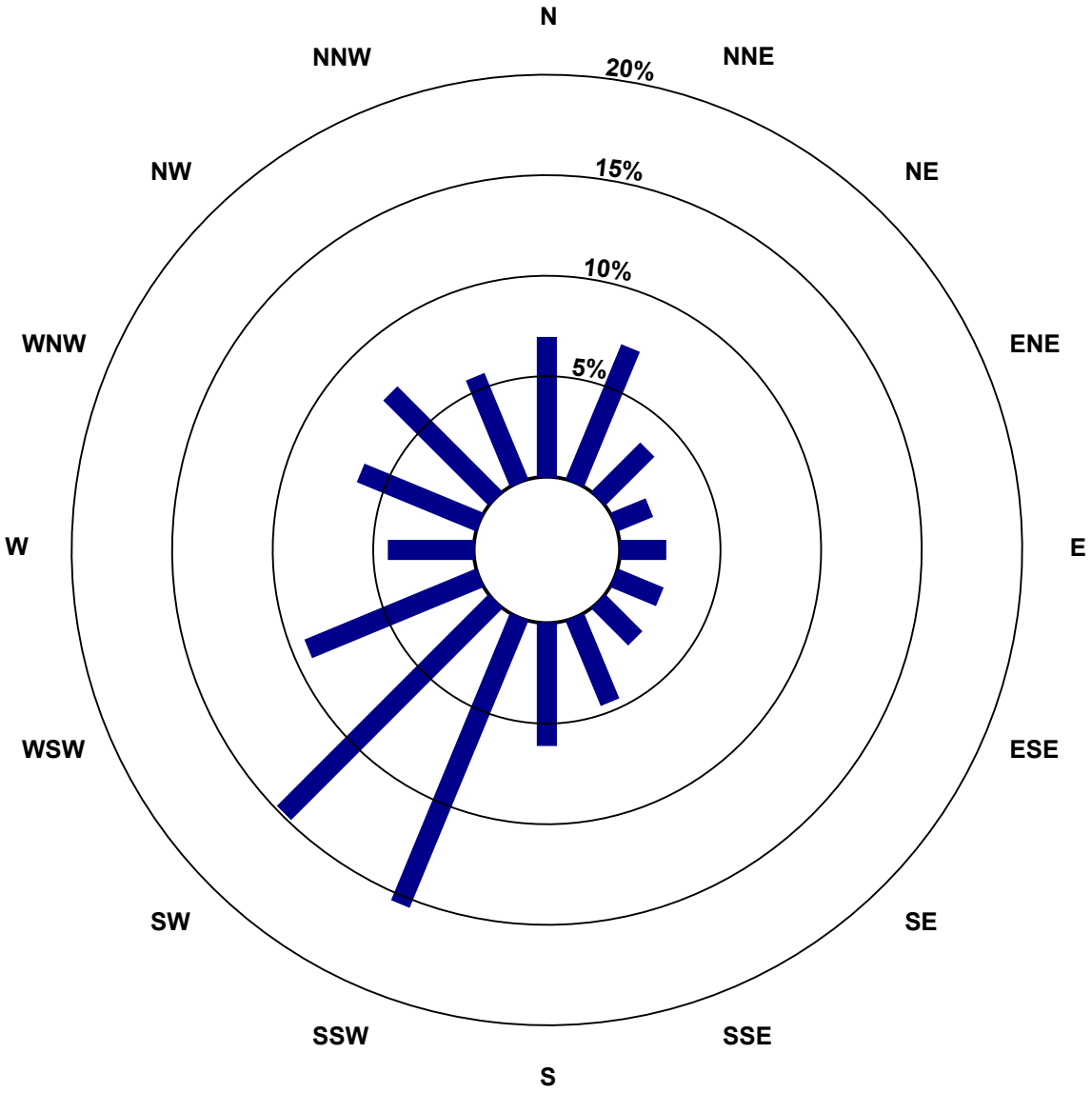
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Janvier




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

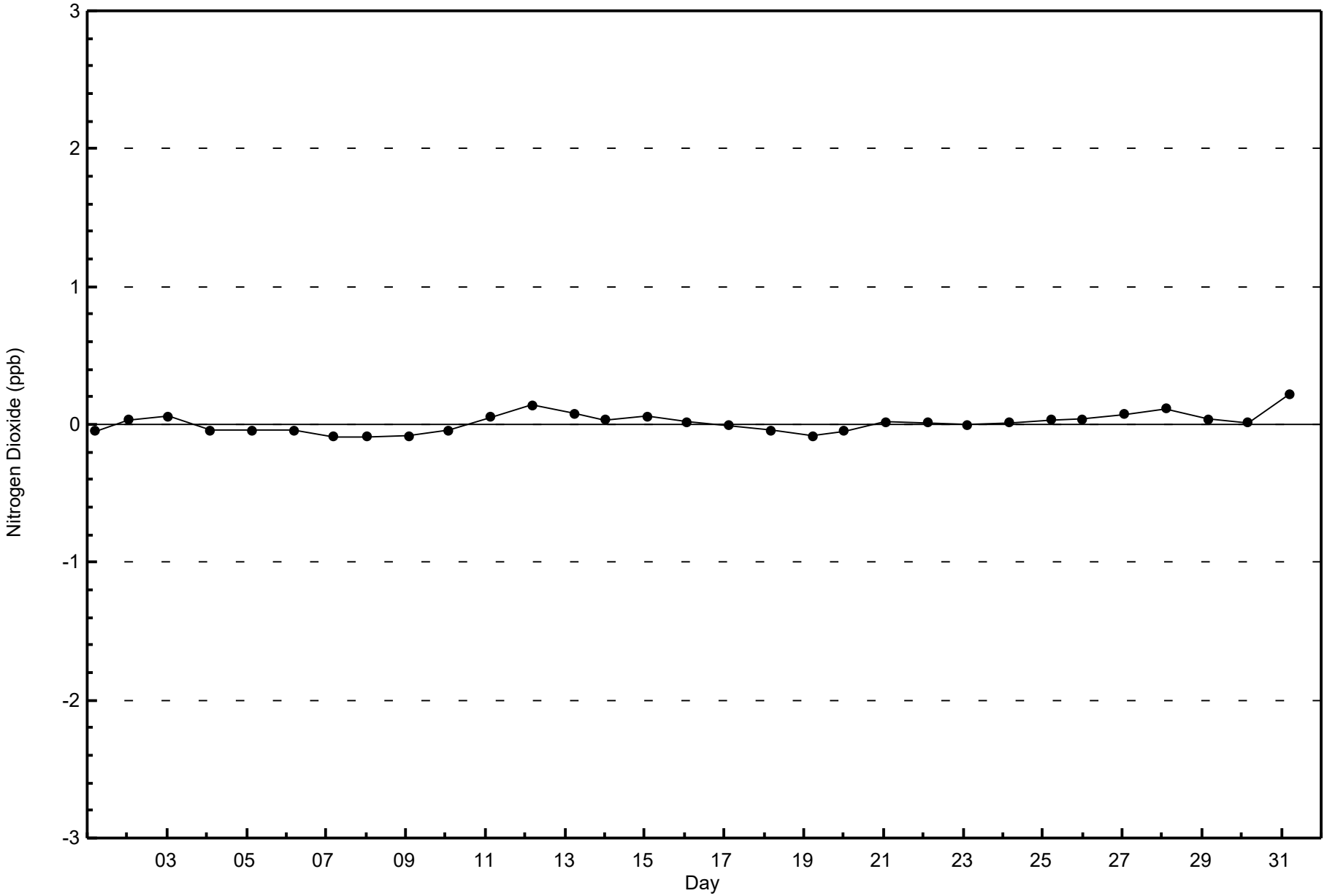
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Janvier - August 2026**

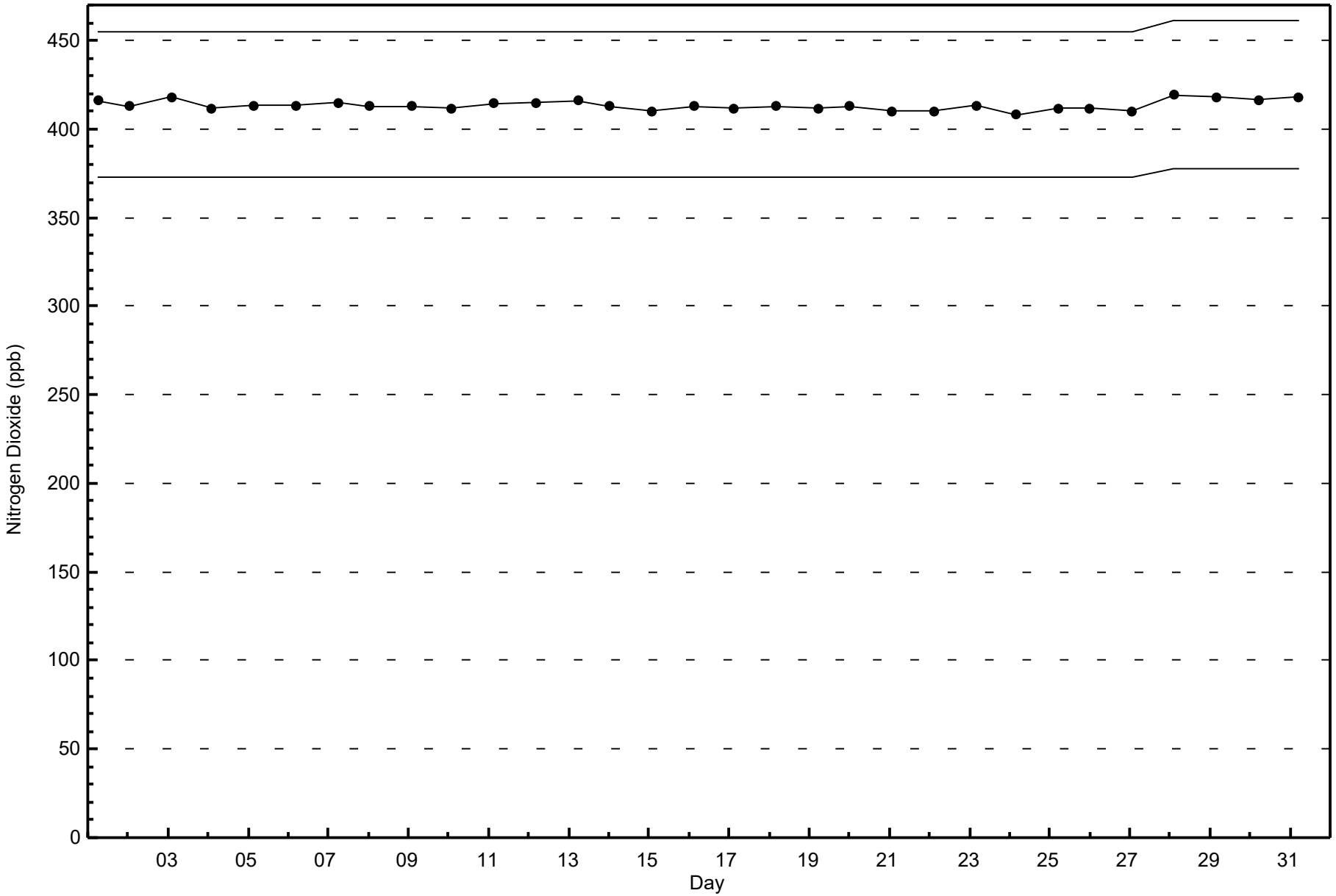


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Janvier - August 2026

Maximum Value: 5.1 ppb on Aug 14 20:00

Maximum Daily Average: 2.3 ppb on Aug 8

Minimum Value: 0.1 ppb on Aug 13 19:00

Minimum Daily Average: 0.4 ppb on Aug 6

Maximum Diurnal Average: 2.0 ppb at hour 8

Minimum Diurnal Average: 0.6 ppb at hour 15

Monthly Average: 1.13 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.3 $Q_1$ = 0.5 Median = 0.9 $Q_3$ = 1.5 $P_{90}$ = 2.3 $P_{99}$ = 4.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.5 | 1.4 | 1.6 | 1.4 | 1.4 | Z | 3.6 | 2.9 | 2.1 | 1.3 | 0.9 | 0.8 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 1.2 | 1.0 | 1.2 | 0.7 | 0.8 | 0.7 | 1.2 | 3.6 |
| 2-Aug | Z | 1.2 | 1.1 | 0.7 | 0.6 | 1.1 | 3.8 | 3.6 | 2.3 | 0.9 | 1.1 | 1.0 | 0.6 | 0.7 | 0.7 | 0.8 | 1.2 | 1.3 | 1.3 | 1.3 | 1.2 | 1.0 | 1.1 | 0.9 | 1.3 | 3.8 |
| 3-Aug | 0.6 | Z | 0.8 | 0.6 | 0.7 | 0.8 | 0.8 | 1.0 | 1.1 | 1.0 | 0.6 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 2.0 | 0.8 | 0.8 | 0.7 | 0.9 | 0.6 | 0.7 | 2.0 |
| 4-Aug | 0.9 | 0.4 | Z | 0.6 | 0.6 | 0.7 | 2.3 | 1.0 | 1.1 | 1.0 | 0.9 | 0.7 | 0.5 | 0.7 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.7 | 2.3 |
| 5-Aug | 0.4 | 0.6 | 0.5 | Z | 0.4 | 0.4 | 1.4 | 2.9 | 0.7 | 0.8 | 0.6 | 0.7 | 0.2 | 2.3 | 0.4 | 0.2 | 0.2 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 0.5 | 0.9 | 0.7 | 2.9 |
| 6-Aug | 0.3 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.5 | 0.2 | 1.7 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.6 | 0.7 | 0.6 | 0.5 | 0.2 | 0.2 | 0.4 | 1.7 |
| 7-Aug | 0.4 | 0.3 | 0.5 | 0.4 | 0.4 | Z | 1.0 | 0.8 | 0.9 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.5 | 1.9 | 1.2 | 2.6 | 3.5 | 2.3 | 0.8 | 3.5 |
| 8-Aug | Z | 1.4 | 1.6 | 1.6 | 1.4 | 3.0 | 4.0 | 3.3 | 4.9 | 4.4 | 2.4 | 1.8 | 2.0 | 2.6 | 1.6 | 0.8 | 0.8 | 1.3 | 2.1 | 3.7 | 2.9 | 1.3 | 2.1 | 1.4 | 2.3 | 4.9 |
| 9-Aug | 1.4 | Z | 0.9 | 1.2 | 1.0 | 1.1 | 2.4 | 3.0 | 2.0 | 2.4 | 1.3 | 2.3 | 1.6 | 1.9 | 0.9 | 0.7 | 0.6 | 0.8 | 1.2 | 1.1 | 1.5 | 1.6 | 2.0 | 1.1 | 1.5 | 3.0 |
| 10-Aug | 1.0 | 0.8 | Z | 1.0 | 1.0 | 1.3 | 3.7 | 4.2 | 1.3 | 1.3 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 1.7 | 0.7 | 1.4 | 2.0 | 2.4 | 1.5 | 2.5 | 1.6 | 1.2 | 1.4 | 4.2 |
| 11-Aug | 1.2 | 1.0 | 0.9 | Z | 2.5 | 1.5 | 2.4 | 1.0 | 2.2 | 1.5 | 1.0 | 2.4 | 0.9 | 0.4 | 0.5 | 0.6 | 0.5 | 0.7 | 1.5 | 2.9 | 1.8 | 2.9 | 1.4 | 0.7 | 1.4 | 2.9 |
| 12-Aug | 0.6 | 1.1 | 0.6 | 1.9 | Z | 0.6 | 4.4 | 4.0 | 2.4 | 1.4 | 2.1 | 2.3 | 2.3 | 1.2 | 1.3 | 1.4 | 0.5 | 0.4 | 0.1 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 1.3 | 4.4 |
| 13-Aug | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | Z | 0.6 | 1.0 | 1.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 0.1 | 0.1 | 0.5 | 1.5 | 1.7 | 0.3 | 0.5 | 0.5 | 1.7 |
| 14-Aug | Z | 1.2 | 1.4 | 0.8 | 1.1 | 0.8 | 1.0 | 0.7 | 0.7 | 0.5 | 0.4 | 0.2 | 0.4 | 0.2 | 0.2 | 0.5 | 0.5 | 0.6 | 1.5 | 5.1 | 2.2 | 1.4 | 1.3 | 0.4 | 1.0 | 5.1 |
| 15-Aug | 0.6 | Z | 0.6 | 0.7 | 0.6 | 0.5 | 1.4 | 1.0 | 0.7 | 0.7 | 0.5 | 0.3 | 0.7 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.5 | 0.6 | 2.5 | 0.9 | 0.7 | 0.4 | 0.7 | 2.5 |
| 16-Aug | 0.7 | 0.5 | Z | 0.9 | 0.6 | 0.6 | 0.9 | 1.0 | 0.4 | 1.2 | 0.6 | 0.8 | 0.9 | 1.0 | 0.9 | 1.1 | 1.3 | 1.1 | 1.7 | 1.5 | 1.8 | 1.3 | 0.5 | 1.0 | 1.0 | 1.8 |
| 17-Aug | 0.6 | 0.7 | 0.6 | Z | 0.9 | 0.4 | 1.1 | 1.4 | 1.2 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.7 | 0.5 | 0.5 | 2.0 | 1.2 | 2.3 | 2.3 | 1.9 | 1.0 | 0.6 | 0.9 | 2.3 |
| 18-Aug | 0.6 | 0.8 | 0.7 | 1.2 | Z | 1.6 | 1.7 | 2.7 | 4.1 | 2.4 | 1.3 | 1.1 | 0.8 | 0.7 | 0.8 | 0.4 | 1.2 | 0.9 | 0.5 | 0.6 | 1.4 | 3.9 | 2.8 | 1.3 | 1.5 | 4.1 |
| 19-Aug | 0.3 | 0.3 | 0.4 | 0.7 | 0.9 | Z | 1.2 | 2.9 | 1.2 | 0.7 | 0.8 | 0.4 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.5 | 0.7 | 2.0 | 3.4 | 1.3 | 1.5 | 0.9 | 3.4 |
| 20-Aug | Z | 1.6 | 1.5 | 0.8 | 1.4 | 2.2 | 1.2 | 1.6 | 2.2 | 1.2 | 1.6 | 0.9 | 0.5 | 0.4 | 0.7 | 0.8 | 1.7 | 3.1 | 1.9 | 2.8 | 2.3 | 1.8 | 2.1 | 1.1 | 1.5 | 3.1 |
| 21-Aug | 1.3 | Z | 2.8 | 2.8 | 1.6 | 1.9 | 1.4 | 2.2 | 2.2 | 2.3 | 1.6 | 2.5 | 1.2 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.8 | 2.1 | 1.1 | 2.1 | 2.8 | 2.1 | 1.6 | 2.8 |
| 22-Aug | 1.4 | 2.0 | Z | 2.2 | 3.0 | 1.7 | 2.0 | 0.8 | 1.9 | 1.7 | 1.1 | 1.2 | 2.1 | 1.8 | 1.6 | 1.5 | 1.2 | 0.9 | 1.2 | 1.6 | 2.0 | 1.8 | 1.9 | 1.1 | 1.6 | 3.0 |
| 23-Aug | 1.0 | 1.0 | 0.8 | Z | 1.1 | 2.0 | 2.2 | 1.3 | 1.7 | 1.7 | 1.2 | 1.3 | 1.7 | 1.3 | 1.1 | 1.5 | 1.7 | 2.0 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 2.2 | 1.3 | 2.2 |
| 24-Aug | 0.9 | 1.0 | 0.6 | 0.7 | Z | 3.4 | 3.0 | 2.7 | 3.0 | 3.4 | 3.3 | 1.4 | 0.4 | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 1.2 | 2.3 | 2.6 | 1.2 | 1.8 | 2.0 | 1.6 | 3.4 |
| 25-Aug | 1.1 | 1.6 | 0.7 | 0.5 | 0.9 | Z | 1.7 | 3.3 | 1.5 | 1.2 | 0.9 | 1.2 | 0.8 | 0.5 | 1.6 | 0.9 | 1.1 | 1.2 | 1.4 | 2.2 | 2.0 | 1.4 | 0.7 | 0.6 | 1.3 | 3.3 |
| 26-Aug | Z | 0.8 | 0.6 | 0.6 | 1.3 | 2.7 | 2.7 | 3.8 | 3.9 | 2.2 | 1.6 | 1.2 | 1.1 | 2.2 | 1.0 | 0.9 | 1.4 | 2.1 | 1.0 | 1.1 | 1.6 | 1.4 | 1.3 | 0.6 | 1.6 | 3.9 |
| 27-Aug | 1.0 | Z | 0.9 | 0.8 | 0.5 | 0.5 | 1.1 | 1.1 | 1.5 | C | C | C | C | 0.8 | 0.6 | 0.6 | 0.6 | 0.3 | 0.4 | 0.5 | 1.0 | 0.3 | 0.8 | 0.9 | 0.8 | 1.5 |
| 28-Aug | 2.5 | 0.9 | Z | 0.7 | 0.7 | 4.6 | 1.5 | 0.9 | 0.6 | 0.5 | 0.5 | 0.6 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.4 | 0.7 | 1.1 | 1.7 | 1.4 | 0.5 | 0.6 | 0.9 | 4.6 |
| 29-Aug | 0.6 | 0.5 | 0.5 | Z | 0.8 | 1.7 | 0.9 | 1.7 | 0.9 | 0.8 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 1.0 | 1.9 | 2.0 | 1.6 | 1.0 | 0.8 | 1.8 | 0.9 | 2.0 |
| 30-Aug | 0.7 | 0.5 | 0.5 | 0.5 | Z | 2.1 | 2.5 | 1.6 | 1.6 | 1.6 | 0.5 | 0.6 | 0.5 | 0.8 | 0.4 | 0.5 | 0.4 | 0.5 | 1.0 | 1.5 | 1.9 | 1.5 | 0.5 | 1.4 | 1.0 | 2.5 |
| 31-Aug | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.7 | 2.1 | 2.7 | 0.4 | 0.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.6 | 1.8 | 3.5 | 1.2 | 0.8 | 0.5 | 0.2 | 0.8 | 3.5 |
| | 0.8 | 0.9 | 0.8 | 0.9 | 1.0 | 1.5 | 1.9 | 2.0 | 1.8 | 1.3 | 1.0 | 0.9 | 0.8 | 0.8 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 1.6 | 1.5 | 1.5 | 1.2 | 1.0 | Diurnal Average | |
| | 2.5 | 2.0 | 2.8 | 2.8 | 3.0 | 4.6 | 4.4 | 4.2 | 4.9 | 4.4 | 3.3 | 2.5 | 2.3 | 2.6 | 1.6 | 1.7 | 1.7 | 3.1 | 2.1 | 5.1 | 2.9 | 3.9 | 3.5 | 2.3 | Diurnal Maximum | |

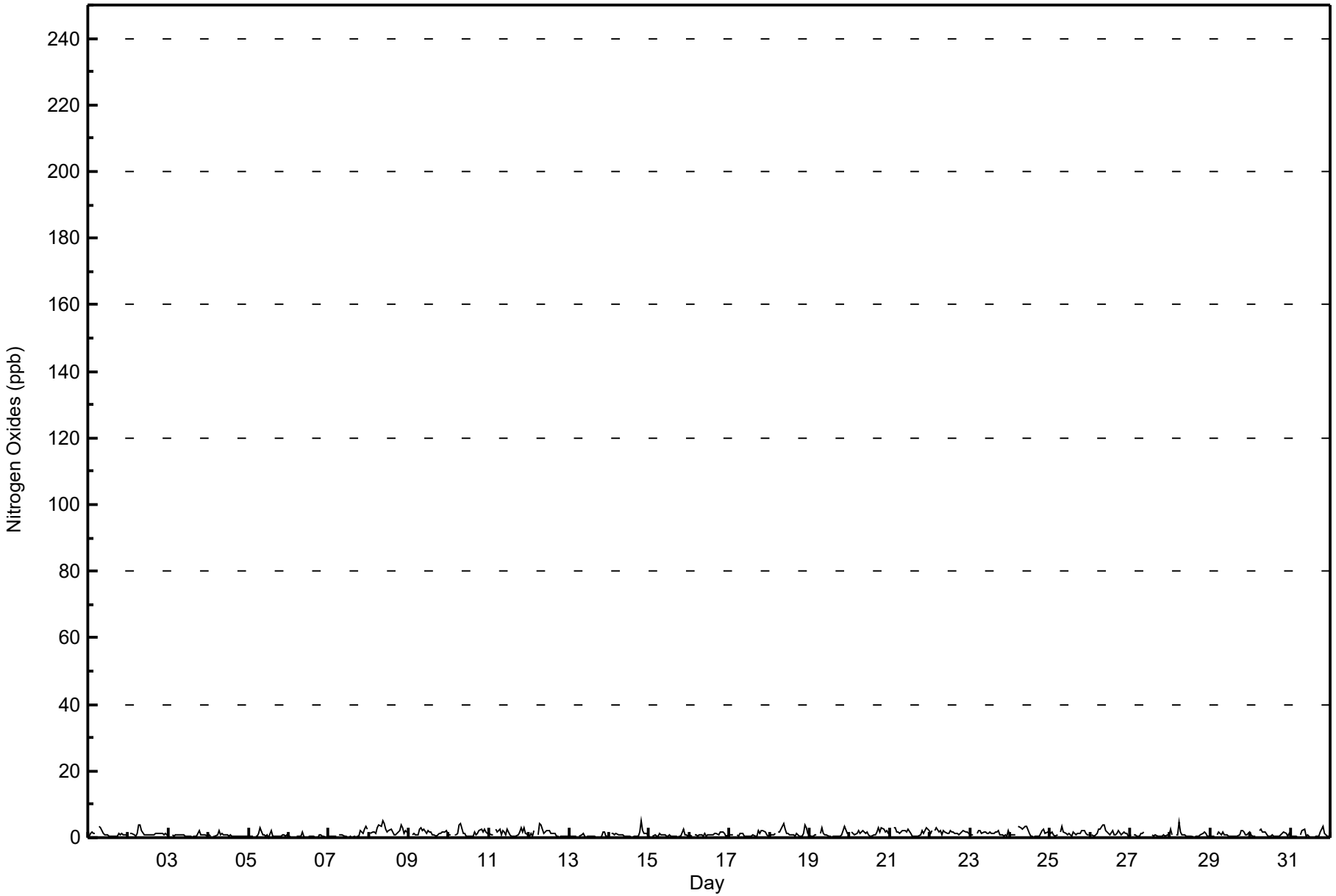
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Janvier - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb

## Janvier - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 709 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Janvier - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 49 | 51 | 24 | 13 | 16 | 17 | 18 | 32 | 43 | 109 | 105 | 65 | 30 | 45 | 52 | 40 | 709 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 49 | 51 | 24 | 13 | 16 | 17 | 18 | 32 | 43 | 109 | 105 | 65 | 30 | 45 | 52 | 40 | 709 |

Total Number of Valid Hours: 709

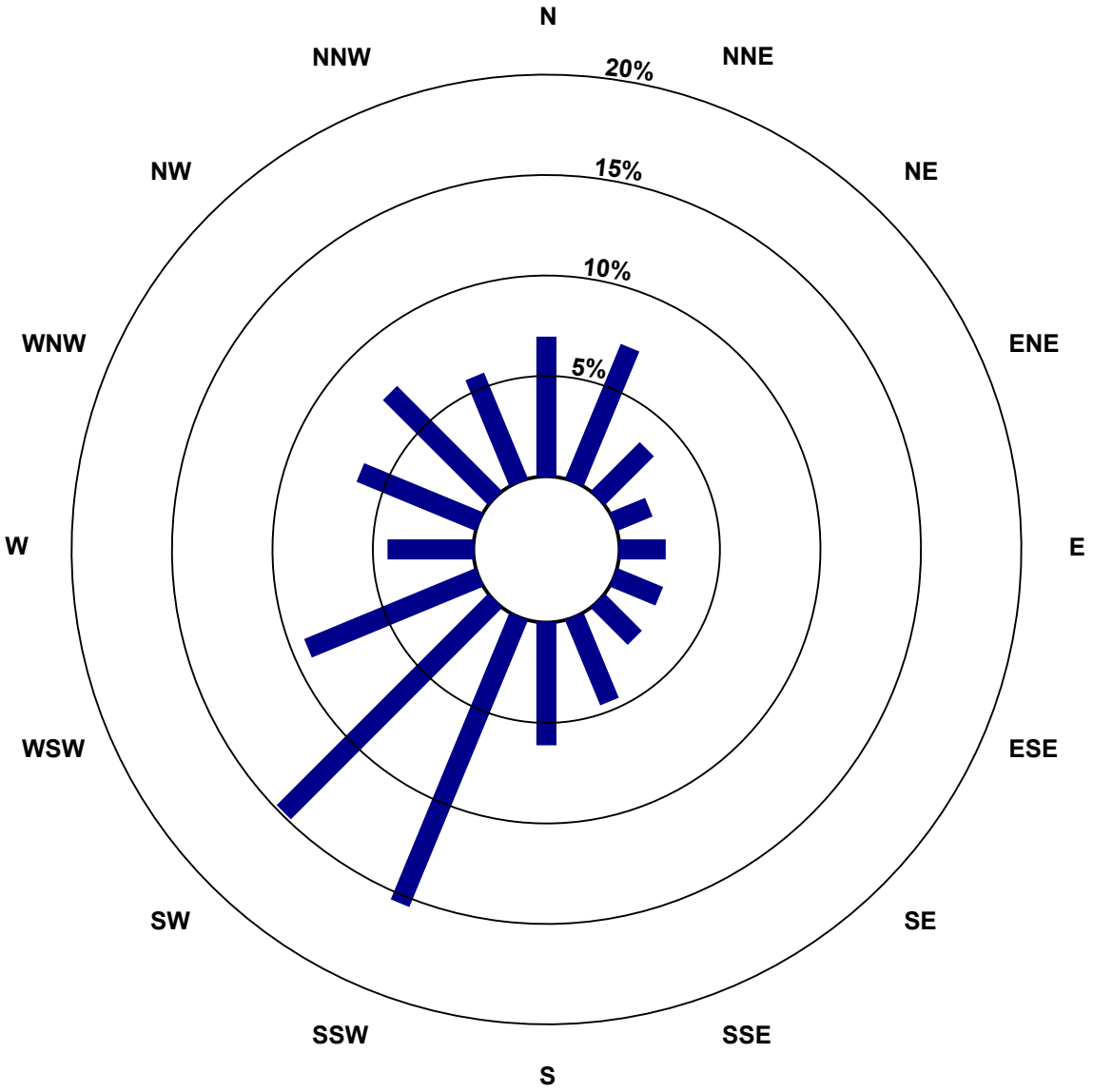
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Janvier




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

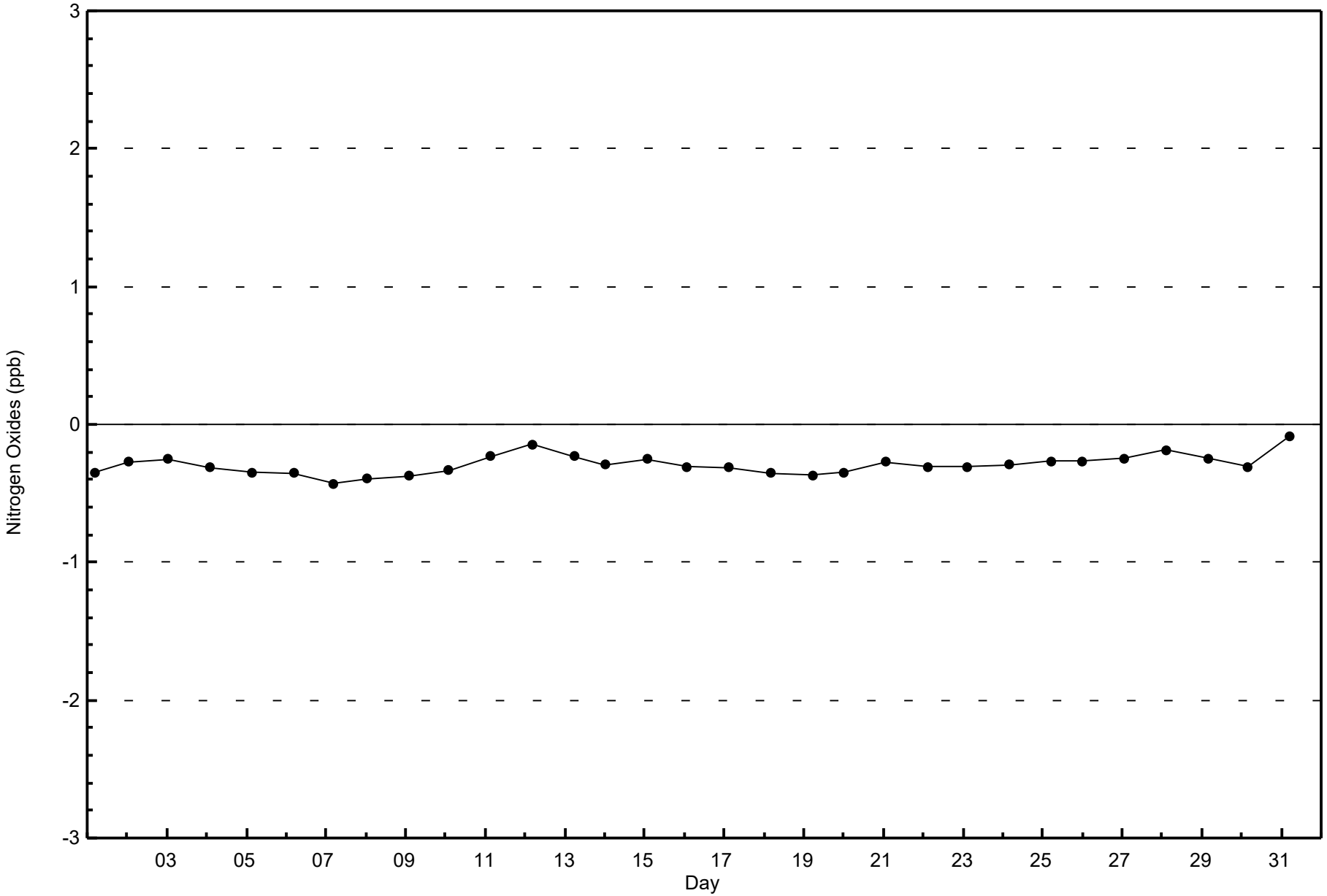
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Janvier - August 2026**

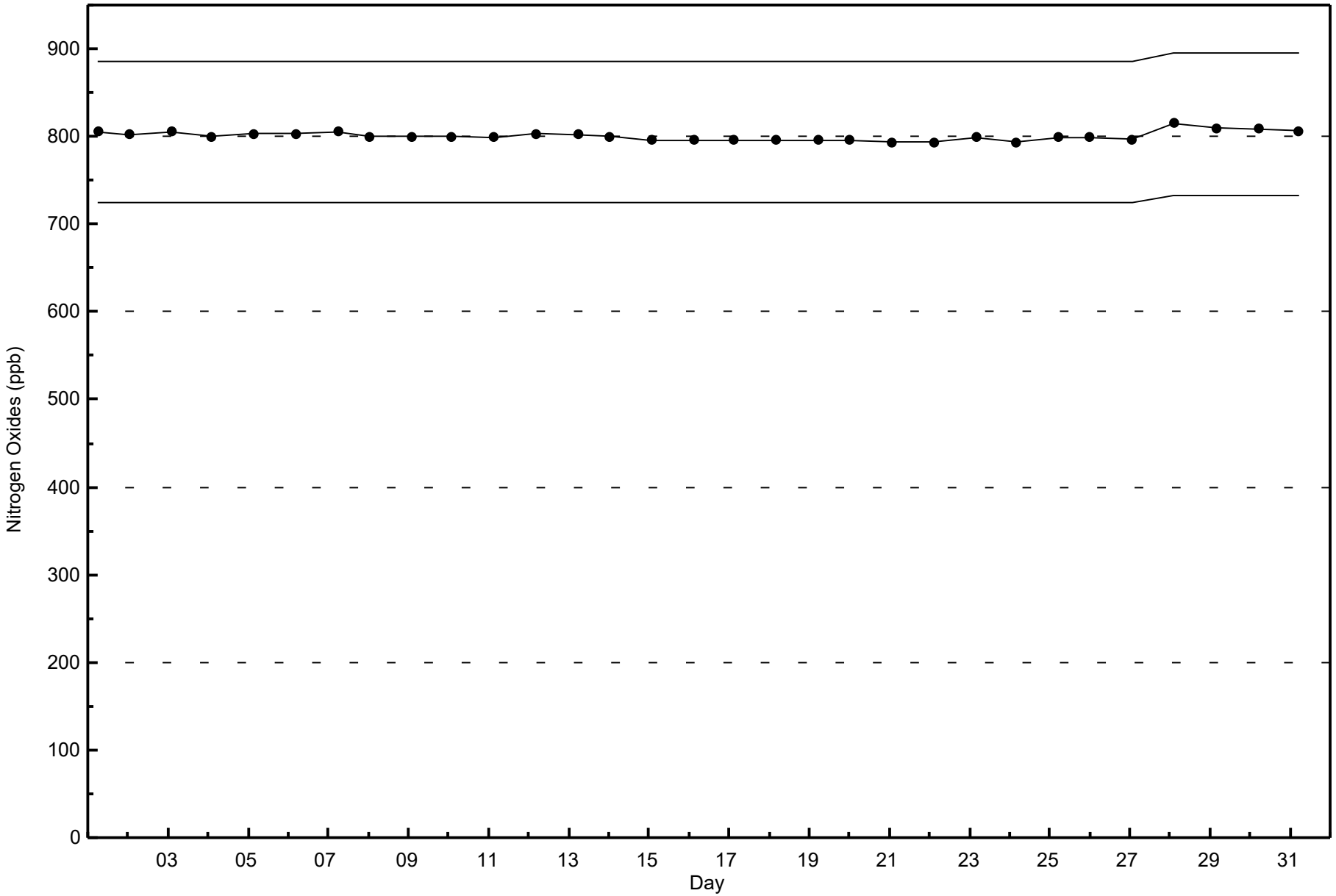


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ozone ($O_3$) - ppb

## Janvier - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 45.1 ppb on Aug 1 23:00 Maximum Daily Average: 28.0 ppb on Aug 1

Minimum Value: 0.9 ppb on Aug 10 05:00 Minimum Daily Average: 7.6 ppb on Aug 30

Maximum Diurnal Average: 29.1 ppb at hour 16 Minimum Diurnal Average: 7.9 ppb at hour 6

Monthly Average: 18.13 ppb Percentiles: $P_1$ = 2.2 $P_{10}$ = 5.7 $Q_1$ = 9.9 Median = 16.7 $Q_3$ = 25.2 $P_{90}$ = 32.0 $P_{99}$ = 42.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 5.5 | 7.5 | 7.9 | Z | 7.9 | 7.4 | 7.5 | 11.8 | 19.7 | 28.4 | 33.1 | 32.8 | 37.0 | 39.8 | 41.5 | 42.6 | 43.3 | 43.6 | 44.7 | 36.3 | 26.2 | 32.1 | 45.1 | 41.2 | 28.0 | 45.1 |
| 2-Aug | 39.9 | 37.3 | 29.5 | 20.5 | Z | 16.9 | 23.0 | 23.2 | 23.4 | 25.5 | 26.8 | 24.4 | 21.7 | 15.8 | 16.8 | 18.6 | 19.3 | 20.4 | 22.5 | 21.1 | 19.9 | 19.1 | 17.6 | 17.7 | 22.6 | 39.9 |
| 3-Aug | 18.0 | 18.7 | 17.6 | 16.7 | 16.1 | Z | 15.4 | 15.7 | 16.3 | 17.8 | 21.3 | 23.4 | 24.8 | 24.2 | 24.2 | 25.4 | 26.5 | 25.0 | 19.1 | 13.3 | 12.0 | 9.5 | 7.5 | 5.1 | 18.0 | 26.5 |
| 4-Aug | Z | 2.4 | 3.0 | 3.5 | 3.8 | 5.7 | 6.5 | 8.3 | 10.6 | 16.0 | 19.4 | 22.3 | 30.3 | 28.5 | 29.9 | 27.1 | 22.5 | 21.1 | 32.5 | 26.0 | 20.1 | 16.7 | 18.8 | 16.5 | 17.0 | 32.5 |
| 5-Aug | 17.1 | Z | 18.3 | 17.5 | 15.9 | 14.3 | 15.4 | 15.7 | 19.3 | 23.2 | 25.8 | 26.4 | 27.0 | 23.8 | 25.5 | 25.9 | 25.2 | 24.0 | 24.1 | 21.2 | 24.4 | 27.8 | 23.7 | 28.1 | 22.2 | 28.1 |
| 6-Aug | 27.3 | 23.2 | Z | 20.0 | 19.8 | 17.6 | 15.4 | 13.9 | 12.8 | 12.4 | 11.9 | 12.4 | 13.4 | 15.8 | 24.9 | 24.9 | 23.1 | 22.3 | 17.9 | 16.7 | 16.4 | 15.5 | 14.4 | 12.2 | 17.6 | 27.3 |
| 7-Aug | 11.2 | 10.3 | 9.2 | Z | 8.3 | 7.5 | 6.3 | 6.5 | 8.8 | 19.4 | 22.7 | 24.2 | 24.8 | 26.7 | 27.3 | 27.9 | 27.2 | 23.9 | 21.1 | 15.5 | 12.3 | 9.6 | 7.2 | 6.8 | 15.9 | 27.9 |
| 8-Aug | 7.2 | 5.6 | 6.4 | 5.2 | Z | 4.2 | 10.2 | 13.5 | 16.3 | 17.9 | 24.0 | 25.2 | 25.5 | 24.2 | 25.8 | 26.3 | 27.3 | 24.3 | 14.3 | 12.1 | 11.5 | 9.9 | 6.7 | 4.9 | 15.2 | 27.3 |
| 9-Aug | 3.5 | 3.1 | 2.8 | 4.0 | 3.6 | Z | 4.4 | 4.6 | 7.9 | 15.5 | 20.1 | 25.5 | 29.0 | 31.5 | 34.2 | 35.6 | 37.5 | 34.2 | 24.3 | 19.5 | 15.3 | 12.9 | 9.6 | 7.7 | 16.8 | 37.5 |
| 10-Aug | Z | 3.3 | 2.2 | 1.2 | 0.9 | 1.2 | 3.7 | 8.6 | 14.5 | 20.7 | 28.4 | 29.1 | 30.9 | 33.6 | 31.1 | 21.0 | 22.5 | 22.8 | 17.4 | 14.9 | 14.3 | 14.1 | 15.3 | 16.4 | 16.0 | 33.6 |
| 11-Aug | 16.6 | Z | 11.8 | 8.7 | 6.6 | 7.4 | 7.7 | 11.2 | 23.6 | 25.9 | 31.8 | 28.2 | 33.4 | 32.0 | 32.4 | 32.1 | 30.8 | 29.1 | 24.0 | 12.5 | 12.2 | 12.0 | 13.6 | 14.1 | 19.9 | 33.4 |
| 12-Aug | 11.8 | 13.2 | Z | 7.8 | 5.2 | 6.3 | 6.7 | 11.9 | 15.7 | 18.7 | 17.6 | 17.9 | 18.7 | 23.6 | 23.8 | 22.2 | 22.9 | 21.0 | 18.8 | 17.3 | 12.8 | 11.0 | 10.1 | 8.7 | 14.9 | 23.8 |
| 13-Aug | 8.4 | 8.2 | 7.7 | Z | 9.2 | 8.4 | 9.6 | 11.5 | 13.1 | 15.2 | 18.4 | 20.2 | 20.6 | 16.3 | 18.5 | 22.9 | 22.3 | 19.1 | 16.4 | 10.6 | 7.1 | 5.1 | 6.0 | 3.5 | 13.0 | 22.9 |
| 14-Aug | 2.4 | 4.3 | 3.8 | 1.8 | Z | 1.3 | 2.3 | 5.5 | 9.3 | 12.7 | 17.7 | 23.0 | 27.5 | 30.8 | 32.0 | 32.1 | 30.9 | 20.1 | 12.8 | 8.9 | 10.0 | 11.0 | 13.3 | 10.3 | 14.1 | 32.1 |
| 15-Aug | 8.0 | 7.2 | 7.8 | 7.5 | 6.9 | Z | 8.5 | 8.9 | 10.6 | 16.6 | 27.5 | 27.4 | 24.0 | 26.4 | 24.9 | 25.2 | 25.2 | 22.6 | 22.2 | 14.1 | 12.4 | 14.8 | 15.7 | 16.1 | 16.5 | 27.5 |
| 16-Aug | Z | 17.0 | 17.7 | 17.1 | 16.3 | 16.4 | 16.1 | 16.9 | 19.3 | 14.0 | 16.1 | 15.2 | 22.8 | 25.1 | 30.5 | 33.1 | 38.6 | 34.4 | 28.9 | 14.7 | 11.4 | 13.5 | 13.7 | 14.9 | 20.2 | 38.6 |
| 17-Aug | 10.7 | Z | 8.1 | 8.5 | 8.8 | 11.3 | 11.1 | 11.9 | 15.4 | 25.9 | 31.8 | 32.8 | 32.9 | 34.8 | 34.5 | 31.7 | 31.9 | 22.2 | 19.5 | 13.9 | 13.0 | 11.1 | 13.4 | 17.1 | 19.7 | 34.8 |
| 18-Aug | 15.9 | 17.1 | Z | 10.6 | 8.3 | 6.4 | 9.5 | 15.1 | 17.0 | 24.0 | 29.7 | 31.3 | 29.9 | 27.4 | 27.4 | 28.2 | 25.8 | 25.2 | 27.9 | 27.1 | 17.8 | 16.9 | 13.3 | 13.7 | 20.2 | 31.3 |
| 19-Aug | 16.3 | 16.3 | 16.0 | Z | 12.9 | 10.8 | 10.8 | 10.3 | 9.9 | 10.4 | 12.9 | 19.4 | 22.6 | 23.9 | 23.1 | 22.5 | 22.0 | 20.8 | 27.7 | 21.7 | 17.0 | 11.9 | 11.7 | 10.2 | 16.6 | 27.7 |
| 20-Aug | 8.7 | 6.2 | 4.9 | 5.0 | Z | 6.4 | 7.0 | 9.8 | 13.1 | 17.2 | 19.1 | 23.5 | 26.4 | 29.1 | 30.3 | 36.6 | 41.2 | 41.8 | 40.7 | 24.0 | 21.5 | 18.9 | 15.0 | 12.9 | 20.0 | 41.8 |
| 21-Aug | 10.6 | 7.5 | 4.9 | 4.2 | 4.8 | Z | 7.6 | 11.5 | 20.3 | C | C | C | C | 31.1 | 31.9 | 32.3 | 30.3 | 29.5 | 20.0 | 15.7 | 13.6 | 12.7 | 15.0 | 16.8 | 16.9 | 32.3 |
| 22-Aug | Z | 11.6 | 7.8 | 6.2 | 4.3 | 4.4 | 3.3 | 5.7 | 19.6 | 27.0 | 30.9 | 35.9 | 41.5 | 42.6 | 41.5 | 41.7 | 43.4 | 37.7 | 34.4 | 31.0 | 22.3 | 17.0 | 14.9 | 14.2 | 23.4 | 43.4 |
| 23-Aug | 11.9 | Z | 6.7 | 4.6 | 4.2 | 2.2 | 3.9 | 8.0 | 8.3 | 8.5 | 8.5 | 10.9 | 13.0 | 14.5 | 20.3 | 24.2 | 12.5 | 9.2 | 19.1 | 16.5 | 12.3 | 10.4 | 11.0 | 7.8 | 10.8 | 24.2 |
| 24-Aug | 5.2 | 3.7 | Z | 5.3 | 4.9 | 5.3 | 3.8 | 9.3 | 13.7 | 18.1 | 23.9 | 28.4 | 30.1 | 32.3 | 30.4 | 29.7 | 31.4 | 30.5 | 26.7 | 17.9 | 15.6 | 15.7 | 11.8 | 10.4 | 17.6 | 32.3 |
| 25-Aug | 8.7 | 9.3 | 9.5 | Z | 9.2 | 8.9 | 9.6 | 11.3 | 15.8 | 23.3 | 23.4 | 23.9 | 26.5 | 27.6 | 30.5 | 36.3 | 36.1 | 30.7 | 20.0 | 17.9 | 14.2 | 10.9 | 11.6 | 9.9 | 18.5 | 36.3 |
| 26-Aug | 8.2 | 6.5 | 4.3 | 2.7 | Z | 2.2 | 3.1 | 10.0 | 15.1 | 19.5 | 28.2 | 35.2 | 39.4 | 40.5 | 42.7 | 41.8 | 43.0 | 40.4 | 27.8 | 26.7 | 30.4 | 29.9 | 25.5 | 12.3 | 23.3 | 43.0 |
| 27-Aug | 18.3 | 11.7 | 9.6 | 9.3 | 7.2 | Z | 1.9 | 3.9 | 7.5 | 23.4 | 25.8 | 28.0 | 30.0 | 30.2 | 36.4 | 38.6 | 38.2 | 38.5 | 36.8 | 35.5 | 36.0 | 36.3 | 30.9 | 22.3 | 24.2 | 38.6 |
| 28-Aug | Z | 17.0 | 16.9 | 26.7 | 24.9 | 16.7 | 21.8 | 25.5 | 29.4 | 34.3 | 38.6 | 37.7 | 35.0 | 34.2 | 33.5 | 33.3 | 32.9 | 31.0 | 29.4 | 23.8 | 18.8 | 20.2 | 20.9 | 17.7 | 27.0 | 38.6 |
| 29-Aug | 13.7 | Z | 11.8 | 10.3 | 8.6 | 7.7 | 9.2 | 10.0 | 12.5 | 16.1 | 19.4 | 22.4 | 25.1 | 25.8 | 26.1 | 26.8 | 27.3 | 25.4 | 17.2 | 12.6 | 12.9 | 10.3 | 10.5 | 9.4 | 16.1 | 27.3 |
| 30-Aug | 7.2 | 3.9 | Z | 4.3 | 3.9 | 2.4 | 2.0 | 3.5 | 5.5 | 8.2 | 8.4 | 11.3 | 15.4 | 15.7 | 14.3 | 16.1 | 14.9 | 11.6 | 5.5 | 4.4 | 3.2 | 2.7 | 3.9 | 6.7 | 7.6 | 16.1 |
| 31-Aug | 4.8 | 14.2 | 12.8 | Z | 9.1 | 6.4 | 7.3 | 6.0 | 7.8 | 13.5 | 14.6 | 17.5 | 22.0 | 22.3 | 20.7 | 18.8 | 19.9 | 17.0 | 9.4 | 7.1 | 8.7 | 8.2 | 7.3 | 7.1 | 12.3 | 22.3 |
| | 12.2 | 11.0 | 10.0 | 9.2 | 8.9 | 7.9 | 8.7 | 11.0 | 14.6 | 19.0 | 22.6 | 24.5 | 26.7 | 27.4 | 28.6 | 29.1 | 28.9 | 26.4 | 23.3 | 18.4 | 16.0 | 15.1 | 14.7 | 13.3 | Diurnal Average | |
| | 39.9 | 37.3 | 29.5 | 26.7 | 24.9 | 17.6 | 23.0 | 25.5 | 29.4 | 34.3 | 38.6 | 37.7 | 41.5 | 42.6 | 42.7 | 42.6 | 43.4 | 43.6 | 44.7 | 36.3 | 36.0 | 36.3 | 45.1 | 41.2 | Diurnal Maximum | |

Z - zerospan C - Calibration

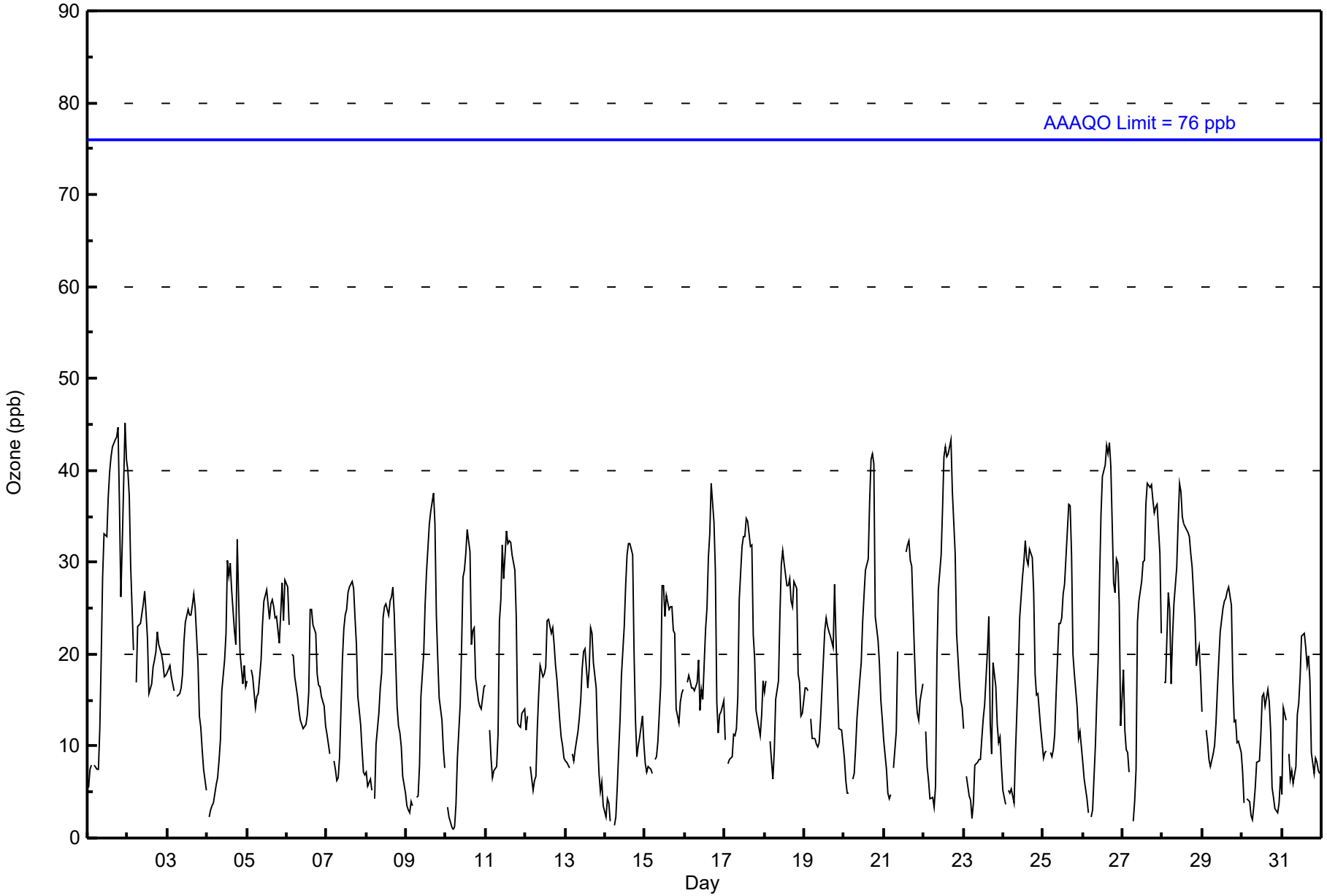
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ozone ($O_3$) - ppb**

**Janvier - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 440 | 62.06 | 62.06 |
| 21 - 50 | 269 | 37.94 | 100.00 |
| 51 - 82 | 0 | 0.00 | 100.00 |
| > 83 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Ozone ($O_3$) - ppb**

**Janvier - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 26 | 32 | 13 | 7 | 9 | 6 | 10 | 16 | 22 | 107 | 82 | 28 | 17 | 18 | 28 | 19 | 440 |
| 21 - 50 | 23 | 19 | 10 | 8 | 7 | 10 | 10 | 16 | 20 | 6 | 19 | 35 | 15 | 26 | 24 | 21 | 269 |
| 51 - 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 49 | 51 | 23 | 15 | 16 | 16 | 20 | 32 | 42 | 113 | 101 | 63 | 32 | 44 | 52 | 40 | 709 |

Total Number of Valid Hours: 709

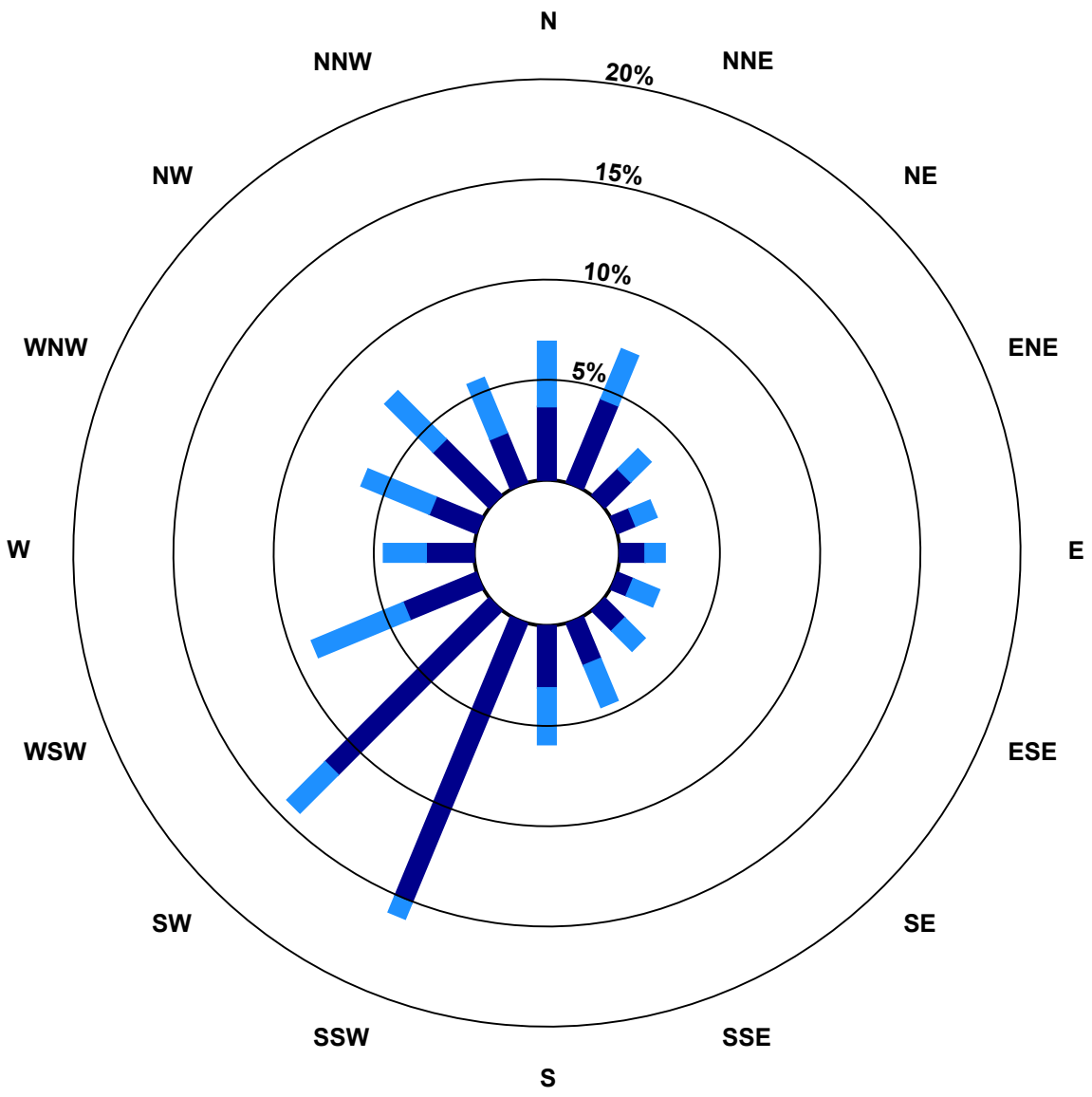
Total Number of Hours: 744

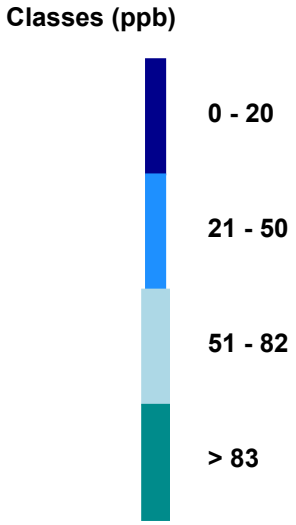
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Ozone ($O_3$) - ppb**

**Janvier**



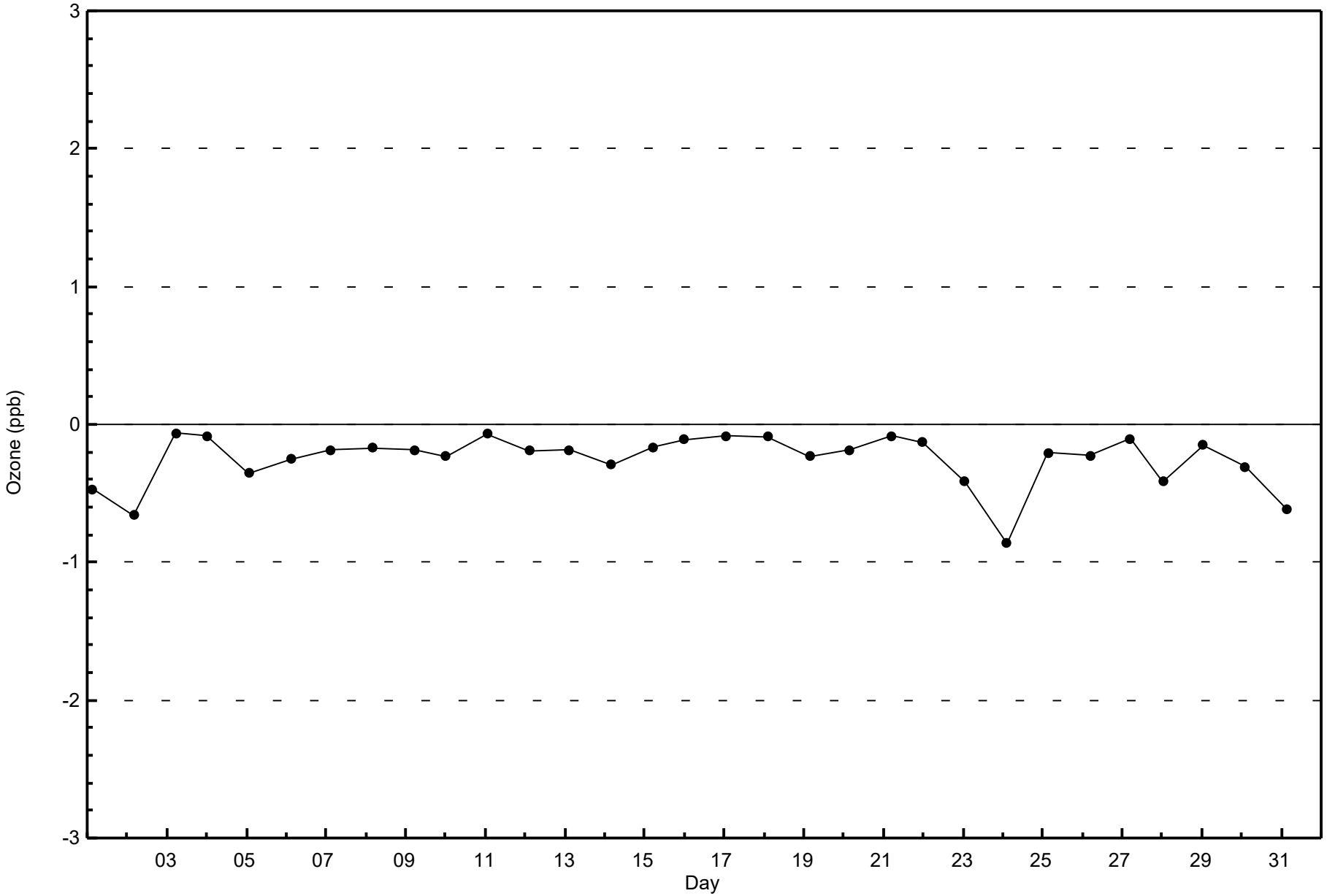

**Total Number of Valid Hours: 709**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Ozone ($O_3$) - ppb**

**Janvier - August 2026**

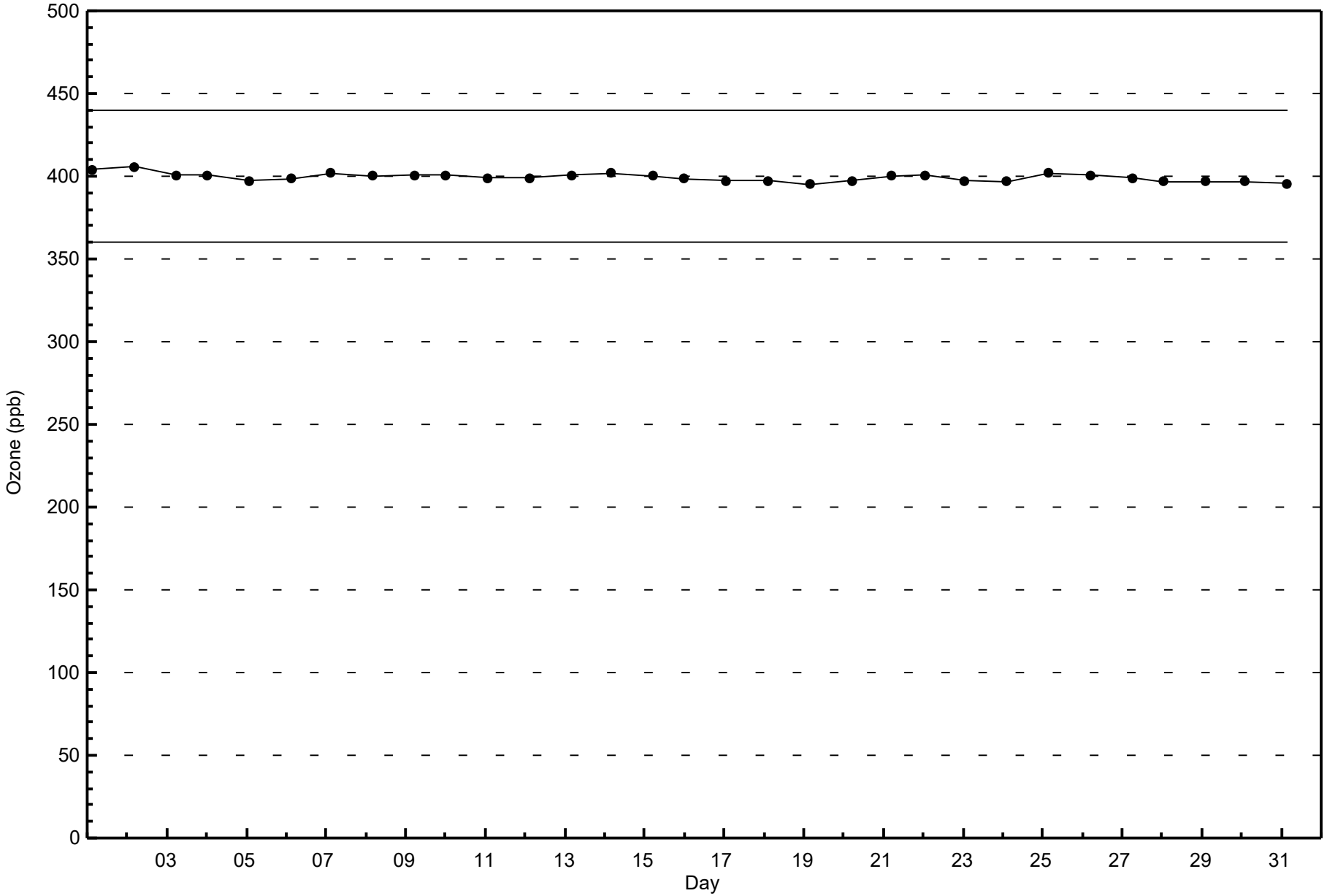


**Wood Buffalo Environmental Association**

**Span Responses**

**Ozone ($O_3$) - ppb**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Janvier - August 2026

Number of Exceedances (AAAQO): 1-hr: 13 24-hr: 3

Maximum Value: 178.4 $\mu g/m^3$ on Aug 28 21:00

Maximum Daily Average: 72.2 $\mu g/m^3$ on Aug 29

Minimum Value: 0.6 $\mu g/m^3$ on Aug 6 12:00

Maximum Diurnal Average: 20.7 $\mu g/m^3$ at hour 1

Monthly Average: 15.41 $\mu g/m^3$

Minimum Daily Average: 1.4 $\mu g/m^3$ on Aug 6

Minimum Diurnal Average: 10.1 $\mu g/m^3$ at hour 15

Percentiles: $P_1$ = 1.0 $P_{10}$ = 2.6 $Q_1$ = 3.8 Median = 7.2 $Q_3$ = 19.6 $P_{90}$ = 34.0 $P_{99}$ = 150.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 689 |
| Hours of Missing Data: | 55 |
| Hours of Calibration: | 2 |
| Percent Operational Time: | 92.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 7.0 | 8.9 | 9.6 | 9.6 | 9.4 | 9.0 | 9.0 | 9.0 | 10.5 | 10.2 | 10.0 | 11.5 | 11.0 | 12.6 | 14.2 | 16.0 | 17.5 | 16.7 | 17.7 | 16.1 | 16.0 | 15.6 | 24.3 | 25.1 | 13.2 | 25.1 |
| 2-Aug | 30.4 | 34.1 | 34.6 | 42.3 | 38.3 | 31.5 | 12.9 | 11.4 | 9.4 | 5.8 | 4.9 | 6.9 | 5.2 | 3.1 | 2.7 | 3.8 | 4.0 | 4.5 | 5.1 | 5.2 | 4.5 | 4.1 | 4.1 | 3.6 | 13.0 | 42.3 |
| 3-Aug | 2.7 | 2.4 | 2.7 | 2.7 | 2.9 | 3.0 | 2.9 | 3.0 | 3.1 | 3.4 | 3.2 | 2.6 | 2.7 | 2.4 | 3.2 | 3.5 | 2.7 | 2.1 | 2.1 | 2.5 | 3.1 | 3.0 | 3.1 | 3.2 | 2.8 | 3.5 |
| 4-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | 8.7 | 4.3 | 5.0 | 4.4 | 4.8 | 5.9 | 6.0 | 5.8 | 5.4 | 5.4 | 5.2 | 5.2 | 5.7 | -- | 8.7 |
| 5-Aug | 6.9 | 8.7 | 11.8 | 13.9 | 15.9 | 16.8 | 17.3 | 16.9 | 15.6 | 12.3 | 8.4 | 7.2 | 7.0 | 8.7 | 8.4 | 8.4 | 10.2 | 9.1 | 13.4 | 14.6 | 6.7 | 1.9 | 1.7 | 1.6 | 10.1 | 17.3 |
| 6-Aug | 1.2 | 1.2 | 1.2 | 1.1 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 1.2 | 1.9 | 3.1 | 2.6 | 1.6 | 1.3 | 1.4 | 1.7 | 1.8 | 2.1 | 1.9 | 2.0 | 1.4 | 3.1 |
| 7-Aug | 2.0 | 2.2 | 2.4 | 2.6 | 2.7 | 2.9 | 3.1 | 3.2 | 3.2 | 2.3 | 2.1 | 2.5 | 2.6 | 2.8 | 2.9 | 3.3 | 3.4 | 3.9 | 4.6 | 5.4 | 5.6 | 5.7 | 7.0 | 7.3 | 3.6 | 7.3 |
| 8-Aug | 8.6 | 8.1 | 9.0 | 9.0 | 7.8 | 7.1 | 5.8 | 4.9 | 4.7 | 5.0 | 3.8 | 3.9 | 3.6 | 4.7 | 4.3 | 2.8 | 2.9 | 3.1 | 4.0 | 4.2 | 4.8 | 5.2 | 5.1 | 4.9 | 5.3 | 9.0 |
| 9-Aug | 5.2 | 5.2 | 5.3 | 5.4 | 5.0 | 5.3 | 5.3 | 5.0 | 4.6 | 3.9 | 3.2 | 3.0 | 2.8 | 3.1 | 3.0 | 3.7 | 3.8 | 3.9 | 3.3 | 3.6 | 3.6 | 4.1 | 4.7 | 4.5 | 4.2 | 5.4 |
| 10-Aug | 4.7 | 4.6 | 4.6 | 4.9 | 4.4 | 4.6 | 4.3 | 4.1 | 3.8 | 3.1 | 2.6 | 3.1 | 3.3 | 3.3 | 3.5 | 3.5 | 3.7 | 4.3 | 4.2 | 4.8 | 5.3 | 7.0 | 8.4 | 8.3 | 4.5 | 8.4 |
| 11-Aug | 7.3 | 6.4 | 5.9 | 5.4 | 5.3 | 5.0 | 4.5 | 4.2 | 4.1 | 4.4 | 4.9 | 4.8 | 5.1 | 5.1 | 5.3 | 6.7 | 5.6 | 5.6 | 6.0 | 6.7 | 6.7 | 6.6 | 7.5 | 6.7 | 5.7 | 7.5 |
| 12-Aug | 6.4 | 5.9 | 5.2 | 4.7 | 4.7 | 4.2 | 4.1 | 3.3 | 2.9 | 2.6 | 3.1 | 2.2 | 2.0 | 2.0 | 2.8 | 2.7 | 1.5 | 0.9 | 1.1 | 1.2 | 1.7 | 1.7 | 1.7 | 1.9 | 2.9 | 6.4 |
| 13-Aug | 2.0 | 2.0 | 2.2 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 2.2 | 1.7 | 1.8 | 1.8 | 1.4 | 1.7 | 1.6 | 1.7 | 2.0 | 2.1 | 2.6 | 3.0 | 5.1 | 4.0 | 3.4 | 2.4 | 5.1 |
| 14-Aug | 3.6 | 3.5 | 3.6 | 3.4 | 3.3 | 3.5 | 3.5 | 3.6 | 3.6 | 3.5 | 3.2 | 2.6 | 2.7 | 2.1 | 2.0 | 2.4 | 2.4 | 2.7 | 3.1 | 3.5 | 3.7 | 4.0 | 4.2 | 4.2 | 3.2 | 4.2 |
| 15-Aug | 4.0 | 3.9 | 3.9 | 4.0 | 4.1 | 4.1 | 4.1 | 3.7 | 3.5 | 3.2 | 4.4 | 4.2 | 4.1 | 4.2 | 4.0 | 3.3 | 3.0 | 2.8 | 2.6 | 3.2 | 3.8 | 3.8 | 3.9 | 3.8 | 3.7 | 4.4 |
| 16-Aug | 3.8 | 3.8 | 3.7 | 4.0 | 4.0 | 4.0 | 4.0 | 4.2 | 3.9 | 3.8 | 4.1 | 5.0 | 9.3 | 12.6 | 17.7 | 19.6 | 20.5 | 12.1 | 16.3 | 17.8 | 18.1 | 18.0 | 18.0 | 20.5 | 10.4 | 20.5 |
| 17-Aug | 23.7 | 25.0 | 27.6 | 26.2 | 22.8 | 19.8 | 18.3 | 17.9 | 18.5 | 20.3 | 20.8 | 19.3 | 18.7 | 17.9 | 17.2 | 17.9 | 15.7 | 14.7 | 13.9 | 13.6 | 14.1 | 14.5 | 15.0 | 14.0 | 18.6 | 27.6 |
| 18-Aug | 13.9 | 13.7 | 13.4 | 13.2 | 13.1 | 13.0 | 11.8 | 11.0 | 9.8 | 8.7 | 7.8 | 7.3 | 7.3 | 7.3 | 7.2 | 6.5 | 7.2 | 7.3 | 6.1 | 5.0 | 5.5 | 5.8 | 6.1 | 5.9 | 8.9 | 13.9 |
| 19-Aug | 5.5 | 5.8 | 5.7 | 5.8 | 6.2 | 5.8 | 5.6 | 5.9 | 5.6 | 5.2 | 5.4 | 3.9 | 3.8 | 3.1 | 2.8 | 4.2 | 11.0 | 16.3 | 15.3 | 19.7 | 21.1 | 19.6 | 20.3 | 19.0 | 9.3 | 21.1 |
| 20-Aug | 19.1 | 21.9 | 23.8 | 26.1 | 28.5 | 28.3 | 26.7 | 30.9 | 34.0 | 32.4 | 30.1 | 19.1 | 13.3 | 16.0 | 18.7 | 20.2 | 20.6 | 21.6 | 19.6 | 21.0 | 21.5 | 22.3 | 22.3 | 22.1 | 23.3 | 34.0 |
| 21-Aug | 21.9 | 22.2 | 22.3 | 21.5 | 20.2 | 19.3 | 17.7 | 16.8 | 20.7 | 20.4 | 19.6 | 11.0 | 8.4 | 9.6 | 9.6 | 11.6 | 11.6 | 11.8 | 11.5 | 12.0 | 11.5 | 11.7 | 11.2 | 9.9 | 15.2 | 22.3 |
| 22-Aug | 7.9 | 7.1 | 6.5 | 6.4 | 6.3 | 6.7 | 6.3 | 6.5 | 7.2 | 8.6 | 9.8 | 11.3 | 12.3 | 13.5 | 15.4 | 13.4 | 12.8 | 13.6 | DF | DF | DF | DF | DF | DF | 9.5 | 15.4 |
| 23-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | -- | -- |
| 24-Aug | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | DF | C | C | DF | 5.5 | 5.8 | 5.5 | 6.0 | 10.7 | 12.8 | 14.9 | 23.3 | 33.2 | 14.3 | -- | 33.2 |
| 25-Aug | 13.6 | 12.7 | 12.9 | 13.2 | 13.3 | 13.3 | 13.5 | 14.1 | 41.4 | 23.4 | 22.3 | 22.3 | 22.2 | 19.9 | 22.2 | 31.2 | 33.3 | 30.6 | 30.5 | 28.5 | 28.4 | 29.3 | 29.4 | 31.5 | 23.0 | 41.4 |
| 26-Aug | 32.5 | 33.2 | 34.4 | 35.4 | 35.5 | 35.6 | 34.6 | 29.6 | 25.8 | 24.0 | 19.6 | 13.2 | 13.4 | 14.1 | 14.3 | 14.1 | 14.1 | 14.5 | 14.0 | 15.8 | 20.4 | 26.2 | 33.6 | 27.7 | 24.0 | 35.6 |
| 27-Aug | 39.6 | 42.1 | 43.4 | 45.6 | 47.8 | 45.9 | 35.3 | 33.1 | 39.9 | 52.7 | 48.6 | 42.8 | 40.4 | 37.8 | 29.6 | 32.5 | 33.0 | 33.2 | 36.0 | 44.0 | 50.9 | 57.2 | 62.4 | 64.0 | 43.2 | 64.0 |
| 28-Aug | 65.1 | 67.0 | 66.2 | 54.0 | 50.5 | 50.9 | 51.5 | 53.1 | 50.8 | 41.7 | 35.8 | 26.9 | 14.6 | 12.5 | 11.0 | 12.9 | 12.9 | 14.8 | 63.8 | 160.5 | 178.4 | 153.4 | 104.4 | 149.6 | 62.6 | 178.4 |
| 29-Aug | 176.0 | 154.8 | 155.9 | 155.6 | 150.2 | 123.9 | 91.2 | 84.5 | 73.6 | 63.9 | 54.3 | 46.7 | 37.9 | 37.6 | 31.4 | 28.0 | 25.5 | 30.6 | 33.3 | 34.6 | 34.5 | 35.7 | 36.0 | 38.0 | 72.2 | 176.0 |
| 30-Aug | 39.8 | 36.1 | 35.9 | 34.7 | 31.5 | 30.9 | 29.6 | 29.4 | 30.3 | 28.2 | 27.7 | 25.2 | 22.6 | 23.9 | 24.2 | 24.2 | 23.9 | 24.0 | 25.6 | 26.5 | 25.9 | 30.0 | 27.6 | 25.7 | 28.5 | 39.8 |
| 31-Aug | 25.5 | 25.5 | 24.0 | 19.8 | 14.2 | 12.4 | 10.8 | 10.3 | 11.0 | 10.6 | 10.9 | 10.5 | 9.4 | 9.1 | 9.4 | 8.0 | 6.7 | 5.1 | 6.0 | 6.8 | 7.1 | 6.9 | 7.2 | 6.7 | 11.4 | 25.5 |
| | 20.7 | 20.3 | 20.6 | 20.5 | 19.7 | 18.2 | 15.6 | 15.1 | 15.9 | 14.5 | 13.3 | 11.4 | 10.1 | 10.3 | 10.1 | 10.6 | 10.8 | 10.8 | 13.1 | 17.2 | 18.2 | 18.2 | 17.7 | 18.5 | Diurnal Average | |
| | 176.0 | 154.8 | 155.9 | 155.6 | 150.2 | 123.9 | 91.2 | 84.5 | 73.6 | 63.9 | 54.3 | 46.7 | 40.4 | 37.8 | 31.4 | 32.5 | 33.3 | 33.2 | 63.8 | 160.5 | 178.4 | 153.4 | 104.4 | 149.6 | Diurnal Maximum | |

C - Calibration DF - DAS Failure

Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Janvier - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Janvier - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 282 | 40.93 | 40.93 |
| 6 - 15 | 193 | 28.01 | 68.94 |
| 16 - 25 | 91 | 13.21 | 82.15 |
| 26 - 80 | 110 | 15.97 | 98.11 |
| > 81.0 | 13 | 1.89 | 100.00 |

Total Number of Valid Hours: 689

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Janvier - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 33 | 25 | 15 | 7 | 4 | 11 | 3 | 4 | 8 | 26 | 41 | 20 | 13 | 16 | 37 | 19 | 282 |
| 6 - 15 | 5 | 11 | 3 | 1 | 1 | 2 | 4 | 13 | 14 | 41 | 26 | 27 | 12 | 15 | 12 | 6 | 193 |
| 16 - 25 | 5 | 6 | 2 | 2 | 5 | 1 | 3 | 5 | 7 | 18 | 8 | 7 | 3 | 11 | 4 | 4 | 91 |
| 26 - 80 | 5 | 8 | 3 | 4 | 5 | 4 | 10 | 9 | 12 | 19 | 13 | 10 | 3 | 1 | 2 | 2 | 110 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 1 | 1 | 0 | 0 | 0 | 13 |
| **Totals** | 48 | 50 | 23 | 14 | 15 | 18 | 20 | 31 | 41 | 106 | 97 | 65 | 32 | 43 | 55 | 31 | 689 |

Total Number of Valid Hours: 689

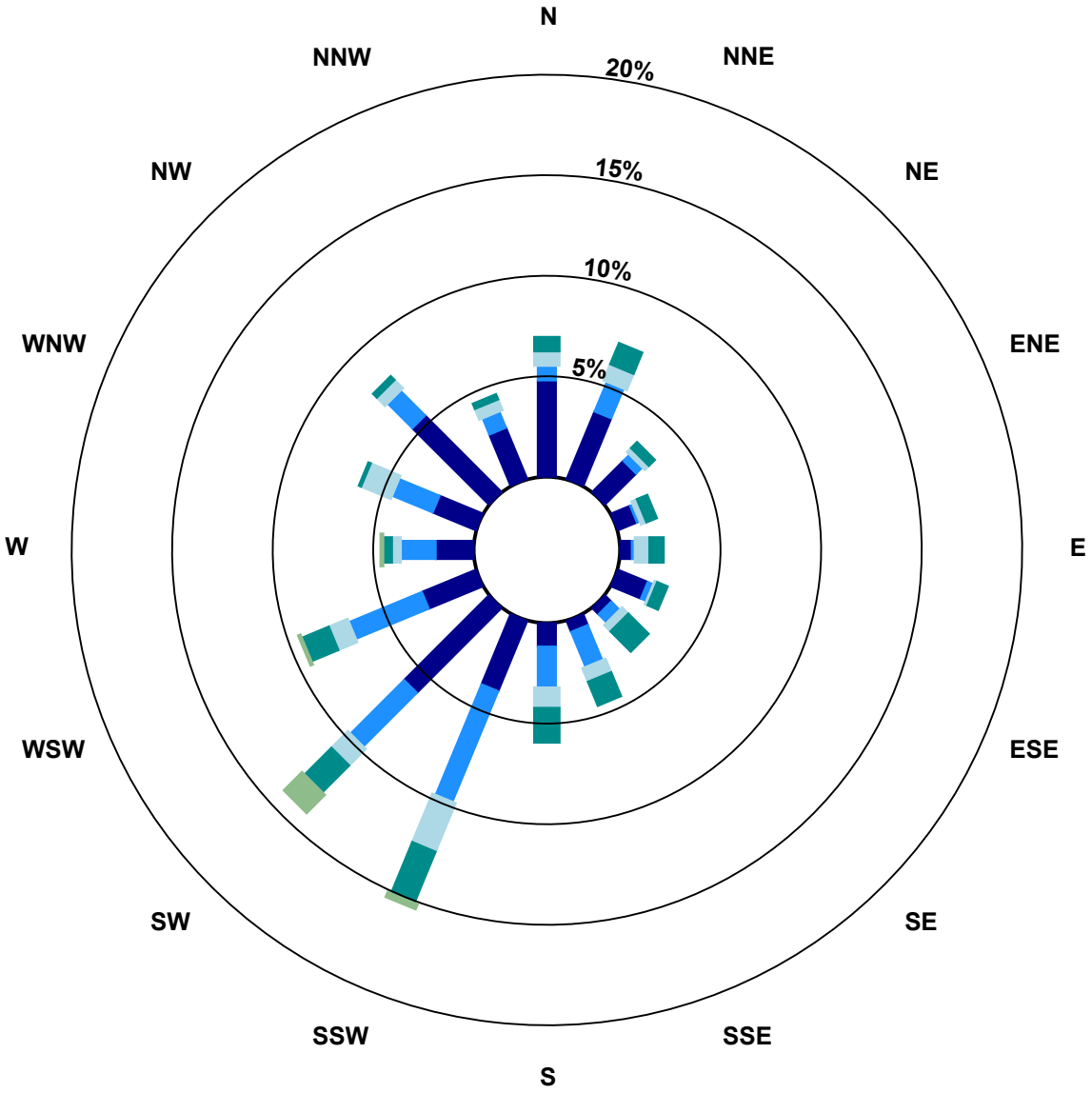
Total Number of Hours: 744

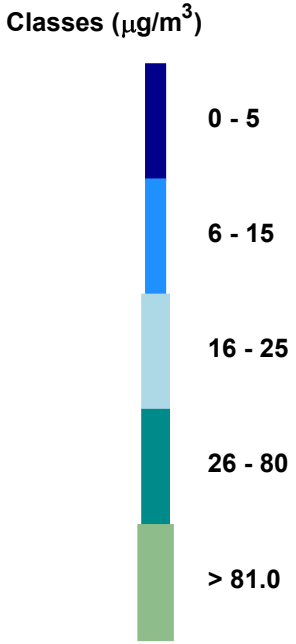
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Janvier




Total Number of Valid Hours: 689

Maximum Value: 29.6 C on Aug 27 15:00

Maximum Daily Average: 22.0 C on Aug 1

Minimum Value: 6.0 C on Aug 4 04:00

Minimum Daily Average: 12.2 C on Aug 3

Maximum Diurnal Average: 21.5 C at hour 15

Minimum Diurnal Average: 10.6 C at hour 6

Monthly Average: 15.82 C

Percentiles: $P_1$ = 6.6 $P_{10}$ = 9.9 $Q_1$ = 11.8 Median = 15.2 $Q_3$ = 19.4 $P_{90}$ = 22.8 $P_{99}$ = 27.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

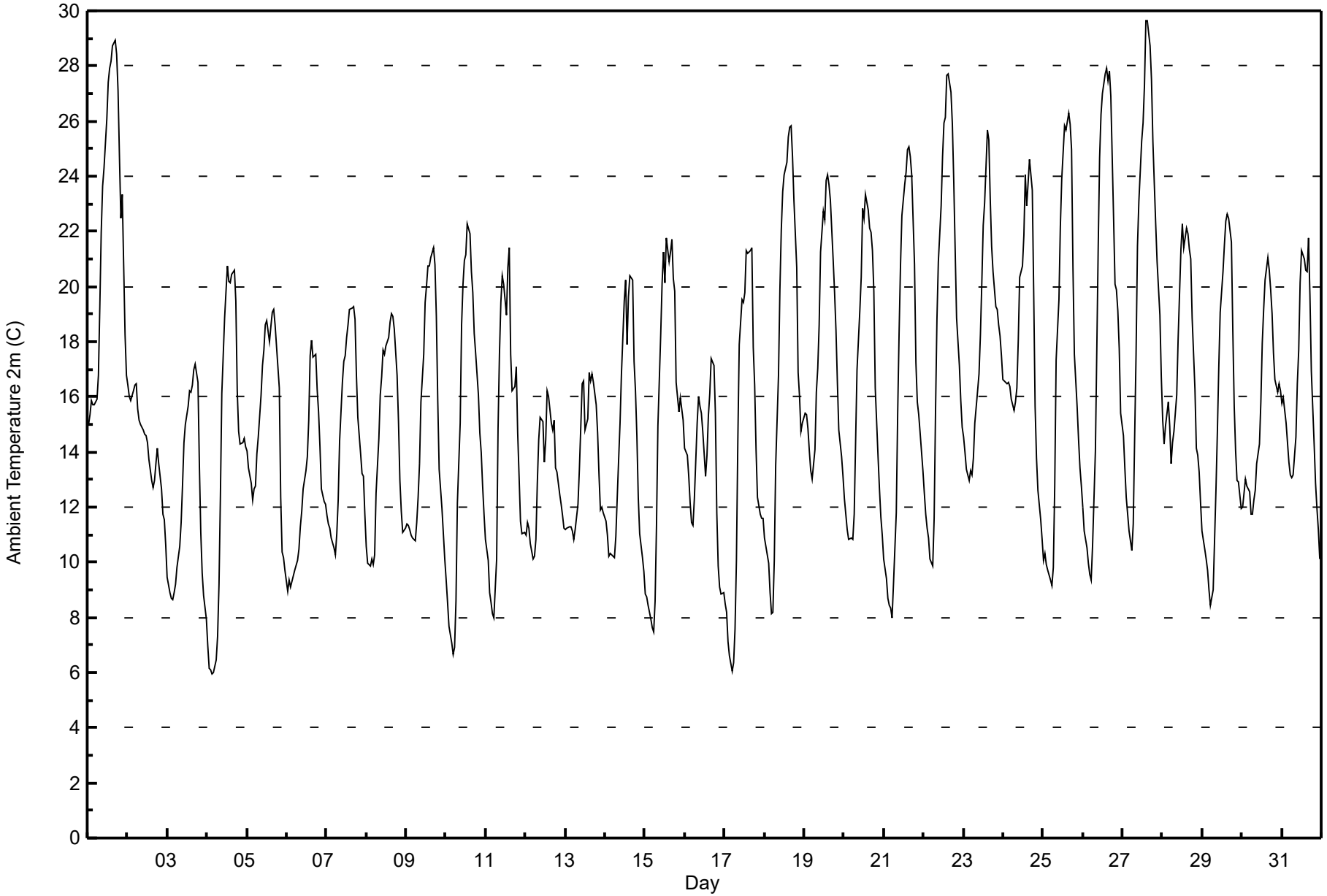
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.0 | 15.4 | 15.9 | 15.7 | 15.7 | 15.9 | 16.8 | 19.3 | 22.0 | 23.6 | 24.3 | 26.1 | 27.4 | 27.9 | 28.2 | 28.7 | 29.0 | 28.4 | 27.1 | 24.7 | 22.5 | 23.4 | 18.3 | 16.8 | 22.0 | 29.0 |
| 2-Aug | 16.4 | 16.0 | 15.8 | 16.2 | 16.4 | 16.5 | 15.5 | 15.1 | 15.0 | 14.8 | 14.6 | 14.6 | 14.3 | 13.7 | 12.9 | 12.7 | 13.0 | 13.6 | 14.1 | 13.6 | 12.7 | 11.7 | 11.5 | 10.6 | 14.2 | 16.5 |
| 3-Aug | 9.4 | 8.9 | 8.7 | 8.7 | 8.9 | 9.2 | 9.8 | 10.6 | 11.4 | 12.8 | 14.3 | 15.0 | 15.6 | 16.2 | 16.2 | 16.4 | 17.0 | 17.2 | 16.5 | 13.5 | 11.1 | 9.6 | 8.8 | 7.9 | 12.2 | 17.2 |
| 4-Aug | 7.0 | 6.2 | 6.1 | 6.0 | 6.0 | 6.5 | 7.3 | 9.2 | 12.4 | 16.1 | 18.8 | 19.8 | 20.8 | 20.2 | 20.1 | 20.4 | 20.6 | 19.5 | 16.2 | 14.7 | 14.3 | 14.3 | 14.5 | 14.2 | 13.8 | 20.8 |
| 5-Aug | 14.0 | 13.4 | 12.9 | 12.3 | 12.7 | 12.8 | 14.0 | 14.5 | 16.1 | 17.1 | 17.7 | 18.6 | 18.8 | 18.0 | 18.6 | 19.0 | 19.2 | 18.6 | 17.8 | 16.3 | 12.3 | 10.4 | 10.2 | 9.7 | 15.2 | 19.2 |
| 6-Aug | 8.9 | 9.4 | 9.1 | 9.3 | 9.5 | 9.7 | 10.1 | 10.5 | 11.3 | 11.9 | 12.7 | 13.3 | 13.8 | 15.2 | 17.5 | 18.1 | 17.4 | 17.6 | 16.3 | 15.4 | 14.2 | 12.7 | 12.2 | 12.1 | 12.8 | 18.1 |
| 7-Aug | 11.7 | 11.4 | 11.2 | 10.9 | 10.5 | 10.3 | 11.0 | 12.2 | 14.4 | 16.5 | 17.3 | 17.5 | 18.2 | 18.6 | 19.2 | 19.2 | 19.3 | 18.8 | 16.8 | 15.2 | 14.0 | 13.2 | 13.1 | 11.8 | 14.7 | 19.3 |
| 8-Aug | 10.6 | 10.0 | 9.9 | 10.1 | 9.9 | 10.3 | 12.5 | 14.5 | 16.1 | 16.7 | 17.7 | 17.6 | 17.9 | 18.1 | 18.7 | 19.0 | 18.9 | 18.5 | 16.8 | 15.1 | 13.0 | 11.8 | 11.1 | 11.2 | 14.4 | 19.0 |
| 9-Aug | 11.4 | 11.3 | 11.2 | 11.0 | 10.9 | 10.8 | 11.5 | 12.4 | 13.6 | 15.8 | 17.5 | 19.4 | 20.0 | 20.7 | 20.8 | 21.0 | 21.4 | 20.8 | 18.9 | 15.9 | 13.4 | 12.0 | 11.0 | 10.1 | 15.1 | 21.4 |
| 10-Aug | 9.4 | 8.5 | 7.7 | 7.1 | 6.6 | 6.9 | 8.6 | 12.2 | 15.1 | 18.6 | 20.1 | 21.0 | 21.1 | 22.3 | 21.9 | 20.5 | 19.8 | 18.3 | 17.6 | 16.1 | 14.7 | 14.0 | 12.8 | 11.7 | 14.7 | 22.3 |
| 11-Aug | 10.8 | 10.0 | 8.9 | 8.6 | 8.1 | 8.0 | 10.1 | 14.8 | 17.6 | 19.4 | 20.4 | 20.1 | 18.9 | 20.7 | 21.4 | 17.5 | 16.2 | 16.4 | 17.1 | 14.7 | 13.1 | 11.5 | 11.1 | 11.1 | 14.4 | 21.4 |
| 12-Aug | 11.0 | 11.4 | 11.3 | 10.7 | 10.1 | 10.2 | 10.8 | 12.9 | 14.4 | 15.3 | 15.1 | 13.7 | 14.4 | 16.2 | 16.0 | 15.1 | 14.8 | 15.1 | 13.4 | 13.3 | 12.5 | 12.1 | 11.7 | 11.2 | 13.0 | 16.2 |
| 13-Aug | 11.2 | 11.3 | 11.3 | 11.3 | 11.1 | 10.8 | 11.2 | 12.1 | 13.4 | 14.9 | 16.5 | 16.6 | 14.8 | 15.2 | 16.9 | 16.6 | 16.8 | 16.5 | 15.7 | 14.7 | 13.2 | 11.9 | 12.0 | 11.8 | 13.7 | 16.9 |
| 14-Aug | 11.5 | 11.0 | 10.2 | 10.3 | 10.3 | 10.2 | 10.9 | 12.4 | 13.7 | 15.1 | 16.8 | 19.5 | 20.2 | 17.9 | 19.6 | 20.4 | 20.3 | 17.3 | 16.2 | 14.6 | 12.3 | 11.0 | 10.2 | 9.6 | 14.2 | 20.4 |
| 15-Aug | 8.9 | 8.7 | 8.4 | 7.9 | 7.6 | 7.5 | 8.6 | 11.3 | 15.0 | 18.2 | 20.1 | 21.3 | 20.1 | 21.8 | 20.9 | 21.2 | 21.7 | 20.3 | 19.8 | 16.5 | 15.4 | 16.0 | 15.6 | 15.2 | 15.3 | 21.8 |
| 16-Aug | 14.2 | 13.9 | 13.1 | 12.2 | 11.4 | 11.4 | 12.3 | 15.1 | 16.0 | 15.6 | 15.4 | 14.8 | 13.1 | 13.9 | 15.3 | 16.1 | 17.4 | 17.1 | 15.4 | 11.8 | 9.9 | 9.1 | 8.8 | 8.9 | 13.4 | 17.4 |
| 17-Aug | 8.5 | 8.2 | 7.1 | 6.6 | 6.1 | 6.4 | 7.6 | 10.0 | 14.4 | 17.9 | 19.5 | 19.4 | 19.8 | 21.3 | 21.2 | 21.3 | 21.4 | 17.8 | 16.4 | 14.1 | 12.4 | 11.7 | 11.6 | 11.6 | 13.8 | 21.4 |
| 18-Aug | 10.9 | 10.6 | 10.0 | 8.9 | 8.1 | 8.2 | 10.1 | 13.5 | 16.8 | 19.9 | 22.0 | 23.5 | 24.1 | 24.5 | 25.4 | 25.8 | 25.8 | 24.7 | 23.1 | 20.7 | 16.9 | 16.0 | 14.7 | 15.1 | 17.5 | 25.8 |
| 19-Aug | 15.4 | 15.3 | 14.9 | 14.0 | 13.3 | 13.0 | 14.1 | 16.2 | 17.0 | 18.6 | 21.3 | 22.7 | 22.4 | 23.8 | 24.1 | 23.7 | 23.2 | 20.9 | 19.8 | 18.4 | 16.5 | 14.8 | 13.8 | 13.1 | 17.9 | 24.1 |
| 20-Aug | 12.3 | 11.8 | 11.2 | 10.8 | 10.9 | 10.8 | 11.7 | 14.4 | 17.0 | 19.1 | 20.3 | 22.8 | 22.5 | 23.4 | 22.8 | 22.1 | 21.9 | 21.3 | 19.8 | 16.3 | 13.8 | 12.7 | 11.6 | 11.0 | 16.3 | 23.4 |
| 21-Aug | 10.1 | 9.4 | 8.7 | 8.5 | 8.4 | 8.0 | 9.2 | 11.8 | 15.4 | 18.3 | 20.8 | 22.6 | 23.7 | 24.2 | 25.0 | 25.1 | 24.7 | 24.0 | 20.8 | 17.3 | 15.8 | 15.4 | 14.7 | 13.3 | 16.5 | 25.1 |
| 22-Aug | 12.5 | 11.7 | 11.3 | 10.9 | 10.1 | 9.9 | 11.6 | 15.5 | 18.8 | 20.9 | 22.9 | 24.7 | 25.9 | 26.1 | 27.7 | 27.7 | 27.1 | 25.9 | 23.8 | 21.3 | 18.9 | 17.1 | 15.9 | 14.9 | 18.9 | 27.7 |
| 23-Aug | 14.6 | 14.0 | 13.4 | 13.0 | 13.3 | 13.2 | 13.8 | 15.1 | 16.2 | 16.8 | 18.3 | 20.1 | 22.2 | 23.1 | 25.7 | 25.3 | 23.2 | 21.5 | 20.6 | 19.3 | 19.2 | 18.6 | 18.2 | 17.5 | 18.2 | 25.7 |
| 24-Aug | 16.6 | 16.5 | 16.5 | 16.5 | 16.4 | 15.9 | 15.5 | 15.8 | 16.3 | 18.0 | 20.3 | 20.8 | 21.9 | 24.0 | 22.9 | 23.8 | 24.6 | 23.5 | 19.8 | 15.7 | 13.8 | 12.6 | 11.5 | 10.8 | 17.9 | 24.6 |
| 25-Aug | 10.1 | 10.3 | 9.9 | 9.7 | 9.4 | 9.1 | 9.8 | 12.8 | 17.4 | 19.5 | 22.2 | 23.9 | 24.9 | 25.8 | 25.7 | 26.3 | 25.9 | 25.0 | 20.7 | 17.6 | 15.6 | 14.4 | 13.4 | 12.7 | 17.2 | 26.3 |
| 26-Aug | 12.0 | 11.1 | 10.5 | 9.9 | 9.6 | 9.4 | 10.6 | 14.0 | 17.7 | 21.4 | 24.7 | 26.2 | 27.0 | 27.7 | 27.9 | 27.5 | 27.8 | 26.9 | 22.4 | 20.1 | 19.9 | 19.1 | 17.8 | 15.4 | 19.0 | 27.9 |
| 27-Aug | 14.6 | 13.4 | 12.3 | 11.8 | 11.1 | 10.4 | 11.4 | 14.6 | 17.5 | 21.4 | 23.1 | 25.3 | 25.9 | 27.3 | 29.6 | 29.6 | 28.8 | 27.5 | 25.3 | 23.8 | 22.3 | 20.9 | 18.9 | 16.7 | 20.2 | 29.6 |
| 28-Aug | 15.2 | 14.3 | 15.0 | 15.8 | 14.9 | 13.6 | 14.3 | 14.7 | 16.0 | 18.1 | 19.7 | 21.3 | 22.3 | 21.4 | 22.1 | 21.9 | 21.3 | 21.0 | 18.9 | 16.3 | 14.1 | 13.9 | 13.3 | 12.1 | 17.2 | 22.3 |
| 29-Aug | 11.1 | 10.5 | 10.1 | 9.7 | 9.0 | 8.4 | 9.0 | 10.8 | 12.6 | 14.7 | 17.1 | 19.1 | 20.5 | 21.5 | 22.4 | 22.6 | 22.5 | 21.6 | 18.4 | 15.7 | 14.0 | 13.0 | 12.9 | 12.0 | 15.0 | 22.6 |
| 30-Aug | 12.0 | 12.5 | 13.0 | 12.8 | 12.6 | 11.7 | 11.7 | 12.3 | 12.6 | 13.6 | 14.3 | 15.8 | 18.0 | 19.2 | 20.2 | 21.1 | 20.6 | 19.9 | 19.0 | 17.6 | 16.6 | 16.2 | 16.5 | 16.2 | 15.7 | 21.1 |
| 31-Aug | 15.8 | 16.0 | 15.1 | 14.3 | 13.6 | 13.2 | 13.1 | 13.2 | 14.5 | 16.5 | 17.7 | 20.1 | 21.3 | 21.0 | 20.6 | 20.5 | 21.7 | 19.7 | 16.9 | 14.3 | 12.8 | 12.0 | 11.2 | 10.1 | 16.0 | 21.7 |
| | 12.0 | 11.7 | 11.3 | 11.0 | 10.7 | 10.6 | 11.4 | 13.3 | 15.4 | 17.3 | 18.8 | 19.9 | 20.4 | 21.0 | 21.5 | 21.5 | 21.4 | 20.5 | 18.8 | 16.6 | 14.9 | 14.0 | 13.2 | 12.5 | Diurnal Average | |
| | 16.6 | 16.5 | 16.5 | 16.5 | 16.4 | 16.5 | 16.8 | 19.3 | 22.0 | 23.6 | 24.7 | 26.2 | 27.4 | 27.9 | 29.6 | 29.6 | 29.0 | 28.4 | 27.1 | 24.7 | 22.5 | 23.4 | 18.9 | 17.5 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Janvier - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 81 | 10.89 | 10.89 |
| 10 - 20 | 496 | 66.67 | 77.55 |
| > 20 | 167 | 22.45 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Janvier - August 2026

Maximum Value: 99.1 % on Aug 10 06:00

Maximum Daily Average: 91.6 % on Aug 2

Minimum Value: 32.6 % on Aug 24 17:00

Minimum Daily Average: 66.9 % on Aug 27

Maximum Diurnal Average: 95.6 % at hour 6

Minimum Diurnal Average: 53.4 % at hour 15

Monthly Average: 77.59 %

Percentiles: $P_1$ = 36.5 $P_{10}$ = 48.8 $Q_1$ = 61.5 Median = 83.0 $Q_3$ = 94.6 $P_{90}$ = 97.7 $P_{99}$ = 98.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

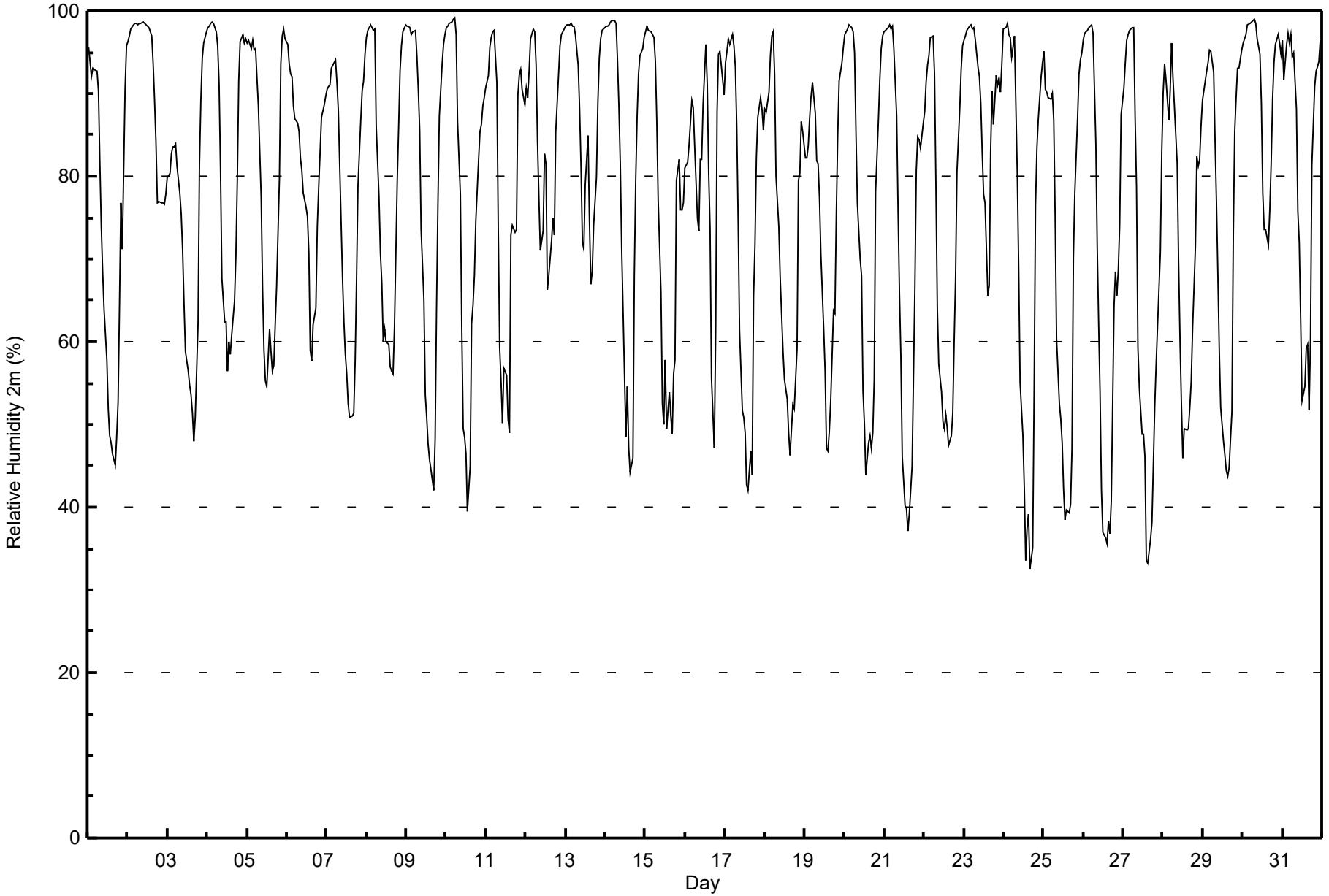
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 95.6 | 93.9 | 92.1 | 93.0 | 92.9 | 92.7 | 90.3 | 81.7 | 74.1 | 68.5 | 63.8 | 57.7 | 51.9 | 48.6 | 47.8 | 46.5 | 45.0 | 48.5 | 52.7 | 64.4 | 76.8 | 71.2 | 90.6 | 95.7 | 72.3 | 95.7 |
| 2-Aug | 96.2 | 96.9 | 97.7 | 98.3 | 98.4 | 98.6 | 98.2 | 98.6 | 98.5 | 98.6 | 98.5 | 98.4 | 98.2 | 97.9 | 97.0 | 93.6 | 89.2 | 84.0 | 76.8 | 76.9 | 76.7 | 76.7 | 76.6 | 77.9 | 91.6 | 98.6 |
| 3-Aug | 79.9 | 80.3 | 82.7 | 83.6 | 83.6 | 83.8 | 81.1 | 78.0 | 75.4 | 71.0 | 64.6 | 58.9 | 56.4 | 54.7 | 53.6 | 51.3 | 48.0 | 50.9 | 62.2 | 81.4 | 89.1 | 94.3 | 96.1 | 97.4 | 73.3 | 97.4 |
| 4-Aug | 97.9 | 98.2 | 98.5 | 98.6 | 98.5 | 97.5 | 95.8 | 91.2 | 80.8 | 67.7 | 62.4 | 62.4 | 56.5 | 59.9 | 58.5 | 60.9 | 64.8 | 70.5 | 79.6 | 91.5 | 96.2 | 97.2 | 96.1 | 96.7 | 82.4 | 98.6 |
| 5-Aug | 96.2 | 96.5 | 95.4 | 96.5 | 95.2 | 95.5 | 91.8 | 88.4 | 77.5 | 66.5 | 59.0 | 55.2 | 54.6 | 61.5 | 58.8 | 56.5 | 57.2 | 62.0 | 66.7 | 79.6 | 93.5 | 97.0 | 97.8 | 96.7 | 79.0 | 97.8 |
| 6-Aug | 95.9 | 93.5 | 92.3 | 92.1 | 88.5 | 87.0 | 86.4 | 85.5 | 82.2 | 80.6 | 77.9 | 76.2 | 75.0 | 70.7 | 59.0 | 57.5 | 62.1 | 64.0 | 74.0 | 78.7 | 82.9 | 87.0 | 88.7 | 89.7 | 80.3 | 95.9 |
| 7-Aug | 90.5 | 90.8 | 91.1 | 93.0 | 93.8 | 94.1 | 91.4 | 87.9 | 81.3 | 67.7 | 62.4 | 58.4 | 56.2 | 52.5 | 50.8 | 51.0 | 51.3 | 57.6 | 67.6 | 78.8 | 86.8 | 90.4 | 91.5 | 94.7 | 76.3 | 94.7 |
| 8-Aug | 96.8 | 97.6 | 98.2 | 98.0 | 97.6 | 97.8 | 86.1 | 77.4 | 70.6 | 67.1 | 60.0 | 61.5 | 60.0 | 59.7 | 56.9 | 56.4 | 56.2 | 61.7 | 79.5 | 85.9 | 92.6 | 95.8 | 97.5 | 98.2 | 79.5 | 98.2 |
| 9-Aug | 98.2 | 98.1 | 98.0 | 97.1 | 97.4 | 97.7 | 94.7 | 90.6 | 85.5 | 73.5 | 65.1 | 53.5 | 50.8 | 47.6 | 45.8 | 44.6 | 42.0 | 48.2 | 63.9 | 76.6 | 87.4 | 93.6 | 96.0 | 97.1 | 76.8 | 98.2 |
| 10-Aug | 98.0 | 98.2 | 98.4 | 98.7 | 99.0 | 99.1 | 97.2 | 86.7 | 77.8 | 61.6 | 49.5 | 48.5 | 46.4 | 39.4 | 44.9 | 62.2 | 64.5 | 67.9 | 74.7 | 82.0 | 85.5 | 86.4 | 88.6 | 89.5 | 76.9 | 99.1 |
| 11-Aug | 90.7 | 92.3 | 95.6 | 96.7 | 97.4 | 97.7 | 91.3 | 73.9 | 59.3 | 55.2 | 50.1 | 56.7 | 56.0 | 50.7 | 48.9 | 72.8 | 74.0 | 73.3 | 73.5 | 89.8 | 92.2 | 92.8 | 90.6 | 88.7 | 77.5 | 97.7 |
| 12-Aug | 90.7 | 89.5 | 92.7 | 96.6 | 97.7 | 97.5 | 93.5 | 84.1 | 77.3 | 71.0 | 73.4 | 82.7 | 81.5 | 66.2 | 68.0 | 72.3 | 74.9 | 72.9 | 85.3 | 88.9 | 95.7 | 97.1 | 97.4 | 97.8 | 85.2 | 97.8 |
| 13-Aug | 98.1 | 98.3 | 98.3 | 98.5 | 98.2 | 98.1 | 97.1 | 93.3 | 88.2 | 81.2 | 72.1 | 71.2 | 78.9 | 84.9 | 74.8 | 66.9 | 68.5 | 74.1 | 79.8 | 88.7 | 94.3 | 96.5 | 97.6 | 97.9 | 87.3 | 98.5 |
| 14-Aug | 98.2 | 98.1 | 98.4 | 98.6 | 98.7 | 98.7 | 98.5 | 94.2 | 88.4 | 81.5 | 71.1 | 55.9 | 48.6 | 54.5 | 47.2 | 44.3 | 45.9 | 68.1 | 79.6 | 87.2 | 92.4 | 94.6 | 95.5 | 96.7 | 80.6 | 98.7 |
| 15-Aug | 97.5 | 98.2 | 97.7 | 97.4 | 97.1 | 96.8 | 93.9 | 86.8 | 77.2 | 65.8 | 52.5 | 50.0 | 57.8 | 49.5 | 53.9 | 51.0 | 48.8 | 56.0 | 57.8 | 79.5 | 82.0 | 75.9 | 76.0 | 76.8 | 74.0 | 98.2 |
| 16-Aug | 81.1 | 81.6 | 83.8 | 86.5 | 89.2 | 88.2 | 83.8 | 74.9 | 73.4 | 82.0 | 82.0 | 88.6 | 96.0 | 91.0 | 80.3 | 73.8 | 55.6 | 47.2 | 61.2 | 87.8 | 94.8 | 95.1 | 93.5 | 89.8 | 81.7 | 96.0 |
| 17-Aug | 93.7 | 95.1 | 96.6 | 96.0 | 97.2 | 95.8 | 93.2 | 86.2 | 74.9 | 61.3 | 51.7 | 50.8 | 49.0 | 42.7 | 42.0 | 46.7 | 43.8 | 65.5 | 71.6 | 82.2 | 87.1 | 89.4 | 88.1 | 85.5 | 74.4 | 97.2 |
| 18-Aug | 88.1 | 87.8 | 90.2 | 94.6 | 97.0 | 97.4 | 92.3 | 80.0 | 73.9 | 67.7 | 63.2 | 58.9 | 55.4 | 53.1 | 49.0 | 46.3 | 49.2 | 52.5 | 51.8 | 59.2 | 79.5 | 80.3 | 86.6 | 85.4 | 72.5 | 97.4 |
| 19-Aug | 82.1 | 82.2 | 83.7 | 87.0 | 89.7 | 91.4 | 87.6 | 81.9 | 81.6 | 77.2 | 70.5 | 61.5 | 56.4 | 47.0 | 46.8 | 49.2 | 52.9 | 63.7 | 63.4 | 75.4 | 84.9 | 91.5 | 93.7 | 95.6 | 74.9 | 95.6 |
| 20-Aug | 97.2 | 97.4 | 97.8 | 98.3 | 98.0 | 97.5 | 94.9 | 85.4 | 76.7 | 70.0 | 67.9 | 54.0 | 50.1 | 43.9 | 47.8 | 48.6 | 47.2 | 49.0 | 55.4 | 78.1 | 86.8 | 91.7 | 95.4 | 96.9 | 76.1 | 98.3 |
| 21-Aug | 97.4 | 97.8 | 98.0 | 98.3 | 97.9 | 98.1 | 95.5 | 87.3 | 76.2 | 66.0 | 58.4 | 46.1 | 40.1 | 39.9 | 37.1 | 39.1 | 42.1 | 44.9 | 66.7 | 80.7 | 84.8 | 84.4 | 83.4 | 86.4 | 72.8 | 98.3 |
| 22-Aug | 87.7 | 91.4 | 93.5 | 94.6 | 96.7 | 97.0 | 92.3 | 79.1 | 64.1 | 57.3 | 54.0 | 50.4 | 49.5 | 51.3 | 49.7 | 47.4 | 48.6 | 51.4 | 60.0 | 67.6 | 80.6 | 88.2 | 92.8 | 95.8 | 72.5 | 97.0 |
| 23-Aug | 96.4 | 97.0 | 97.7 | 98.1 | 98.4 | 97.8 | 98.0 | 96.6 | 93.3 | 92.0 | 88.8 | 82.9 | 77.8 | 76.8 | 65.6 | 66.7 | 83.0 | 90.4 | 86.3 | 92.2 | 91.0 | 91.8 | 90.2 | 93.5 | 89.3 | 98.4 |
| 24-Aug | 97.7 | 97.9 | 98.4 | 97.1 | 96.7 | 94.3 | 97.0 | 88.6 | 80.3 | 69.0 | 55.1 | 48.6 | 42.4 | 33.5 | 37.5 | 39.2 | 32.6 | 35.1 | 54.0 | 76.4 | 83.4 | 87.0 | 92.0 | 93.7 | 72.0 | 98.4 |
| 25-Aug | 95.2 | 90.5 | 90.2 | 89.6 | 89.3 | 90.0 | 86.8 | 75.1 | 60.3 | 52.6 | 50.7 | 47.7 | 42.1 | 38.5 | 39.7 | 39.3 | 40.3 | 47.1 | 70.2 | 77.9 | 87.1 | 92.3 | 94.0 | 95.0 | 70.1 | 95.2 |
| 26-Aug | 96.5 | 97.3 | 97.7 | 98.0 | 98.2 | 98.3 | 97.2 | 84.1 | 71.3 | 62.1 | 53.9 | 42.0 | 36.9 | 36.3 | 35.7 | 38.3 | 36.8 | 40.7 | 64.3 | 68.6 | 65.5 | 68.6 | 74.1 | 87.4 | 68.7 | 98.3 |
| 27-Aug | 90.6 | 93.7 | 96.4 | 97.2 | 97.7 | 97.9 | 98.0 | 87.2 | 78.6 | 59.3 | 54.4 | 48.8 | 48.8 | 46.0 | 33.5 | 33.2 | 36.1 | 38.2 | 45.1 | 52.1 | 57.2 | 61.8 | 70.9 | 83.1 | 66.9 | 98.0 |
| 28-Aug | 90.2 | 93.6 | 91.7 | 86.9 | 90.4 | 96.1 | 91.9 | 88.5 | 81.6 | 69.6 | 60.4 | 52.6 | 46.0 | 49.5 | 49.3 | 49.4 | 52.1 | 55.2 | 61.7 | 71.6 | 82.4 | 81.1 | 82.1 | 86.2 | 73.3 | 96.1 |
| 29-Aug | 89.1 | 91.5 | 92.7 | 93.8 | 95.3 | 95.1 | 92.5 | 84.2 | 76.9 | 68.2 | 59.0 | 52.1 | 47.9 | 46.3 | 44.4 | 43.7 | 44.8 | 51.4 | 72.9 | 85.4 | 89.6 | 93.1 | 93.0 | 95.2 | 74.9 | 95.3 |
| 30-Aug | 96.2 | 96.7 | 97.1 | 98.3 | 98.5 | 98.6 | 98.9 | 99.0 | 98.5 | 96.7 | 94.7 | 88.8 | 78.0 | 73.5 | 73.6 | 71.6 | 75.9 | 81.7 | 89.4 | 93.7 | 96.0 | 97.2 | 96.1 | 94.8 | 91.0 | 99.0 |
| 31-Aug | 96.5 | 91.7 | 95.9 | 97.2 | 96.2 | 97.2 | 94.4 | 94.8 | 88.1 | 75.8 | 72.0 | 62.7 | 52.9 | 54.6 | 59.1 | 59.6 | 51.7 | 60.2 | 81.4 | 90.8 | 92.7 | 93.2 | 94.0 | 96.4 | 81.2 | 97.2 |
| | 93.4 | 93.7 | 94.5 | 95.1 | 95.5 | 95.6 | 93.0 | 86.2 | 78.8 | 71.1 | 65.1 | 60.8 | 58.0 | 55.6 | 53.4 | 54.2 | 54.4 | 59.2 | 68.7 | 79.7 | 86.0 | 88.2 | 90.2 | 92.0 | Diurnal Average | |
| | 98.2 | 98.3 | 98.5 | 98.7 | 99.0 | 99.1 | 98.9 | 99.0 | 98.5 | 98.6 | 98.5 | 98.4 | 98.2 | 97.9 | 97.0 | 93.6 | 89.2 | 90.4 | 89.4 | 93.7 | 96.2 | 97.2 | 97.8 | 98.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Janvier - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 20m (WS20) - km/h

## Janvier - August 2026

Maximum Speed: 17 km/h on Aug 2 15:00

Maximum Daily Speed Average: 10.8 km/h on Aug 6

Minimum Speed Value: 0 km/h on Aug 8 21:00

Minimum Daily Speed Average: 0.2 km/h on Aug 10

Maximum Diurnal Speed Average: 4.1 km/h at hour 5

Minimum Diurnal Speed Average: 1.4 km/h at hour 19

Monthly Average Velocity: 2.5 km/h 254.5 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 4 Median = 6 $Q_3$ = 9 $P_{90}$ = 11 $P_{99}$ = 15

Hours in Service: 744

Hours of Data: 744

Hours of Missing Data: 0

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SW7 | SSW6 | SSW5 | SSW5 | SSW6 | SSW4 | SSW4 | SSW2 | SSE3 | SE8 | S11 | SSE10 | SSE10 | SSE12 | SE13 | SSE13 | S15 | S13 | S13 | S8 | SSE8 | SE5 | NNW10 | N7 | S6.4 | S15 |
| 2-Aug | NW7 | ENE4 | SW7 | SSW4 | WSW6 | NW6 | NW11 | WNW4 | WNW3 | NNW7 | NNW9 | N10 | N11 | N15 | NNW17 | NNW16 | NNW14 | NNW15 | NNW14 | NNW10 | NW11 | NW9 | NW10 | NNW10 | NNW8.1 | NNW17 |
| 3-Aug | NW8 | NW10 | NW8 | NW7 | NW5 | NW6 | NW6 | NW7 | NW8 | NW11 | NNW11 | NNW13 | N10 | N10 | NNW9 | NNW9 | N8 | NNE5 | ENE3 | E3 | SSE3 | SSW5 | SSW4 | SSE1 | NNW5.5 | NNW13 |
| 4-Aug | SSE1 | SSW4 | SSW7 | SSW7 | SSW8 | SSW9 | SSW10 | SW9 | SW9 | SW9 | SW11 | WSW11 | W15 | WSW15 | WSW16 | WSW15 | SW11 | WSW10 | SW11 | SSW5 | SW6 | WSW6 | W7 | W5 | SW8.5 | WSW16 |
| 5-Aug | NW8 | NW7 | NW6 | W6 | W8 | WNW10 | WNW10 | WNW10 | WNW12 | NW12 | NW14 | NW14 | NW15 | NW9 | NW11 | WNW13 | WNW13 | WNW8 | W8 | WSW9 | NNW14 | N10 | NW5 | NW10 | NW9.4 | NW15 |
| 6-Aug | WNW9 | NW12 | NW12 | WNW12 | NW15 | NW15 | NW14 | NW13 | NW16 | NW14 | NW12 | NNW12 | NW12 | WNW14 | NW13 | WNW13 | NW12 | NW12 | NW5 | W6 | W7 | WSW7 | WSW8 | WSW7 | WNW10.8 | NW16 |
| 7-Aug | SW8 | SW8 | SW7 | SW7 | WSW7 | SW7 | WSW7 | SW5 | SW7 | NW10 | WNW10 | WNW10 | WNW9 | WNW11 | WNW10 | NW9 | NW7 | N4 | NE6 | ENE3 | E1 | NNE2 | NNW2 | SW4 | W4.4 | WNW11 |
| 8-Aug | WSW3 | SW3 | SW5 | SW1 | ESE1 | NNE0 | NE5 | NE6 | NE7 | NNE3 | NNE10 | N7 | N7 | NW6 | NW7 | NNE6 | NNE6 | NNE4 | SE1 | NE0 | W0 | N1 | SSW3 | SW2 | N2.2 | NNE10 |
| 9-Aug | SSW3 | SSW3 | SSW3 | S3 | S2 | SW3 | SSW4 | SSW4 | WSW3 | NE4 | NE4 | ENE4 | ESE2 | E3 | NE3 | ENE5 | NE5 | N2 | ENE4 | E6 | ESE4 | S0 | SSE1 | SW2 | ESE1.1 | E6 |
| 10-Aug | S3 | SW2 | NNE2 | SW2 | S1 | SSW4 | SW2 | WSW2 | NW3 | ESE2 | ESE6 | SE7 | NNE3 | ESE2 | ESE4 | WSW2 | WSW4 | W5 | W1 | WNW1 | NNE3 | NNE4 | NNE3 | NNE5 | S0.2 | SE7 |
| 11-Aug | NNE5 | NE3 | ENE2 | E2 | SSW3 | SSW5 | SSW4 | N0 | SW1 | ENE3 | NE4 | NE2 | NE7 | NNE5 | NNW5 | W8 | WNW10 | W4 | WSW4 | SW1 | WNW3 | NNW2 | NNE4 | NE3 | NNW1.0 | WNW10 |
| 12-Aug | N2 | NNE4 | N3 | W3 | W2 | N2 | W3 | W2 | ESE1 | NNW7 | NNE6 | NNE11 | N6 | N8 | NNE7 | N9 | N7 | NNE8 | N6 | N7 | N5 | N5 | N5 | N5 | N4.6 | NNE11 |
| 13-Aug | N5 | N4 | N4 | N5 | NNE6 | NNE5 | NNE6 | NNE8 | NE8 | NE6 | NNE8 | NNE10 | NE11 | S4 | SSE4 | ENE8 | NNE7 | N4 | NNE5 | N4 | NNE2 | SW1 | S1 | W1 | NNE4.2 | NE11 |
| 14-Aug | N1 | NE3 | NNE2 | WSW1 | SW1 | S2 | SW1 | WNW2 | WSW2 | NNW2 | E1 | ESE4 | N3 | NNW11 | NNE6 | ESE3 | ESE6 | SE3 | SW2 | SSW4 | SSW4 | SW5 | SSW7 | SSW6 | S0.3 | NNW11 |
| 15-Aug | SSW3 | SSW7 | SSW8 | SSW8 | SSW9 | SSW9 | SW8 | SW6 | SSW5 | SW5 | SW7 | WSW7 | SW5 | WSW7 | WSW7 | WSW7 | SW7 | SW10 | SW7 | SSW6 | SSW8 | SW8 | SW10 | SW10 | SW7.1 | SW10 |
| 16-Aug | SW10 | SW10 | SW11 | SW11 | SW12 | SW11 | SW12 | SW8 | WNW6 | N3 | NNW5 | NW6 | N9 | NNW7 | NW8 | NW7 | NNW9 | NNW9 | NNW5 | SW3 | SSW6 | SSW7 | SSW9 | SSW9 | WSW4.5 | SW12 |
| 17-Aug | SSE3 | S4 | SSW7 | SSW8 | SSW9 | SSW10 | SSW8 | SW8 | WSW6 | WNW9 | WNW10 | WNW9 | NW5 | NW7 | NNE7 | NE1 | WSW3 | SSW5 | SSW6 | SSW6 | SSW7 | SSW9 | SSW9 | SSW10 | SW4.6 | SSW10 |
| 18-Aug | SSW9 | SSW9 | SSW9 | SSW6 | S6 | S4 | SSW5 | SW5 | WSW5 | WSW6 | W9 | WSW9 | WSW9 | SW10 | SW9 | W8 | W6 | WSW7 | W9 | W8 | SW6 | WSW7 | SW7 | SSW7 | SW6.7 | SW10 |
| 19-Aug | SSW8 | SW9 | SW8 | SW10 | SW9 | SSW9 | SW8 | SW6 | SW7 | SW8 | SW7 | WNW7 | NW10 | WNW11 | NW11 | WNW13 | WNW11 | WNW8 | NW8 | WNW4 | WSW6 | SW5 | NNW2 | SW3 | WSW5.9 | WNW13 |
| 20-Aug | SSW6 | SSW5 | S3 | SSW7 | SSW8 | SSW9 | SW7 | SW3 | S2 | WNW3 | WSW4 | W5 | WNW10 | N9 | N9 | N12 | NNE12 | NNE10 | NNE9 | NE3 | NNE1 | WSW1 | SW5 | SSW5 | WNW1.7 | N12 |
| 21-Aug | SSW5 | SSW4 | SW4 | SSW7 | SSW7 | SSW6 | SSW8 | SW6 | SSW5 | WSW7 | WSW6 | WSW7 | WSW6 | WSW7 | WSW9 | WSW9 | WSW9 | WSW8 | SW4 | S6 | SSE7 | S8 | SSW7 | SSW3 | SW5.7 | WSW9 |
| 22-Aug | S3 | S5 | SSE3 | ESE2 | SSE2 | SE3 | WSW1 | W2 | SSW8 | SW9 | SW7 | SSW9 | S8 | S6 | SE4 | SSE10 | SSE10 | SSE11 | S9 | SSW9 | SSW7 | S5 | S4 | S5 | S5.1 | SSE11 |
| 23-Aug | SSW6 | S4 | SSE4 | S1 | SSW6 | SW5 | SSW4 | SW6 | SW6 | SW5 | SW4 | SSW6 | ENE4 | NNE3 | E5 | NNE4 | SW4 | SSW6 | NNW7 | NNW4 | NNW5 | NNW6 | NNW6 | N4 | SW1.3 | NNW7 |
| 24-Aug | NE2 | WSW1 | SW5 | WSW5 | WSW6 | WNW3 | WNW2 | NNE6 | N5 | NNW5 | NNW9 | NNW8 | N9 | NNW15 | NNW13 | NNE8 | N13 | N10 | NNE5 | NNE1 | WSW2 | SW4 | SSW5 | SSW6 | NNW3.9 | NNW15 |
| 25-Aug | SSW7 | SSW10 | SSW9 | SSW10 | SSW10 | SSW9 | SSW8 | SSW4 | NNE1 | ENE5 | E4 | E5 | ESE5 | E3 | E7 | E7 | ENE6 | E6 | E6 | E6 | SE4 | SW2 | SSW4 | SSE4 | SSE2.9 | SSW10 |
| 26-Aug | SE2 | SW2 | SSW1 | SSW2 | S4 | SSW5 | SSW6 | SSW6 | SSW5 | W0 | S3 | S10 | SSW11 | S11 | S11 | S10 | S10 | S8 | SSE7 | SSE9 | SSE9 | S8 | SSE7 | SSW4 | S5.9 | S11 |
| 27-Aug | SW0 | ENE1 | NE1 | E1 | SE3 | NNE2 | NNE2 | N1 | N2 | SE5 | SSE6 | S1 | N3 | NE4 | SSE13 | S15 | S13 | S14 | SSE10 | SE12 | SE11 | SE8 | SE6 | ESE3 | SE4.4 | S15 |
| 28-Aug | NNE2 | SSE2 | SSW5 | NNW4 | S7 | SSW5 | SW9 | WSW10 | WSW11 | W13 | WSW13 | SW13 | WSW17 | WSW16 | WSW14 | WSW17 | W12 | W9 | W9 | WSW6 | SSW8 | SW9 | SW8 | W7 | WSW8.4 | WSW17 |
| 29-Aug | SW7 | SW8 | SW9 | SW10 | SW8 | SSW9 | SW10 | SW10 | SW11 | SW12 | SW10 | SW11 | WSW12 | SW13 | SW12 | SW12 | WSW11 | SW7 | SSW3 | S5 | SSW2 | S3 | S3 | SE2 | SW7.9 | WSW13 |
| 30-Aug | SSE1 | SSE2 | ESE2 | N1 | ENE2 | NNW1 | NNE1 | NNE2 | NNE4 | NNE3 | W3 | W3 | E5 | SE5 | SE2 | ENE2 | N3 | NNE1 | NE1 | ESE4 | N1 | ESE2 | SE3 | S3 | E0.8 | E5 |
| 31-Aug | SSW2 | SSE4 | WNW5 | WNW3 | WNW2 | WSW5 | WSW4 | SW6 | SW4 | SSW2 | SW3 | NW4 | WNW8 | NW7 | WNW6 | WNW4 | WNW7 | W4 | SW3 | SSW2 | SSW6 | SSW7 | S5 | S6 | WSW3.3 | WNW8 |
| | SW2.4 | SW2.7 | SW3.4 | SW3.6 | SW4.1 | SW3.9 | WSW4.0 | WSW3.3 | W3.0 | WNW3.0 | WNW2.9 | WNW3.1 | NW3.5 | WNW3.8 | WNW2.9 | WNW3.0 | WNW3.1 | W2.4 | W1.4 | SSW1.5 | SSW1.9 | SW2.4 | SW2.7 | SW2.5 | Diurnal Average | |
| | SW10 | NW12 | NW12 | WNW12 | NW15 | NW15 | NW14 | NW13 | NW16 | NW14 | NW14 | NW14 | WSW17 | WSW16 | NNW17 | WSW17 | S15 | NNW15 | NNW14 | SE12 | NNW14 | N10 | NNW10 | SW10 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 7 km/h on Aug 1 23:00

Minimum Value: 1 km/h on Aug 16 21:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

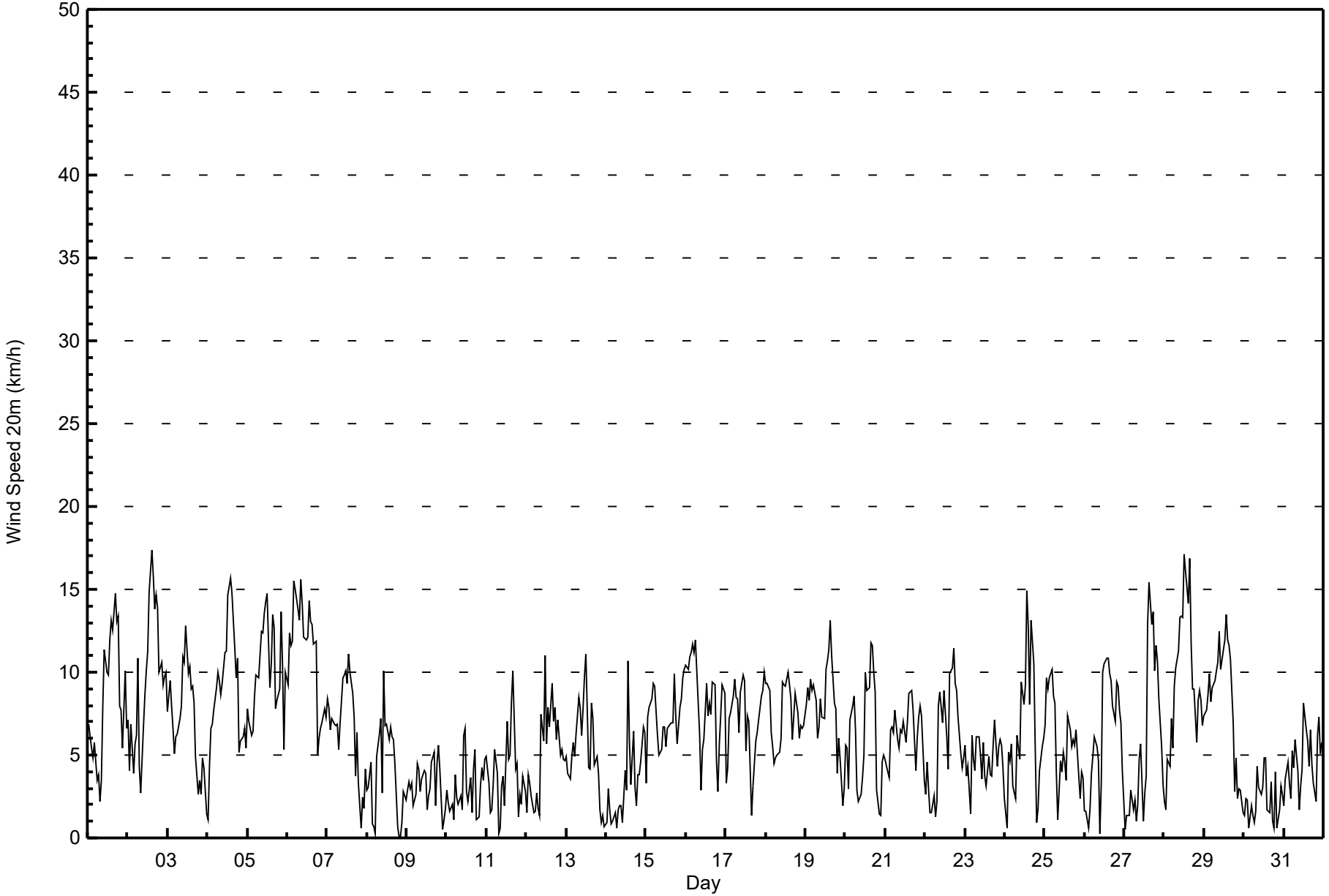
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 2 | 2 | 2 | 7 | 2 | 7 |
| 2-Aug | 3 | 3 | 3 | 3 | 2 | 3 | 5 | 2 | 2 | 3 | 4 | 5 | 5 | 6 | 7 | 7 | 6 | 6 | 5 | 5 | 4 | 3 | 4 | 4 | 7 |
| 3-Aug | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 5 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 2 | 1 | 1 | 2 | 1 | 5 |
| 5-Aug | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 5 | 6 | 6 | 6 | 6 | 3 | 4 | 5 | 5 | 3 | 3 | 3 | 6 | 5 | 2 | 3 | 6 |
| 6-Aug | 3 | 5 | 4 | 4 | 6 | 6 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 4 | 2 | 1 | 1 | 1 | 2 | 2 | 6 |
| 7-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 4 |
| 8-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 3 |
| 9-Aug | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 3 |
| 10-Aug | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 11-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 3 | 2 | 6 | 4 | 2 | 5 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| 12-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 5 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 5 |
| 13-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 6 | 2 | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 6 |
| 14-Aug | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 5 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 5 |
| 15-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 4 |
| 16-Aug | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 2 | 1 | 1 | 1 | 1 | 3 | 4 |
| 17-Aug | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 |
| 18-Aug | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 4 |
| 19-Aug | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 4 | 2 | 2 | 1 | 1 | 1 | 5 |
| 20-Aug | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 3 | 1 | 1 | 2 | 1 | 1 | 5 |
| 21-Aug | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 3 |
| 22-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 3 | 3 | 4 | 3 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 4 |
| 23-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 3 |
| 24-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 6 | 7 | 7 | 2 | 5 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 7 |
| 25-Aug | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 26-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 4 |
| 27-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1 | 3 | 5 | 5 | 5 | 5 | 3 | 3 | 4 | 3 | 2 | 1 | 5 |
| 28-Aug | 1 | 2 | 3 | 5 | 3 | 3 | 2 | 3 | 4 | 6 | 4 | 5 | 5 | 6 | 5 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 2 | 2 | 6 |
| 29-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 30-Aug | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 3 |
| 31-Aug | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 3 |
| | 3 | 5 | 4 | 5 | 6 | 6 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 6 | 5 | 7 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 20m (WS20) - km/h**

**Janvier - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 325 | 43.68 | 43.68 |
| 6 - 11 | 351 | 47.18 | 90.86 |
| 12 - 19 | 68 | 9.14 | 100.00 |
| 20 - 28 | 0 | 0.00 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 20m (WS20) - km/h**

**Janvier - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 28 | 33 | 17 | 13 | 10 | 16 | 13 | 16 | 26 | 48 | 39 | 20 | 15 | 13 | 6 | 12 | 325 |
| 6 - 11 | 20 | 19 | 7 | 2 | 6 | 2 | 5 | 15 | 14 | 71 | 64 | 37 | 14 | 24 | 33 | 18 | 351 |
| 12 - 19 | 3 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 6 | 0 | 5 | 11 | 3 | 8 | 16 | 10 | 68 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 51 | 53 | 24 | 15 | 16 | 18 | 20 | 34 | 46 | 119 | 108 | 68 | 32 | 45 | 55 | 40 | 744 |

Total Number of Valid Hours: 744

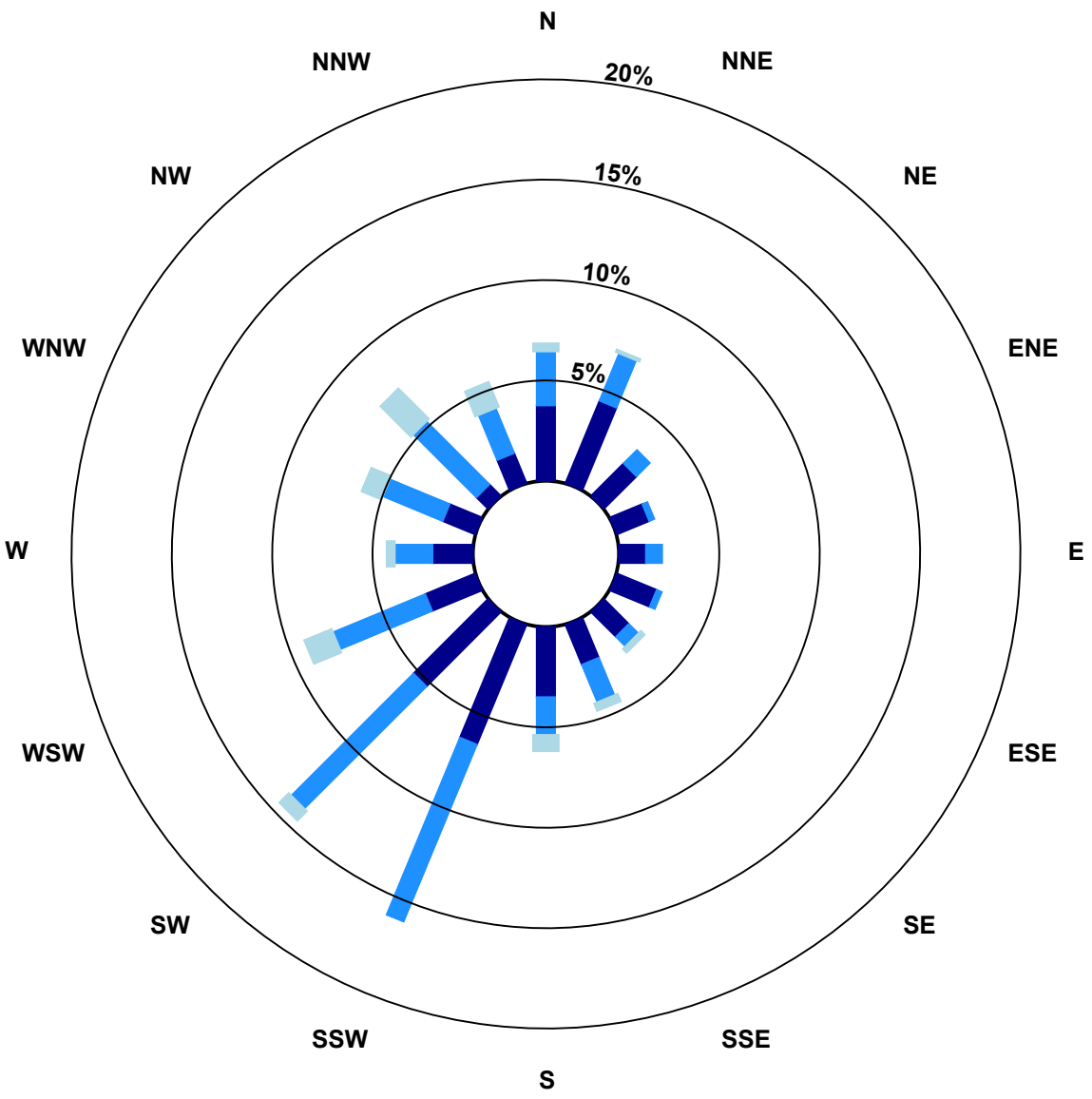
Total Number of Hours: 744

Wood Buffalo Environmental Association

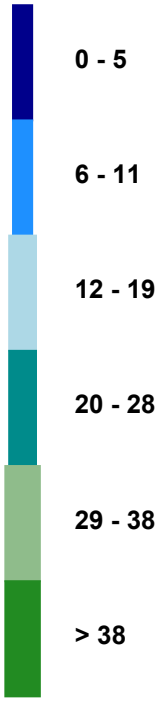
Wind Rose Aug 2026

Wind Speed 20m (WS20) - km/h

Janvier




Classes (km/h)




Total Number of Valid Hours: 744

Direction of Maximum Speed: 346 deg on Aug 2 15:00
Direction of Maximum Daily Speed Average: 302.5 deg on Aug 6

Direction of Minimum Speed: 278 deg on Aug 8 21:00

Direction of Minimum Daily Speed Average: 0.2 deg on Aug 10

Monthly Average Direction: 254.5 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 219 | 206 | 207 | 196 | 204 | 195 | 200 | 212 | 161 | 142 | 169 | 159 | 159 | 152 | 142 | 155 | 176 | 182 | 186 | 177 | 165 | 144 | 327 | 352 | 173.9 |
| 2-Aug | 321 | 64 | 215 | 200 | 244 | 318 | 306 | 285 | 297 | 340 | 345 | 353 | 354 | 349 | 346 | 345 | 337 | 329 | 344 | 336 | 322 | 320 | 324 | 330 | 331.6 |
| 3-Aug | 325 | 320 | 313 | 314 | 325 | 323 | 323 | 318 | 324 | 314 | 335 | 344 | 356 | 350 | 335 | 344 | 8 | 29 | 58 | 94 | 151 | 207 | 207 | 163 | 333.4 |
| 4-Aug | 160 | 193 | 205 | 208 | 206 | 213 | 212 | 218 | 221 | 223 | 234 | 247 | 262 | 250 | 241 | 238 | 230 | 243 | 234 | 199 | 220 | 247 | 264 | 268 | 232.2 |
| 5-Aug | 305 | 309 | 306 | 277 | 265 | 285 | 296 | 288 | 297 | 310 | 319 | 316 | 315 | 313 | 309 | 299 | 302 | 286 | 274 | 257 | 347 | 356 | 309 | 317 | 304.5 |
| 6-Aug | 302 | 309 | 307 | 301 | 306 | 313 | 314 | 311 | 309 | 307 | 318 | 330 | 315 | 300 | 306 | 297 | 304 | 304 | 305 | 275 | 259 | 256 | 255 | 244 | 302.5 |
| 7-Aug | 228 | 222 | 233 | 236 | 237 | 236 | 238 | 227 | 230 | 312 | 302 | 302 | 301 | 294 | 300 | 310 | 322 | 353 | 53 | 77 | 87 | 14 | 332 | 215 | 276.9 |
| 8-Aug | 243 | 225 | 234 | 232 | 121 | 20 | 36 | 40 | 39 | 12 | 29 | 6 | 2 | 320 | 313 | 14 | 29 | 18 | 128 | 50 | 278 | 352 | 213 | 215 | 4.4 |
| 9-Aug | 203 | 197 | 201 | 184 | 185 | 215 | 201 | 211 | 251 | 42 | 51 | 71 | 104 | 91 | 54 | 73 | 38 | 352 | 58 | 80 | 102 | 190 | 163 | 225 | 112.7 |
| 10-Aug | 188 | 221 | 15 | 236 | 184 | 209 | 220 | 244 | 306 | 104 | 109 | 137 | 24 | 110 | 112 | 254 | 253 | 262 | 262 | 287 | 12 | 30 | 25 | 18 | 169.0 |
| 11-Aug | 22 | 49 | 64 | 101 | 198 | 201 | 197 | 2 | 226 | 71 | 45 | 50 | 54 | 14 | 340 | 261 | 294 | 262 | 248 | 218 | 289 | 343 | 29 | 34 | 332.7 |
| 12-Aug | 7 | 14 | 10 | 268 | 275 | 360 | 278 | 269 | 102 | 347 | 15 | 14 | 355 | 8 | 13 | 349 | 359 | 31 | 350 | 5 | 3 | 357 | 352 | 349 | 359.7 |
| 13-Aug | 2 | 355 | 350 | 7 | 15 | 12 | 19 | 33 | 37 | 34 | 19 | 31 | 45 | 183 | 147 | 57 | 29 | 0 | 12 | 359 | 28 | 226 | 187 | 278 | 26.5 |
| 14-Aug | 3 | 47 | 13 | 238 | 220 | 180 | 230 | 302 | 251 | 348 | 94 | 103 | 9 | 341 | 13 | 111 | 112 | 134 | 231 | 195 | 202 | 225 | 205 | 208 | 190.8 |
| 15-Aug | 210 | 213 | 208 | 207 | 210 | 212 | 215 | 217 | 202 | 219 | 226 | 254 | 228 | 239 | 239 | 241 | 229 | 234 | 229 | 202 | 211 | 217 | 218 | 223 | 221.0 |
| 16-Aug | 218 | 225 | 220 | 220 | 220 | 223 | 227 | 232 | 297 | 353 | 339 | 316 | 3 | 342 | 325 | 316 | 339 | 345 | 347 | 225 | 206 | 205 | 207 | 212 | 255.9 |
| 17-Aug | 160 | 175 | 201 | 196 | 199 | 205 | 209 | 226 | 244 | 283 | 292 | 293 | 326 | 309 | 20 | 41 | 248 | 197 | 192 | 197 | 208 | 213 | 212 | 211 | 227.9 |
| 18-Aug | 211 | 213 | 205 | 206 | 191 | 185 | 206 | 224 | 242 | 258 | 271 | 249 | 248 | 230 | 224 | 260 | 261 | 254 | 271 | 269 | 227 | 237 | 217 | 208 | 234.0 |
| 19-Aug | 209 | 215 | 222 | 220 | 217 | 209 | 219 | 217 | 222 | 220 | 228 | 282 | 307 | 293 | 306 | 297 | 297 | 301 | 314 | 297 | 251 | 228 | 342 | 219 | 255.5 |
| 20-Aug | 197 | 213 | 185 | 202 | 212 | 206 | 215 | 226 | 190 | 284 | 239 | 266 | 295 | 355 | 355 | 5 | 13 | 13 | 17 | 39 | 31 | 256 | 214 | 200 | 289.0 |
| 21-Aug | 201 | 207 | 218 | 210 | 207 | 207 | 209 | 215 | 206 | 241 | 251 | 245 | 237 | 238 | 255 | 258 | 254 | 255 | 215 | 169 | 159 | 191 | 197 | 208 | 221.4 |
| 22-Aug | 169 | 173 | 161 | 118 | 148 | 126 | 253 | 280 | 209 | 232 | 225 | 203 | 176 | 179 | 127 | 161 | 152 | 157 | 169 | 197 | 196 | 169 | 171 | 189 | 180.8 |
| 23-Aug | 200 | 172 | 167 | 170 | 194 | 215 | 213 | 215 | 219 | 229 | 220 | 212 | 69 | 28 | 100 | 28 | 215 | 212 | 338 | 345 | 342 | 345 | 348 | 357 | 233.8 |
| 24-Aug | 44 | 255 | 215 | 237 | 250 | 282 | 295 | 12 | 350 | 344 | 345 | 338 | 350 | 346 | 338 | 21 | 356 | 356 | 14 | 23 | 245 | 218 | 205 | 203 | 335.7 |
| 25-Aug | 205 | 207 | 209 | 210 | 207 | 212 | 210 | 213 | 15 | 58 | 89 | 90 | 114 | 92 | 93 | 80 | 63 | 86 | 93 | 96 | 129 | 216 | 210 | 164 | 157.8 |
| 26-Aug | 134 | 228 | 203 | 194 | 184 | 193 | 206 | 205 | 199 | 259 | 182 | 190 | 202 | 189 | 182 | 184 | 185 | 182 | 160 | 155 | 156 | 171 | 168 | 194 | 182.8 |
| 27-Aug | 236 | 76 | 42 | 80 | 127 | 19 | 24 | 351 | 10 | 127 | 155 | 177 | 2 | 53 | 160 | 169 | 176 | 170 | 158 | 137 | 124 | 124 | 129 | 107 | 143.7 |
| 28-Aug | 28 | 149 | 196 | 333 | 171 | 205 | 217 | 245 | 251 | 262 | 255 | 236 | 250 | 247 | 255 | 251 | 269 | 264 | 277 | 246 | 211 | 221 | 233 | 268 | 245.7 |
| 29-Aug | 222 | 215 | 223 | 216 | 220 | 207 | 215 | 224 | 236 | 233 | 233 | 232 | 246 | 236 | 233 | 232 | 246 | 225 | 209 | 177 | 193 | 186 | 181 | 139 | 225.1 |
| 30-Aug | 156 | 160 | 120 | 352 | 76 | 327 | 17 | 30 | 12 | 16 | 259 | 274 | 98 | 146 | 133 | 74 | 1 | 12 | 54 | 103 | 7 | 108 | 145 | 187 | 90.0 |
| 31-Aug | 210 | 160 | 284 | 285 | 282 | 242 | 245 | 236 | 218 | 209 | 229 | 315 | 303 | 304 | 294 | 290 | 284 | 263 | 229 | 206 | 207 | 204 | 190 | 189 | 249.6 |
| | 233.4 | 222.8 | 227.1 | 228.1 | 221.6 | 229.7 | 238.4 | 249.1 | 260.6 | 283.6 | 286.7 | 288.6 | 306.3 | 294.5 | 294.3 | 285.7 | 293.1 | 272.5 | 269.7 | 195.0 | 208.6 | 222.0 | 228.6 | 233.7 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 107 deg on Aug 26 10:00

Minimum Value: 7 deg on Aug 16 23:00

Percentiles: $P_1$ = 8 $P_{10}$ = 13 $Q_1$ = 20 Median = 30 $Q_3$ = 42 $P_{90}$ = 67 $P_{99}$ = 90

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

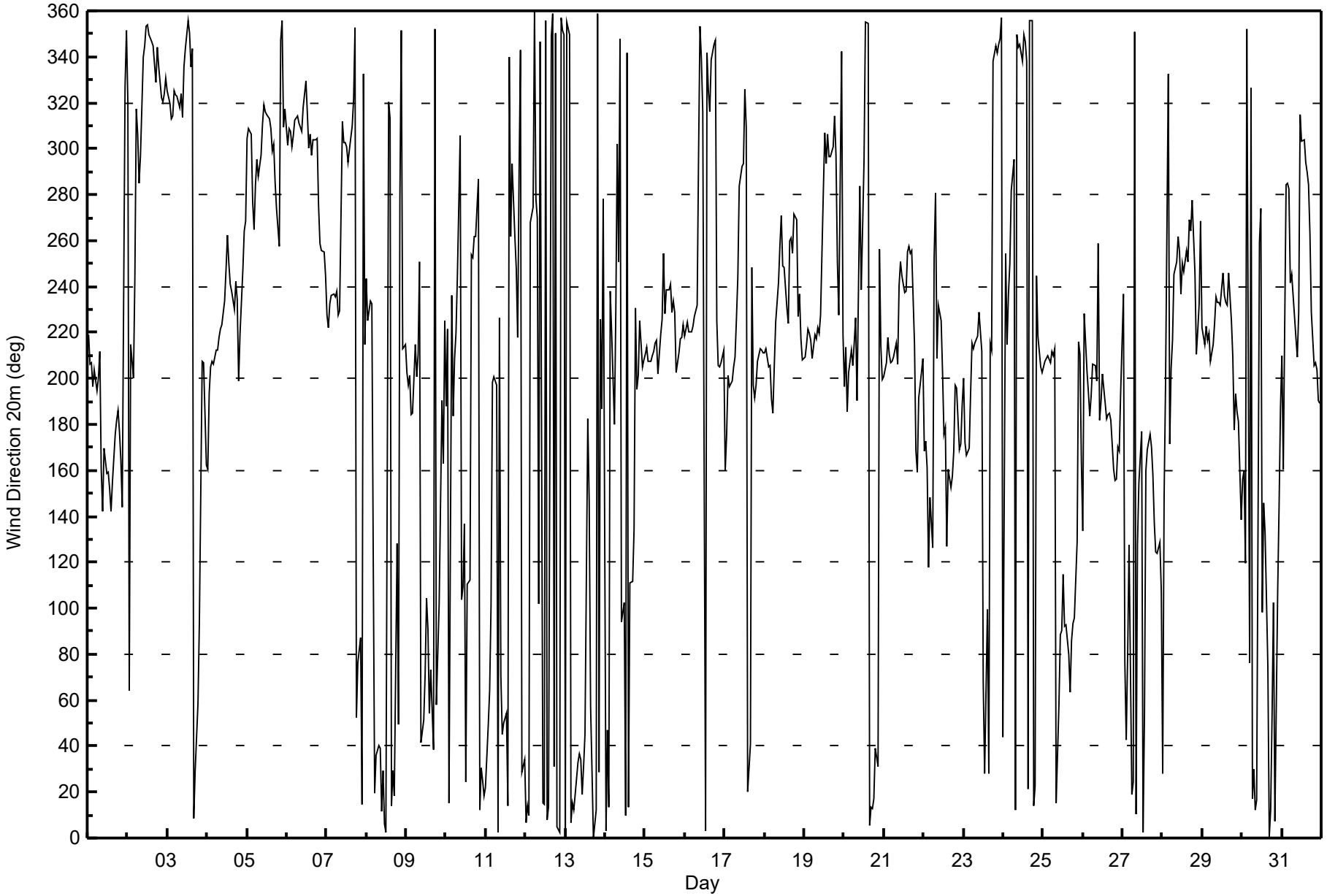
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 11 | 10 | 11 | 11 | 12 | 18 | 28 | 44 | 53 | 35 | 25 | 31 | 33 | 30 | 26 | 30 | 24 | 23 | 18 | 15 | 16 | 54 | 41 | 38 | 54 |
| 2-Aug | 39 | 72 | 40 | 47 | 35 | 40 | 31 | 49 | 64 | 32 | 31 | 35 | 31 | 36 | 34 | 36 | 39 | 31 | 36 | 35 | 32 | 29 | 33 | 29 | 72 |
| 3-Aug | 40 | 33 | 29 | 34 | 36 | 30 | 32 | 34 | 36 | 32 | 35 | 34 | 37 | 38 | 41 | 41 | 36 | 33 | 35 | 30 | 37 | 11 | 8 | 65 | 65 |
| 4-Aug | 67 | 17 | 7 | 10 | 10 | 15 | 16 | 21 | 23 | 25 | 26 | 28 | 27 | 29 | 27 | 27 | 25 | 34 | 25 | 45 | 23 | 19 | 19 | 30 | 67 |
| 5-Aug | 21 | 28 | 28 | 17 | 15 | 19 | 19 | 20 | 28 | 35 | 32 | 34 | 31 | 31 | 30 | 26 | 29 | 27 | 21 | 25 | 39 | 32 | 35 | 28 | 39 |
| 6-Aug | 21 | 28 | 27 | 24 | 27 | 30 | 30 | 32 | 25 | 28 | 32 | 35 | 30 | 27 | 33 | 30 | 29 | 24 | 27 | 17 | 18 | 18 | 17 | 21 | 35 |
| 7-Aug | 16 | 15 | 17 | 16 | 20 | 19 | 22 | 22 | 25 | 32 | 34 | 30 | 32 | 25 | 29 | 32 | 33 | 60 | 17 | 36 | 80 | 69 | 59 | 20 | 80 |
| 8-Aug | 21 | 17 | 14 | 67 | 73 | 88 | 22 | 24 | 32 | 74 | 27 | 37 | 39 | 36 | 33 | 40 | 27 | 32 | 63 | 94 | 87 | 59 | 77 | 69 | 94 |
| 9-Aug | 28 | 21 | 52 | 30 | 73 | 74 | 45 | 28 | 42 | 50 | 32 | 52 | 91 | 61 | 76 | 49 | 38 | 83 | 18 | 20 | 36 | 84 | 87 | 69 | 91 |
| 10-Aug | 68 | 58 | 44 | 74 | 79 | 13 | 27 | 49 | 60 | 83 | 30 | 36 | 81 | 80 | 55 | 61 | 21 | 19 | 66 | 62 | 28 | 14 | 15 | 15 | 83 |
| 11-Aug | 11 | 15 | 70 | 54 | 28 | 12 | 18 | 103 | 95 | 58 | 64 | 76 | 60 | 76 | 50 | 36 | 23 | 40 | 24 | 66 | 26 | 49 | 20 | 20 | 103 |
| 12-Aug | 53 | 19 | 31 | 37 | 54 | 41 | 39 | 76 | 71 | 42 | 32 | 28 | 45 | 36 | 31 | 40 | 34 | 20 | 37 | 27 | 25 | 23 | 25 | 21 | 76 |
| 13-Aug | 19 | 24 | 21 | 20 | 20 | 22 | 21 | 20 | 24 | 33 | 40 | 27 | 22 | 52 | 58 | 37 | 25 | 34 | 20 | 24 | 35 | 63 | 73 | 67 | 73 |
| 14-Aug | 72 | 25 | 34 | 64 | 61 | 68 | 73 | 36 | 48 | 59 | 92 | 63 | 81 | 39 | 48 | 78 | 30 | 18 | 67 | 54 | 78 | 14 | 8 | 11 | 92 |
| 15-Aug | 18 | 12 | 12 | 11 | 12 | 12 | 15 | 21 | 29 | 33 | 39 | 44 | 43 | 42 | 27 | 23 | 24 | 20 | 21 | 9 | 8 | 14 | 15 | 17 | 44 |
| 16-Aug | 15 | 16 | 15 | 16 | 16 | 17 | 19 | 29 | 30 | 49 | 38 | 31 | 29 | 38 | 38 | 37 | 43 | 40 | 42 | 45 | 9 | 8 | 7 | 28 | 49 |
| 17-Aug | 40 | 50 | 15 | 11 | 12 | 9 | 11 | 19 | 24 | 43 | 39 | 38 | 74 | 46 | 35 | 93 | 46 | 21 | 14 | 10 | 9 | 8 | 10 | 11 | 93 |
| 18-Aug | 10 | 12 | 11 | 14 | 13 | 14 | 15 | 33 | 32 | 29 | 24 | 32 | 27 | 28 | 30 | 27 | 23 | 28 | 23 | 26 | 13 | 13 | 15 | 10 | 33 |
| 19-Aug | 11 | 15 | 15 | 15 | 16 | 12 | 19 | 20 | 20 | 22 | 27 | 42 | 28 | 31 | 34 | 25 | 23 | 21 | 34 | 32 | 21 | 18 | 55 | 43 | 55 |
| 20-Aug | 14 | 11 | 49 | 12 | 13 | 10 | 19 | 46 | 40 | 41 | 49 | 63 | 31 | 50 | 44 | 30 | 24 | 23 | 22 | 20 | 74 | 67 | 14 | 10 | 74 |
| 21-Aug | 7 | 10 | 11 | 9 | 12 | 9 | 12 | 26 | 32 | 27 | 29 | 32 | 48 | 44 | 30 | 27 | 22 | 22 | 30 | 12 | 17 | 13 | 13 | 42 | 48 |
| 22-Aug | 26 | 12 | 25 | 47 | 80 | 50 | 56 | 39 | 31 | 32 | 36 | 31 | 29 | 26 | 55 | 24 | 26 | 23 | 22 | 16 | 13 | 16 | 10 | 9 | 80 |
| 23-Aug | 10 | 27 | 17 | 79 | 26 | 16 | 40 | 28 | 26 | 25 | 59 | 40 | 48 | 76 | 36 | 65 | 26 | 21 | 52 | 63 | 53 | 42 | 36 | 29 | 79 |
| 24-Aug | 76 | 86 | 30 | 25 | 25 | 31 | 44 | 21 | 29 | 48 | 36 | 39 | 36 | 45 | 37 | 27 | 35 | 32 | 23 | 31 | 32 | 11 | 9 | 8 | 86 |
| 25-Aug | 18 | 8 | 9 | 9 | 9 | 17 | 16 | 70 | 85 | 21 | 29 | 35 | 53 | 65 | 36 | 34 | 36 | 19 | 17 | 11 | 23 | 34 | 11 | 27 | 85 |
| 26-Aug | 74 | 30 | 89 | 48 | 15 | 13 | 10 | 17 | 19 | 107 | 72 | 28 | 30 | 25 | 28 | 28 | 26 | 22 | 18 | 14 | 17 | 19 | 24 | 54 | 107 |
| 27-Aug | 82 | 63 | 45 | 49 | 33 | 37 | 28 | 32 | 43 | 37 | 33 | 101 | 64 | 74 | 29 | 26 | 26 | 26 | 24 | 20 | 19 | 21 | 21 | 35 | 101 |
| 28-Aug | 45 | 62 | 53 | 83 | 27 | 40 | 22 | 23 | 27 | 27 | 29 | 30 | 27 | 26 | 28 | 26 | 25 | 25 | 21 | 31 | 11 | 17 | 19 | 24 | 83 |
| 29-Aug | 15 | 13 | 16 | 17 | 20 | 17 | 20 | 24 | 29 | 26 | 28 | 32 | 30 | 28 | 30 | 28 | 26 | 23 | 38 | 14 | 44 | 63 | 37 | 73 | 73 |
| 30-Aug | 79 | 82 | 60 | 86 | 48 | 68 | 70 | 48 | 33 | 59 | 62 | 63 | 45 | 48 | 82 | 72 | 31 | 86 | 71 | 32 | 75 | 38 | 40 | 57 | 86 |
| 31-Aug | 73 | 64 | 31 | 35 | 50 | 24 | 28 | 16 | 26 | 85 | 61 | 67 | 37 | 41 | 25 | 39 | 35 | 40 | 19 | 84 | 8 | 9 | 13 | 12 | 85 |
| | 82 | 86 | 89 | 86 | 80 | 88 | 73 | 103 | 95 | 107 | 92 | 101 | 91 | 80 | 82 | 93 | 46 | 86 | 71 | 94 | 87 | 84 | 87 | 73 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 20m (WD20) - deg**

**Janvier - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS23
## FORT HILLS
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
AUGUST 2026

MONTHLY SUMMARY for
AMD SECTION III.B.1(c)

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 710 | 34 | 34 | 100 | - | - | 10.5 | 0 | 2.4 | 0 |
| TRS(ppb) Average | 707 | 36 | 37 | 99.87 | 7.6 | 2 | 6.2 | - | 1.4 | - |
| H2S(ppb) Average | 707 | 36 | 37 | 99.87 | - | - | 5.8 | 0 | 1.1 | 0 |
| THC(ppm) Average | 710 | 34 | 34 | 100 | - | - | 5.1 | - | 2.9 | - |
| NMHC(ppm) Average | 710 | 34 | 34 | 100 | - | - | 1.486 | - | 0.383 | - |
| CH4(ppm) Average | 710 | 34 | 34 | 100 | - | - | 4.8 | - | 2.5 | - |
| NO2 (ppb) Average | 707 | 36 | 37 | 99.87 | - | - | 32.9 | 0 | 14.3 | - |
| NO (ppb) Average | 707 | 36 | 37 | 99.87 | - | - | 123.8 | - | 24.6 | - |
| NOX (ppb) Average | 707 | 36 | 37 | 99.87 | - | - | 148 | - | 33.6 | - |
| PM2.5 (ug/m3) Average | 723 | 2 | 21 | 97.45 | - | - | 100.8 | 4 | 39.6 | 3 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 28.8 | - | 22 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 97.5 | - | 87.4 | - |
| Wind Speed 10 m (km/h) Average | 742 | 2 | 2 | 100 | - | - | 35 | - | 23 | - |
| Wind Direction 10 m (deg) Average | 742 | 2 | 2 | 100 | - | - | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2(ppb) Average | 710 | 0.34 | 1 | - | 0 | 0 | 0 | 0.1 | 0.3 | 0.6 | 10.5 |
| TRS(ppb) Average | 707 | 0.54 | 0.5 | - | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.9 | 6.2 |
| H2S(ppb) Average | 707 | 0.39 | 0.5 | - | 0 | 0.1 | 0.1 | 0.2 | 0.5 | 0.8 | 5.8 |
| THC(ppm) Average | 710 | 2.27 | 0.4 | - | 2 | 2 | 2 | 2.1 | 2.4 | 2.7 | 5.1 |
| NMHC(ppm) Average | 710 | 0.079 | 0.161 | - | 0 | 0 | 0 | 0 | 0.1 | 0.3 | 1.486 |
| CH4(ppm) Average | 710 | 2.19 | 0.3 | - | 2 | 2 | 2 | 2.1 | 2.3 | 2.5 | 4.8 |
| NO2(ppb) Average | 707 | 6.47 | 6.4 | - | 0 | 0.5 | 1.6 | 4.3 | 9.6 | 16.2 | 32.9 |
| NO(ppb) Average | 707 | 5.83 | 13.1 | - | 0 | 0.1 | 0.3 | 1.1 | 4.4 | 18.7 | 123.8 |
| NOX(ppb) Average | 707 | 12.3 | 17.6 | - | 0.1 | 0.7 | 2.1 | 5.7 | 14.6 | 34.5 | 148 |
| PM2.5(ug/m3) Average | 723 | 15.2 | 13.1 | - | 0.4 | 3.4 | 6.1 | 11.3 | 20.3 | 31.8 | 100.8 |
| AT(C) Average | 744 | 17.35 | 4.3 | - | 7.3 | 11.9 | 14.1 | 16.9 | 20.5 | 23.3 | 28.8 |
| RH(%) Average | 744 | 69.29 | 17.1 | - | 29.2 | 44.4 | 55.3 | 72.7 | 83.4 | 90.9 | 97.5 |
| WS(km/h) Average | 742 | 10.2 | 6 | - | 0 | 3 | 5 | 9 | 13 | 18 | 35 |
| WD(deg) Average | 742 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| H2S, NO2, TRS | 10 Aug 2026 13:00 | 10 Aug 2026 13:00 | 1 | Maintenance - sample manifold cleaned |
| Wind Speed, Wind Direction | 06 Aug 2026 17:00 | 07 Aug 2026 00:00 | 8 | Flat line in sensor output signal |
| Wind Speed, Wind Direction | 17 Aug 2026 22:00 | 18 Aug 2026 08:00 | 11 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.5 ppb on Aug 22 16:00 Maximum Daily Average: 2.4 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 2 03:00 Minimum Daily Average: 0.0 ppb on Aug 12
Maximum Diurnal Average: 0.9 ppb at hour 14 Minimum Diurnal Average: 0.1 ppb at hour 1
Monthly Average: 0.34 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 0.6 $P_{99}$ = 5.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.3 | 0.3 | 0.3 | Z | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.7 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.9 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4-Aug | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 |
| 5-Aug | 0.0 | Z | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 |
| 6-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 7-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.2 | 0.1 | 0.6 |
| 9-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.3 | 0.2 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 |
| 10-Aug | Z | 0.6 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.3 | 0.1 | 0.1 | C | C | C | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 11-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 |
| 12-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13-Aug | 0.0 | 0.2 | 0.1 | Z | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 14-Aug | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 |
| 15-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 |
| 16-Aug | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 17-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 1.2 | 0.3 | 0.5 | 0.7 | 0.4 | 0.3 | 1.1 | 1.6 | 2.5 | 1.8 | 0.8 | 0.4 | 0.3 | 0.3 | 0.6 | 2.5 |
| 18-Aug | 0.3 | 0.5 | Z | 0.8 | 1.5 | 2.1 | 1.7 | 0.9 | 0.7 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.6 | 2.1 |
| 19-Aug | 0.2 | 0.3 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.5 | 0.3 | 0.5 |
| 20-Aug | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.6 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.6 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 1.6 | 0.6 | 0.2 | 0.2 | 0.3 | 0.9 | 0.6 | 0.3 | 1.6 |
| 22-Aug | Z | 0.5 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 0.5 | 0.8 | 0.8 | 0.8 | 2.2 | 3.3 | 9.1 | 8.0 | 10.5 | 6.0 | 5.6 | 2.0 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 2.4 | 10.5 |
| 23-Aug | 0.5 | Z | 0.5 | 0.3 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.4 | 0.5 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 24-Aug | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 |
| 25-Aug | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.5 | 1.2 | 1.1 | 1.1 | 0.9 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 1.2 |
| 26-Aug | 0.2 | 0.1 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 1.5 | 3.4 | 3.1 | 4.6 | 5.9 | 9.0 | 7.2 | 3.3 | 2.9 | 4.0 | 1.3 | 0.8 | 0.5 | 0.4 | 0.5 | 1.2 | 0.7 | 2.2 | 9.0 |
| 27-Aug | 0.6 | 0.4 | 0.5 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 1.9 | 3.0 | 0.8 | 0.9 | 3.6 | 2.9 | 2.9 | 1.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.6 | 0.7 | 0.6 | 1.1 | 3.6 |
| 28-Aug | Z | 0.4 | 0.3 | 0.2 | 0.6 | 0.6 | 0.5 | 1.0 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 1.0 |
| 29-Aug | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 30-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 2.8 | 1.6 | 2.1 | 1.8 | 0.5 | 0.5 | 0.0 | 0.1 | 0.1 | 0.0 | 0.4 | 2.8 |
| 31-Aug | 0.0 | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 | 1.0 | 0.5 | 1.1 | 0.8 | 0.2 | 0.1 | 0.1 | 0.3 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 | 1.1 |
| | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.6 | 0.6 | 0.5 | 0.8 | 1.5 | 2.1 | 1.7 | 1.5 | 3.4 | 3.1 | 4.6 | 5.9 | 9.0 | 9.1 | 8.0 | 10.5 | 6.0 | 5.6 | 2.5 | 1.8 | 0.8 | 0.6 | 1.2 | 0.7 | Diurnal Maximum | |

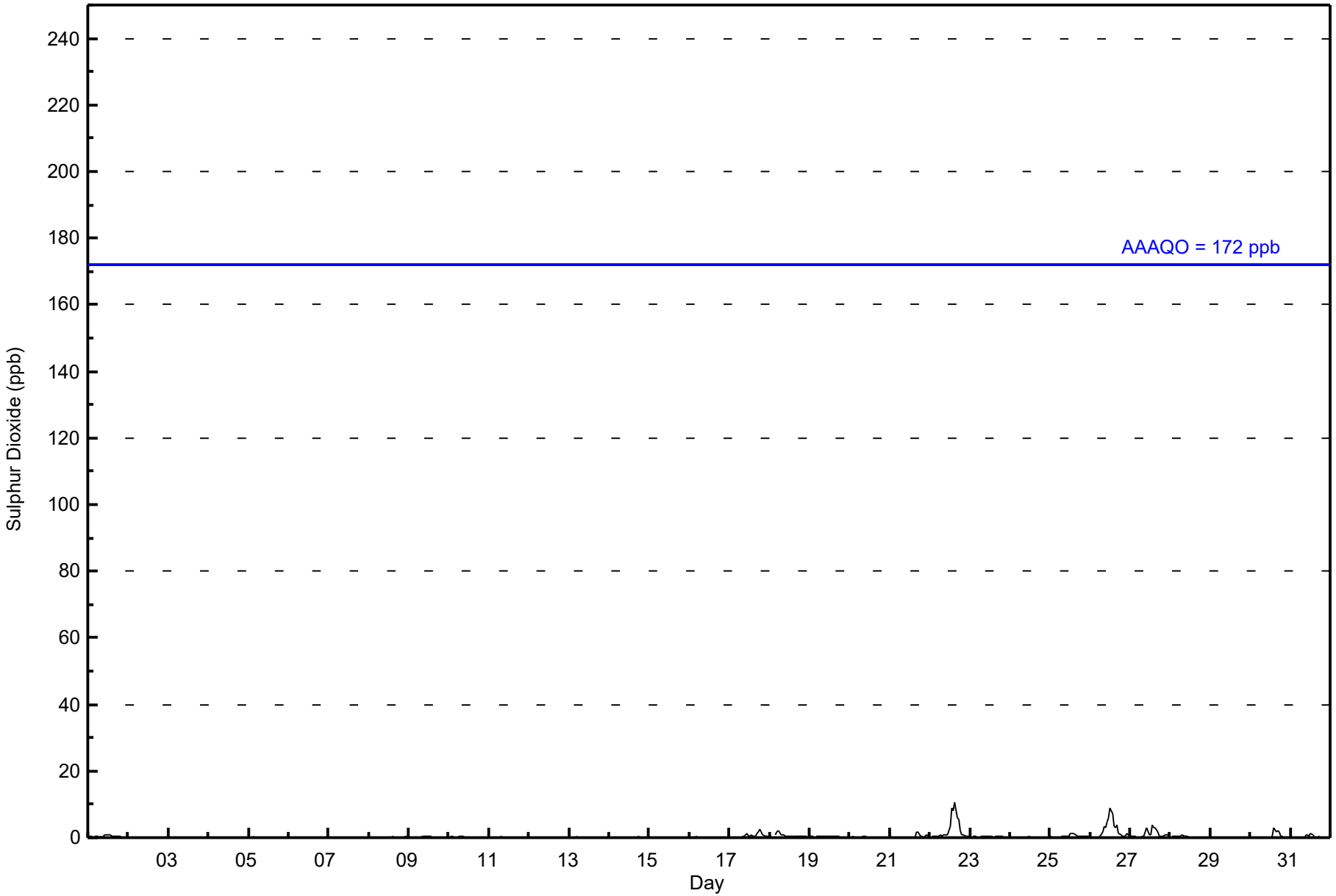
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Hills - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 710 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Hills - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 107 | 57 | 12 | 2 | 6 | 7 | 16 | 104 | 88 | 41 | 53 | 17 | 22 | 33 | 66 | 77 | 708 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 107 | 57 | 12 | 2 | 6 | 7 | 16 | 104 | 88 | 41 | 53 | 17 | 22 | 33 | 66 | 77 | 708 |

Total Number of Valid Hours: 708

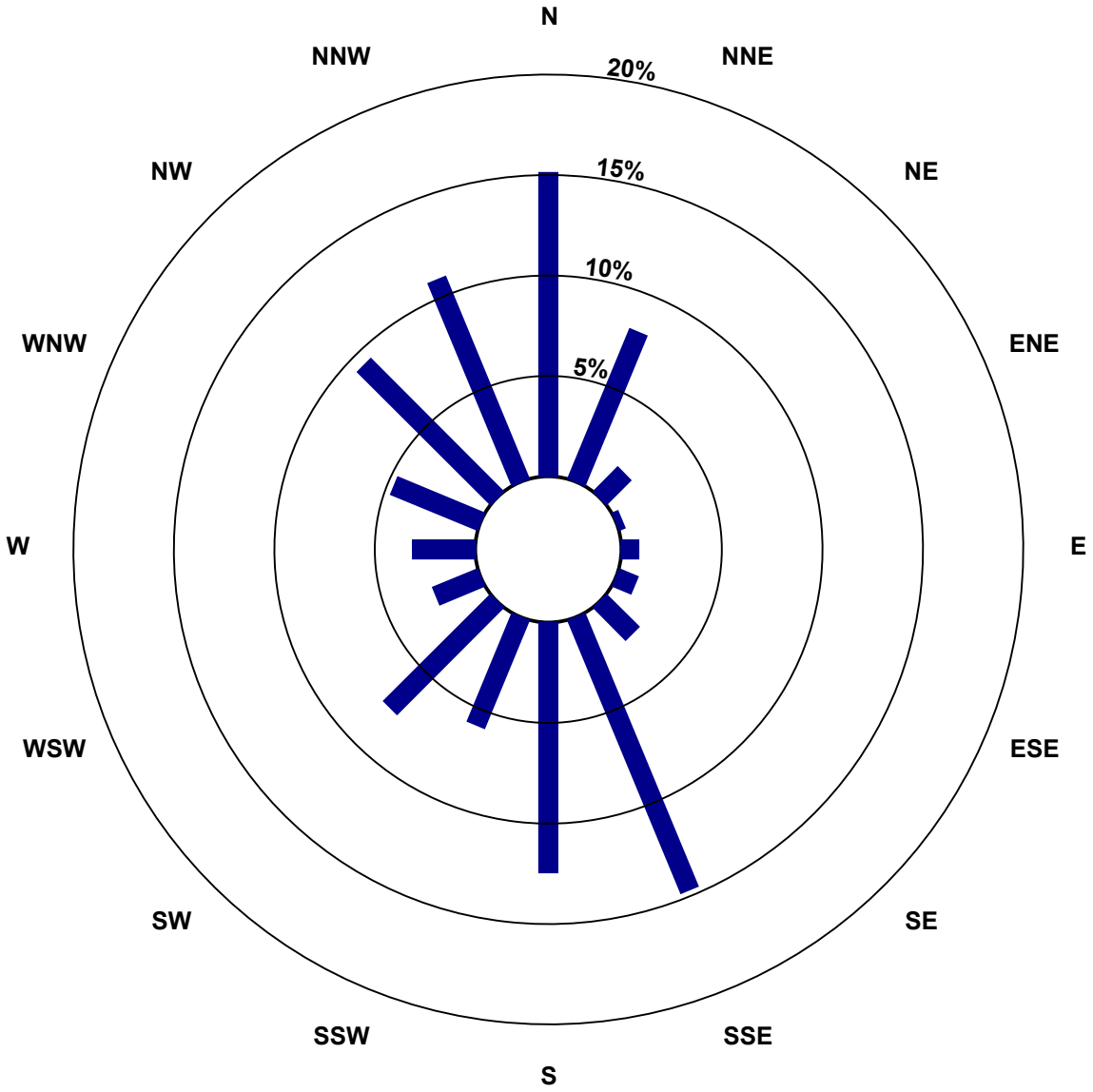
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Hills**




**Classes (ppb)**

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

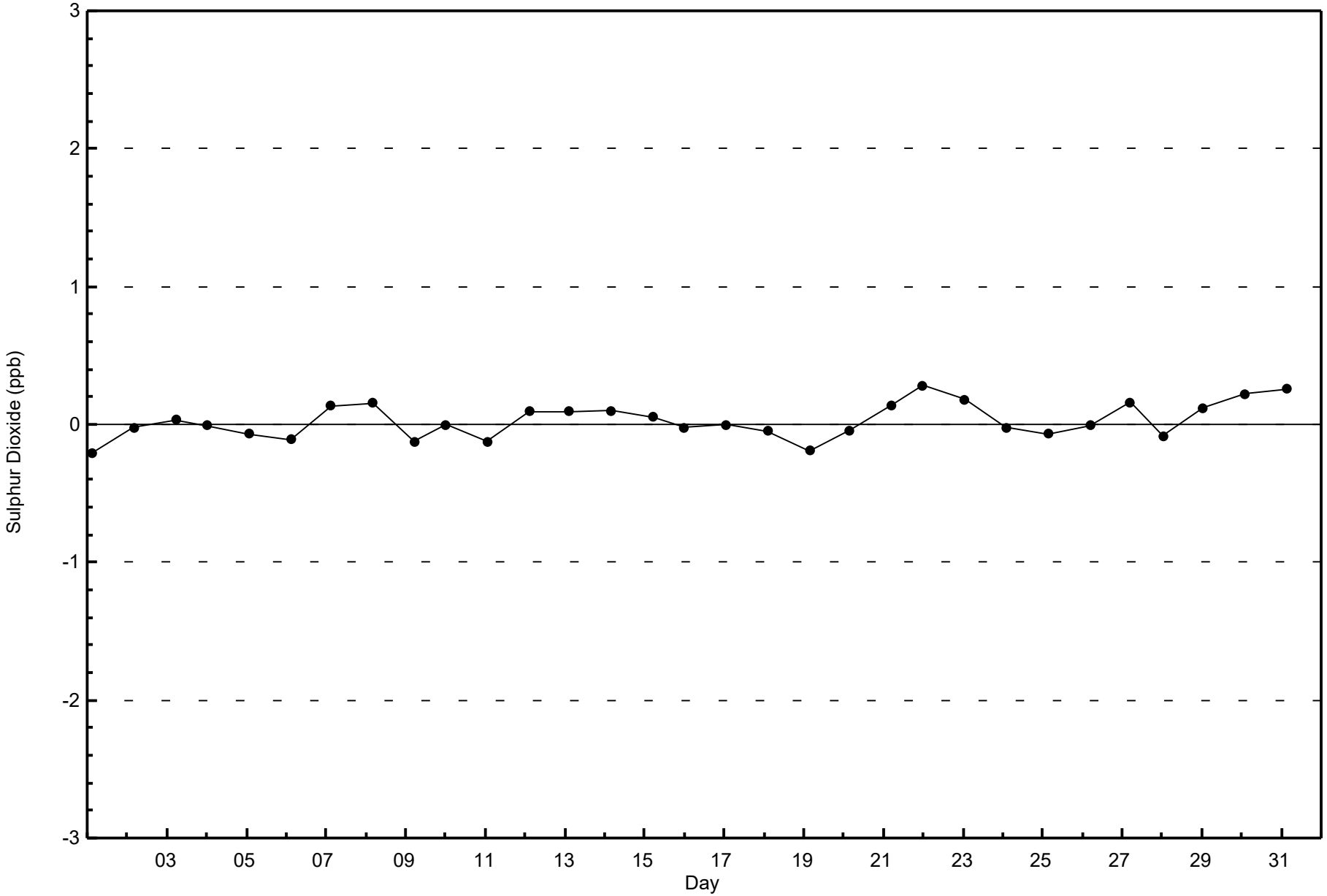
**Total Number of Valid Hours: 708**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Hills - August 2026**

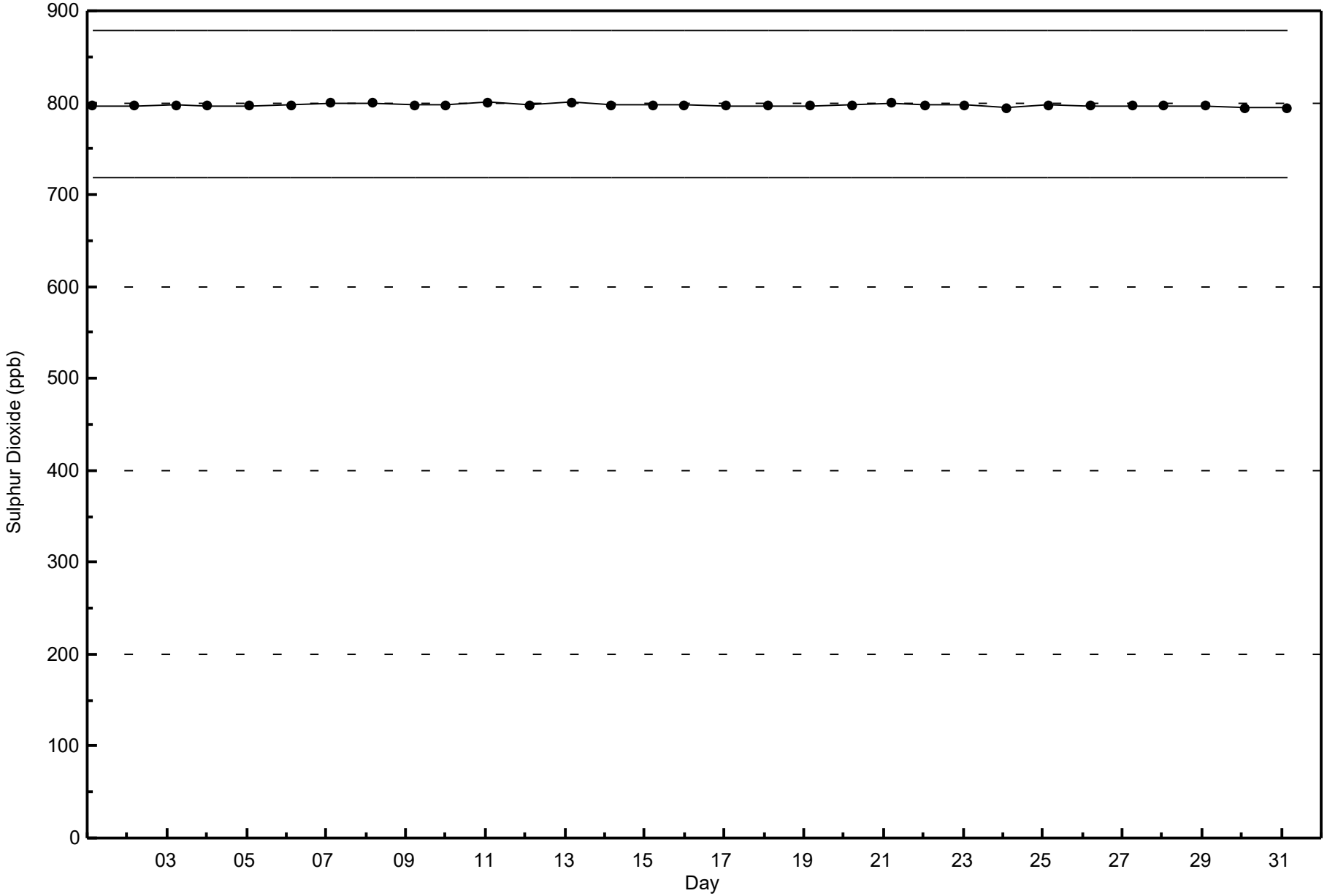


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort Hills - August 2026

Number of Exceedences (AAAQG): 30-Min: 2

Maximum Value: 7.6 ppb on Aug 26 09:00 Maximum Daily Average: 1.4 ppb on Aug 22

Minimum Value: 0.1 ppb on Aug 23 20:30 Minimum Daily Average: 0.2 ppb on Aug 15

Maximum Diurnal Average: 0.9 ppb at hour 9 Minimum Diurnal Average: 0.3 ppb at hour 17

Monthly Average: 0.54 ppb Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.2 $Q_1$ = 0.3 Median = 0.4 $Q_3$ = 0.6 $P_{90}$ = 0.9 $P_{99}$ = 2.5

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1413 |
| Periods of Invalid Data: | 75 |
| Periods of Calibration: | 72 |
| Percent Operational Time: | 99.8 |

| Day | Period Ending At (MST) 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 1.1 | 1.0 | 0.9 | 1.1 | Z | 0.9 | 0.7 | 1.0 | 0.5 | 1.0 | 4.2 | 3.5 | 2.1 | 2.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 1.1 | 4.3 |
| | 1.2 | 0.8 | 0.9 | 1.1 | SP | 0.9 | 0.8 | 0.7 | 0.7 | 2.2 | 4.3 | 2.8 | 2.6 | 1.5 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | | |
| 2-Aug | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | Z | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 |
| | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | SP | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 3-Aug | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.6 |
| | SP | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.6 | | |
| 4-Aug | 0.4 | Z | 0.5 | 0.9 | 0.7 | 0.7 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.9 |
| | 0.4 | SP | 0.8 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 5-Aug | 0.3 | 0.4 | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 1.0 |
| | 0.5 | 1.0 | SP | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | | |
| 6-Aug | 0.2 | 0.4 | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.3 | 0.3 | 0.6 |
| | 0.3 | 0.3 | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | | |
| 7-Aug | 0.3 | 0.4 | 0.6 | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 |
| | 0.3 | 0.4 | 0.4 | 0.4 | SP | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | | |
| 8-Aug | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.5 | 0.7 | 0.3 | 0.7 |
| | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | SP | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.7 | 0.5 | | |
| 9-Aug | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.7 | 0.4 | 0.3 | 0.7 |
| | SP | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.5 | 0.4 | 0.3 | | |
| 10-Aug | 0.3 | Z | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 0.9 | 0.9 | 0.6 | 0.4 | 0.3 | M | M | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 1.0 |
| | 0.4 | SP | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 0.8 | 0.4 | 0.3 | 0.3 | M | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | | |
| 11-Aug | 0.3 | 0.3 | Z | 0.4 | 0.5 | 0.5 | 0.4 | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.7 |
| | 0.3 | 0.4 | SP | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | | |
| 12-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| | 0.3 | 0.2 | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.1 | 0.2 | 0.2 | | |
| 13-Aug | 0.2 | 0.3 | 0.4 | 0.4 | Z | 0.3 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 |
| | 0.2 | 0.4 | 0.5 | 0.5 | SP | 0.5 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | | |
| 14-Aug | 0.4 | 0.5 | 0.3 | 0.3 | 0.4 | Z | 0.4 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 |
| | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | SP | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| 15-Aug | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.5 |
| | SP | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort Hills - August 2026

| Day | 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16-Aug | 0.5 | Z | 0.4 | 0.7 | 0.8 | 0.9 | 0.8 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.9 |
| | 0.5 | SP | 0.6 | 0.8 | 0.9 | 0.9 | 0.6 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | | |
| 17-Aug | 0.4 | 0.4 | Z | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.5 | 1.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.3 | 0.3 | 1.7 | 1.4 | 0.9 | 0.6 | 1.7 |
| | 0.5 | 0.4 | SP | 0.5 | 0.4 | 0.5 | 0.4 | 0.6 | 0.5 | 0.6 | 1.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 1.6 | 1.2 | 0.9 | | |
| 18-Aug | 0.8 | 0.8 | 0.8 | Z | 1.7 | 2.3 | 1.7 | 1.6 | 2.0 | 1.0 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.7 | 2.3 |
| | 0.8 | 0.7 | 1.0 | SP | 2.0 | 2.1 | 1.4 | 1.4 | 1.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | | |
| 19-Aug | 0.4 | 0.6 | 0.5 | 0.4 | Z | 0.3 | 0.4 | 0.4 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.8 |
| | 0.4 | 0.6 | 0.4 | 0.3 | SP | 0.4 | 0.4 | 0.5 | 0.7 | 0.5 | 0.7 | 0.5 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | | |
| 20-Aug | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | Z | 0.4 | 0.5 | 1.4 | 0.9 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 1.4 |
| | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | SP | 0.5 | 0.9 | 1.2 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | | |
| 21-Aug | Z | 0.5 | 0.6 | 0.7 | 0.8 | 0.7 | 0.6 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 2.7 | 0.7 | 1.7 | 2.3 | 0.7 | 2.7 |
| | SP | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 0.8 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.6 | 1.5 | 1.2 | 1.9 | 2.1 | | |
| 22-Aug | 2.0 | Z | 1.5 | 1.2 | 1.2 | 1.4 | 1.6 | 2.2 | 2.1 | 1.2 | 1.7 | 1.5 | 1.6 | 1.2 | 0.9 | 0.9 | 0.5 | 0.4 | 0.5 | 0.9 | 0.9 | 1.8 | 2.1 | 2.4 | 1.4 | 2.5 |
| | 1.9 | SP | 1.4 | 1.2 | 1.3 | 1.3 | 2.5 | 2.5 | 1.8 | 1.6 | 1.5 | 1.6 | 1.5 | 0.8 | 1.0 | 0.7 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.9 | 2.1 | 2.2 | | |
| 23-Aug | 1.8 | 1.2 | Z | 1.9 | 2.3 | 1.6 | 2.2 | 1.9 | 2.3 | 2.3 | 2.6 | 1.6 | 0.7 | 0.4 | 0.5 | 0.8 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.1 | 2.6 |
| | 1.4 | 1.1 | SP | 1.8 | 2.0 | 1.7 | 2.4 | 2.5 | 2.3 | 2.5 | 2.0 | 1.2 | 0.5 | 0.5 | 0.5 | 0.9 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | | |
| 24-Aug | 0.1 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.8 | 0.6 | 0.4 | 0.5 | 0.3 | 0.8 |
| | 0.1 | 0.2 | 0.2 | SP | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.8 | 0.4 | 0.4 | 0.5 | | |
| 25-Aug | 0.5 | 0.6 | 0.6 | 0.7 | Z | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 0.6 | 1.0 |
| | 0.5 | 0.6 | 0.6 | 0.7 | SP | 0.8 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 1.0 | 0.9 | | |
| 26-Aug | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | Z | 0.5 | 2.0 | 4.9 | 5.7 | 1.6 | 0.8 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 2.0 | 3.8 | 1.3 | 7.6 |
| | 0.7 | 0.6 | 0.7 | 0.6 | 0.5 | SP | 1.0 | 4.8 | 7.6 | 2.1 | 0.9 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 3.2 | 3.6 | | |
| 27-Aug | Z | 1.6 | 1.4 | 2.5 | 1.7 | 1.6 | 1.5 | 0.5 | 1.5 | 1.8 | 0.8 | 0.5 | 0.5 | 1.0 | 0.5 | 1.0 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.9 | 2.5 |
| | SP | 1.5 | 1.7 | 2.2 | 1.4 | 1.7 | 1.2 | 0.4 | 1.1 | 1.2 | 0.7 | 0.4 | 0.4 | 0.8 | 0.5 | 0.7 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | | |
| 28-Aug | 0.5 | Z | 0.6 | 0.4 | 0.6 | 0.8 | 0.5 | 0.6 | 2.0 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 2.0 |
| | 0.7 | SP | 0.7 | 0.4 | 0.8 | 0.4 | 0.4 | 0.8 | 1.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | | |
| 29-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 1.2 | 1.1 | 0.3 | 1.3 |
| | 0.3 | 0.3 | SP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.6 | 1.3 | | |
| 30-Aug | 1.4 | 0.7 | 0.4 | Z | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 0.3 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 1.4 |
| | 1.2 | 0.5 | 0.4 | SP | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 0.7 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | | |
| 31-Aug | 0.5 | 0.6 | 0.7 | 0.6 | Z | 0.5 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.5 | 0.8 |
| | 0.5 | 0.6 | 0.7 | 0.6 | SP | 0.8 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.6 | | |
| | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.9 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | Diurnal Average | |
| | 2.0 | 1.6 | 1.7 | 2.5 | 2.3 | 2.3 | 2.5 | 4.8 | 7.6 | 5.7 | 4.3 | 3.5 | 2.6 | 2.2 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.9 | 2.7 | 1.9 | 3.2 | 3.8 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Reduced Sulphur (TRS) - ppb

## Fort Hills - August 2026

Maximum Value: 6.2 ppb on Aug 26 09:00

Maximum Daily Average: 1.4 ppb on Aug 22

Minimum Value: 0.1 ppb on Aug 15 17:00

Minimum Daily Average: 0.2 ppb on Aug 15

Maximum Diurnal Average: 0.9 ppb at hour 9

Minimum Diurnal Average: 0.3 ppb at hour 17

Monthly Average: 0.54 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.2 $Q_1$ = 0.3 Median = 0.4 $Q_3$ = 0.6 $P_{90}$ = 0.9 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.1 | 0.9 | 0.9 | 1.1 | Z | 0.9 | 0.7 | 0.9 | 0.6 | 1.6 | 4.2 | 3.2 | 2.3 | 1.9 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 1.1 | 4.2 |
| 2-Aug | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | Z | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 |
| 3-Aug | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.3 | 0.5 |
| 4-Aug | 0.4 | Z | 0.7 | 0.9 | 0.7 | 0.6 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.9 |
| 5-Aug | 0.4 | 0.6 | Z | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.6 |
| 6-Aug | 0.2 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | C | C | C | C | C | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.5 |
| 7-Aug | 0.3 | 0.4 | 0.5 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 |
| 8-Aug | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.3 | 0.6 |
| 9-Aug | Z | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.5 |
| 10-Aug | 0.4 | Z | 0.6 | 0.7 | 0.7 | 0.6 | 0.7 | 1.0 | 0.8 | 0.5 | 0.3 | 0.3 | M | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 1.0 |
| 11-Aug | 0.3 | 0.3 | Z | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 |
| 12-Aug | 0.3 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 13-Aug | 0.2 | 0.4 | 0.5 | 0.5 | Z | 0.4 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 |
| 14-Aug | 0.4 | 0.5 | 0.3 | 0.3 | 0.4 | Z | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 |
| 15-Aug | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.4 |
| 16-Aug | 0.5 | Z | 0.5 | 0.7 | 0.8 | 0.9 | 0.7 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.9 |
| 17-Aug | 0.4 | 0.4 | Z | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 1.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 1.6 | 1.3 | 0.9 | 0.6 | 1.6 |
| 18-Aug | 0.8 | 0.8 | 0.9 | Z | 1.8 | 2.2 | 1.6 | 1.5 | 1.8 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.7 | 2.2 |
| 19-Aug | 0.4 | 0.6 | 0.5 | 0.3 | Z | 0.4 | 0.4 | 0.5 | 0.7 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 |
| 20-Aug | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | Z | 0.4 | 0.7 | 1.3 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 1.3 |
| 21-Aug | Z | 0.5 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.5 | 2.1 | 0.9 | 1.8 | 2.2 | 0.7 | 2.2 |
| 22-Aug | 2.0 | Z | 1.5 | 1.2 | 1.3 | 1.3 | 2.1 | 2.4 | 1.9 | 1.4 | 1.6 | 1.5 | 1.6 | 1.0 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.9 | 1.0 | 1.9 | 2.1 | 2.3 | 1.4 | 2.4 |
| 23-Aug | 1.6 | 1.2 | Z | 1.9 | 2.2 | 1.6 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 1.4 | 0.6 | 0.5 | 0.5 | 0.8 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.1 | 2.4 |
| 24-Aug | 0.1 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.8 | 0.5 | 0.4 | 0.5 | 0.3 | 0.8 |
| 25-Aug | 0.5 | 0.6 | 0.6 | 0.7 | Z | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | 0.6 | 1.0 |
| 26-Aug | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | Z | 0.7 | 3.4 | 6.2 | 3.9 | 1.2 | 0.7 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 2.6 | 3.7 | 1.3 | 6.2 |
| 27-Aug | Z | 1.5 | 1.5 | 2.3 | 1.6 | 1.6 | 1.4 | 0.5 | 1.3 | 1.5 | 0.7 | 0.5 | 0.5 | 0.9 | 0.5 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 2.3 |
| 28-Aug | 0.6 | Z | 0.6 | 0.4 | 0.7 | 0.6 | 0.5 | 0.7 | 1.7 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 1.7 |
| 29-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 | 1.2 | 0.3 | 1.2 |
| 30-Aug | 1.3 | 0.6 | 0.4 | Z | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.3 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 1.3 |
| 31-Aug | 0.5 | 0.6 | 0.7 | 0.6 | Z | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.6 | 0.5 | 0.7 |
| | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.9 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | Diurnal Average | |
| | 2.0 | 1.5 | 1.5 | 2.3 | 2.2 | 2.2 | 2.3 | 3.4 | 6.2 | 3.9 | 4.2 | 3.2 | 2.3 | 1.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.9 | 2.1 | 1.9 | 2.6 | 3.7 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

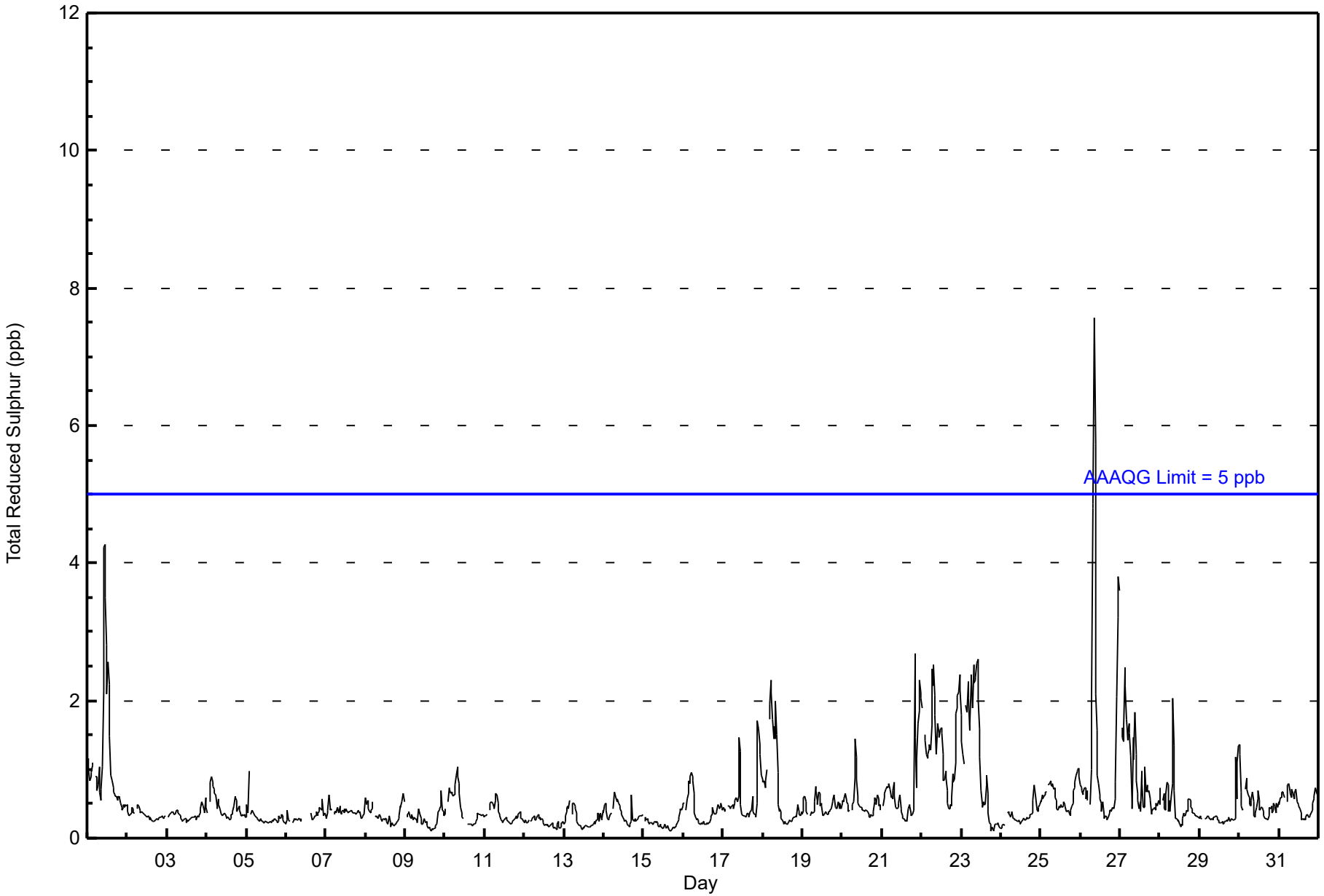
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Hills - August 2026**



# Total Reduced Sulphur (TRS) - ppb

## Fort Hills - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 700 | 99.01 | 99.01 |
| 3 - 4 | 6 | 0.85 | 99.86 |
| 5 - 7 | 1 | 0.14 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Hills - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 109 | 57 | 11 | 2 | 6 | 7 | 14 | 102 | 85 | 42 | 53 | 18 | 24 | 35 | 64 | 69 | 698 |
| 3 - 4 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 109 | 57 | 12 | 2 | 6 | 7 | 15 | 104 | 88 | 42 | 53 | 18 | 24 | 35 | 64 | 69 | 705 |

Total Number of Valid Hours: 705

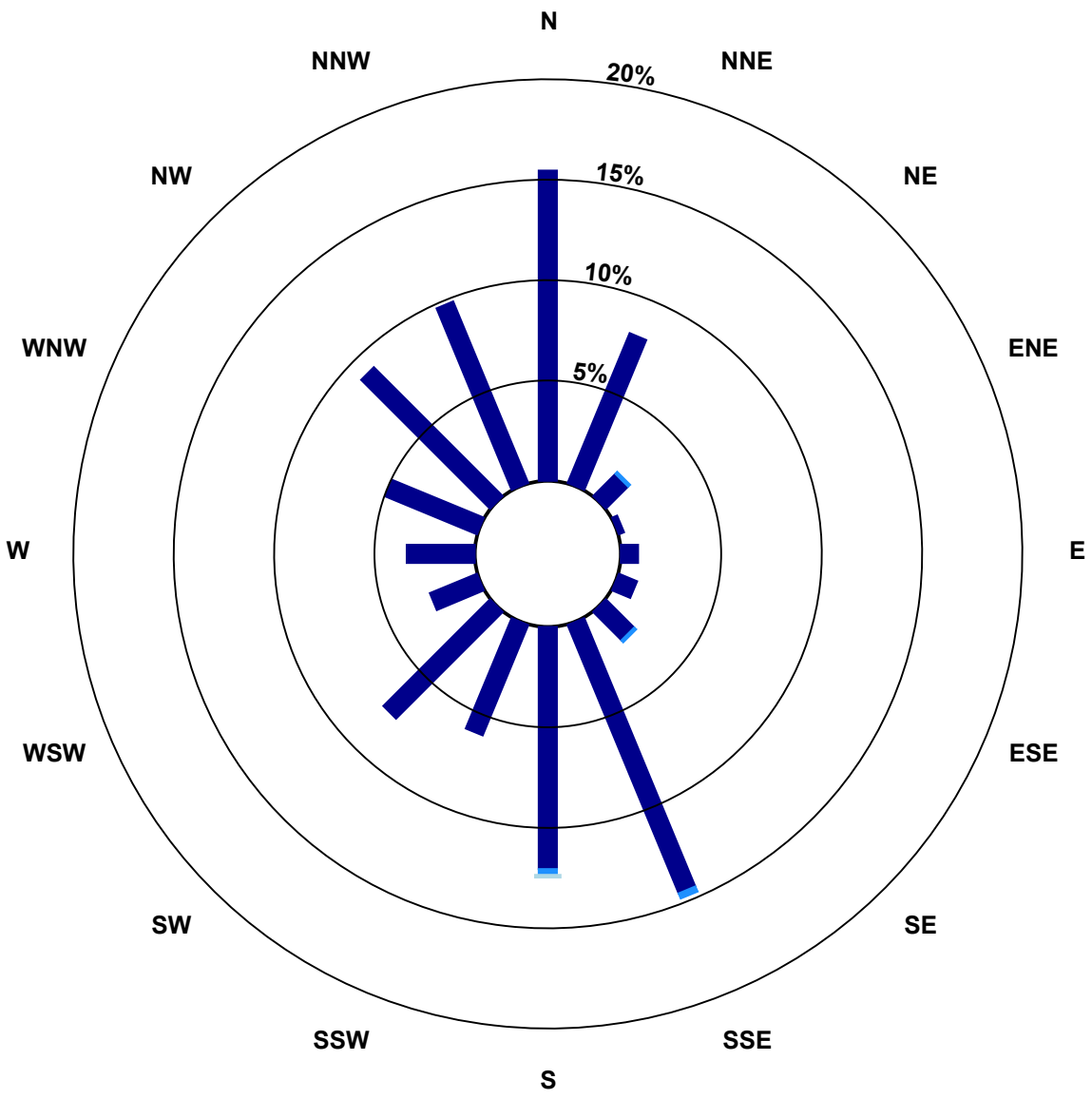
Total Number of Hours: 744

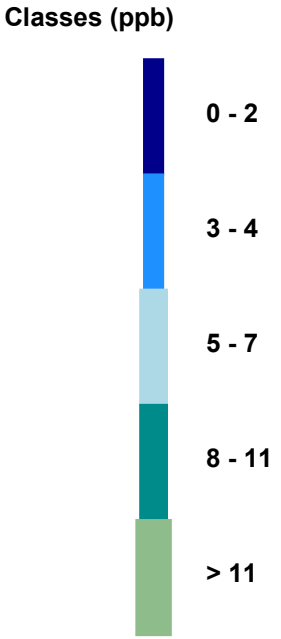
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Hills**



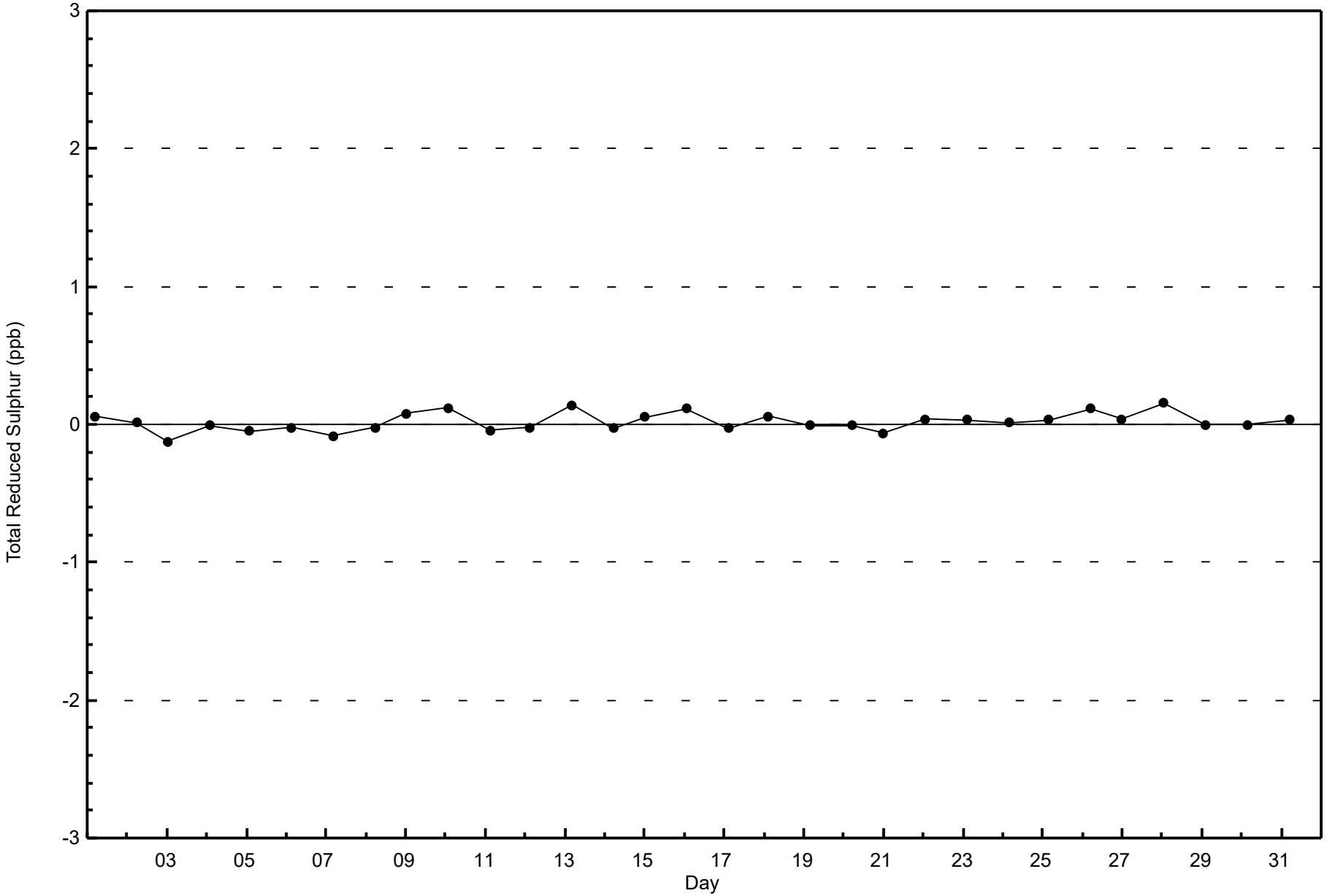

**Total Number of Valid Hours: 705**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Hills - August 2026**

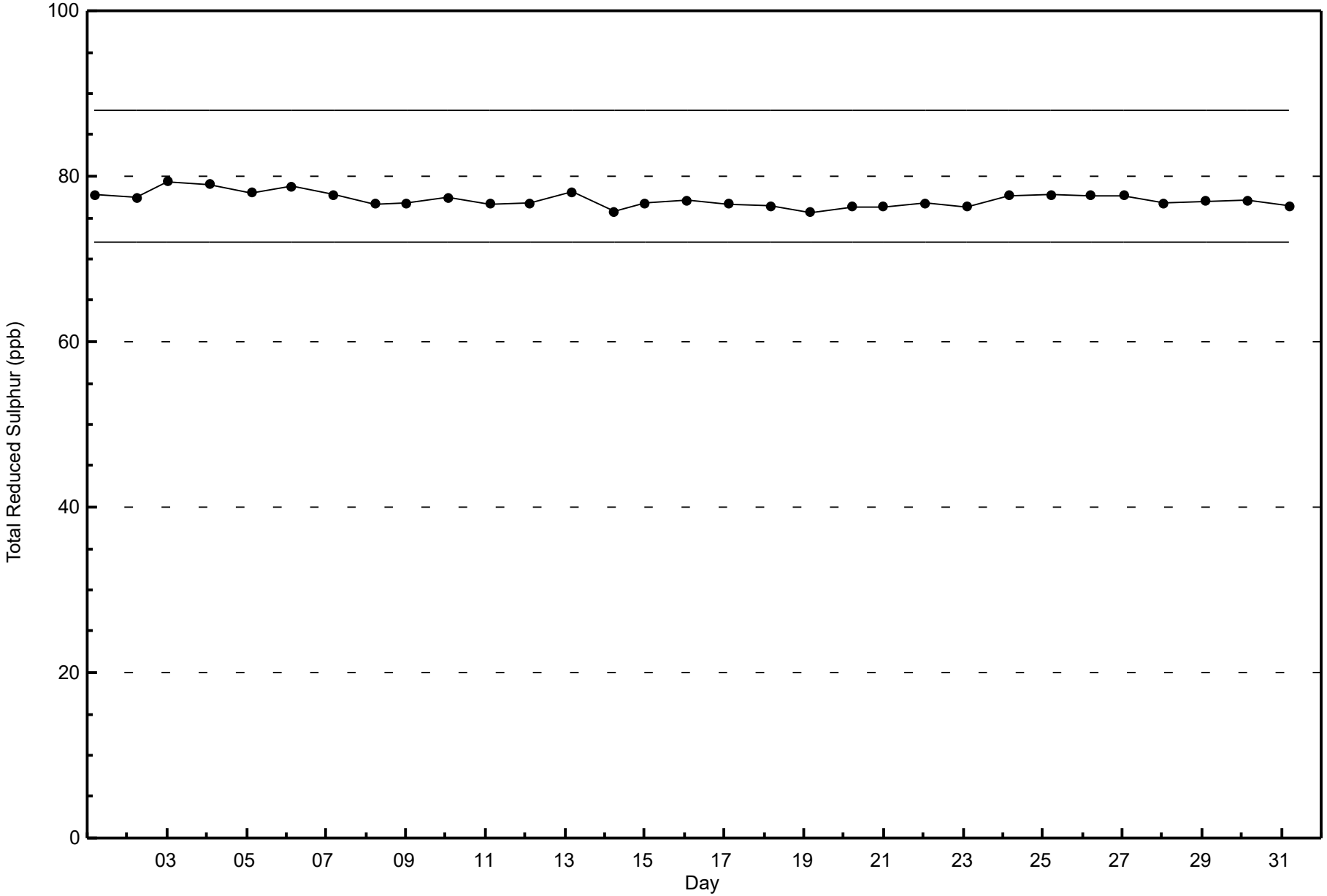


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.8 ppb on Aug 26 09:00 Maximum Daily Average: 1.1 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 21 15:00 Minimum Daily Average: 0.1 ppb on Aug 5
Maximum Diurnal Average: 0.8 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 17
Monthly Average: 0.39 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.5 $P_{90}$ = 0.8 $P_{99}$ = 2.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.9 | 0.7 | 0.7 | 0.8 | Z | 0.7 | 0.5 | 0.7 | 0.5 | 1.5 | 3.9 | 2.9 | 2.4 | 1.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 | 1.0 | 3.9 |
| 2-Aug | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 3-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.3 | 0.1 | 0.4 |
| 4-Aug | 0.3 | Z | 0.5 | 0.7 | 0.6 | 0.5 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 |
| 5-Aug | 0.2 | 0.4 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 6-Aug | 0.1 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | C | C | C | C | C | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | 0.1 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 8-Aug | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.8 | 0.7 | 0.3 | 0.8 |
| 9-Aug | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.6 | 0.5 | 0.3 | 0.6 |
| 10-Aug | 0.5 | Z | 0.9 | 0.8 | 0.7 | 0.7 | 0.8 | 1.3 | 1.0 | 0.6 | 0.4 | 0.3 | M | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 1.3 |
| 11-Aug | 0.1 | 0.2 | Z | 0.3 | 0.4 | 0.3 | 0.4 | 0.8 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.8 |
| 12-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 13-Aug | 0.3 | 0.5 | 0.6 | 0.6 | Z | 0.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 |
| 14-Aug | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | Z | 0.6 | 0.5 | 0.6 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| 15-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.1 | 0.4 |
| 16-Aug | 0.5 | Z | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 |
| 17-Aug | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 1.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 1.4 | 1.1 | 0.8 | 0.5 | 1.4 |
| 18-Aug | 0.7 | 0.7 | 0.8 | Z | 1.8 | 2.0 | 1.4 | 1.4 | 1.6 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.6 | 2.0 |
| 19-Aug | 0.2 | 0.5 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 |
| 20-Aug | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | Z | 0.2 | 0.6 | 1.4 | 0.7 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 1.4 |
| 21-Aug | Z | 0.3 | 0.5 | 0.6 | 0.7 | 0.4 | 0.4 | 0.6 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.3 | 1.7 | 0.7 | 1.5 | 2.0 | 0.5 | 2.0 |
| 22-Aug | 1.8 | Z | 1.2 | 0.9 | 1.0 | 1.1 | 1.8 | 2.2 | 1.8 | 1.2 | 1.4 | 1.3 | 1.3 | 0.8 | 0.6 | 0.5 | 0.2 | 0.2 | 0.2 | 0.6 | 0.9 | 1.6 | 1.7 | 1.9 | 1.1 | 2.2 |
| 23-Aug | 1.3 | 0.9 | Z | 1.5 | 1.8 | 1.4 | 2.1 | 2.0 | 2.0 | 2.2 | 2.0 | 1.1 | 0.4 | 0.3 | 0.2 | 0.5 | 0.6 | 0.7 | 0.4 | 0.3 | 0.5 | 0.6 | 0.5 | 0.2 | 1.0 | 2.2 |
| 24-Aug | 0.1 | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.5 | 0.3 | 0.2 | 0.3 | 0.1 | 0.5 |
| 25-Aug | 0.4 | 0.4 | 0.4 | 0.5 | Z | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.8 | 1.0 | 0.9 | 0.4 | 1.0 |
| 26-Aug | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | Z | 0.6 | 3.1 | 5.8 | 3.6 | 1.0 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.6 | 2.3 | 3.3 | 1.1 | 5.8 |
| 27-Aug | Z | 1.3 | 1.3 | 2.1 | 1.4 | 1.4 | 1.2 | 0.3 | 1.1 | 1.3 | 0.6 | 0.4 | 0.3 | 0.7 | 0.3 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 2.1 |
| 28-Aug | 0.7 | Z | 0.5 | 0.5 | 0.7 | 0.6 | 0.5 | 0.6 | 1.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 1.5 |
| 29-Aug | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 1.0 | 0.2 | 1.0 |
| 30-Aug | 1.1 | 0.4 | 0.3 | Z | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 1.1 |
| 31-Aug | 0.4 | 0.6 | 0.5 | 0.4 | Z | 0.5 | 0.6 | 0.5 | 0.7 | 0.5 | 0.6 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.6 | 0.5 | 0.4 | 0.7 |
| | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | Diurnal Average | |
| | 1.8 | 1.3 | 1.3 | 2.1 | 1.8 | 2.0 | 2.1 | 3.1 | 5.8 | 3.6 | 3.9 | 2.9 | 2.4 | 1.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 1.7 | 1.6 | 2.3 | 3.3 | Diurnal Maximum | |

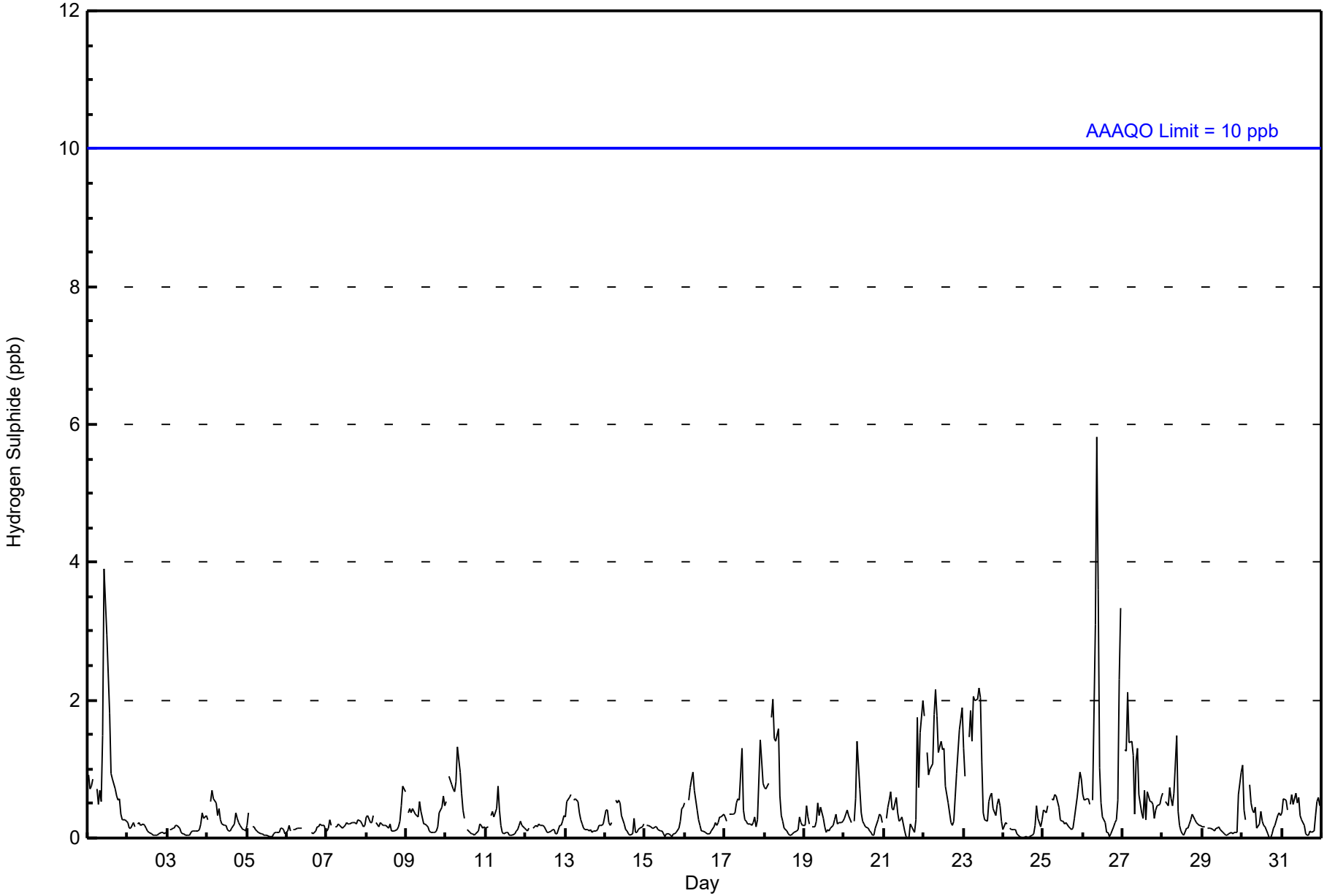
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort Hills - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 701 | 99.15 | 99.15 |
| 3 - 4 | 5 | 0.71 | 99.86 |
| 5 - 7 | 1 | 0.14 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort Hills - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 109 | 57 | 11 | 2 | 6 | 7 | 14 | 103 | 85 | 42 | 53 | 18 | 24 | 35 | 64 | 69 | 699 |
| 3 - 4 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 109 | 57 | 12 | 2 | 6 | 7 | 15 | 104 | 88 | 42 | 53 | 18 | 24 | 35 | 64 | 69 | 705 |

Total Number of Valid Hours: 705

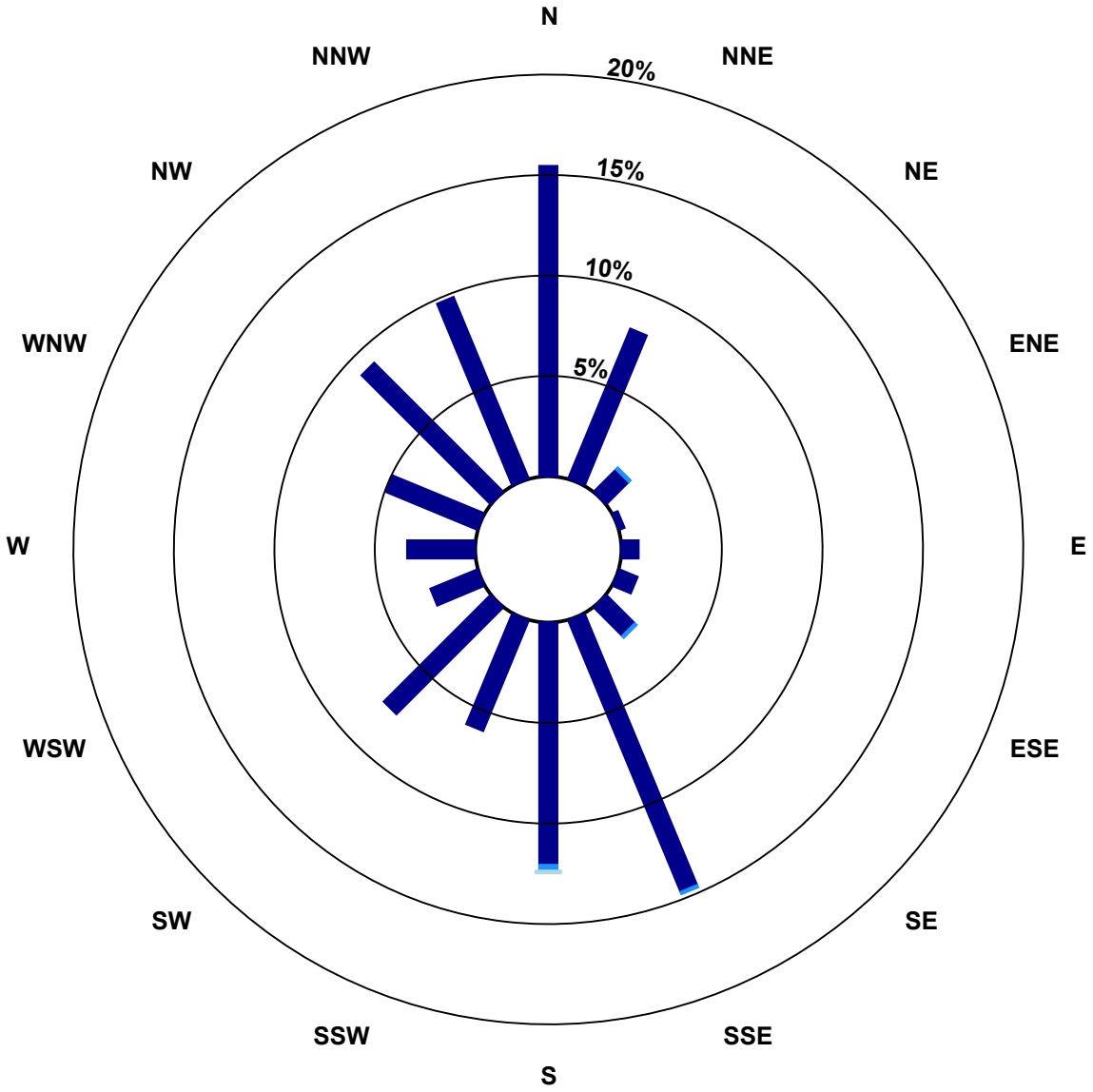
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Fort Hills




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

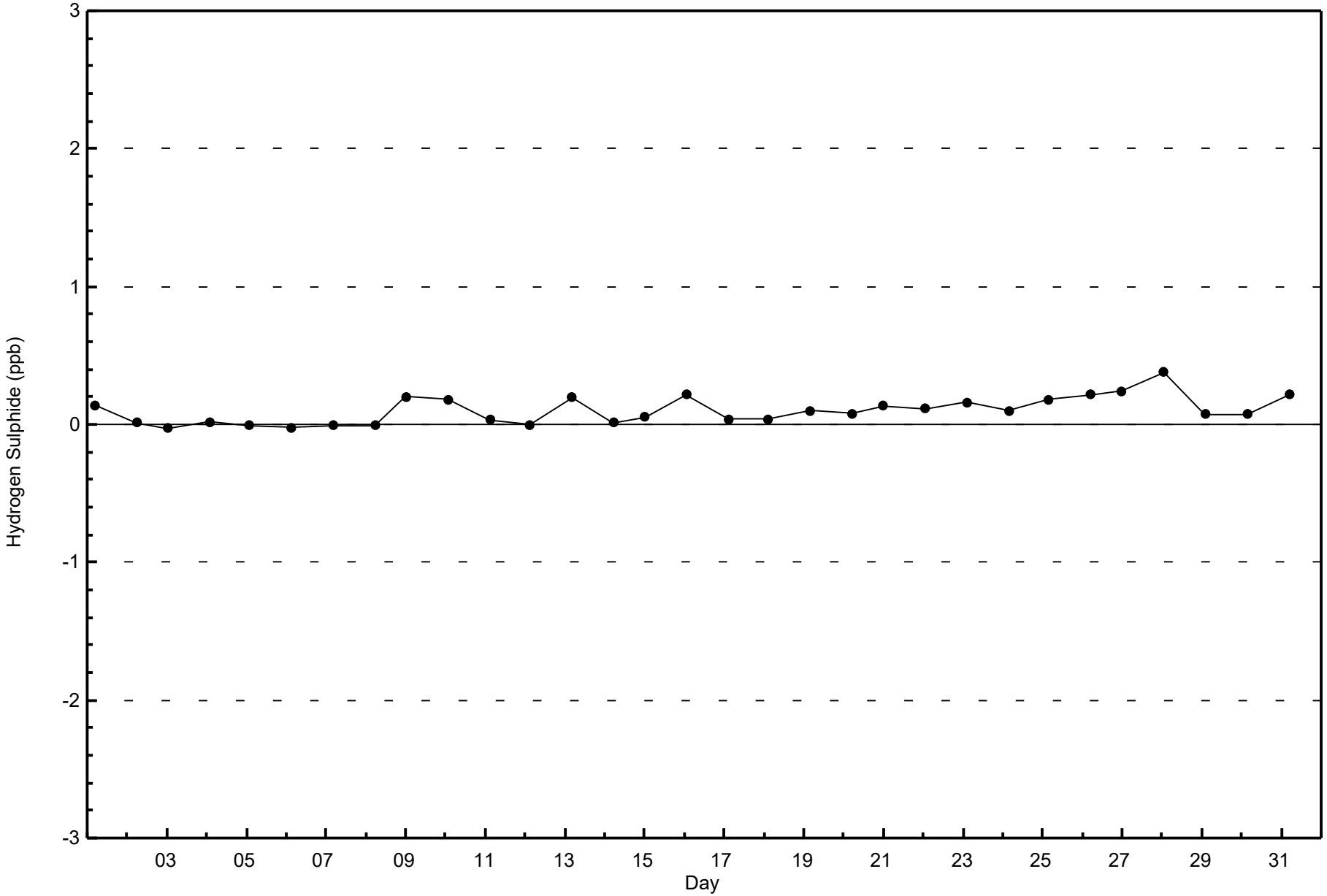
Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort Hills - August 2026**

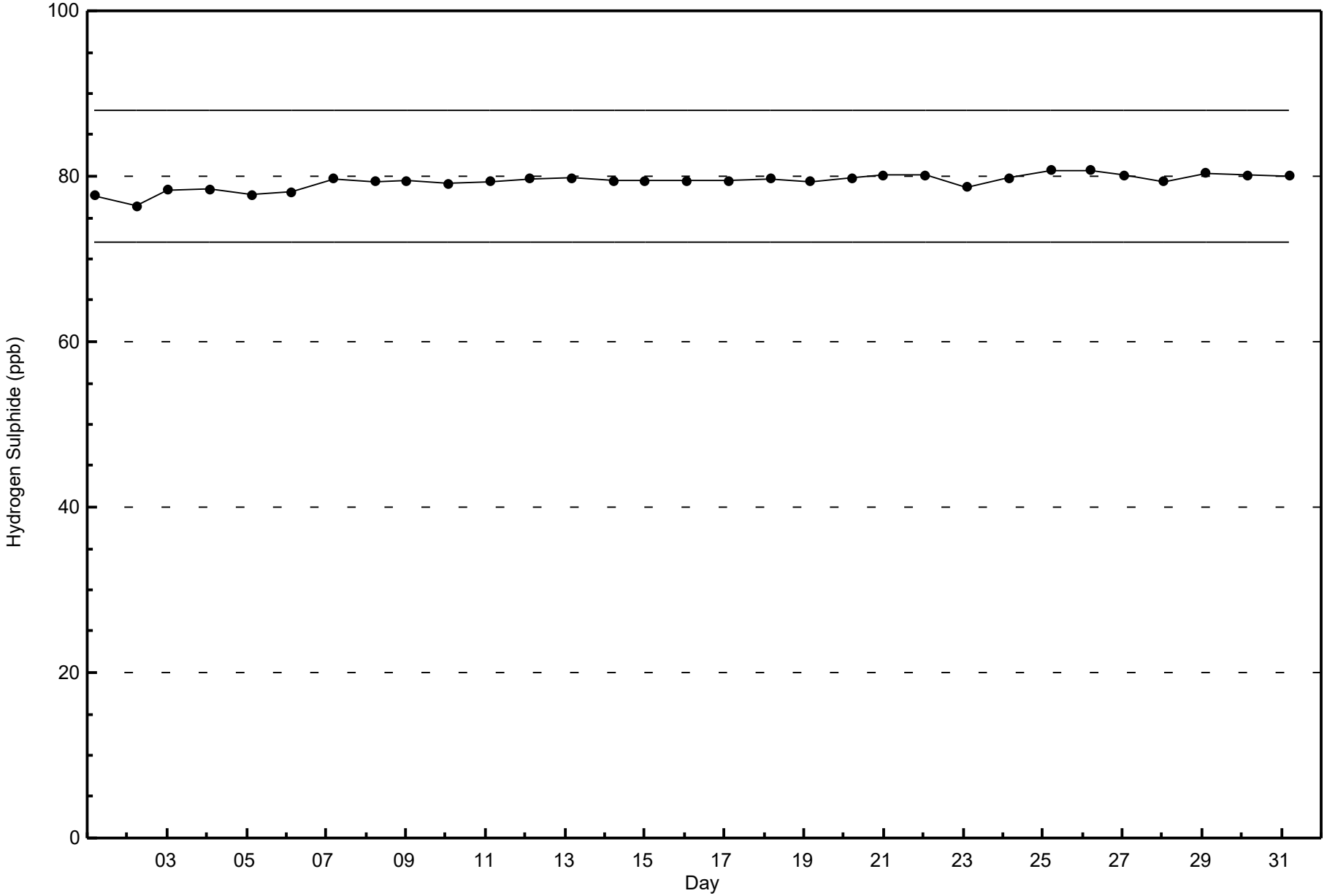


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 5.1 ppm on Aug 11 08:00

Maximum Daily Average: 2.9 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 19 17:00

Minimum Daily Average: 2.0 ppm on Aug 5

Maximum Diurnal Average: 2.5 ppm at hour 8

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.27 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.4 $P_{90}$ = 2.7 $P_{99}$ = 3.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 3.1 | 2.9 | 3.0 | Z | 2.6 | 3.3 | 2.3 | 2.7 | 2.8 | 3.7 | 4.4 | 3.6 | 4.8 | 3.1 | 2.5 | 2.7 | 2.7 | 2.4 | 2.3 | 2.4 | 2.1 | 2.1 | 2.2 | 2.3 | 2.9 | 4.8 |
| 2-Aug | 2.1 | 2.0 | 2.1 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 3-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.4 | 2.1 | 2.2 | 2.0 | 2.4 |
| 4-Aug | Z | 2.2 | 2.2 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.2 | 2.2 | 2.8 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.8 |
| 5-Aug | 2.0 | Z | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 7-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.1 | 2.0 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.4 |
| 8-Aug | 2.0 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.1 | 2.0 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.5 | 2.7 | 3.1 | 2.5 | 2.2 | 3.1 |
| 9-Aug | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | Z | 2.1 | 2.2 | 2.8 | 2.3 | 2.0 | 2.0 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.7 | 3.1 | 2.4 | 2.4 | 2.3 | 3.1 |
| 10-Aug | Z | 3.8 | 3.5 | 2.5 | 2.4 | 2.4 | 2.9 | 4.1 | 3.4 | 2.8 | 2.4 | C | C | C | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.5 | 4.1 |
| 11-Aug | 2.0 | Z | 2.5 | 2.9 | 3.0 | 2.3 | 2.8 | 5.1 | 2.9 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.4 | 2.2 | 2.0 | 2.0 | 2.4 | 5.1 |
| 12-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.4 | 2.1 | 2.2 | 2.3 | 2.1 | 2.4 |
| 13-Aug | 2.3 | 2.6 | 2.6 | Z | 2.7 | 2.6 | 2.4 | 2.5 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.7 |
| 14-Aug | 2.7 | 2.3 | 2.1 | 2.1 | Z | 2.2 | 3.0 | 2.7 | 2.6 | 2.6 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.3 | 2.2 | 2.4 | 2.3 | 3.0 |
| 15-Aug | 2.7 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 3.1 | 2.9 | 2.2 | 3.1 |
| 16-Aug | Z | 3.3 | 3.4 | 3.2 | 3.2 | 2.9 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 3.4 |
| 17-Aug | 2.2 | Z | 2.3 | 2.4 | 2.3 | 2.4 | 2.5 | 3.2 | 3.6 | 3.1 | 3.6 | 2.6 | 2.1 | 2.4 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.3 | 2.4 | 3.6 |
| 18-Aug | 2.2 | 2.2 | Z | 3.0 | 2.2 | 2.3 | 2.4 | 2.6 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 3.1 | 2.1 | 2.1 | 2.3 | 3.1 |
| 19-Aug | 2.1 | 3.7 | 2.4 | Z | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.3 | 2.6 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 3.7 |
| 20-Aug | 2.3 | 2.5 | 2.7 | 2.4 | Z | 2.1 | 2.3 | 2.7 | 3.4 | 2.6 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.5 | 2.6 | 2.1 | 2.1 | 2.3 | 3.4 |
| 21-Aug | 2.1 | 2.4 | 3.3 | 3.3 | 3.0 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.8 | 2.8 | 2.3 | 2.1 | 2.2 | 2.3 | 3.3 |
| 22-Aug | Z | 2.4 | 2.4 | 2.2 | 2.2 | 2.2 | 2.8 | 2.9 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.8 | 3.3 | 2.3 | 2.4 | 2.7 | 2.4 | 3.3 |
| 23-Aug | 2.5 | Z | 2.6 | 2.6 | 2.8 | 2.7 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.6 | 2.2 | 2.1 | 2.3 | 2.2 | 2.1 | 2.0 | 2.5 | 2.9 |
| 24-Aug | 2.0 | 2.3 | Z | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.2 | 2.1 | 2.3 | 2.1 | 2.3 |
| 25-Aug | 2.4 | 2.2 | 2.2 | Z | 2.5 | 2.6 | 2.4 | 2.4 | 2.7 | 2.4 | 2.2 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.4 | 3.1 | 2.8 | 2.6 | 2.4 | 2.4 | 3.1 |
| 26-Aug | 2.3 | 2.3 | 2.4 | 2.5 | Z | 2.3 | 2.2 | 2.5 | 2.7 | 2.8 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.4 | 2.6 | 3.6 | 2.4 | 2.4 | 2.4 | 3.6 |
| 27-Aug | 2.4 | 2.5 | 3.0 | 3.1 | 2.3 | Z | 2.4 | 2.6 | 2.2 | 2.3 | 2.7 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.3 | 2.5 | 2.3 | 2.3 | 2.4 | 2.4 | 2.6 | 2.9 | 2.4 | 3.1 |
| 28-Aug | Z | 2.8 | 2.6 | 2.5 | 2.3 | 2.3 | 2.7 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.8 |
| 29-Aug | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.3 | 2.1 | 2.3 |
| 30-Aug | 2.3 | 2.3 | Z | 2.1 | 3.6 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.5 | 2.3 | 2.1 | 2.3 | 3.6 |
| 31-Aug | 2.2 | 2.9 | 2.6 | Z | 2.1 | 3.3 | 3.5 | 2.7 | 3.2 | 3.1 | 2.8 | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.6 | 2.4 | 2.7 | 2.1 | 2.5 | 3.5 |
| | 2.2 | 2.5 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | Diurnal Average | |
| | 3.1 | 3.8 | 3.5 | 3.3 | 3.6 | 3.3 | 3.5 | 5.1 | 3.6 | 3.7 | 4.4 | 3.6 | 4.8 | 3.1 | 2.5 | 2.7 | 2.7 | 2.8 | 2.5 | 2.8 | 3.3 | 3.6 | 3.1 | 2.9 | Diurnal Maximum | |

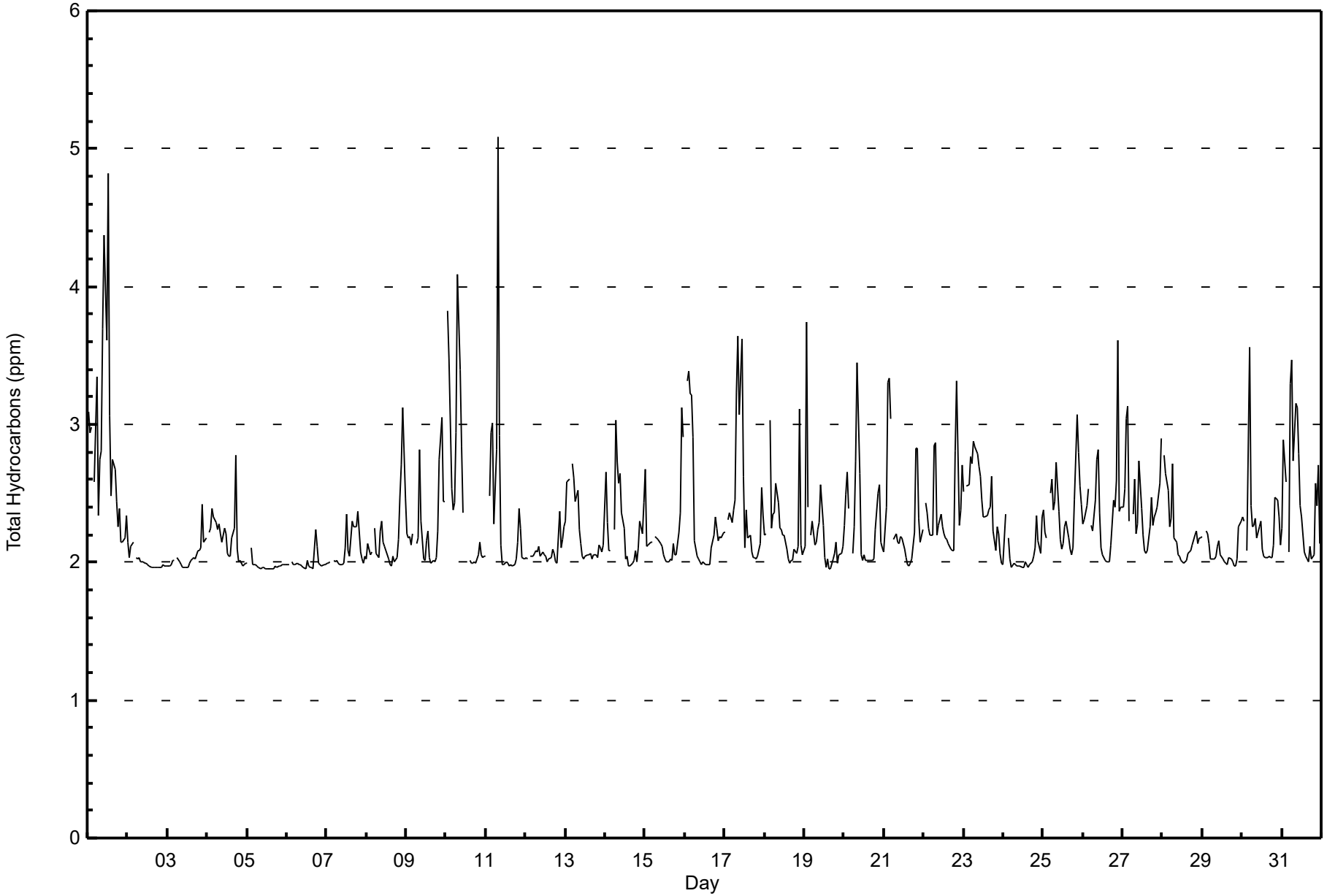
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Fort Hills - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 251 | 35.35 | 35.35 |
| 2.1 - 3.0 | 422 | 59.44 | 94.79 |
| 3.1 - 10.0 | 37 | 5.21 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Fort Hills - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 46 | 19 | 3 | 1 | 1 | 0 | 0 | 11 | 11 | 11 | 22 | 6 | 16 | 20 | 38 | 46 | 251 |
| 2.1 - 3.0 | 56 | 37 | 8 | 1 | 5 | 6 | 11 | 85 | 76 | 26 | 27 | 9 | 6 | 13 | 26 | 28 | 420 |
| 3.1 - 10.0 | 5 | 1 | 1 | 0 | 0 | 1 | 5 | 8 | 1 | 4 | 4 | 2 | 0 | 0 | 2 | 3 | 37 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 107 | 57 | 12 | 2 | 6 | 7 | 16 | 104 | 88 | 41 | 53 | 17 | 22 | 33 | 66 | 77 | 708 |

Total Number of Valid Hours: 708

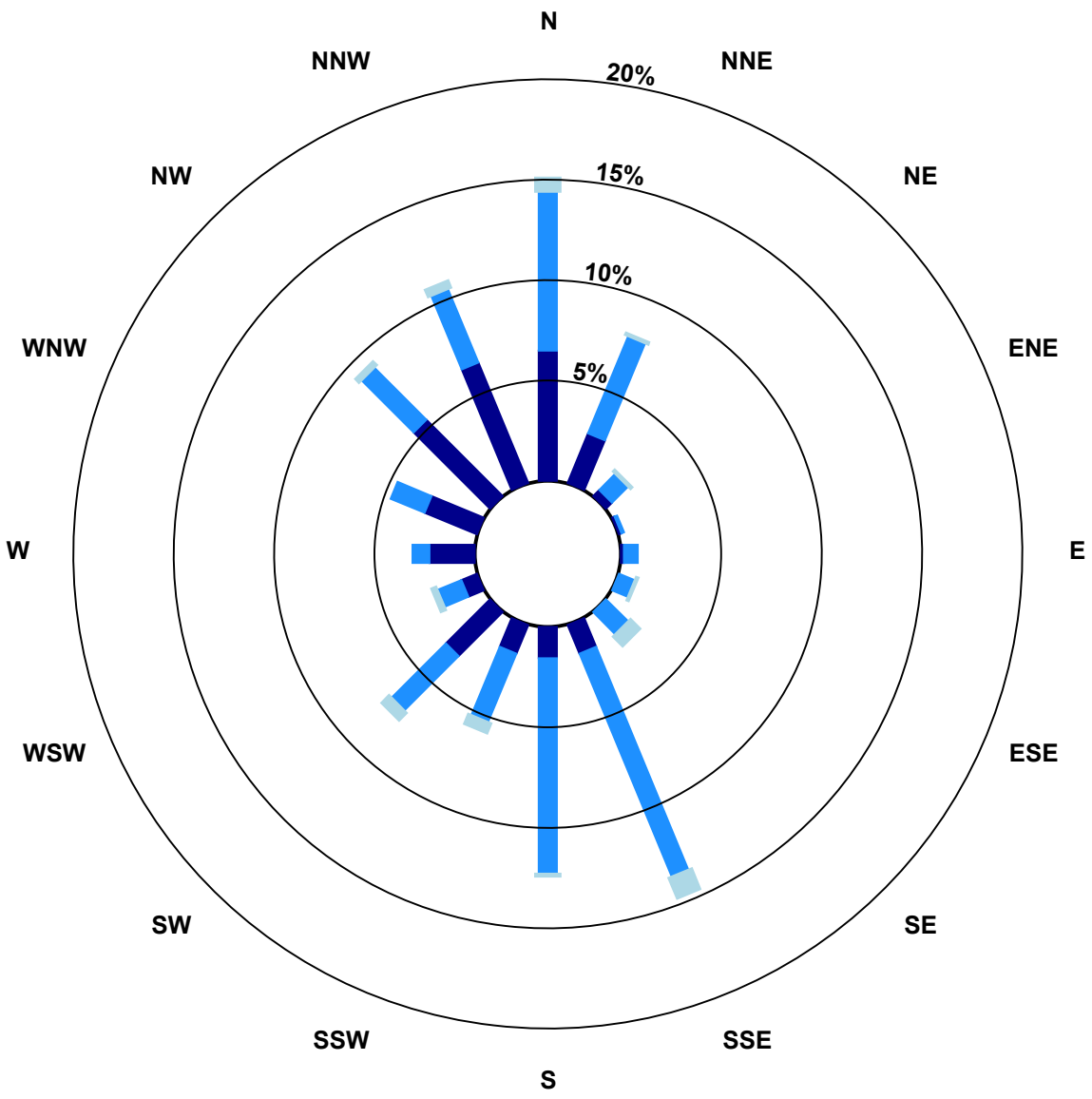
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Fort Hills




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

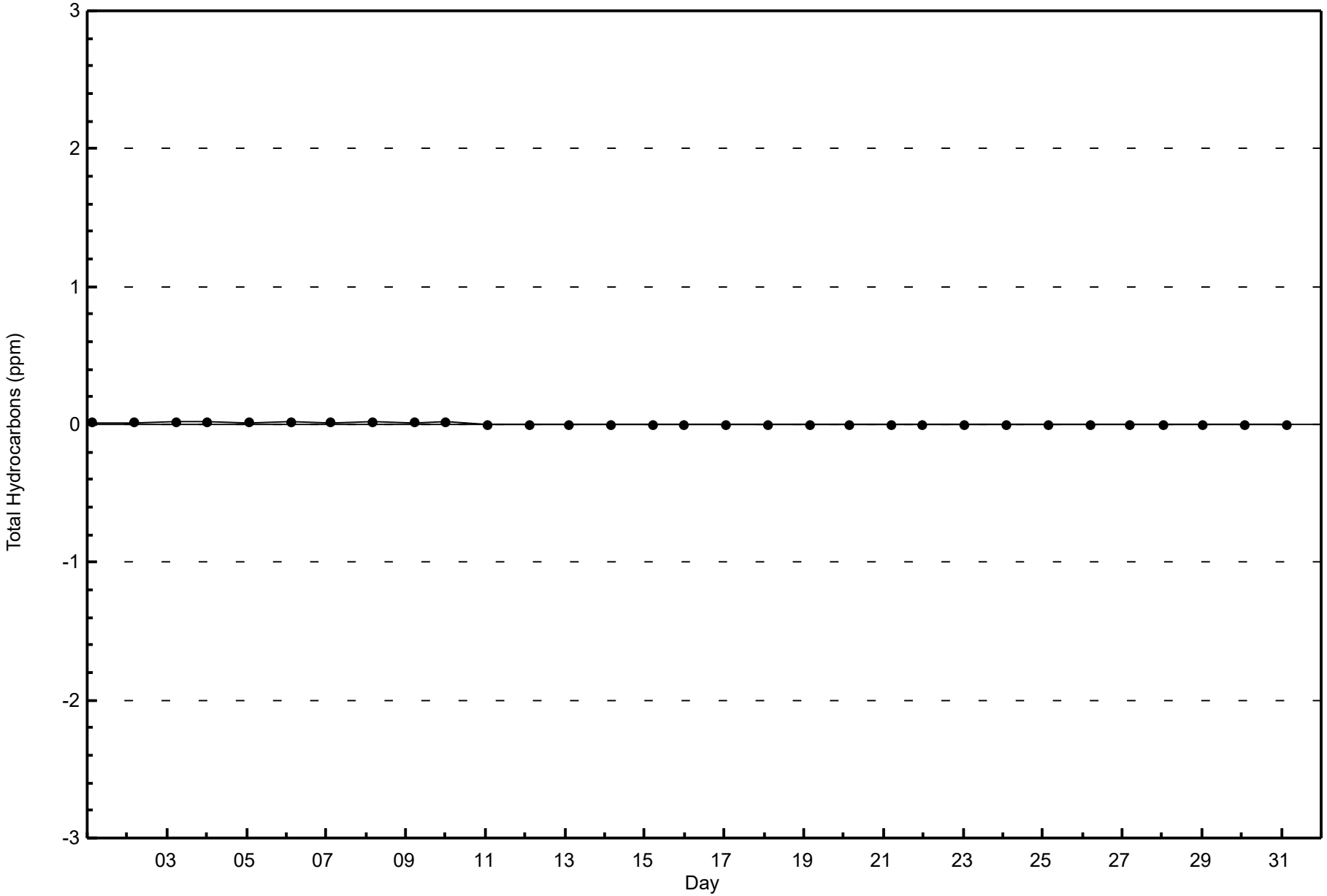
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Fort Hills - August 2026**

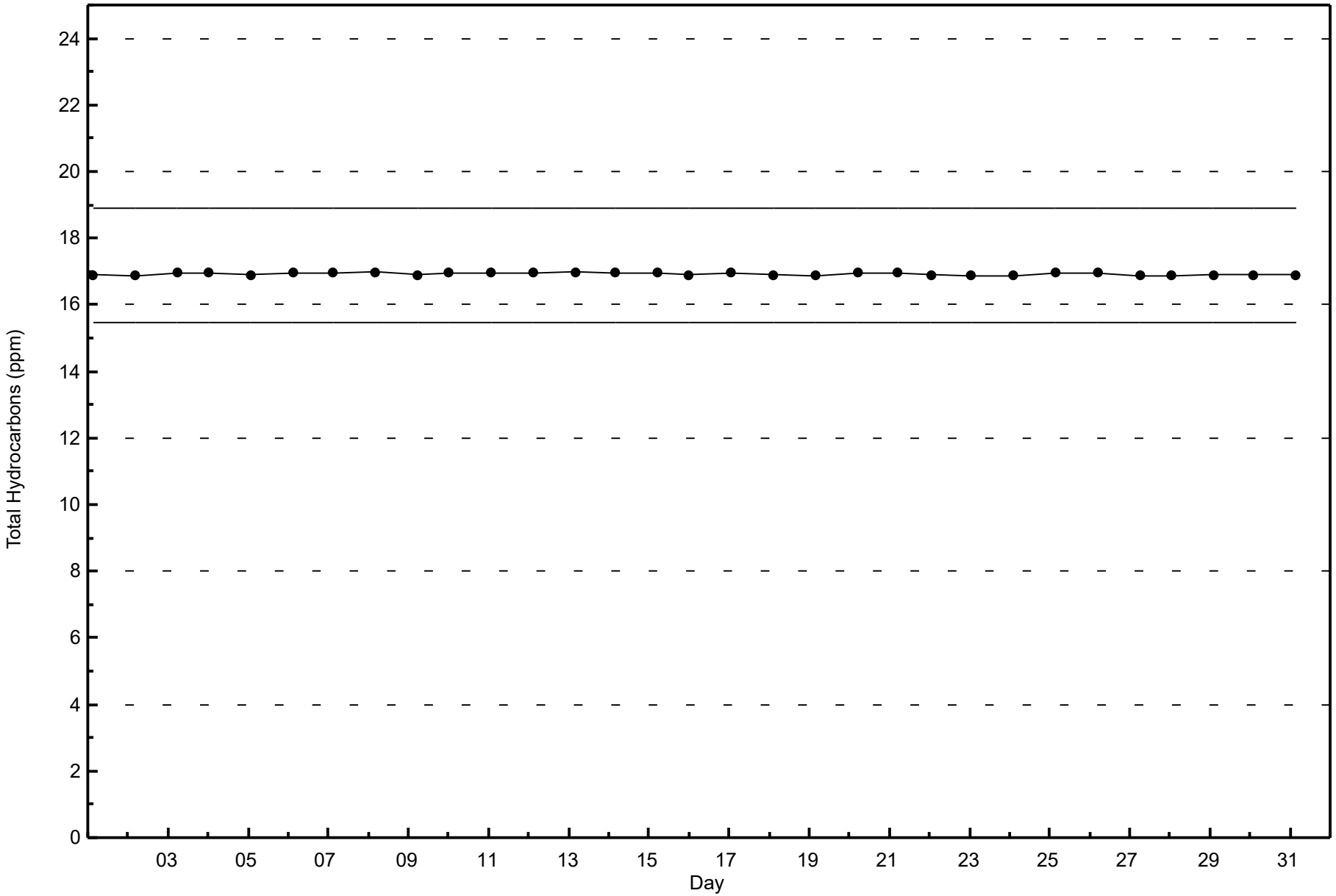


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Non Methane Hydrocarbons (NMHC) - ppm

## Fort Hills - August 2026

Maximum Value: 1.486 ppm on Aug 1 13:00

Maximum Daily Average: 0.383 ppm on Aug 1

Minimum Value: 0.000 ppm on Aug 1 23:00

Minimum Daily Average: 0.000 ppm on Aug 29

Maximum Diurnal Average: 0.147 ppm at hour 22

Minimum Diurnal Average: 0.014 ppm at hour 15

Monthly Average: 0.079 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.3 $P_{99}$ = 0.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.379 | 0.334 | 0.388 | Z | 0.120 | 0.345 | 0.010 | 0.162 | 0.170 | 0.760 | 1.163 | 0.983 | 1.486 | 0.562 | 0.219 | 0.463 | 0.461 | 0.299 | 0.126 | 0.227 | 0.080 | 0.083 | 0.000 | 0.000 | 0.383 | 1.486 |
| 2-Aug | 0.000 | 0.000 | 0.000 | 0.007 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 |
| 3-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.003 | 0.000 | 0.012 | 0.009 | 0.054 | 0.085 | 0.080 | 0.291 | 0.045 | 0.015 | 0.026 | 0.291 |
| 4-Aug | Z | 0.003 | 0.035 | 0.026 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.027 | 0.004 | 0.000 | 0.000 | 0.000 | 0.140 | 0.180 | 0.571 | 0.068 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.571 |
| 5-Aug | 0.000 | Z | 0.038 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.038 |
| 6-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 | 0.000 | 0.000 | 0.000 | 0.000 | 0.189 | 0.000 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.189 |
| 7-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.040 | 0.264 | 0.000 | 0.000 | 0.147 | 0.144 | 0.125 | 0.140 | 0.173 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 | 0.264 |
| 8-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.117 | 0.152 | 0.057 | 0.046 | 0.042 | 0.014 | 0.000 | 0.000 | 0.013 | 0.000 | 0.000 | 0.061 | 0.325 | 0.399 | 0.646 | 0.253 | 0.092 | 0.646 |
| 9-Aug | 0.008 | 0.029 | 0.000 | 0.003 | 0.000 | Z | 0.000 | 0.022 | 0.468 | 0.130 | 0.000 | 0.000 | 0.111 | 0.158 | 0.000 | 0.000 | 0.000 | 0.000 | 0.008 | 0.133 | 0.460 | 0.743 | 0.194 | 0.140 | 0.113 | 0.743 |
| 10-Aug | Z | 0.805 | 0.745 | 0.188 | 0.088 | 0.083 | 0.364 | 1.012 | 0.756 | 0.407 | 0.160 | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.017 | 0.065 | 0.000 | 0.000 | 0.000 | 0.234 | 1.012 |
| 11-Aug | 0.000 | Z | 0.049 | 0.150 | 0.148 | 0.005 | 0.041 | 0.298 | 0.071 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.064 | 0.000 | 0.000 | 0.038 | 0.298 |
| 12-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.124 | 0.000 | 0.049 | 0.079 | 0.011 | 0.124 |
| 13-Aug | 0.090 | 0.206 | 0.230 | Z | 0.155 | 0.113 | 0.046 | 0.130 | 0.014 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.043 | 0.230 |
| 14-Aug | 0.316 | 0.112 | 0.000 | 0.000 | Z | 0.020 | 0.265 | 0.286 | 0.133 | 0.161 | 0.161 | 0.174 | 0.011 | 0.027 | 0.000 | 0.000 | 0.000 | 0.004 | 0.010 | 0.000 | 0.000 | 0.000 | 0.000 | 0.052 | 0.075 | 0.316 |
| 15-Aug | 0.133 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.138 | 0.261 | 0.201 | 0.032 | 0.261 |
| 16-Aug | Z | 0.227 | 0.239 | 0.212 | 0.336 | 0.235 | 0.000 | 0.020 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.028 | 0.059 | 0.130 | 0.077 | 0.027 | 0.000 | 0.000 | 0.000 | 0.069 | 0.336 |
| 17-Aug | 0.004 | Z | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.112 | 0.215 | 0.263 | 0.301 | 0.041 | 0.000 | 0.079 | 0.020 | 0.063 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.117 | 0.043 | 0.055 | 0.301 |
| 18-Aug | 0.000 | 0.019 | Z | 0.219 | 0.011 | 0.063 | 0.058 | 0.216 | 0.129 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.209 | 0.000 | 0.000 | 0.040 | 0.219 |
| 19-Aug | 0.002 | 0.289 | 0.044 | Z | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.087 | 0.066 | 0.023 | 0.000 | 0.016 | 0.000 | 0.000 | 0.002 | 0.011 | 0.048 | 0.000 | 0.000 | 0.002 | 0.081 | 0.029 | 0.289 |
| 20-Aug | 0.175 | 0.261 | 0.191 | 0.014 | Z | 0.000 | 0.000 | 0.257 | 0.554 | 0.270 | 0.000 | 0.000 | 0.022 | 0.012 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.099 | 0.324 | 0.258 | 0.037 | 0.000 | 0.108 | 0.554 |
| 21-Aug | 0.000 | 0.080 | 0.275 | 0.243 | 0.203 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.013 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.071 | 0.288 | 0.292 | 0.124 | 0.034 | 0.044 | 0.073 | 0.292 |
| 22-Aug | Z | 0.129 | 0.087 | 0.000 | 0.000 | 0.020 | 0.248 | 0.213 | 0.005 | 0.055 | 0.106 | 0.052 | 0.022 | 0.018 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.389 | 0.547 | 0.059 | 0.122 | 0.264 | 0.102 | 0.547 |
| 23-Aug | 0.225 | Z | 0.210 | 0.172 | 0.233 | 0.206 | 0.317 | 0.300 | 0.224 | 0.174 | 0.187 | 0.059 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.161 | 0.092 | 0.000 | 0.067 | 0.032 | 0.000 | 0.000 | 0.116 | 0.317 |
| 24-Aug | 0.000 | 0.167 | Z | 0.071 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.033 | 0.037 | 0.029 | 0.002 | 0.000 | 0.046 | 0.017 | 0.167 |
| 25-Aug | 0.100 | 0.039 | 0.000 | Z | 0.026 | 0.110 | 0.032 | 0.101 | 0.263 | 0.149 | 0.051 | 0.000 | 0.034 | 0.145 | 0.177 | 0.096 | 0.025 | 0.000 | 0.040 | 0.263 | 0.546 | 0.323 | 0.251 | 0.147 | 0.127 | 0.546 |
| 26-Aug | 0.009 | 0.004 | 0.000 | 0.031 | Z | 0.000 | 0.000 | 0.199 | 0.413 | 0.487 | 0.173 | 0.019 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.043 | 0.320 | 0.301 | 0.263 | 1.323 | 0.166 | 0.188 | 0.171 | 1.323 |
| 27-Aug | 0.180 | 0.190 | 0.295 | 0.328 | 0.100 | Z | 0.114 | 0.090 | 0.000 | 0.026 | 0.335 | 0.132 | 0.064 | 0.000 | 0.000 | 0.000 | 0.096 | 0.296 | 0.110 | 0.182 | 0.230 | 0.175 | 0.332 | 0.578 | 0.167 | 0.578 |
| 28-Aug | Z | 0.233 | 0.167 | 0.097 | 0.019 | 0.000 | 0.144 | 0.011 | 0.023 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.030 | 0.233 |
| 29-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30-Aug | 0.000 | 0.000 | Z | 0.000 | 0.304 | 0.064 | 0.000 | 0.000 | 0.011 | 0.000 | 0.022 | 0.024 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.031 | 0.184 | 0.197 | 0.132 | 0.032 | 0.044 | 0.304 |
| 31-Aug | 0.051 | 0.314 | 0.176 | Z | 0.000 | 0.212 | 0.232 | 0.147 | 0.620 | 0.777 | 0.359 | 0.176 | 0.083 | 0.000 | 0.000 | 0.000 | 0.004 | 0.045 | 0.000 | 0.002 | 0.188 | 0.123 | 0.157 | 0.000 | 0.159 | 0.777 |
| | 0.064 | 0.132 | 0.122 | 0.071 | 0.067 | 0.057 | 0.060 | 0.115 | 0.135 | 0.123 | 0.103 | 0.061 | 0.072 | 0.034 | 0.014 | 0.029 | 0.031 | 0.059 | 0.039 | 0.078 | 0.125 | 0.147 | 0.082 | 0.070 | Diurnal Average | |
| | 0.379 | 0.805 | 0.745 | 0.328 | 0.336 | 0.345 | 0.364 | 1.012 | 0.756 | 0.777 | 1.163 | 0.983 | 1.486 | 0.562 | 0.219 | 0.463 | 0.461 | 0.571 | 0.320 | 0.389 | 0.547 | 1.323 | 0.646 | 0.578 | Diurnal Maximum | |

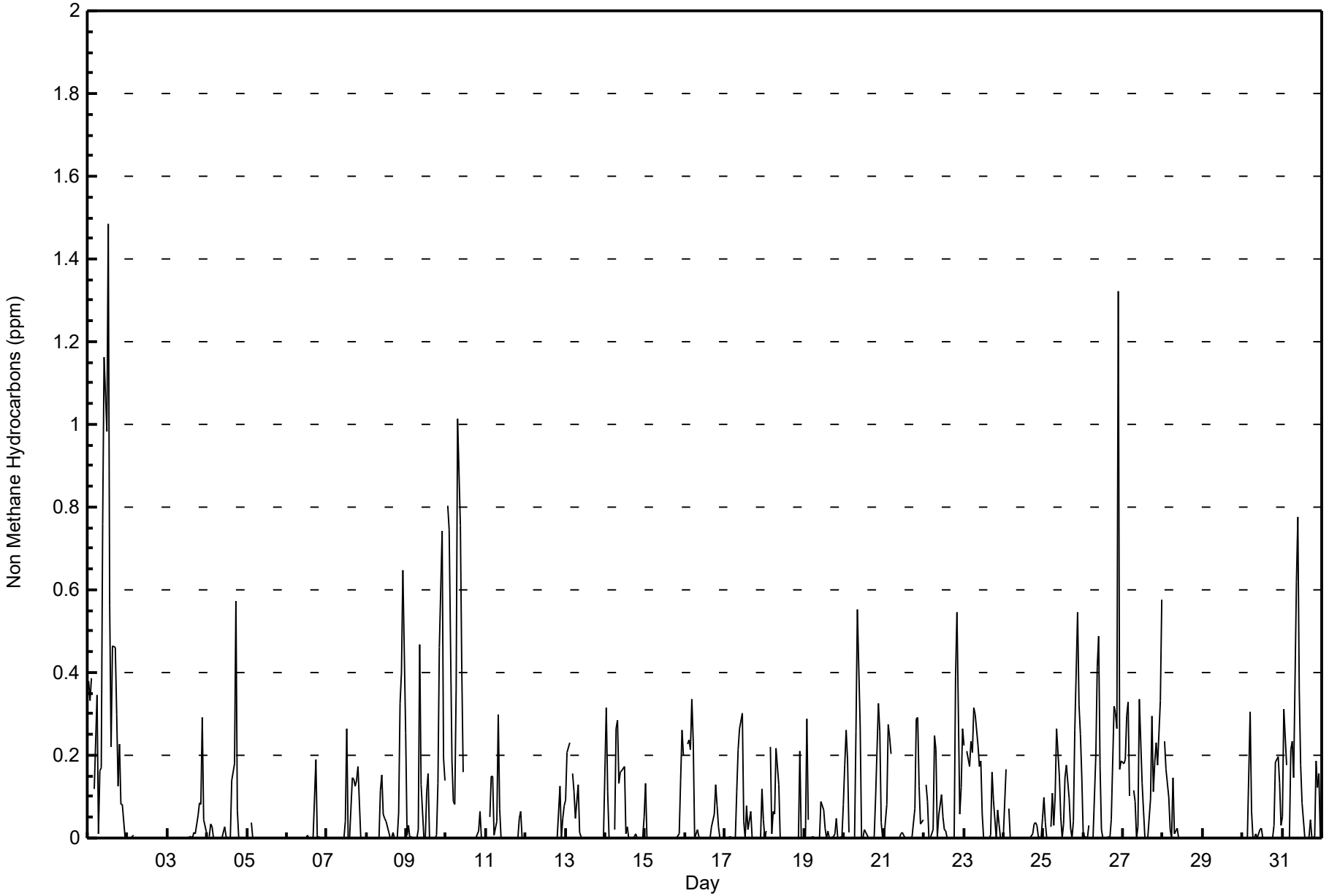
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort Hills - August 2026**



# Non Methane Hydrocarbons (NMHC) - ppm
## Fort Hills - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 403 | 56.76 | 56.76 |
| 0.006 - 0.05 | 89 | 12.54 | 69.30 |
| 0.06 - 0.1 | 82 | 11.55 | 80.85 |
| > 0.1 | 136 | 19.15 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort Hills - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 54 | 20 | 4 | 1 | 0 | 0 | 2 | 37 | 49 | 30 | 40 | 14 | 21 | 26 | 49 | 55 | 402 |
| 0.006 - 0.05 | 15 | 13 | 3 | 0 | 2 | 1 | 1 | 16 | 14 | 3 | 3 | 0 | 1 | 3 | 6 | 8 | 89 |
| 0.06 - 0.1 | 14 | 11 | 1 | 1 | 3 | 1 | 5 | 17 | 8 | 3 | 3 | 1 | 0 | 3 | 4 | 6 | 81 |
| > 0.1 | 24 | 13 | 4 | 0 | 1 | 5 | 8 | 34 | 17 | 5 | 7 | 2 | 0 | 1 | 7 | 8 | 136 |
| **Totals** | 107 | 57 | 12 | 2 | 6 | 7 | 16 | 104 | 88 | 41 | 53 | 17 | 22 | 33 | 66 | 77 | 708 |

Total Number of Valid Hours: 708

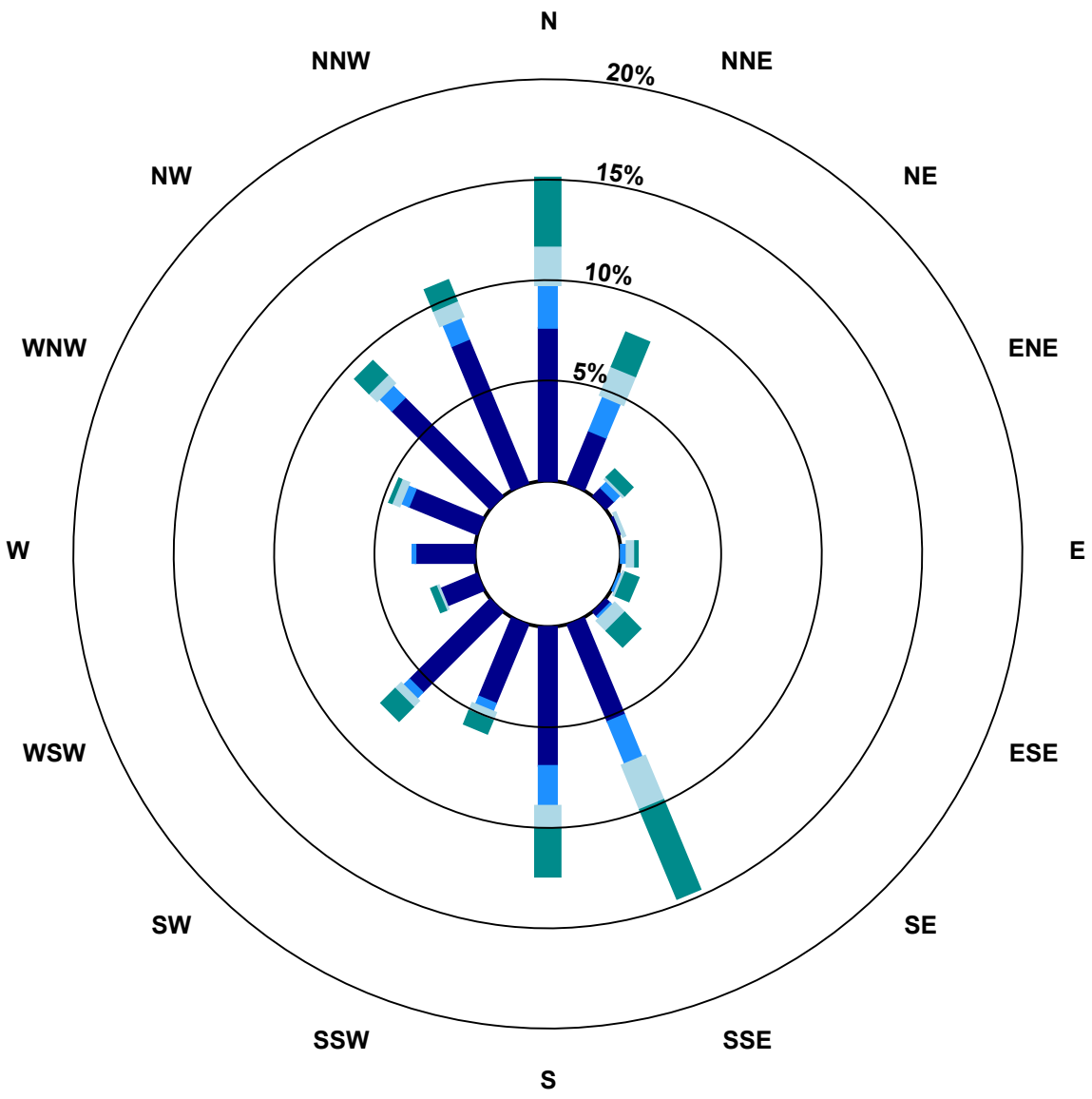
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

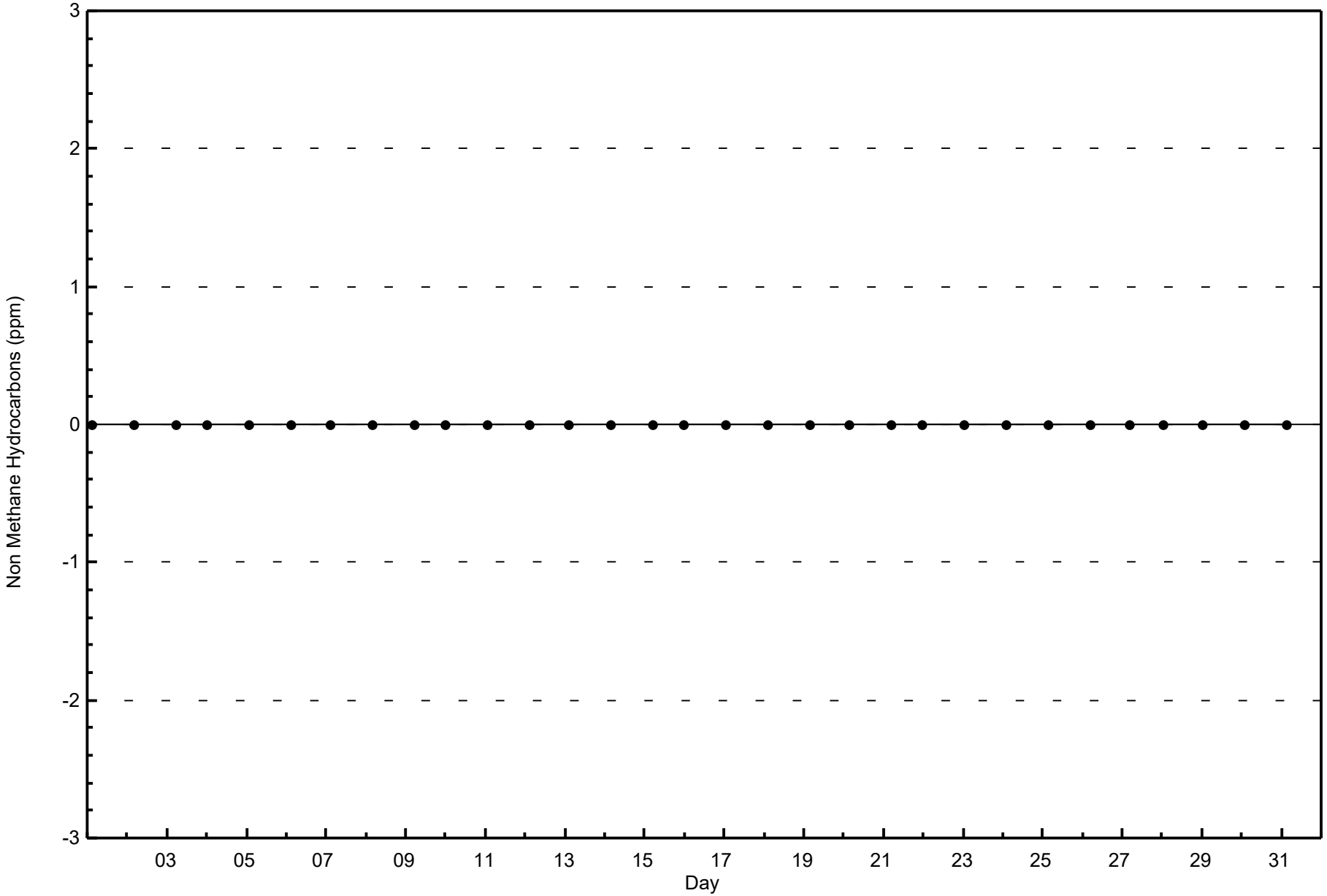
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort Hills - August 2026**

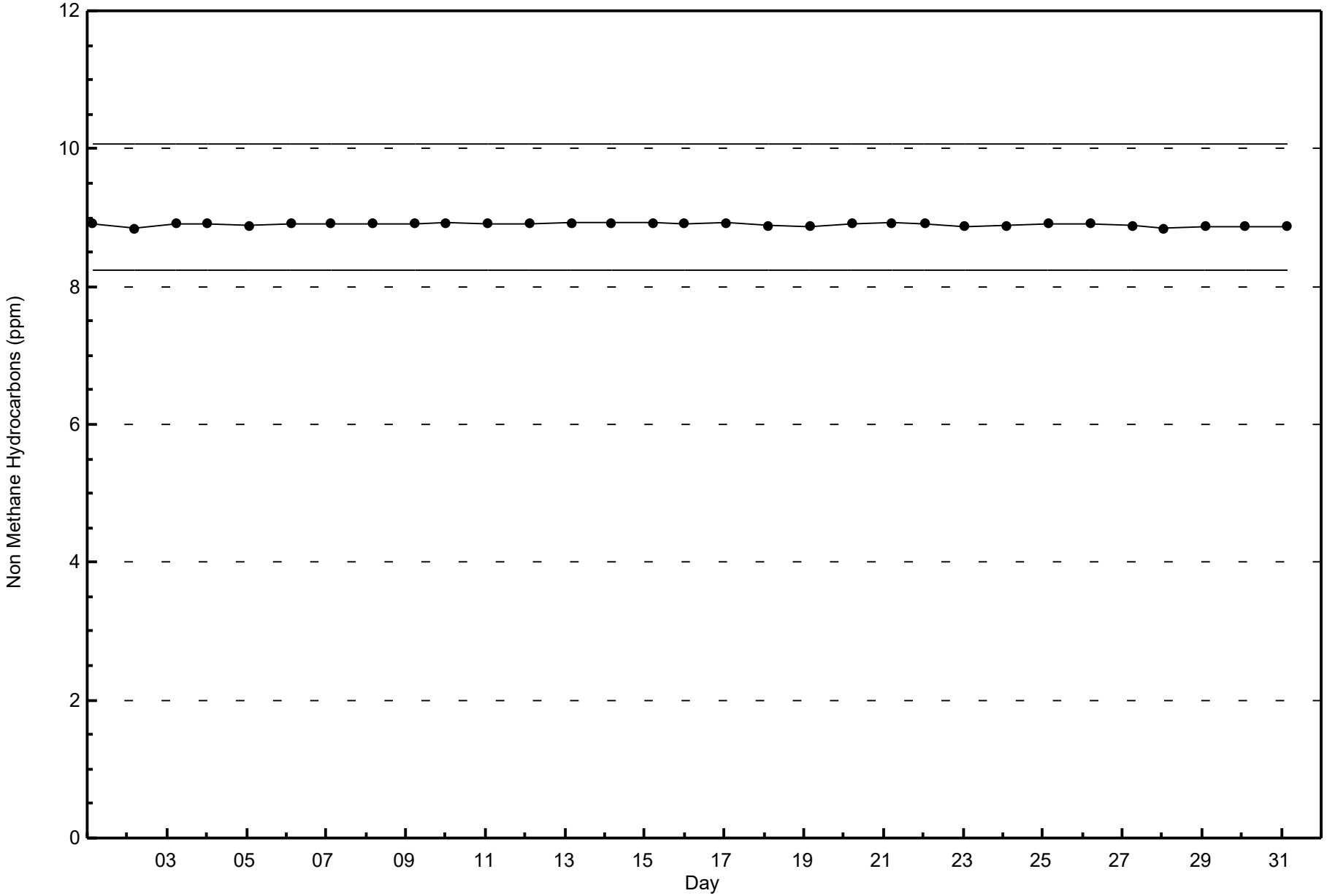


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 4.8 ppm on Aug 11 08:00

Maximum Daily Average: 2.5 ppm on Aug 1

Minimum Value: 2.0 ppm on Aug 19 17:00

Minimum Daily Average: 2.0 ppm on Aug 5

Maximum Diurnal Average: 2.4 ppm at hour 8

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.19 ppm

Percentiles: $P_1$ = 2.0 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 3.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.7 | 2.6 | 2.6 | Z | 2.5 | 3.0 | 2.3 | 2.6 | 2.6 | 2.9 | 3.2 | 2.6 | 3.3 | 2.5 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 3.3 |
| 2-Aug | 2.1 | 2.0 | 2.1 | 2.1 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 3-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.0 | 2.2 |
| 4-Aug | Z | 2.2 | 2.2 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.4 |
| 5-Aug | 2.0 | Z | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 6-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 7-Aug | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 8-Aug | 2.0 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 | 2.5 | 2.2 | 2.1 | 2.5 |
| 9-Aug | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | Z | 2.1 | 2.2 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.2 | 2.3 | 2.1 | 2.3 |
| 10-Aug | Z | 3.0 | 2.7 | 2.3 | 2.3 | 2.4 | 2.6 | 3.1 | 2.6 | 2.4 | 2.2 | C | C | C | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.3 | 3.1 |
| 11-Aug | 2.0 | Z | 2.4 | 2.8 | 2.9 | 2.3 | 2.8 | 4.8 | 2.8 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.2 | 2.0 | 2.0 | 2.3 | 4.8 |
| 12-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 13-Aug | 2.2 | 2.4 | 2.4 | Z | 2.6 | 2.5 | 2.4 | 2.4 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.6 |
| 14-Aug | 2.3 | 2.2 | 2.1 | 2.1 | Z | 2.2 | 2.8 | 2.4 | 2.4 | 2.5 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.3 | 2.2 | 2.4 | 2.2 | 2.8 |
| 15-Aug | 2.5 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.9 | 2.7 | 2.2 | 2.9 |
| 16-Aug | Z | 3.1 | 3.1 | 3.0 | 2.9 | 2.7 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 3.1 |
| 17-Aug | 2.2 | Z | 2.3 | 2.4 | 2.3 | 2.4 | 2.5 | 3.1 | 3.4 | 2.8 | 3.3 | 2.6 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.4 | 2.3 | 2.4 | 3.4 |
| 18-Aug | 2.2 | 2.2 | Z | 2.8 | 2.2 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.9 | 2.1 | 2.1 | 2.2 | 2.9 |
| 19-Aug | 2.1 | 3.4 | 2.4 | Z | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.3 | 2.5 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.2 | 3.4 |
| 20-Aug | 2.1 | 2.2 | 2.5 | 2.4 | Z | 2.1 | 2.3 | 2.5 | 2.9 | 2.4 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.9 |
| 21-Aug | 2.1 | 2.3 | 3.0 | 3.1 | 2.8 | Z | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.5 | 2.2 | 2.1 | 2.2 | 2.3 | 3.1 |
| 22-Aug | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.6 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 2.8 | 2.2 | 2.3 | 2.4 | 2.3 | 2.8 |
| 23-Aug | 2.3 | Z | 2.3 | 2.4 | 2.5 | 2.5 | 2.6 | 2.5 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.3 | 2.6 |
| 24-Aug | 2.0 | 2.2 | Z | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.2 | 2.1 | 2.3 | 2.0 | 2.3 |
| 25-Aug | 2.3 | 2.2 | 2.2 | Z | 2.5 | 2.5 | 2.3 | 2.3 | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.5 | 2.3 | 2.3 | 2.2 | 2.5 |
| 26-Aug | 2.3 | 2.3 | 2.4 | 2.5 | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.5 |
| 27-Aug | 2.2 | 2.3 | 2.7 | 2.8 | 2.2 | Z | 2.2 | 2.5 | 2.2 | 2.2 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.8 |
| 28-Aug | Z | 2.5 | 2.5 | 2.4 | 2.2 | 2.3 | 2.6 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.6 |
| 29-Aug | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.3 | 2.1 | 2.3 |
| 30-Aug | 2.3 | 2.3 | Z | 2.1 | 3.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 3.3 |
| 31-Aug | 2.2 | 2.6 | 2.4 | Z | 2.1 | 3.1 | 3.2 | 2.6 | 2.5 | 2.3 | 2.4 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.4 | 2.3 | 2.5 | 2.1 | 2.3 | 3.2 |
| | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | Diurnal Average | |
| | 2.7 | 3.4 | 3.1 | 3.1 | 3.3 | 3.1 | 3.2 | 4.8 | 3.4 | 2.9 | 3.3 | 2.6 | 3.3 | 2.5 | 2.3 | 2.4 | 2.4 | 2.5 | 2.2 | 2.5 | 2.8 | 2.9 | 2.9 | 2.7 | Diurnal Maximum | |

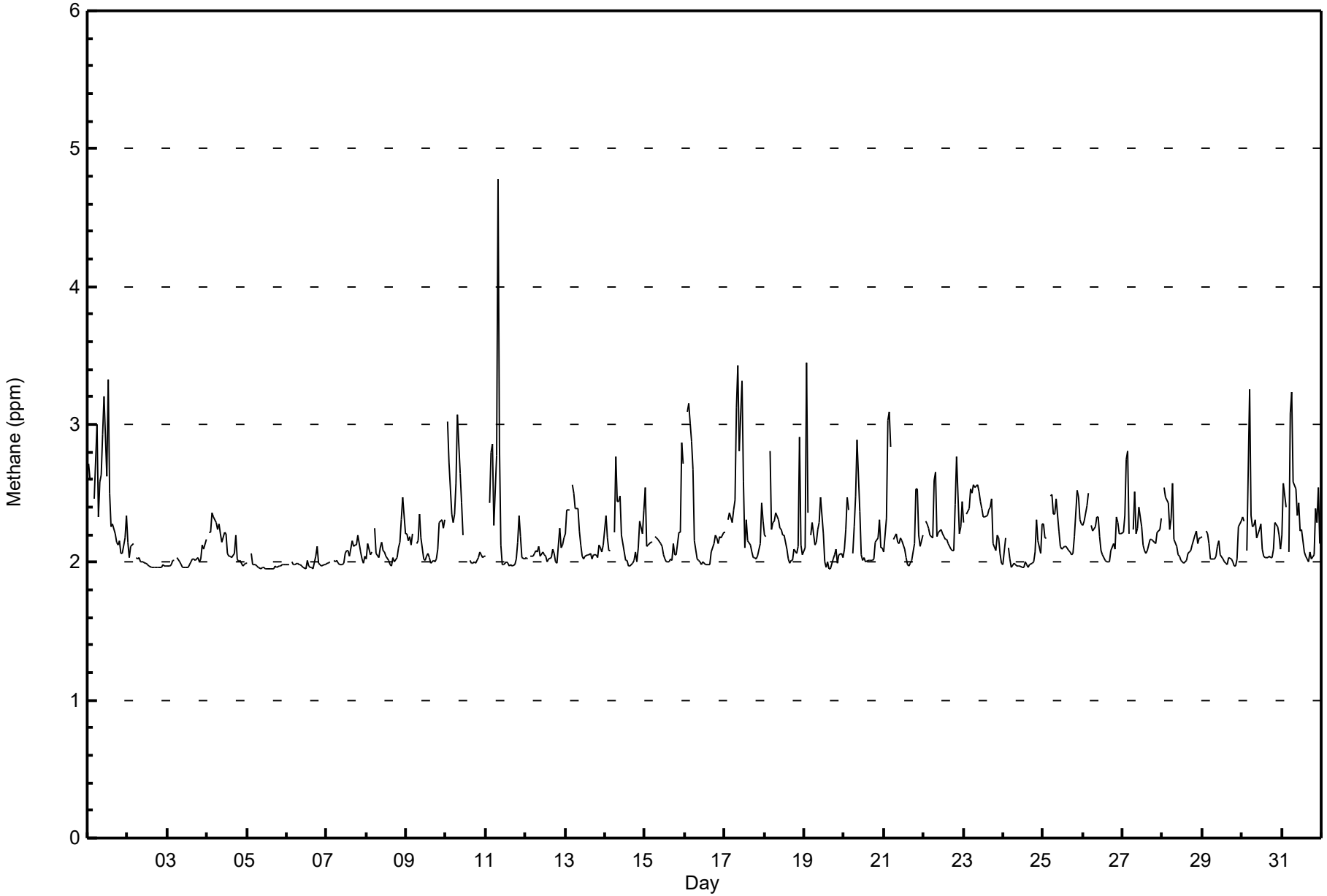
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Fort Hills - August 2026**



# Methane ($CH_4$) - ppm
## Fort Hills - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 261 | 36.76 | 36.76 |
| 2.1 - 3.0 | 435 | 61.27 | 98.03 |
| 3.1 - 10.0 | 14 | 1.97 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Fort Hills - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 47 | 21 | 4 | 2 | 3 | 0 | 1 | 11 | 11 | 12 | 22 | 6 | 16 | 21 | 38 | 46 | 261 |
| 2.1 - 3.0 | 59 | 36 | 8 | 0 | 3 | 7 | 12 | 88 | 77 | 27 | 29 | 11 | 6 | 12 | 28 | 30 | 433 |
| 3.1 - 10.0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 14 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 107 | 57 | 12 | 2 | 6 | 7 | 16 | 104 | 88 | 41 | 53 | 17 | 22 | 33 | 66 | 77 | 708 |

Total Number of Valid Hours: 708

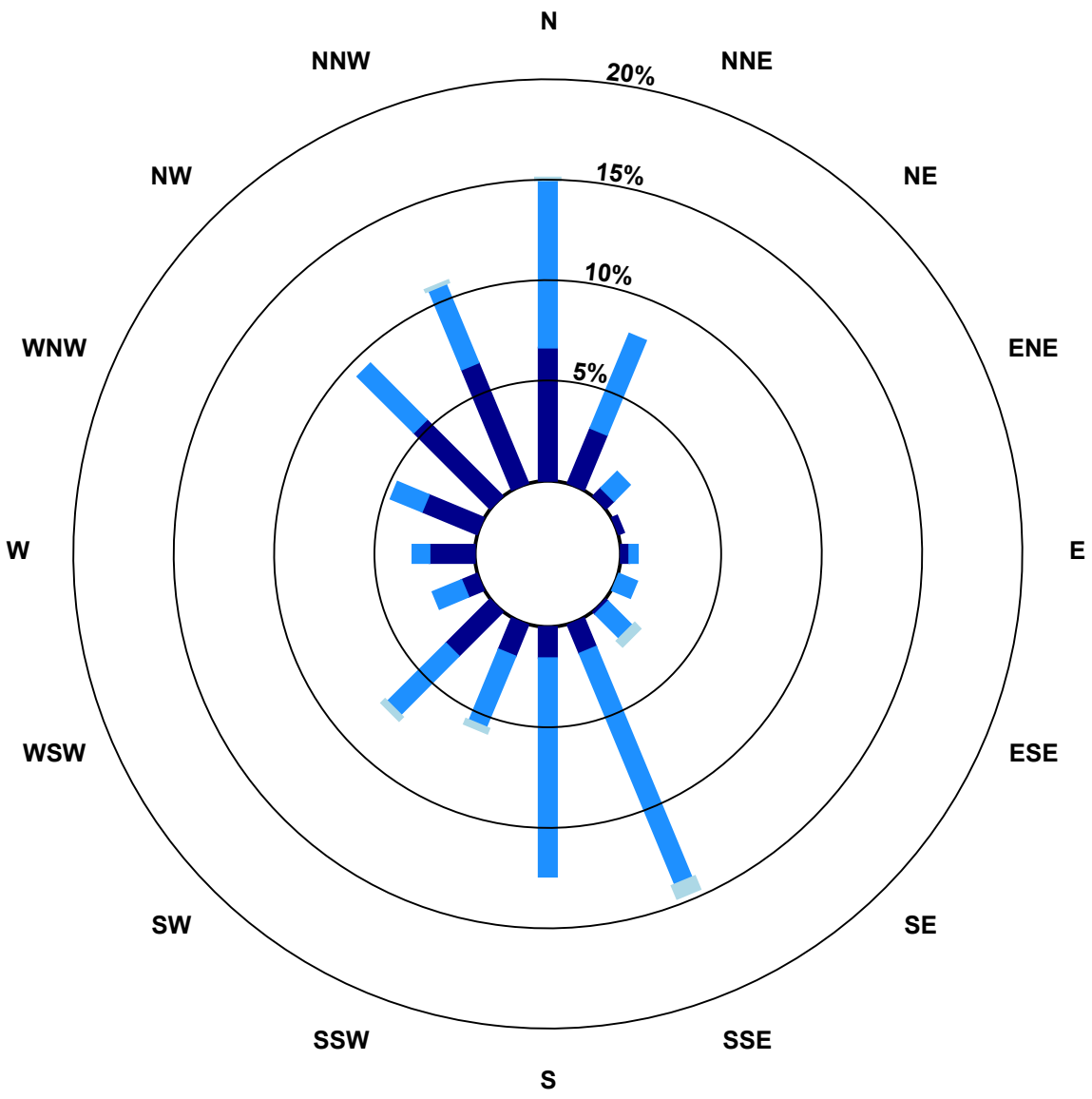
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Fort Hills




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

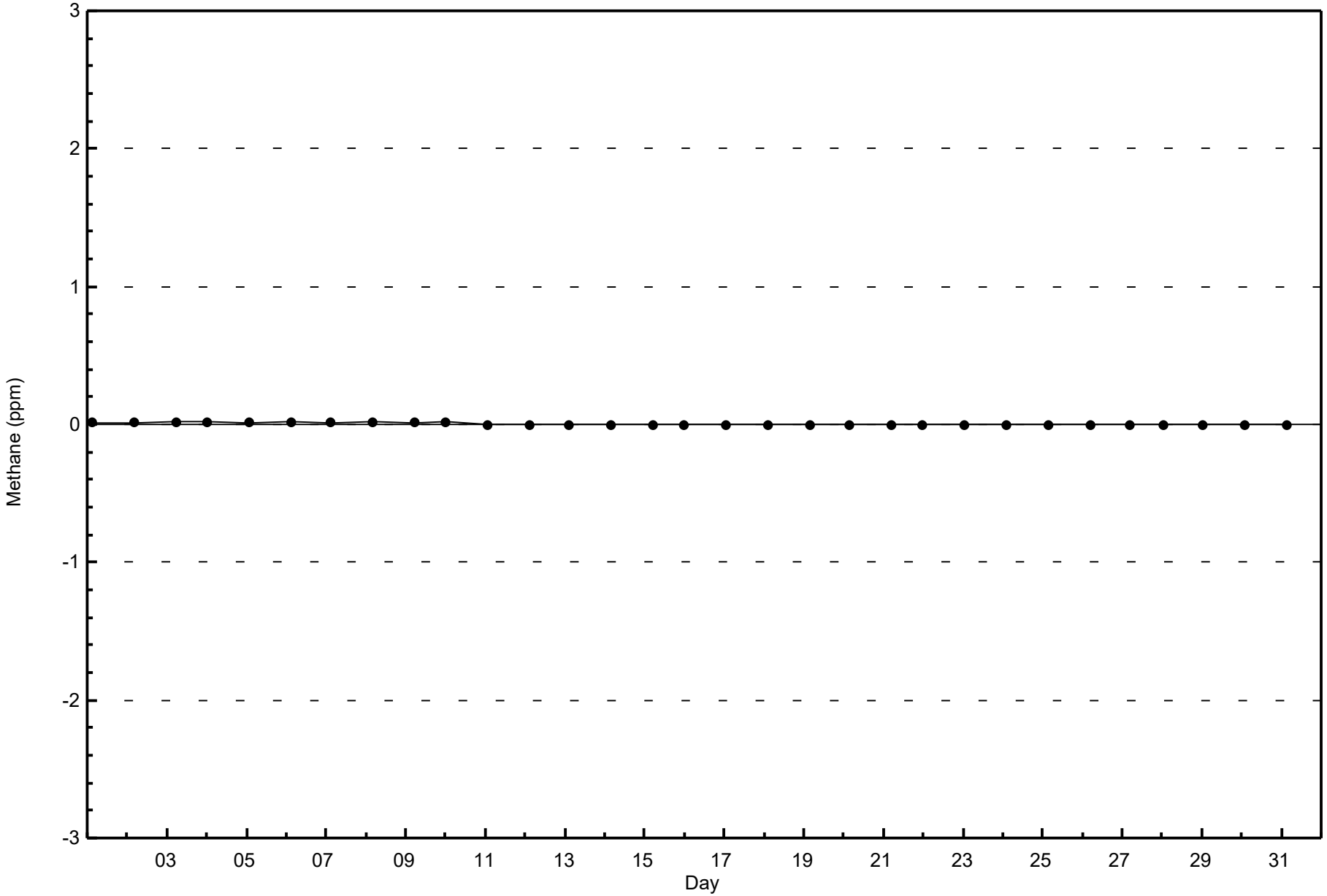
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Fort Hills - August 2026**

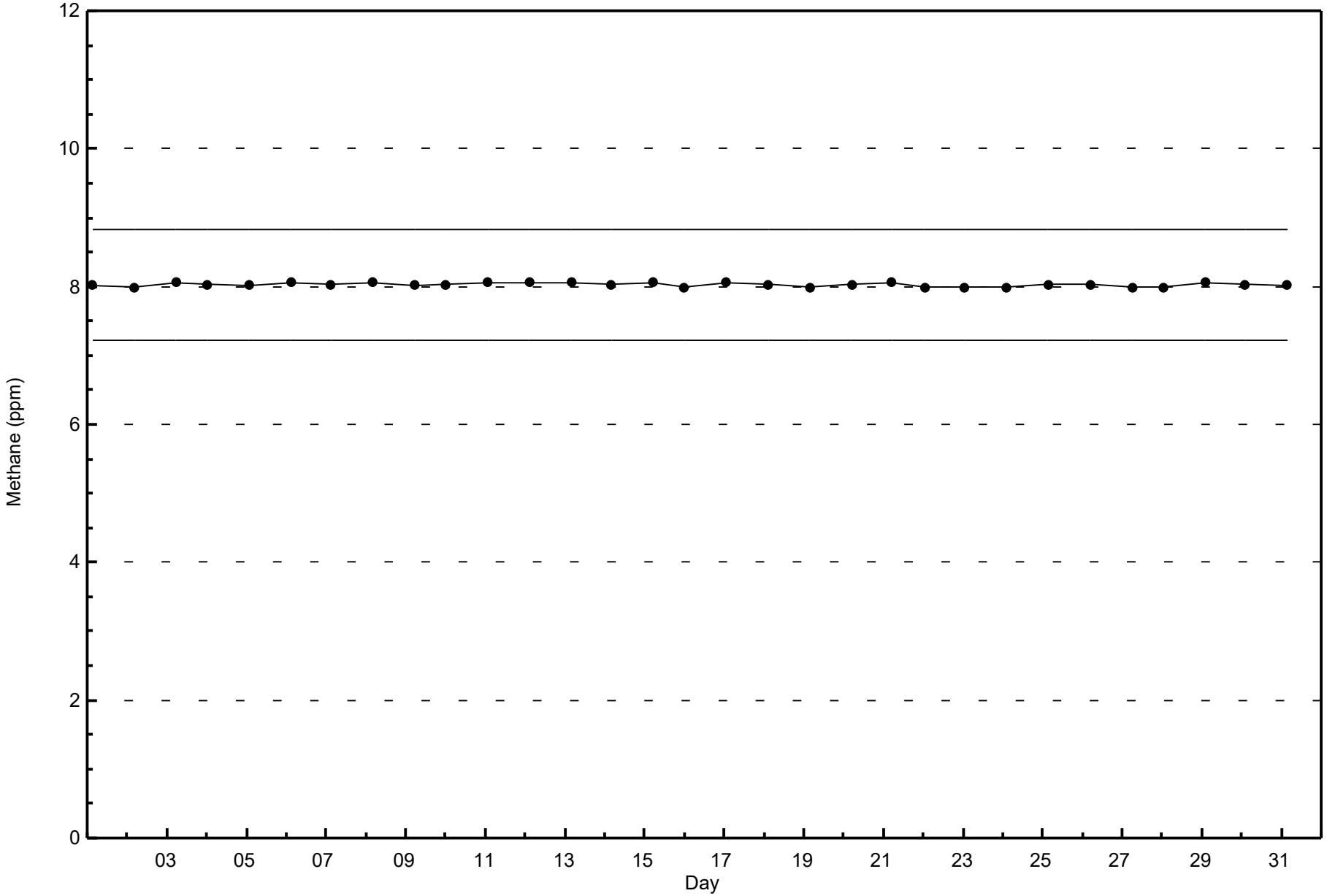


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Fort Hills - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 123.8 ppb on Aug 10 02:00

Maximum Daily Average: 24.6 ppb on Aug 10

Minimum Value: 0.0 ppb on Aug 2 10:00

Minimum Daily Average: 0.2 ppb on Aug 5

Maximum Diurnal Average: 13.5 ppb at hour 9

Minimum Diurnal Average: 1.1 ppb at hour 15

Monthly Average: 5.83 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.3 Median = 1.1 $Q_3$ = 4.4 $P_{90}$ = 18.7 $P_{99}$ = 64.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 20.4 | Z | 30.3 | 3.4 | 8.1 | 31.3 | 4.3 | 15.2 | 18.9 | 38.1 | 76.5 | 30.2 | 70.2 | 18.7 | 8.3 | 9.6 | 5.9 | 4.3 | 4.8 | 2.8 | 0.3 | 0.2 | 0.3 | 0.4 | 17.5 | 76.5 |
| 2-Aug | 0.3 | 0.1 | Z | 0.9 | 0.2 | 0.3 | 0.4 | 0.7 | 0.1 | 0.0 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.9 |
| 3-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 1.1 | 0.4 | 0.4 | 1.7 | 2.2 | 2.7 | 3.0 | 2.5 | 2.3 | 1.2 | 2.8 | 11.7 | 1.8 | 0.2 | 1.6 | 11.7 |
| 4-Aug | 0.7 | 2.6 | 2.4 | 10.1 | Z | 5.4 | 2.8 | 5.7 | 3.2 | 1.5 | 2.4 | 2.7 | 0.9 | 0.5 | 0.4 | 1.0 | 2.6 | 2.7 | 0.5 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 2.1 | 10.1 |
| 5-Aug | 0.0 | 0.1 | 0.4 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.4 |
| 6-Aug | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.8 | 0.4 | 0.2 | 0.1 | 0.2 | 0.1 | 4.6 | 0.7 | 0.4 | 0.1 | 0.3 | 2.0 | 4.9 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.7 | 4.9 |
| 7-Aug | 0.0 | Z | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 3.2 | 5.9 | 5.0 | 2.0 | 6.6 | 6.4 | 7.1 | 6.0 | 11.0 | 2.4 | 0.1 | 0.1 | 0.1 | 2.5 | 11.0 |
| 8-Aug | 0.1 | 0.1 | Z | 0.2 | 0.4 | 1.2 | 1.1 | 0.2 | 13.6 | 10.1 | 5.7 | 6.2 | 5.9 | 2.7 | 1.3 | 0.4 | 2.3 | 1.2 | 1.9 | 3.4 | 8.0 | 20.6 | 64.8 | 36.1 | 8.1 | 64.8 |
| 9-Aug | 2.3 | 9.7 | 3.2 | Z | 14.1 | 0.7 | 2.1 | 3.5 | 32.3 | 13.0 | 1.9 | 1.1 | 3.3 | 3.2 | 1.8 | 0.5 | 0.6 | 0.4 | 0.7 | 0.6 | 0.7 | 1.1 | 5.1 | 15.5 | 5.1 | 32.3 |
| 10-Aug | 31.0 | 123.8 | 87.2 | 34.5 | Z | 18.7 | 45.1 | 119.4 | 49.8 | 15.0 | 4.4 | 2.9 | M | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.6 | 1.3 | 5.1 | 0.2 | 0.2 | 0.1 | 24.6 | 123.8 |
| 11-Aug | 0.0 | 0.1 | 2.0 | 7.2 | 10.1 | Z | 13.9 | 62.7 | 14.2 | 2.3 | 1.3 | 0.9 | 0.8 | 0.7 | 0.7 | 0.9 | 0.6 | 0.8 | 1.3 | 1.2 | 5.6 | 2.0 | 0.3 | 0.2 | 5.6 | 62.7 |
| 12-Aug | Z | 0.2 | 0.2 | 0.6 | 0.2 | 0.5 | 0.4 | 0.4 | 5.5 | 1.9 | 2.3 | 1.7 | 1.9 | 0.5 | 1.3 | 1.7 | 5.1 | 4.5 | 0.1 | 0.2 | 10.9 | 2.4 | 22.0 | 30.3 | 4.1 | 30.3 |
| 13-Aug | 21.4 | Z | 54.1 | 51.4 | 70.5 | 33.7 | 25.9 | 23.8 | 10.6 | 7.1 | 2.6 | 2.2 | 2.2 | 2.6 | 2.0 | 2.4 | 0.7 | 1.0 | 0.4 | 0.3 | 0.3 | 0.3 | 0.9 | 5.6 | 14.0 | 70.5 |
| 14-Aug | 35.1 | 15.1 | Z | 0.2 | 0.4 | 4.5 | 44.4 | 23.0 | 25.7 | 24.0 | 10.6 | 4.6 | 1.7 | 1.4 | 0.2 | 0.2 | 0.2 | 2.7 | 1.3 | 0.1 | 0.1 | 0.5 | 1.8 | 3.4 | 8.7 | 44.4 |
| 15-Aug | 10.7 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.7 | 0.6 | 0.5 | 0.4 | 1.0 | 0.3 | 0.3 | 0.4 | 0.3 | 0.9 | 0.6 | 0.9 | 0.2 | 0.2 | 1.5 | 13.0 | 25.7 | 16.6 | 3.3 | 25.7 |
| 16-Aug | 15.6 | 19.5 | 21.3 | 18.9 | Z | 23.7 | 1.6 | 0.7 | 1.1 | 1.8 | 1.0 | 1.5 | 0.7 | 0.6 | 0.2 | 0.1 | 1.7 | 4.3 | 4.0 | 2.2 | 1.1 | 0.9 | 0.3 | 2.7 | 5.5 | 23.7 |
| 17-Aug | 3.8 | 0.1 | 3.0 | 5.6 | 2.1 | Z | 5.3 | 23.8 | 33.5 | 19.9 | 23.3 | C | C | C | C | C | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 3.8 | 0.4 | 7.0 | 33.5 |
| 18-Aug | Z | 0.1 | 0.2 | 11.3 | 0.4 | 1.2 | 3.0 | 3.7 | 1.7 | 3.1 | 3.0 | 1.8 | 1.0 | 0.6 | 0.3 | 0.3 | 0.5 | 0.6 | 0.5 | 0.3 | 0.2 | 12.1 | 0.2 | 0.2 | 2.0 | 12.1 |
| 19-Aug | 0.4 | Z | 3.8 | 0.3 | 0.4 | 2.4 | 0.5 | 0.4 | 1.5 | 3.1 | 11.2 | 5.5 | 1.8 | 0.4 | 2.0 | 0.5 | 0.3 | 2.5 | 2.2 | 3.0 | 0.1 | 0.1 | 0.1 | 0.1 | 1.9 | 11.2 |
| 20-Aug | 0.8 | 0.7 | Z | 1.0 | 0.1 | 0.8 | 5.0 | 35.8 | 115.3 | 38.1 | 2.2 | 1.8 | 2.8 | 2.1 | 1.7 | 1.9 | 2.0 | 1.6 | 2.4 | 4.0 | 6.4 | 13.2 | 4.6 | 0.4 | 10.6 | 115.3 |
| 21-Aug | 0.2 | 5.5 | 19.6 | Z | 40.2 | 1.7 | 1.4 | 4.8 | 2.1 | 1.8 | 3.6 | 4.2 | 2.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.4 | 0.7 | 5.8 | 4.6 | 1.0 | 0.3 | 0.1 | 4.4 | 40.2 |
| 22-Aug | 0.2 | 0.3 | 0.1 | 0.1 | Z | 1.1 | 13.9 | 10.0 | 4.3 | 2.7 | 1.8 | 1.0 | 0.6 | 1.3 | 0.8 | 0.7 | 0.4 | 0.3 | 0.1 | 6.2 | 40.9 | 0.2 | 0.1 | 1.1 | 3.8 | 40.9 |
| 23-Aug | 0.1 | 0.5 | 0.8 | 0.1 | 0.1 | Z | 1.7 | 1.6 | 1.2 | 0.9 | 1.0 | 1.0 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 1.0 | 0.1 | 0.2 | 6.3 | 9.1 | 1.7 | 0.0 | 1.3 | 9.1 |
| 24-Aug | Z | 10.0 | 5.8 | 2.9 | 0.4 | 0.2 | 0.5 | 0.3 | 0.4 | 0.2 | 0.3 | 0.1 | 1.0 | 2.5 | 1.7 | 1.2 | 1.6 | 1.0 | 1.3 | 1.9 | 3.4 | 1.8 | 0.2 | 10.7 | 2.1 | 10.7 |
| 25-Aug | 27.6 | Z | 3.9 | 7.4 | 11.2 | 10.6 | 9.1 | 35.9 | 34.4 | 10.7 | 1.9 | 1.0 | 1.4 | 2.0 | 1.1 | 0.7 | 0.5 | 0.6 | 1.8 | 4.8 | 19.6 | 35.0 | 49.2 | 27.5 | 13.0 | 49.2 |
| 26-Aug | 7.1 | 9.0 | Z | 20.3 | 12.2 | 3.7 | 2.7 | 2.9 | 2.1 | 2.1 | 1.7 | 1.3 | 1.2 | 0.7 | 0.4 | 0.5 | 0.5 | 1.0 | 1.3 | 6.6 | 2.7 | 21.3 | 1.8 | 0.4 | 4.5 | 21.3 |
| 27-Aug | 0.3 | 0.7 | 13.3 | Z | 0.5 | 0.8 | 3.1 | 3.9 | 2.1 | 4.4 | 23.6 | 8.1 | 1.3 | 0.7 | 0.4 | 0.5 | 1.8 | 5.0 | 1.0 | 4.5 | 8.4 | 7.5 | 3.5 | 12.2 | 4.7 | 23.6 |
| 28-Aug | 13.4 | 14.9 | 10.6 | 2.3 | Z | 0.5 | 7.0 | 0.5 | 0.6 | 0.8 | 0.5 | 0.5 | 0.6 | 0.5 | 0.8 | 0.6 | 0.6 | 0.2 | 0.7 | 1.4 | 1.6 | 1.3 | 0.7 | 0.6 | 2.7 | 14.9 |
| 29-Aug | 0.4 | 0.5 | 0.7 | 0.4 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.9 | 2.5 | 1.5 | 0.8 | 0.8 | 0.5 | 0.6 | 1.1 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 0.8 | 0.5 | 0.6 | 2.5 |
| 30-Aug | Z | 6.1 | 2.9 | 0.2 | 40.4 | 1.4 | 0.8 | 2.2 | 5.3 | 0.9 | 3.8 | 5.2 | 1.9 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.5 | 12.3 | 20.3 | 26.8 | 13.1 | 6.3 | 40.4 |
| 31-Aug | 23.0 | Z | 33.5 | 0.5 | 0.8 | 30.3 | 28.7 | 10.8 | 35.7 | 11.2 | 12.5 | 7.3 | 5.8 | 1.1 | 0.6 | 0.4 | 0.6 | 1.0 | 0.1 | 2.3 | 22.8 | 39.8 | 29.6 | 1.2 | 13.0 | 39.8 |
| | 8.3 | 8.8 | 11.5 | 6.9 | 8.2 | 6.7 | 7.3 | 12.7 | 13.5 | 7.0 | 6.6 | 3.3 | 4.2 | 1.8 | 1.1 | 1.2 | 1.4 | 1.7 | 1.4 | 2.2 | 5.4 | 7.0 | 8.0 | 5.8 | Diurnal Average | |
| | 35.1 | 123.8 | 87.2 | 51.4 | 70.5 | 33.7 | 45.1 | 119.4 | 115.3 | 38.1 | 76.5 | 30.2 | 70.2 | 18.7 | 8.3 | 9.6 | 6.4 | 7.1 | 6.0 | 11.0 | 40.9 | 39.8 | 64.8 | 36.1 | Diurnal Maximum | |

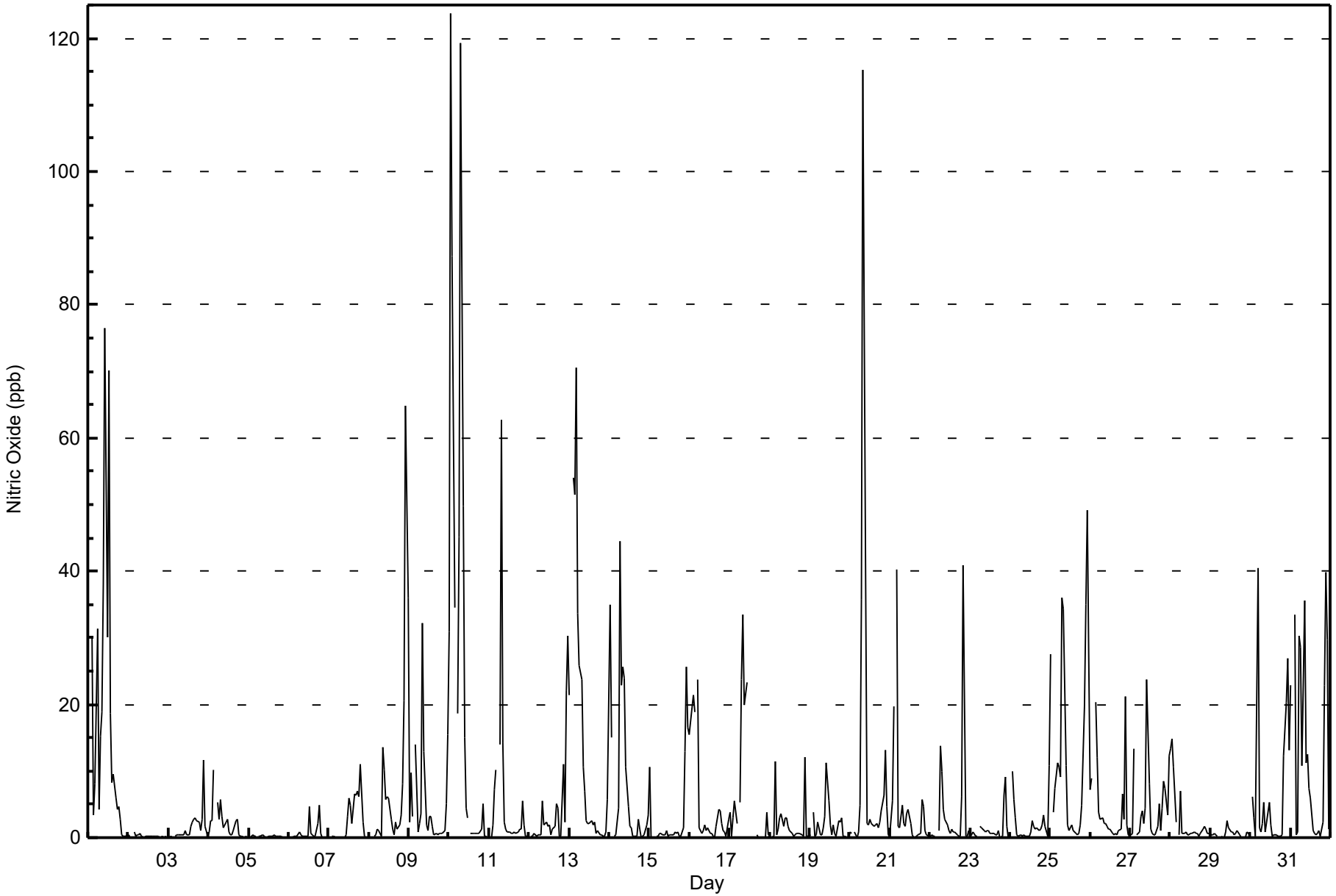
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Fort Hills - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 646 | 91.37 | 91.37 |
| 21 - 40 | 45 | 6.36 | 97.74 |
| 11 - 80 | 12 | 1.70 | 99.43 |
| 81 - 159 | 4 | 0.57 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Fort Hills - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 89 | 52 | 11 | 2 | 6 | 6 | 13 | 91 | 88 | 37 | 49 | 18 | 23 | 35 | 59 | 67 | 646 |
| 21 - 40 | 13 | 4 | 1 | 0 | 0 | 0 | 3 | 8 | 0 | 3 | 3 | 0 | 0 | 1 | 4 | 5 | 45 |
| 11 - 80 | 7 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 12 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 109 | 57 | 12 | 2 | 6 | 6 | 17 | 100 | 88 | 40 | 53 | 18 | 23 | 36 | 64 | 76 | 707 |

Total Number of Valid Hours: 707

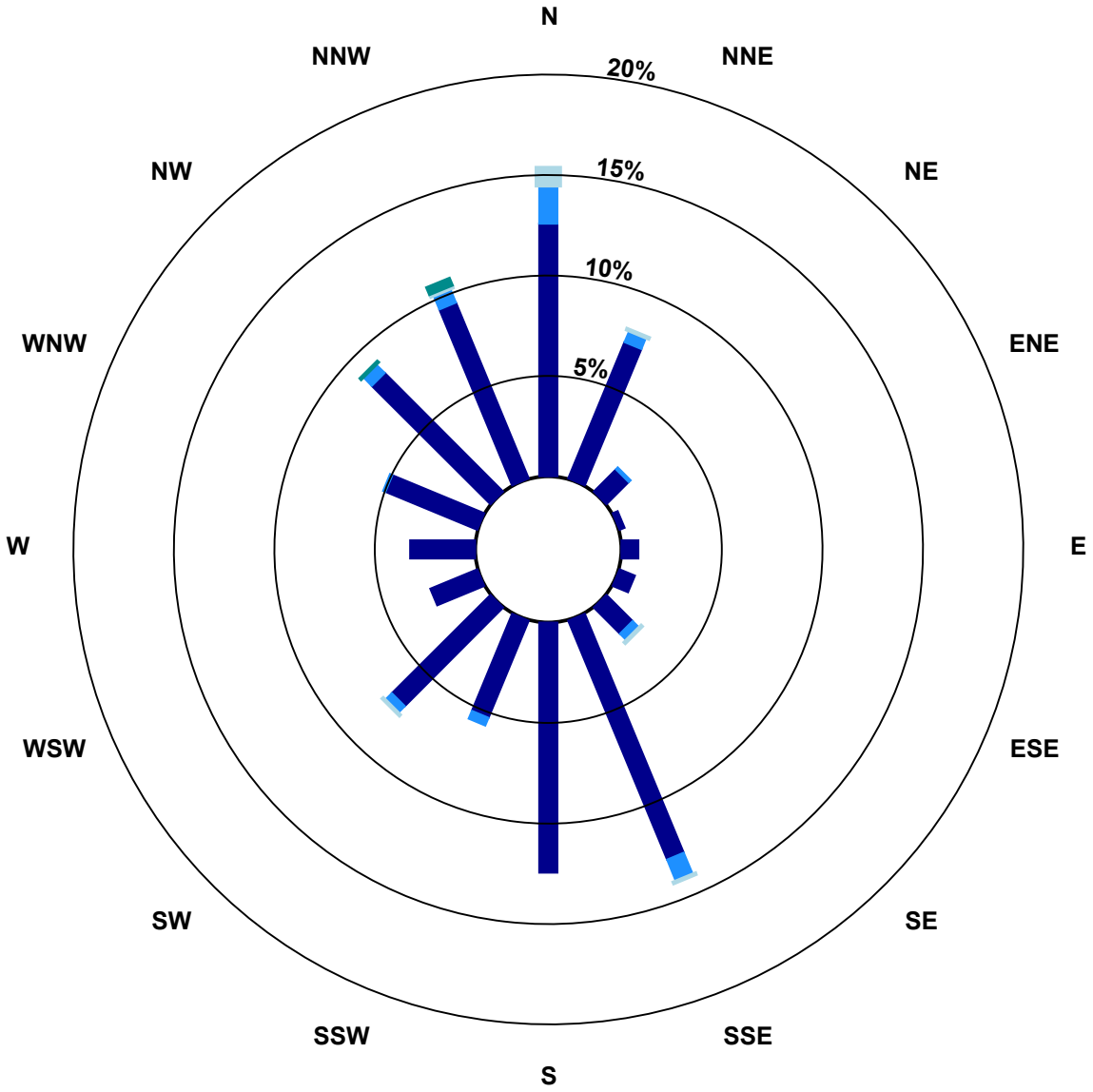
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Fort Hills




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

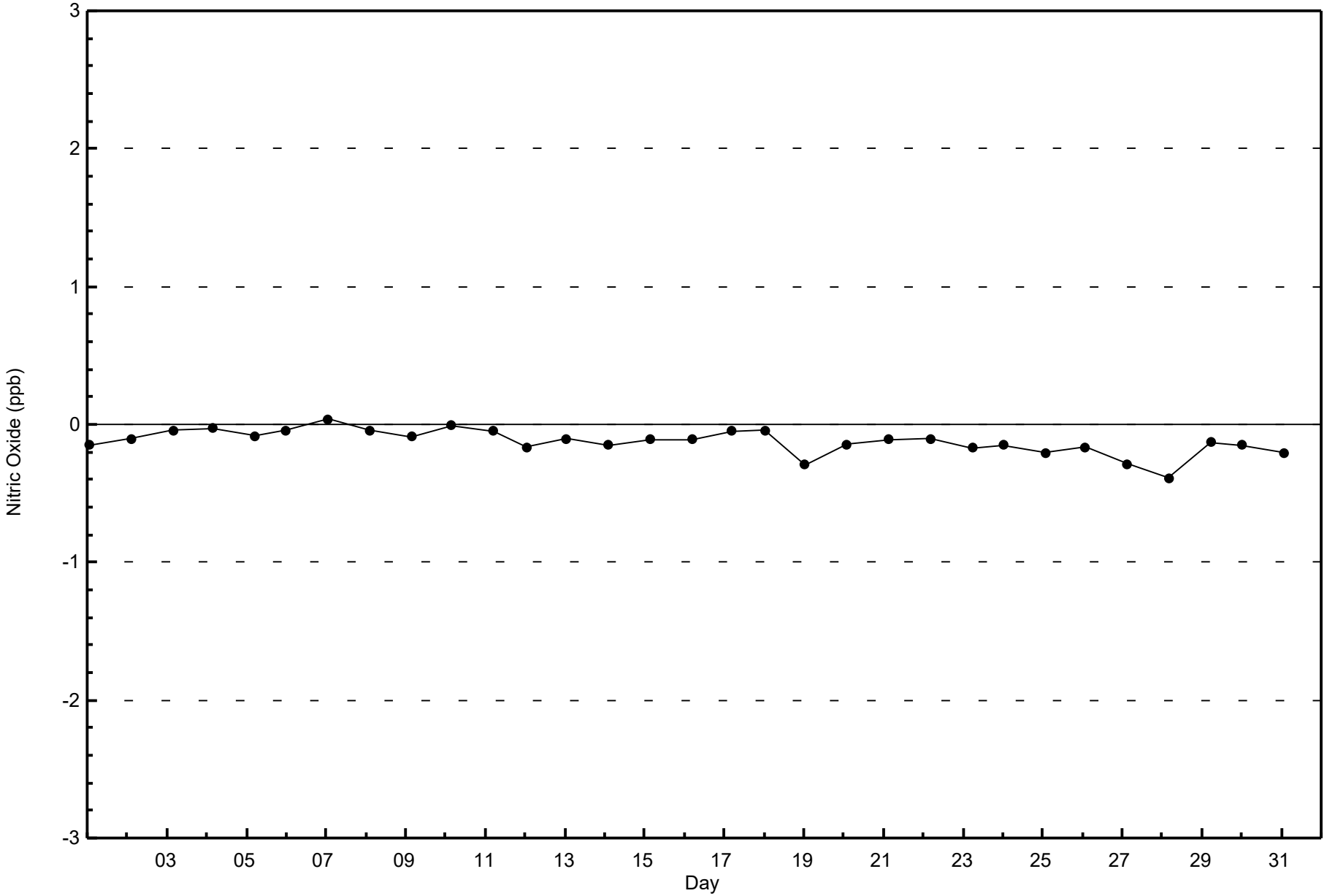
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Fort Hills - August 2026**

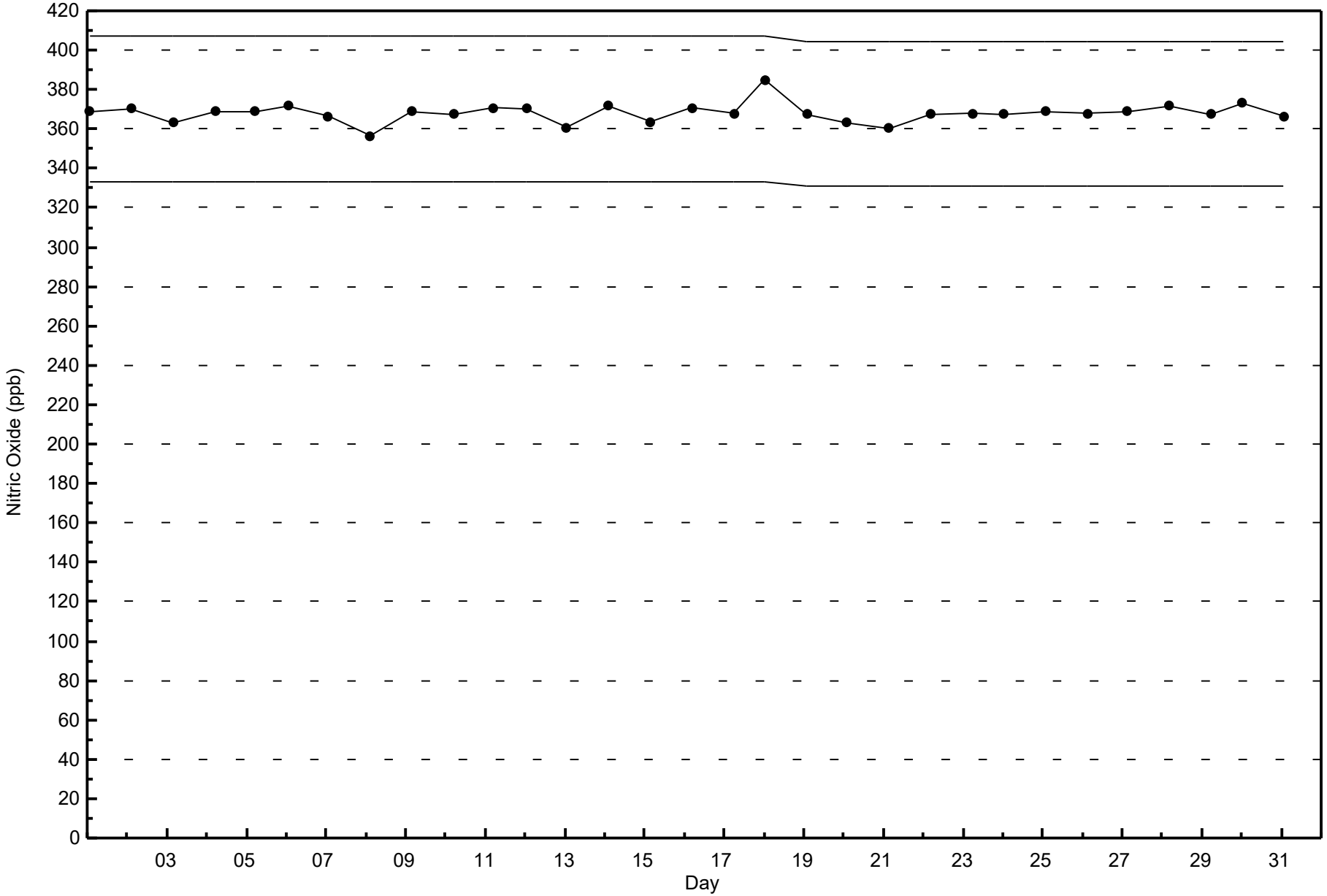


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 32.9 ppb on Aug 22 21:00
Maximum Daily Average: 14.3 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 24 10:00
Minimum Daily Average: 0.8 ppb on Aug 5
Maximum Diurnal Average: 12.5 ppb at hour 21
Minimum Diurnal Average: 2.7 ppb at hour 15
Monthly Average: 6.47 ppb
Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.5 $Q_1$ = 1.6 Median = 4.3 $Q_3$ = 9.6 $P_{90}$ = 16.2 $P_{99}$ = 27.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 11.0 | Z | 9.9 | 5.9 | 6.4 | 8.2 | 3.9 | 6.4 | 8.7 | 11.3 | 21.1 | 21.0 | 24.0 | 17.6 | 11.1 | 12.2 | 9.8 | 12.2 | 11.4 | 15.8 | 6.5 | 9.3 | 10.3 | 14.7 | 11.7 | 24.0 |
| 2-Aug | 10.9 | 1.2 | Z | 12.8 | 1.4 | 4.4 | 3.1 | 3.6 | 0.7 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 1.9 | 12.8 |
| 3-Aug | 0.2 | 0.3 | 0.2 | Z | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 0.6 | 2.7 | 3.7 | 4.2 | 5.3 | 5.1 | 6.6 | 6.4 | 8.8 | 12.4 | 6.8 | 4.3 | 3.2 | 12.4 |
| 4-Aug | 6.7 | 10.9 | 9.5 | 10.7 | Z | 8.8 | 4.3 | 5.4 | 3.3 | 2.5 | 4.0 | 4.3 | 2.1 | 1.9 | 2.0 | 7.8 | 9.0 | 14.2 | 3.2 | 3.7 | 3.0 | 0.6 | 0.6 | 0.3 | 5.2 | 14.2 |
| 5-Aug | 0.5 | 3.6 | 6.1 | 0.5 | 0.4 | Z | 0.8 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 1.0 | 1.2 | 0.9 | 0.3 | 0.4 | 0.5 | 0.1 | 0.1 | 0.2 | 0.8 | 6.1 |
| 6-Aug | Z | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 6.5 | 1.9 | 0.9 | 0.3 | 0.7 | 6.2 | 15.4 | 5.6 | 3.5 | 2.3 | 0.2 | 0.1 | 2.0 | 15.4 |
| 7-Aug | 0.2 | Z | 0.8 | 0.8 | 0.8 | 0.2 | 0.5 | 0.2 | 0.2 | 0.1 | 0.9 | 5.4 | 9.4 | 9.0 | 5.3 | 10.4 | 10.2 | 11.3 | 11.0 | 16.9 | 10.4 | 1.5 | 1.2 | 0.8 | 4.7 | 16.9 |
| 8-Aug | 0.7 | 1.2 | Z | 1.6 | 4.1 | 2.8 | 0.9 | 0.2 | 6.5 | 6.9 | 4.6 | 6.2 | 4.8 | 3.5 | 1.6 | 0.6 | 4.9 | 3.1 | 7.5 | 15.2 | 23.0 | 19.2 | 22.4 | 12.8 | 6.7 | 23.0 |
| 9-Aug | 3.4 | 7.6 | 6.9 | Z | 7.4 | 2.5 | 2.7 | 2.7 | 14.5 | 10.4 | 3.0 | 2.3 | 6.0 | 8.7 | 5.1 | 1.5 | 2.2 | 1.8 | 3.7 | 6.6 | 11.7 | 10.5 | 10.4 | 16.2 | 6.4 | 16.2 |
| 10-Aug | 16.7 | 24.2 | 15.4 | 10.9 | Z | 6.9 | 8.9 | 20.5 | 23.5 | 14.2 | 6.5 | 4.9 | M | 1.9 | 1.8 | 1.5 | 1.9 | 2.2 | 3.2 | 8.3 | 18.2 | 2.1 | 1.7 | 0.8 | 8.9 | 24.2 |
| 11-Aug | 0.4 | 0.3 | 6.5 | 12.9 | 13.1 | Z | 6.6 | 17.1 | 13.3 | 4.6 | 2.7 | 2.0 | 1.4 | 1.3 | 1.4 | 1.7 | 1.5 | 2.8 | 6.2 | 10.1 | 20.8 | 14.9 | 1.4 | 0.5 | 6.2 | 20.8 |
| 12-Aug | Z | 0.3 | 0.3 | 1.2 | 0.2 | 0.6 | 0.6 | 0.8 | 8.0 | 3.3 | 4.0 | 2.8 | 2.3 | 0.8 | 2.3 | 3.0 | 9.0 | 7.0 | 0.3 | 0.8 | 16.8 | 8.6 | 11.8 | 18.2 | 4.5 | 18.2 |
| 13-Aug | 18.1 | Z | 19.9 | 18.9 | 19.5 | 17.3 | 14.3 | 12.1 | 8.2 | 6.3 | 2.9 | 2.7 | 4.3 | 4.5 | 2.8 | 3.7 | 1.9 | 3.2 | 1.1 | 1.4 | 1.4 | 1.3 | 1.6 | 8.1 | 7.6 | 19.9 |
| 14-Aug | 16.9 | 9.5 | Z | 2.4 | 1.7 | 5.2 | 15.8 | 19.7 | 20.0 | 19.7 | 12.3 | 7.7 | 3.7 | 3.4 | 0.5 | 0.4 | 0.5 | 9.1 | 5.6 | 1.5 | 11.0 | 15.6 | 12.6 | 17.7 | 9.2 | 20.0 |
| 15-Aug | 15.7 | 2.8 | 1.6 | Z | 1.2 | 0.7 | 0.9 | 0.6 | 0.5 | 0.6 | 1.5 | 0.6 | 0.9 | 1.8 | 1.3 | 2.5 | 2.2 | 2.9 | 0.9 | 2.3 | 13.2 | 20.5 | 20.1 | 18.8 | 5.0 | 20.5 |
| 16-Aug | 18.2 | 17.6 | 16.0 | 15.5 | Z | 17.7 | 8.3 | 6.2 | 5.6 | 4.4 | 2.3 | 2.8 | 1.5 | 1.6 | 0.9 | 0.9 | 7.0 | 10.6 | 14.7 | 17.1 | 16.6 | 12.9 | 6.4 | 5.8 | 9.2 | 18.2 |
| 17-Aug | 5.8 | 1.6 | 5.2 | 7.3 | 4.8 | Z | 3.2 | 6.7 | 9.4 | 10.8 | 17.6 | C | C | C | C | C | 3.5 | 2.1 | 2.5 | 3.3 | 2.5 | 5.5 | 16.1 | 8.3 | 6.5 | 17.6 |
| 18-Aug | Z | 4.5 | 8.6 | 15.5 | 10.4 | 9.6 | 7.1 | 4.9 | 3.0 | 4.3 | 4.1 | 3.0 | 2.0 | 1.4 | 0.9 | 1.0 | 1.5 | 2.2 | 2.5 | 3.8 | 5.3 | 20.6 | 2.8 | 1.2 | 5.2 | 20.6 |
| 19-Aug | 3.9 | Z | 7.1 | 2.2 | 4.8 | 8.0 | 2.2 | 1.0 | 2.8 | 2.9 | 9.0 | 7.4 | 2.5 | 0.7 | 5.6 | 1.3 | 0.6 | 6.4 | 9.4 | 12.8 | 1.3 | 1.2 | 1.1 | 7.8 | 4.4 | 12.8 |
| 20-Aug | 12.8 | 9.8 | Z | 10.4 | 2.0 | 3.2 | 4.4 | 9.5 | 19.2 | 16.3 | 3.1 | 3.1 | 4.2 | 3.4 | 3.1 | 3.6 | 4.6 | 5.0 | 10.5 | 18.2 | 21.9 | 21.6 | 9.8 | 2.0 | 8.8 | 21.9 |
| 21-Aug | 1.6 | 5.1 | 9.3 | Z | 11.2 | 4.4 | 2.4 | 3.5 | 2.4 | 2.7 | 4.9 | 5.8 | 5.0 | 1.7 | 0.5 | 0.5 | 1.0 | 2.1 | 5.7 | 17.5 | 23.5 | 15.2 | 12.7 | 9.5 | 6.4 | 23.5 |
| 22-Aug | 8.1 | 9.7 | 7.7 | 9.0 | Z | 10.7 | 14.8 | 13.6 | 7.5 | 5.1 | 4.9 | 3.4 | 2.8 | 5.2 | 4.4 | 5.0 | 3.3 | 3.5 | 2.0 | 19.6 | 32.9 | 8.2 | 5.7 | 10.9 | 8.6 | 32.9 |
| 23-Aug | 5.4 | 6.0 | 8.1 | 4.2 | 4.3 | Z | 5.8 | 4.0 | 2.6 | 2.1 | 2.9 | 2.7 | 2.2 | 3.2 | 5.1 | 3.6 | 3.3 | 5.1 | 0.9 | 1.2 | 10.7 | 9.4 | 4.3 | 0.1 | 4.2 | 10.7 |
| 24-Aug | Z | 20.7 | 14.4 | 17.4 | 3.8 | 1.2 | 3.1 | 0.9 | 0.6 | 0.0 | 0.5 | 0.0 | 1.5 | 5.1 | 3.6 | 2.7 | 3.3 | 3.0 | 6.9 | 13.1 | 12.9 | 4.5 | 1.5 | 11.0 | 5.7 | 20.7 |
| 25-Aug | 12.5 | Z | 10.8 | 9.6 | 7.2 | 5.5 | 5.8 | 14.1 | 16.8 | 8.9 | 3.1 | 2.4 | 4.0 | 6.5 | 5.7 | 4.6 | 3.2 | 2.8 | 6.6 | 15.6 | 20.6 | 20.0 | 17.2 | 12.1 | 9.4 | 20.6 |
| 26-Aug | 7.0 | 7.4 | Z | 7.2 | 7.5 | 8.4 | 5.5 | 4.0 | 3.6 | 4.9 | 4.8 | 4.2 | 4.5 | 2.9 | 1.8 | 2.5 | 2.4 | 5.6 | 13.3 | 29.1 | 23.1 | 32.3 | 16.1 | 12.2 | 9.1 | 32.3 |
| 27-Aug | 10.3 | 13.7 | 18.7 | Z | 11.0 | 9.5 | 10.7 | 8.4 | 4.4 | 7.7 | 24.6 | 15.5 | 4.9 | 2.9 | 1.9 | 3.4 | 12.4 | 21.0 | 12.8 | 17.6 | 27.8 | 27.5 | 28.8 | 32.7 | 14.3 | 32.7 |
| 28-Aug | 29.7 | 29.6 | 22.6 | 18.0 | Z | 4.7 | 6.7 | 3.5 | 2.4 | 1.8 | 0.7 | 1.1 | 1.4 | 1.0 | 2.6 | 2.5 | 2.2 | 1.5 | 2.3 | 3.6 | 5.4 | 4.7 | 4.1 | 4.1 | 6.8 | 29.7 |
| 29-Aug | 3.8 | 4.6 | 5.9 | 4.6 | 3.0 | Z | 0.8 | 0.8 | 0.4 | 1.7 | 2.7 | 1.5 | 1.1 | 1.1 | 0.9 | 1.3 | 2.1 | 1.3 | 0.6 | 0.2 | 0.2 | 4.7 | 7.5 | 5.8 | 2.5 | 7.5 |
| 30-Aug | Z | 16.3 | 14.4 | 4.8 | 15.5 | 8.8 | 3.1 | 3.4 | 4.0 | 1.4 | 4.7 | 7.8 | 4.1 | 1.3 | 2.1 | 2.2 | 2.3 | 2.5 | 1.8 | 4.8 | 19.9 | 17.6 | 16.6 | 14.2 | 7.5 | 19.9 |
| 31-Aug | 13.6 | Z | 14.8 | 5.3 | 3.6 | 8.3 | 8.8 | 7.0 | 13.3 | 13.4 | 13.2 | 10.2 | 9.3 | 3.0 | 1.8 | 1.6 | 1.7 | 6.5 | 0.3 | 6.0 | 14.1 | 15.9 | 12.2 | 3.0 | 8.1 | 15.9 |
| | 9.0 | 8.4 | 9.3 | 8.1 | 5.6 | 6.1 | 5.1 | 5.9 | 6.7 | 5.5 | 5.4 | 4.4 | 4.1 | 3.4 | 2.7 | 2.9 | 3.7 | 5.3 | 5.5 | 9.0 | 12.5 | 11.0 | 8.5 | 8.2 | Diurnal Average | |
| | 29.7 | 29.6 | 22.6 | 18.9 | 19.5 | 17.7 | 15.8 | 20.5 | 23.5 | 19.7 | 24.6 | 21.0 | 24.0 | 17.6 | 11.1 | 12.2 | 12.4 | 21.0 | 15.4 | 29.1 | 32.9 | 32.3 | 28.8 | 32.7 | Diurnal Maximum | |

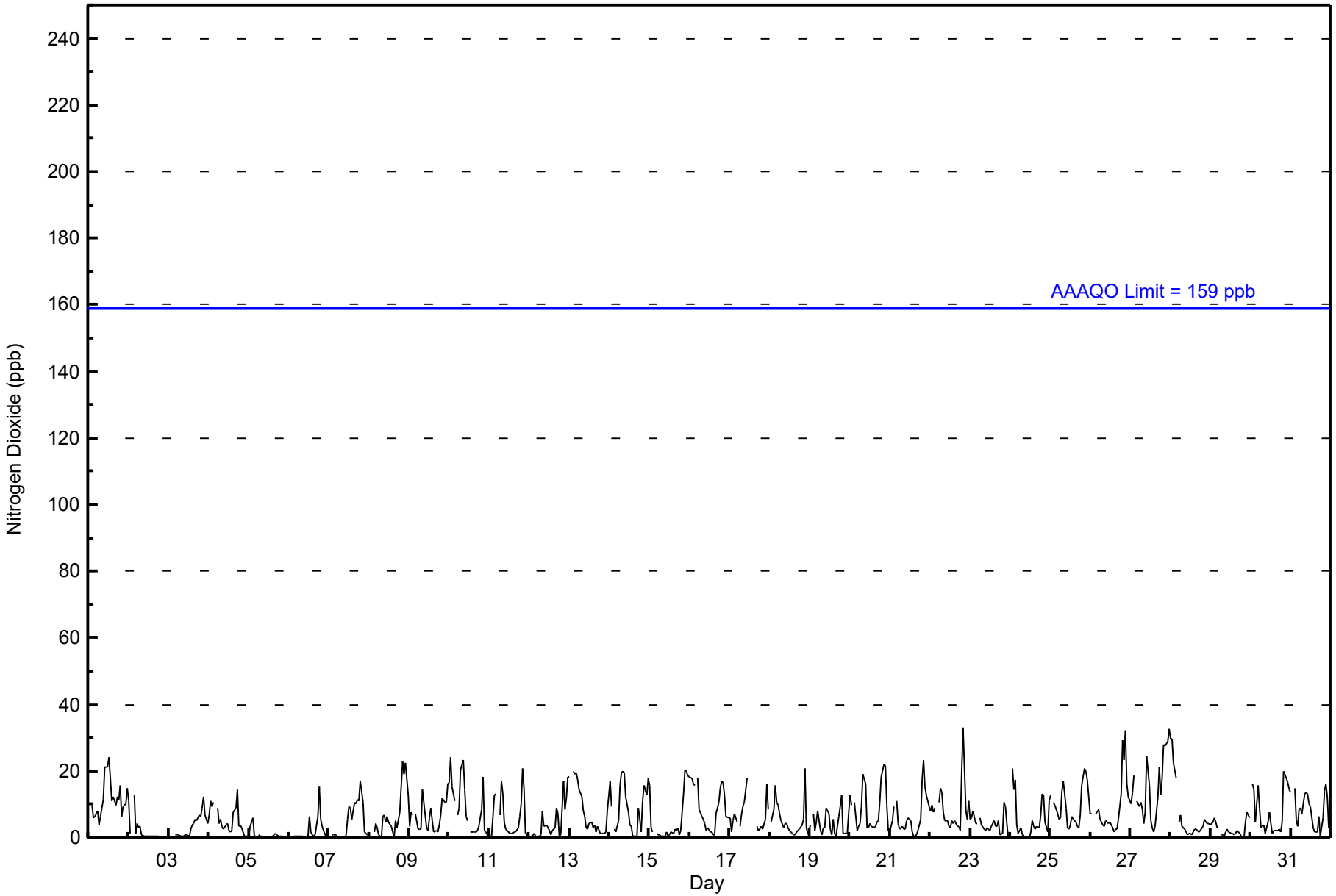
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Hills - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Fort Hills - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 678 | 95.90 | 95.90 |
| 21 - 40 | 29 | 4.10 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Hills - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 103 | 55 | 10 | 2 | 6 | 4 | 13 | 92 | 87 | 40 | 52 | 17 | 23 | 36 | 64 | 74 | 678 |
| 21 - 40 | 6 | 2 | 2 | 0 | 0 | 2 | 4 | 8 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 29 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 109 | 57 | 12 | 2 | 6 | 6 | 17 | 100 | 88 | 40 | 53 | 18 | 23 | 36 | 64 | 76 | 707 |

Total Number of Valid Hours: 707

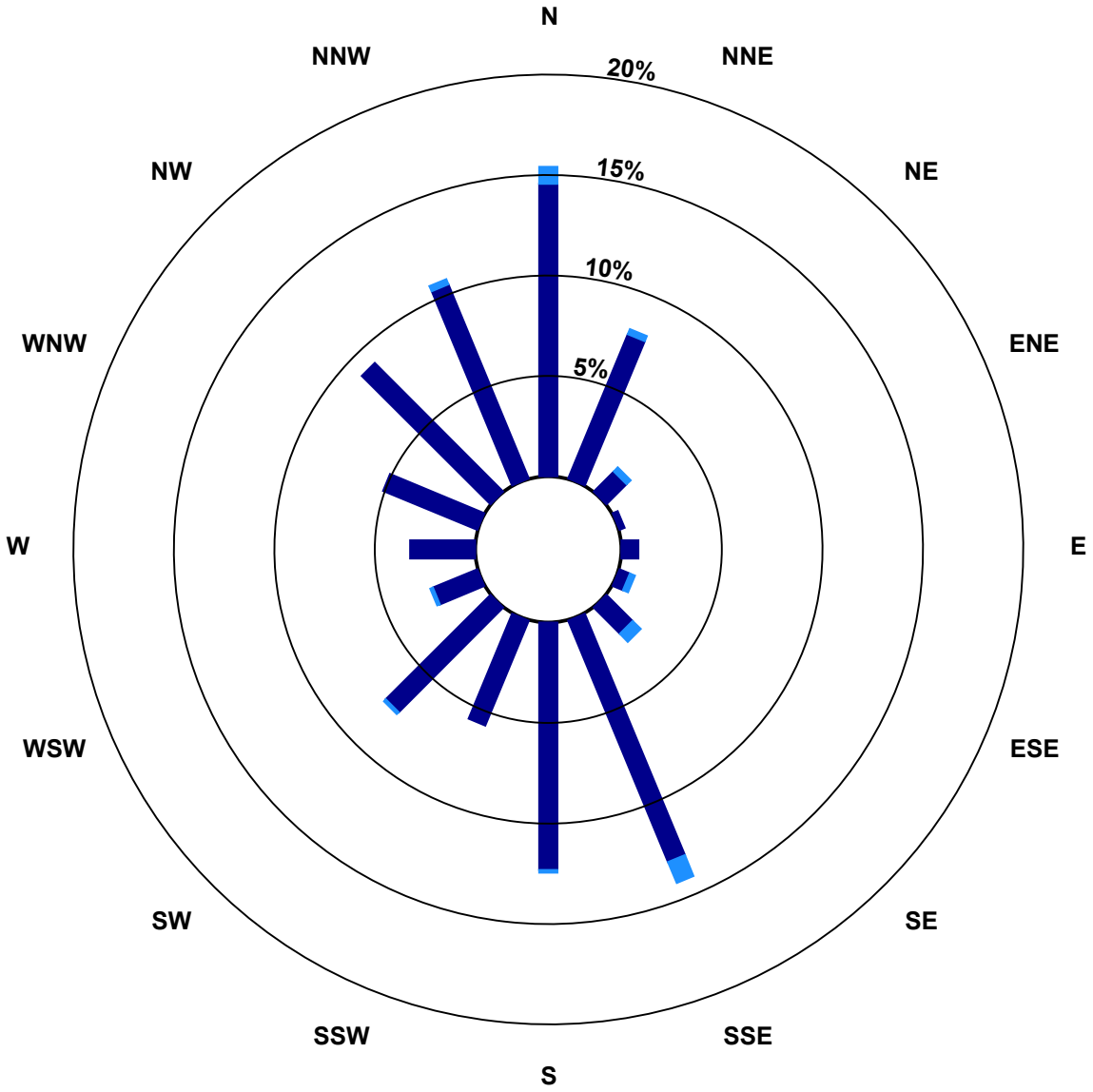
Total Number of Hours: 744

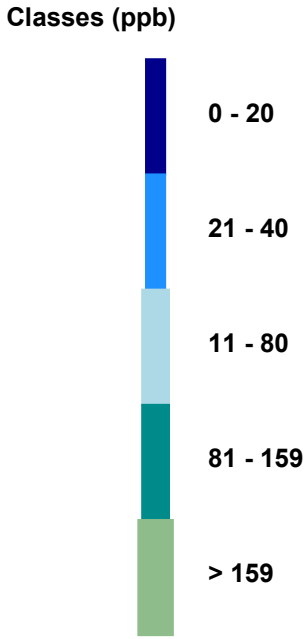
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Fort Hills



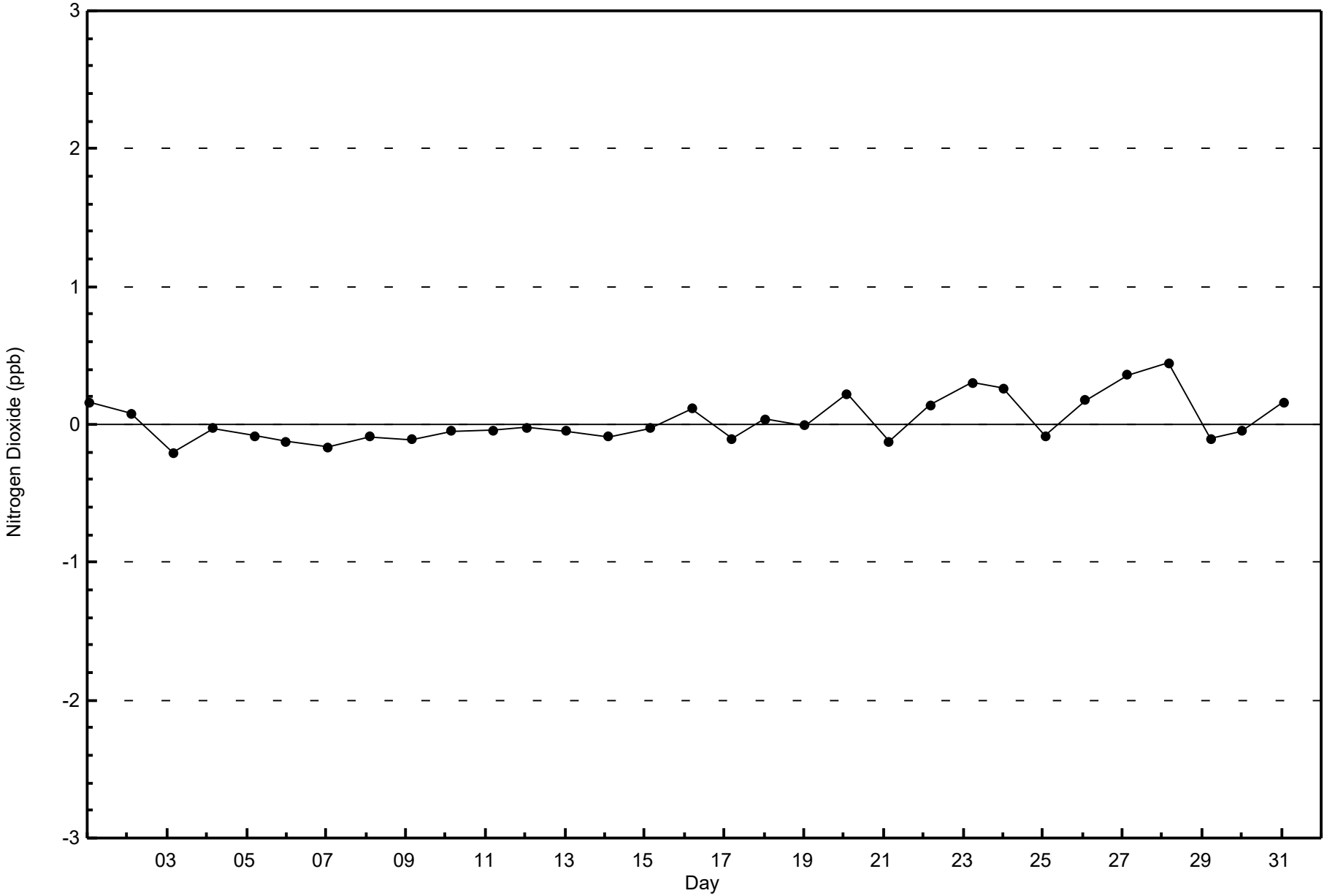

Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Hills - August 2026**

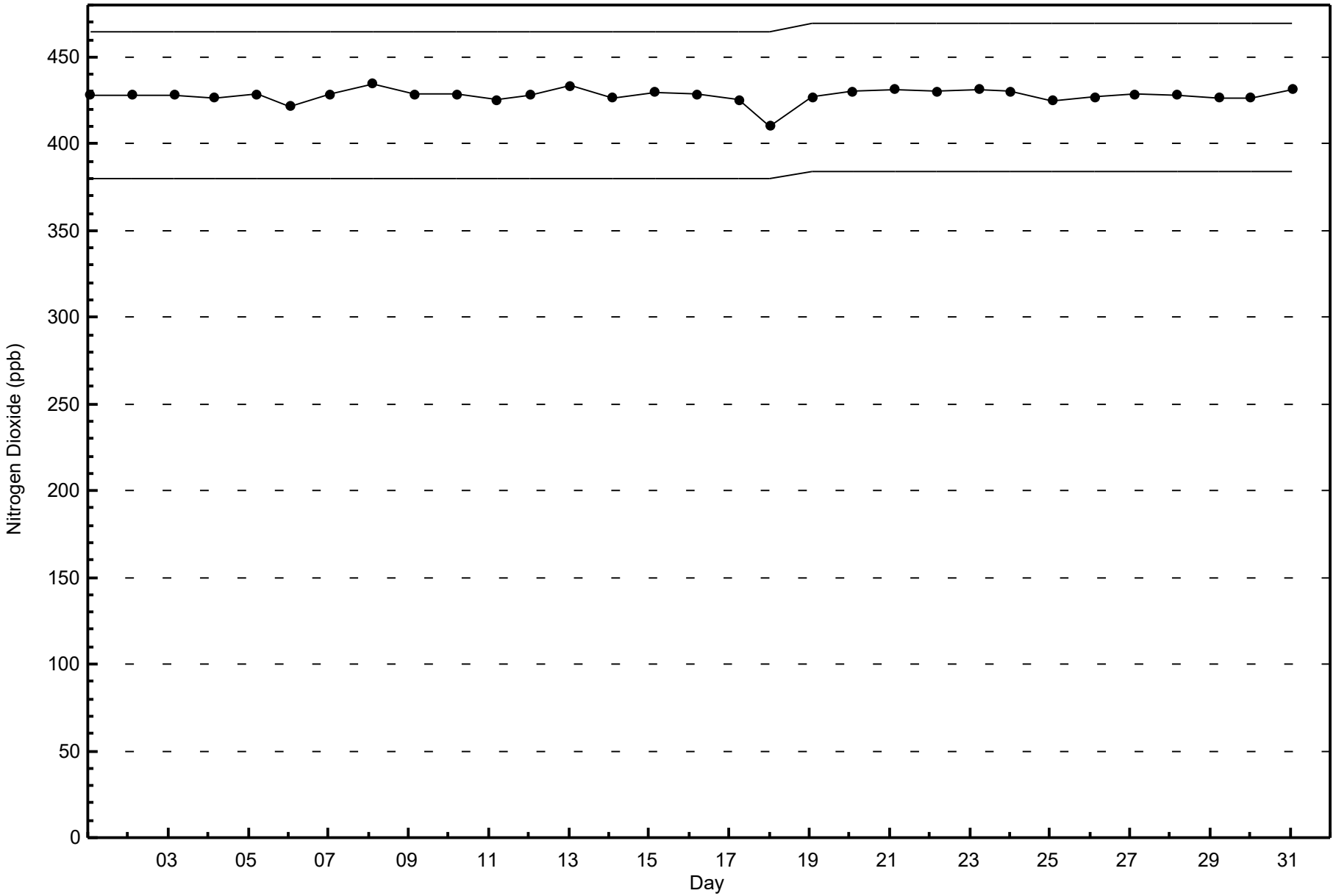


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 148.0 ppb on Aug 10 02:00

Maximum Daily Average: 33.6 ppb on Aug 10

Minimum Value: 0.1 ppb on Aug 7 00:00

Minimum Daily Average: 1.0 ppb on Aug 5

Maximum Diurnal Average: 20.8 ppb at hour 3

Minimum Diurnal Average: 3.8 ppb at hour 15

Monthly Average: 12.30 ppb

Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.7 $Q_1$ = 2.1 Median = 5.7 $Q_3$ = 14.6 $P_{90}$ = 34.5 $P_{99}$ = 86.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 31.4 | Z | 40.2 | 9.3 | 14.5 | 39.5 | 8.2 | 21.6 | 27.6 | 49.4 | 97.6 | 51.2 | 94.2 | 36.3 | 19.4 | 21.8 | 15.7 | 16.5 | 16.2 | 18.6 | 6.8 | 9.5 | 10.6 | 15.1 | 29.2 | 97.6 |
| 2-Aug | 11.2 | 1.3 | Z | 13.7 | 1.6 | 4.7 | 3.5 | 4.3 | 0.8 | 0.3 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 2.1 | 13.7 |
| 3-Aug | 0.3 | 0.4 | 0.3 | Z | 1.1 | 1.2 | 1.1 | 0.9 | 1.0 | 0.8 | 2.1 | 1.4 | 1.0 | 4.4 | 5.9 | 6.9 | 8.3 | 7.6 | 8.9 | 7.6 | 11.6 | 24.1 | 8.6 | 4.5 | 4.8 | 24.1 |
| 4-Aug | 7.4 | 13.5 | 11.9 | 20.8 | Z | 14.2 | 7.1 | 11.1 | 6.5 | 4.0 | 6.4 | 7.0 | 3.0 | 2.4 | 2.4 | 8.8 | 11.6 | 16.9 | 3.7 | 3.8 | 3.1 | 0.7 | 0.8 | 0.3 | 7.3 | 20.8 |
| 5-Aug | 0.5 | 3.7 | 6.5 | 0.7 | 0.6 | Z | 1.1 | 0.6 | 0.7 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 | 1.3 | 1.4 | 1.2 | 0.4 | 0.6 | 0.6 | 0.2 | 0.2 | 0.2 | 1.0 | 6.5 |
| 6-Aug | Z | 0.4 | 0.3 | 0.5 | 0.6 | 0.5 | 1.2 | 0.7 | 0.5 | 0.3 | 0.4 | 0.4 | 11.1 | 2.6 | 1.3 | 0.4 | 1.0 | 8.2 | 20.3 | 6.3 | 3.6 | 2.3 | 0.2 | 0.1 | 2.8 | 20.3 |
| 7-Aug | 0.2 | Z | 1.0 | 1.0 | 0.9 | 0.2 | 0.6 | 0.2 | 0.3 | 0.2 | 1.2 | 8.6 | 15.3 | 14.0 | 7.3 | 17.0 | 16.6 | 18.4 | 17.0 | 27.9 | 12.8 | 1.6 | 1.3 | 0.9 | 7.2 | 27.9 |
| 8-Aug | 0.8 | 1.3 | Z | 1.8 | 4.5 | 4.0 | 2.0 | 0.4 | 20.1 | 17.0 | 10.3 | 12.4 | 10.7 | 6.2 | 2.9 | 1.0 | 7.2 | 4.3 | 9.4 | 18.6 | 31.0 | 39.8 | 87.2 | 48.9 | 14.9 | 87.2 |
| 9-Aug | 5.7 | 17.3 | 10.1 | Z | 21.5 | 3.2 | 4.8 | 6.2 | 46.8 | 23.4 | 4.9 | 3.4 | 9.3 | 11.9 | 6.9 | 2.0 | 2.8 | 2.2 | 4.4 | 7.2 | 12.4 | 11.7 | 15.5 | 31.7 | 11.5 | 46.8 |
| 10-Aug | 47.7 | 148.0 | 102.6 | 45.4 | Z | 25.6 | 54.0 | 139.9 | 73.3 | 29.2 | 10.9 | 7.8 | M | 2.6 | 2.5 | 2.1 | 2.4 | 2.8 | 3.8 | 9.6 | 23.3 | 2.3 | 1.9 | 0.9 | 33.6 | 148.0 |
| 11-Aug | 0.4 | 0.4 | 8.5 | 20.1 | 23.2 | Z | 20.5 | 79.8 | 27.5 | 6.9 | 4.0 | 2.9 | 2.2 | 2.0 | 2.1 | 2.6 | 2.1 | 3.6 | 7.5 | 11.3 | 26.4 | 16.9 | 1.7 | 0.7 | 11.9 | 79.8 |
| 12-Aug | Z | 0.5 | 0.5 | 1.8 | 0.4 | 1.1 | 1.0 | 1.2 | 13.5 | 5.2 | 6.3 | 4.5 | 4.2 | 1.3 | 3.6 | 4.7 | 14.1 | 11.5 | 0.4 | 1.0 | 27.7 | 11.0 | 33.8 | 48.5 | 8.6 | 48.5 |
| 13-Aug | 39.5 | Z | 74.0 | 70.3 | 90.0 | 51.0 | 40.2 | 35.9 | 18.8 | 13.4 | 5.5 | 4.9 | 6.5 | 7.1 | 4.8 | 6.1 | 2.6 | 4.2 | 1.5 | 1.7 | 1.7 | 1.6 | 2.5 | 13.7 | 21.6 | 90.0 |
| 14-Aug | 52.0 | 24.6 | Z | 2.6 | 2.1 | 9.7 | 60.2 | 42.7 | 45.7 | 43.7 | 22.9 | 12.3 | 5.4 | 4.8 | 0.7 | 0.6 | 0.7 | 11.8 | 6.9 | 1.6 | 11.1 | 16.1 | 14.4 | 21.1 | 18.0 | 60.2 |
| 15-Aug | 26.4 | 2.8 | 1.7 | Z | 1.3 | 0.8 | 1.6 | 1.2 | 1.0 | 1.0 | 2.5 | 0.9 | 1.2 | 2.2 | 1.6 | 3.4 | 2.8 | 3.8 | 1.1 | 2.5 | 14.7 | 33.5 | 45.8 | 35.4 | 8.2 | 45.8 |
| 16-Aug | 33.8 | 37.1 | 37.3 | 34.4 | Z | 41.4 | 9.9 | 6.9 | 6.7 | 6.2 | 3.3 | 4.3 | 2.2 | 2.2 | 1.1 | 1.0 | 8.7 | 14.9 | 18.7 | 19.3 | 17.7 | 13.8 | 6.7 | 8.5 | 14.6 | 41.4 |
| 17-Aug | 9.6 | 1.7 | 8.2 | 12.9 | 6.9 | Z | 8.5 | 30.5 | 42.9 | 30.7 | 40.9 | C | C | C | C | C | 4.0 | 2.2 | 2.6 | 3.3 | 2.5 | 5.5 | 19.9 | 8.7 | 13.4 | 42.9 |
| 18-Aug | Z | 4.6 | 8.8 | 26.8 | 10.8 | 10.8 | 10.1 | 8.6 | 4.7 | 7.4 | 7.1 | 4.8 | 3.0 | 2.0 | 1.2 | 1.3 | 2.0 | 2.8 | 3.0 | 4.1 | 5.5 | 32.7 | 3.0 | 1.4 | 7.2 | 32.7 |
| 19-Aug | 4.3 | Z | 10.9 | 2.5 | 5.2 | 10.4 | 2.7 | 1.4 | 4.3 | 6.0 | 20.2 | 12.9 | 4.3 | 1.1 | 7.6 | 1.8 | 0.9 | 8.9 | 11.6 | 15.8 | 1.4 | 1.3 | 1.2 | 7.9 | 6.3 | 20.2 |
| 20-Aug | 13.6 | 10.5 | Z | 11.4 | 2.1 | 4.0 | 9.4 | 45.3 | 134.5 | 54.4 | 5.3 | 4.9 | 7.0 | 5.5 | 4.8 | 5.5 | 6.6 | 6.6 | 12.9 | 22.2 | 28.3 | 34.8 | 14.4 | 2.4 | 19.4 | 134.5 |
| 21-Aug | 1.8 | 10.6 | 28.9 | Z | 51.4 | 6.1 | 3.8 | 8.3 | 4.5 | 4.5 | 8.5 | 10.0 | 7.2 | 2.1 | 0.6 | 0.6 | 1.1 | 2.5 | 6.4 | 23.3 | 28.1 | 16.2 | 13.0 | 9.6 | 10.8 | 51.4 |
| 22-Aug | 8.3 | 10.0 | 7.8 | 9.1 | Z | 11.8 | 28.7 | 23.6 | 11.8 | 7.8 | 6.7 | 4.4 | 3.4 | 6.5 | 5.2 | 5.7 | 3.7 | 3.8 | 2.1 | 25.8 | 73.8 | 8.4 | 5.8 | 12.0 | 12.4 | 73.8 |
| 23-Aug | 5.5 | 6.5 | 8.9 | 4.3 | 4.4 | Z | 7.5 | 5.6 | 3.8 | 3.0 | 3.9 | 3.7 | 2.9 | 3.9 | 5.7 | 4.0 | 3.7 | 6.1 | 1.0 | 1.4 | 17.0 | 18.5 | 6.0 | 0.1 | 5.5 | 18.5 |
| 24-Aug | Z | 30.7 | 20.2 | 20.3 | 4.2 | 1.4 | 3.6 | 1.2 | 1.0 | 0.2 | 0.8 | 0.1 | 2.5 | 7.6 | 5.3 | 3.9 | 4.9 | 4.0 | 8.2 | 15.0 | 16.3 | 6.3 | 1.7 | 21.7 | 7.9 | 30.7 |
| 25-Aug | 40.1 | Z | 14.7 | 17.0 | 18.4 | 16.1 | 14.9 | 50.0 | 51.2 | 19.6 | 5.0 | 3.4 | 5.4 | 8.5 | 6.8 | 5.3 | 3.7 | 3.4 | 8.4 | 20.4 | 40.2 | 55.0 | 66.4 | 39.6 | 22.3 | 66.4 |
| 26-Aug | 14.1 | 16.4 | Z | 27.5 | 19.7 | 12.1 | 8.2 | 6.9 | 5.7 | 7.0 | 6.5 | 5.5 | 5.7 | 3.6 | 2.2 | 3.0 | 2.9 | 6.6 | 14.6 | 35.7 | 25.8 | 53.6 | 17.9 | 12.6 | 13.6 | 53.6 |
| 27-Aug | 10.6 | 14.4 | 32.0 | Z | 11.5 | 10.3 | 13.8 | 12.3 | 6.5 | 12.1 | 48.2 | 23.6 | 6.2 | 3.6 | 2.3 | 3.9 | 14.2 | 26.0 | 13.8 | 22.1 | 36.2 | 35.0 | 32.3 | 44.9 | 19.0 | 48.2 |
| 28-Aug | 43.1 | 44.5 | 33.2 | 20.3 | Z | 5.2 | 13.7 | 4.0 | 3.0 | 2.6 | 1.2 | 1.6 | 2.0 | 1.5 | 3.4 | 3.1 | 2.8 | 1.7 | 3.0 | 5.0 | 7.0 | 6.0 | 4.8 | 4.7 | 9.5 | 44.5 |
| 29-Aug | 4.2 | 5.1 | 6.6 | 5.0 | 3.1 | Z | 0.9 | 0.9 | 0.5 | 2.6 | 5.2 | 3.0 | 1.9 | 1.9 | 1.4 | 1.9 | 3.2 | 1.7 | 0.6 | 0.2 | 0.3 | 4.8 | 8.3 | 6.3 | 3.0 | 8.3 |
| 30-Aug | Z | 22.4 | 17.3 | 5.0 | 55.9 | 10.2 | 3.9 | 5.6 | 9.3 | 2.3 | 8.5 | 13.0 | 6.0 | 1.5 | 2.4 | 2.6 | 2.6 | 2.7 | 1.9 | 5.3 | 32.2 | 37.9 | 43.4 | 27.3 | 13.9 | 55.9 |
| 31-Aug | 36.6 | Z | 48.3 | 5.8 | 4.4 | 38.6 | 37.5 | 17.8 | 49.0 | 24.6 | 25.7 | 17.5 | 15.1 | 4.1 | 2.4 | 2.0 | 2.3 | 7.5 | 0.4 | 8.3 | 36.9 | 55.7 | 41.8 | 4.2 | 21.2 | 55.7 |
| | 17.3 | 17.1 | 20.8 | 15.0 | 13.9 | 12.9 | 12.4 | 18.6 | 20.1 | 12.5 | 12.0 | 7.7 | 8.3 | 5.1 | 3.8 | 4.2 | 5.1 | 6.9 | 6.8 | 11.2 | 17.9 | 18.0 | 16.5 | 14.0 | Diurnal Average | |
| | 52.0 | 148.0 | 102.6 | 70.3 | 90.0 | 51.0 | 60.2 | 139.9 | 134.5 | 54.4 | 97.6 | 51.2 | 94.2 | 36.3 | 19.4 | 21.8 | 16.6 | 26.0 | 20.3 | 35.7 | 73.8 | 55.7 | 87.2 | 48.9 | Diurnal Maximum | |

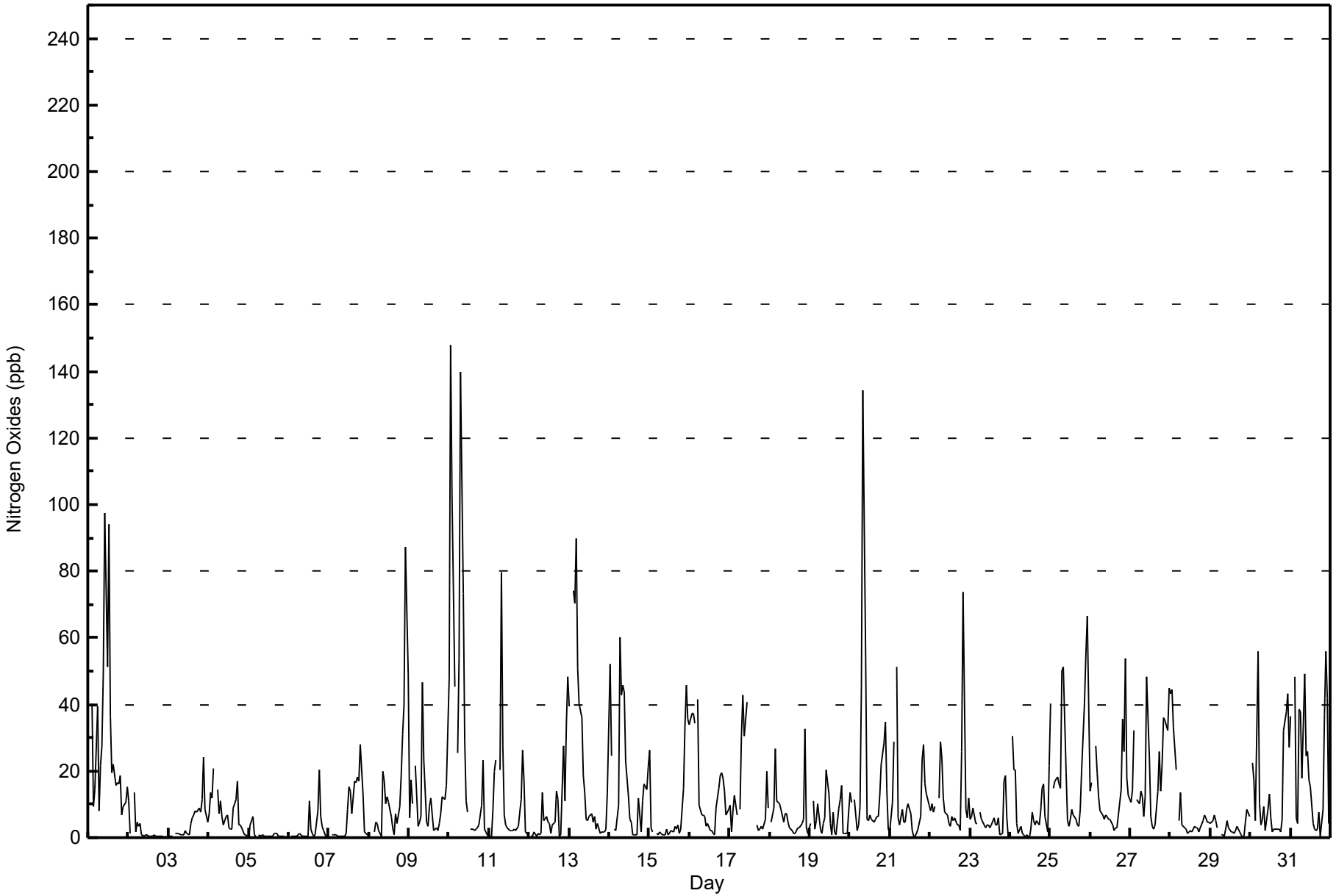
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort Hills - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Fort Hills - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 582 | 82.32 | 82.32 |
| 21 - 40 | 76 | 10.75 | 93.07 |
| 11 - 80 | 41 | 5.80 | 98.87 |
| 81 - 159 | 8 | 1.13 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 77 | 46 | 10 | 2 | 6 | 2 | 9 | 75 | 81 | 34 | 46 | 16 | 23 | 34 | 57 | 64 | 582 |
| 21 - 40 | 19 | 6 | 1 | 0 | 0 | 4 | 5 | 16 | 7 | 4 | 4 | 2 | 0 | 1 | 3 | 4 | 76 |
| 11 - 80 | 10 | 5 | 1 | 0 | 0 | 0 | 2 | 9 | 0 | 2 | 3 | 0 | 0 | 1 | 3 | 5 | 41 |
| 81 - 159 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 8 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 109 | 57 | 12 | 2 | 6 | 6 | 17 | 100 | 88 | 40 | 53 | 18 | 23 | 36 | 64 | 76 | 707 |

Total Number of Valid Hours: 707

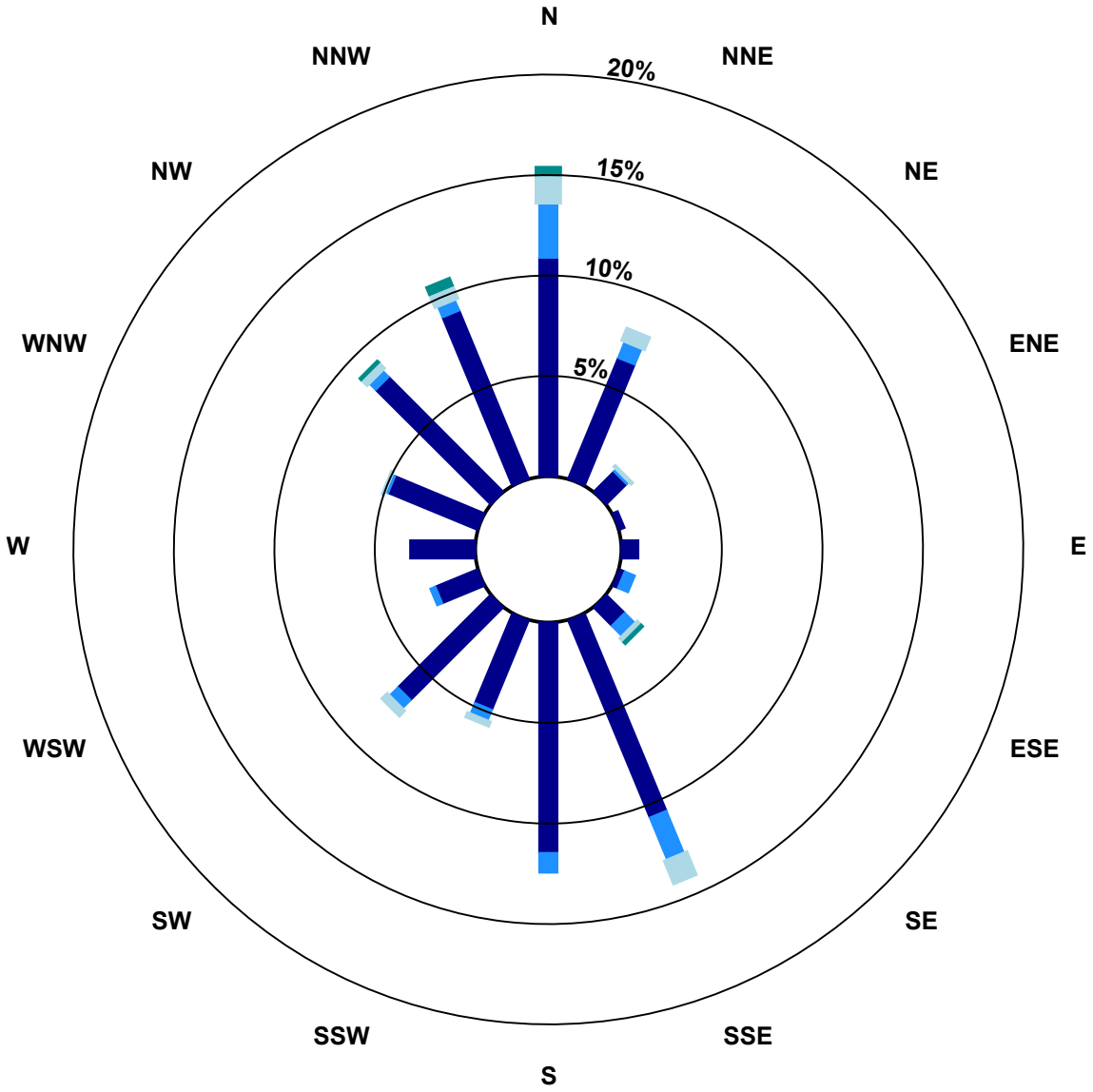
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Fort Hills




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

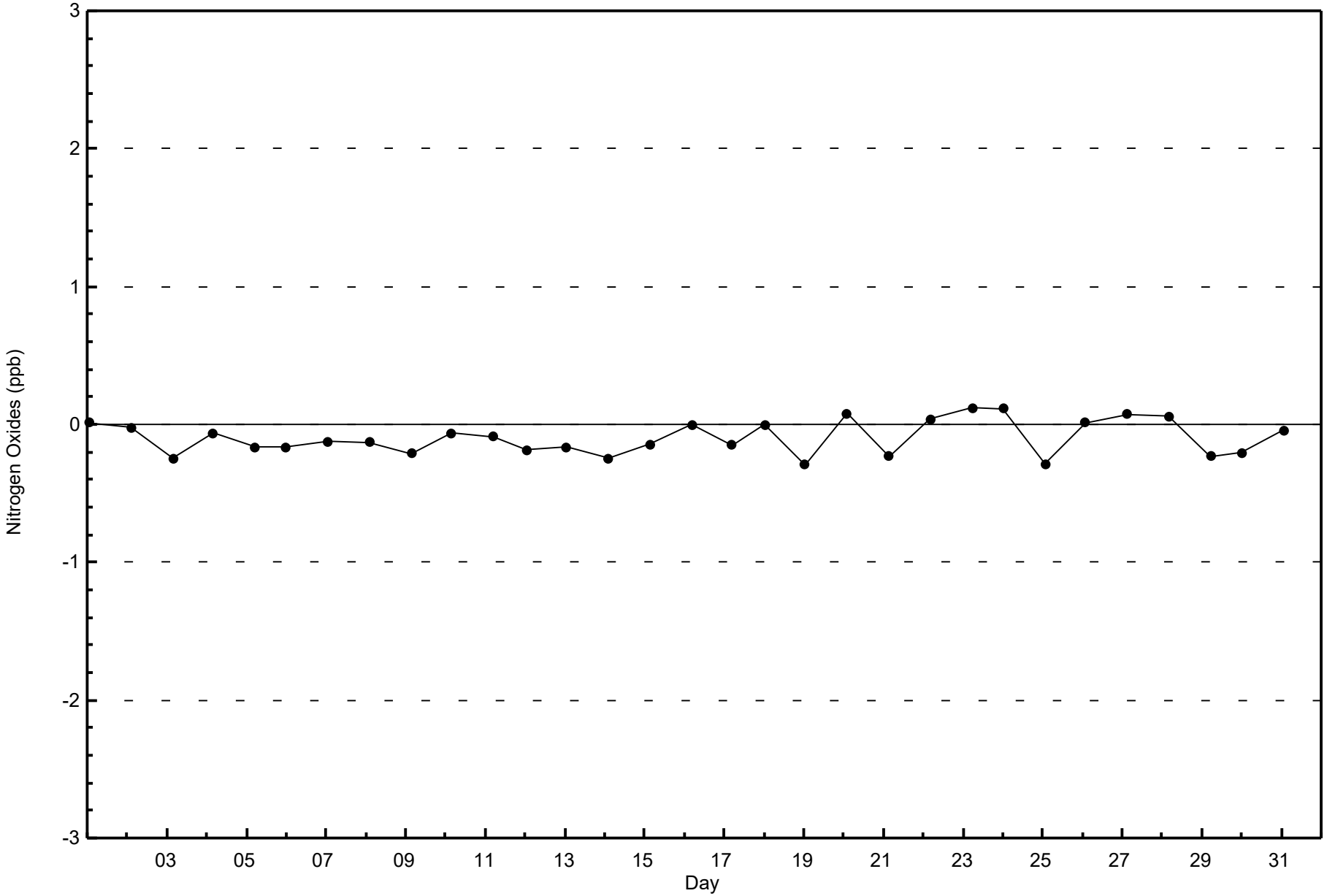
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort Hills - August 2026**

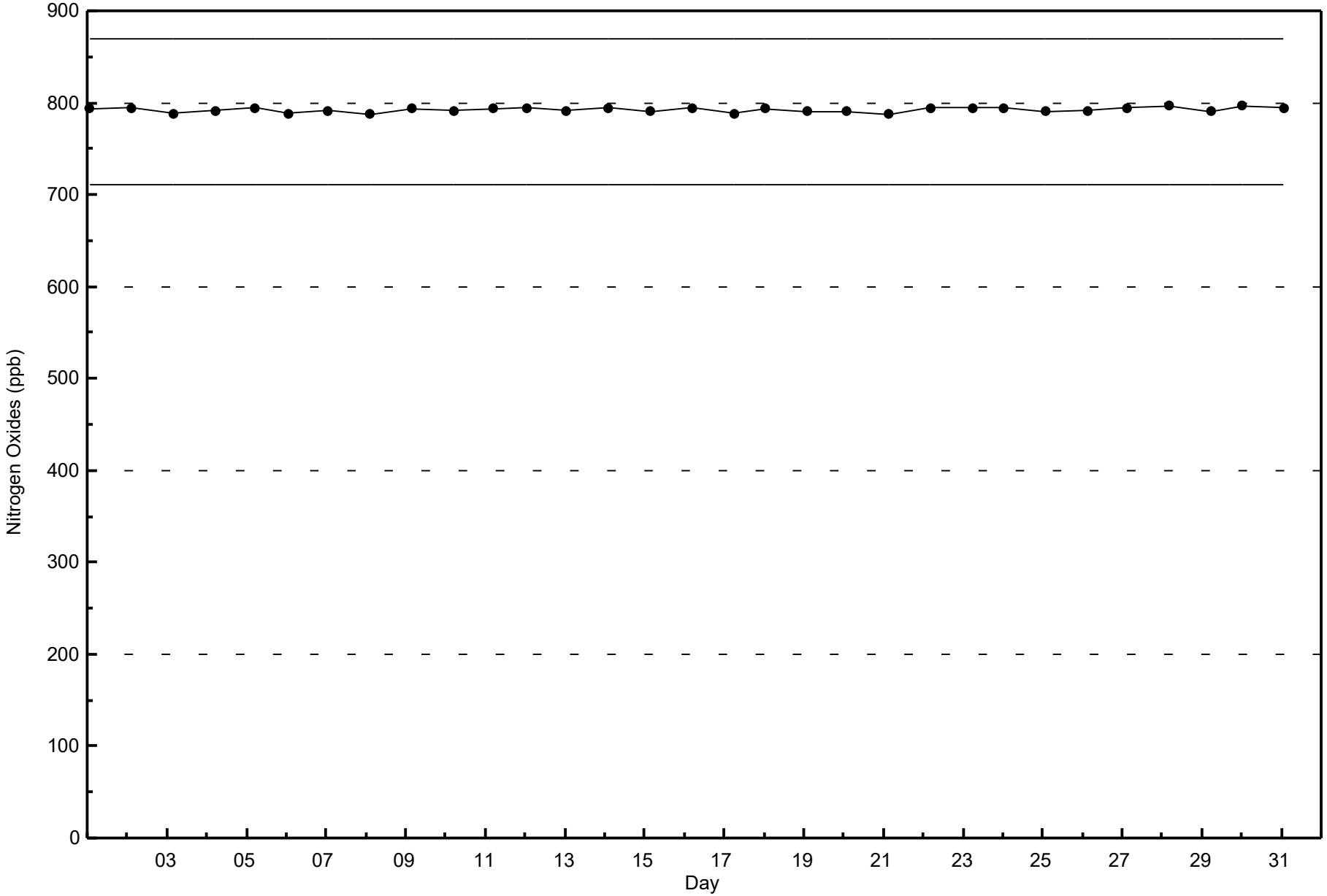


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Fort Hills - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 4 24-hr: 3

Maximum Value: 100.8 $\mu g/m^3$ on Aug 24 21:00

Maximum Daily Average: 39.6 $\mu g/m^3$ on Aug 25

Minimum Value: 0.4 $\mu g/m^3$ on Aug 6 10:00

Minimum Daily Average: 4.5 $\mu g/m^3$ on Aug 12

Maximum Diurnal Average: 22.5 $\mu g/m^3$ at hour 21

Minimum Diurnal Average: 11.7 $\mu g/m^3$ at hour 13

Monthly Average: 15.20 $\mu g/m^3$

Percentiles: $P_1$ = 0.6 $P_{10}$ = 3.4 $Q_1$ = 6.1 Median = 11.3 $Q_3$ = 20.3 $P_{90}$ = 31.8 $P_{99}$ = 56.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 723 |
| Hours of Missing Data: | 21 |
| Hours of Calibration: | 2 |
| Percent Operational Time: | 97.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 13.0 | 12.1 | 10.0 | 6.9 | 8.2 | 8.4 | 7.3 | 7.5 | 9.5 | 11.7 | 18.8 | 22.6 | 17.3 | 20.8 | 22.0 | 25.8 | 26.9 | 27.3 | 26.1 | 24.4 | 20.6 | 19.7 | 13.1 | 12.0 | 16.3 | 27.3 |
| 2-Aug | 14.9 | 16.7 | 17.2 | 15.5 | 11.2 | 10.3 | 10.2 | 8.0 | 6.5 | 7.3 | 5.6 | 4.0 | 3.9 | 4.0 | 3.9 | 4.9 | 5.8 | 5.0 | 4.1 | 3.1 | 2.1 | 2.2 | 2.5 | 2.5 | 7.1 | 17.2 |
| 3-Aug | 2.7 | 2.8 | 2.9 | 3.0 | 4.1 | 3.1 | 3.2 | 2.8 | 3.0 | 4.5 | 6.4 | 8.8 | 5.8 | 6.1 | 10.0 | 10.5 | 17.4 | 19.8 | 12.7 | 12.4 | 28.9 | 34.5 | 15.2 | 11.1 | 9.7 | 34.5 |
| 4-Aug | 8.3 | 11.4 | 10.4 | 10.9 | 9.8 | 8.6 | 6.7 | 7.3 | 9.1 | 13.3 | 15.7 | 14.3 | 9.9 | 9.1 | 8.0 | 11.5 | 10.5 | 10.6 | 8.1 | 7.3 | 7.8 | 9.2 | 14.7 | 15.1 | 10.3 | 15.7 |
| 5-Aug | 18.5 | 18.9 | 18.1 | 12.6 | 11.1 | 7.6 | 5.4 | 4.1 | 3.7 | 4.4 | 5.3 | 5.2 | 4.4 | 4.6 | 4.6 | 5.7 | 4.8 | 2.8 | 2.4 | 2.2 | 2.4 | 2.0 | 1.4 | 1.2 | 6.4 | 18.9 |
| 6-Aug | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 1.1 | 2.4 | 2.1 | 1.7 | 2.1 | UO | UO | UO | UO | UO | UO | UO | UO | -- | 2.4 |
| 7-Aug | 2.9 | 2.9 | 3.0 | 3.0 | 3.1 | 3.2 | 3.5 | 3.7 | 4.2 | 4.8 | 6.0 | 7.2 | 7.8 | 8.4 | 8.0 | 9.8 | 11.1 | 8.3 | 4.9 | 3.5 | 3.5 | 3.5 | 3.8 | 3.7 | 5.2 | 11.1 |
| 8-Aug | 3.6 | 3.5 | 3.5 | 3.7 | 3.8 | 3.4 | 2.5 | 2.0 | 3.0 | 3.3 | 3.6 | 4.0 | 4.8 | 4.7 | 1.7 | 3.6 | 10.7 | 24.7 | 20.4 | 17.0 | 17.4 | 21.0 | 24.6 | 16.3 | 8.6 | 24.7 |
| 9-Aug | 5.5 | 7.2 | 6.4 | 5.7 | 11.4 | 6.6 | 7.9 | 4.9 | 8.6 | 5.7 | 3.4 | 3.8 | 6.5 | 9.9 | 7.8 | 12.9 | 23.5 | 29.4 | 9.6 | 17.2 | 16.0 | 16.0 | 14.2 | 8.5 | 10.4 | 29.4 |
| 10-Aug | 9.2 | 9.2 | 16.2 | 10.3 | 9.2 | 7.3 | 13.9 | 20.0 | 11.4 | 9.5 | 7.7 | 8.0 | 8.0 | 7.9 | 9.8 | 17.0 | 20.2 | 26.0 | 22.4 | 21.5 | 21.3 | 19.1 | 18.4 | 19.2 | 14.3 | 26.0 |
| 11-Aug | 8.3 | 5.5 | 6.7 | 7.6 | 7.2 | 6.0 | 6.9 | 11.5 | 13.2 | 15.2 | 16.4 | 18.5 | 16.0 | 15.8 | 18.8 | 24.2 | 32.9 | 35.9 | 26.2 | 15.5 | 13.7 | 34.9 | 10.6 | 25.1 | 16.4 | 35.9 |
| 12-Aug | 9.7 | 17.3 | 15.2 | 7.8 | 4.8 | 6.8 | 3.2 | 2.4 | 2.1 | 2.3 | 1.5 | 1.6 | 2.2 | 1.5 | 2.2 | 3.0 | 3.0 | 3.0 | 2.7 | 2.8 | 3.2 | 3.1 | 3.6 | 3.6 | 4.5 | 17.3 |
| 13-Aug | 3.5 | 4.0 | 4.1 | 3.9 | 4.3 | 4.2 | 4.0 | 4.1 | 3.8 | 4.5 | 4.2 | 5.6 | 7.0 | 9.4 | 8.2 | 15.0 | 14.6 | 26.0 | 30.4 | 9.1 | 29.5 | 20.6 | 27.7 | 13.1 | 10.9 | 30.4 |
| 14-Aug | 12.2 | 23.7 | 5.5 | 5.3 | 20.2 | 29.7 | 18.2 | 15.0 | 11.4 | 15.7 | 14.5 | 16.2 | 16.3 | 13.2 | 11.1 | 14.1 | 5.0 | 7.4 | 7.0 | 5.0 | 9.8 | 13.1 | 33.2 | 29.1 | 14.7 | 33.2 |
| 15-Aug | 10.6 | 8.7 | 9.3 | 9.1 | 6.5 | 6.3 | 8.2 | 6.1 | 6.2 | 6.5 | 7.8 | 5.7 | 5.2 | 5.9 | 7.0 | 6.1 | 5.6 | 6.3 | 4.6 | 5.5 | 8.2 | 11.2 | 13.6 | 9.2 | 7.5 | 13.6 |
| 16-Aug | 8.5 | 7.6 | 8.1 | 9.0 | 10.4 | 8.3 | 8.6 | 20.1 | 23.7 | 24.8 | 26.2 | 20.3 | 20.3 | 33.6 | 46.3 | 61.6 | 47.0 | 39.3 | 39.3 | 30.9 | 34.5 | 49.7 | 34.3 | 35.0 | 27.0 | 61.6 |
| 17-Aug | 40.2 | 31.1 | 35.4 | 36.6 | 31.9 | 32.5 | 30.1 | 31.5 | 30.8 | 32.6 | 29.7 | 25.7 | 25.3 | 29.2 | C | C | 30.6 | 28.0 | 28.4 | 27.8 | 21.1 | UO | UO | UO | 30.4 | 40.2 |
| 18-Aug | UO | UO | UO | UO | UO | UO | UO | UO | 13.3 | 12.3 | 13.2 | 13.4 | 8.3 | 7.3 | 6.6 | 4.7 | 4.6 | 5.4 | 5.3 | 6.3 | 6.2 | 12.1 | 9.1 | 5.7 | -- | 13.4 |
| 19-Aug | 6.5 | 15.3 | 8.4 | 5.8 | 6.2 | 7.1 | 7.7 | 6.5 | 7.6 | 7.2 | 8.5 | 8.3 | 5.5 | 5.5 | 8.1 | 10.3 | 27.4 | 33.6 | 56.8 | 97.5 | 50.2 | 60.5 | 51.9 | 22.6 | 21.9 | 97.5 |
| 20-Aug | 19.7 | 19.4 | 19.8 | 17.7 | 17.3 | 20.8 | 15.9 | 18.7 | 23.7 | 21.3 | 15.8 | 14.1 | 16.7 | 17.3 | 14.6 | 12.5 | 12.1 | 10.2 | 11.3 | 18.7 | 42.0 | 47.6 | 24.3 | 17.9 | 19.6 | 47.6 |
| 21-Aug | 17.3 | 19.2 | 18.4 | 16.6 | 23.3 | 15.9 | 14.7 | 13.2 | 15.9 | 15.0 | 15.8 | 14.4 | 9.8 | 10.9 | 8.9 | 10.4 | 12.7 | 14.5 | 24.1 | 28.8 | 22.9 | 19.3 | 21.5 | 18.4 | 16.7 | 28.8 |
| 22-Aug | 18.4 | 20.8 | 16.4 | 18.8 | 25.0 | 34.0 | 27.9 | 19.3 | 13.8 | 15.0 | 17.7 | 18.1 | 19.0 | 22.4 | 21.4 | 20.7 | 17.7 | 17.8 | 16.1 | 39.5 | 56.6 | 22.7 | 22.7 | 28.9 | 23.0 | 56.6 |
| 23-Aug | 25.4 | 17.4 | 17.0 | 16.7 | 16.8 | 17.6 | 21.1 | 17.9 | 19.3 | 21.9 | 24.8 | 25.8 | 23.6 | 24.2 | 25.6 | 29.0 | 31.4 | 27.5 | 17.6 | 15.4 | 11.4 | 11.7 | 9.0 | 6.4 | 19.8 | 31.4 |
| 24-Aug | 3.5 | 3.5 | 3.5 | 3.8 | 3.4 | 4.3 | 3.9 | 3.1 | 3.4 | 2.7 | 3.7 | 2.8 | 3.7 | 5.0 | 5.8 | 7.9 | 9.7 | 10.6 | 12.6 | 22.7 | 100.8 | 28.4 | 13.4 | 20.2 | 11.8 | 100.8 |
| 25-Aug | 20.7 | 20.6 | 26.3 | 35.4 | 31.6 | 53.9 | 40.7 | 52.3 | 44.7 | 29.2 | 26.9 | 34.8 | 41.9 | 47.4 | 54.0 | 53.1 | 46.4 | 36.9 | 33.1 | 39.6 | 49.7 | 46.7 | 43.4 | 42.4 | 39.6 | 54.0 |
| 26-Aug | 39.7 | 53.0 | 45.3 | 89.7 | 84.4 | 36.9 | 31.8 | 30.7 | 29.2 | 25.6 | 23.7 | 19.2 | 14.7 | 11.8 | 10.0 | 10.3 | 10.4 | 12.2 | 21.7 | 32.5 | 22.3 | 32.7 | 18.6 | 14.3 | 30.0 | 89.7 |
| 27-Aug | 13.8 | 16.6 | 20.3 | 18.9 | 17.1 | 16.8 | 20.6 | 18.0 | 16.2 | 20.1 | 31.9 | 29.7 | 21.7 | 26.6 | 23.6 | 24.2 | 36.7 | 39.9 | 38.6 | 28.9 | 38.7 | 38.0 | 33.9 | 42.5 | 26.4 | 42.5 |
| 28-Aug | 37.0 | 32.0 | 46.0 | 26.3 | 24.0 | 19.6 | 19.6 | 16.6 | 16.2 | 15.9 | 15.8 | 10.8 | 6.9 | 6.1 | 9.1 | 6.7 | 10.4 | 20.6 | 23.2 | 10.6 | 5.6 | 4.5 | 3.4 | 2.9 | 16.2 | 46.0 |
| 29-Aug | 2.7 | 2.5 | 2.7 | 2.9 | 3.1 | 3.4 | 3.9 | 5.0 | 6.6 | 7.1 | 8.2 | 7.6 | 6.8 | 6.7 | 6.1 | 5.4 | 6.6 | 6.6 | 6.9 | 6.3 | 6.9 | 14.6 | 29.0 | 19.9 | 7.4 | 29.0 |
| 30-Aug | 17.9 | 21.5 | 14.9 | 9.6 | 18.4 | 11.7 | 10.8 | 12.1 | 13.4 | 11.5 | 13.9 | 15.1 | 11.0 | 11.5 | 13.4 | 11.2 | 11.5 | 12.8 | 12.8 | 56.3 | 11.8 | 7.6 | 6.5 | 7.9 | 14.4 | 56.3 |
| 31-Aug | 10.6 | 8.1 | 7.5 | 6.0 | 19.3 | 9.3 | 54.1 | 6.9 | 13.8 | 9.9 | 11.2 | 11.0 | 11.4 | 7.7 | 6.5 | 6.0 | 5.0 | 19.2 | 9.3 | 8.5 | 11.0 | 9.8 | 11.0 | 7.2 | 11.7 | 54.1 |
| | 13.5 | 14.4 | 14.0 | 14.0 | 14.9 | 13.5 | 13.8 | 12.4 | 12.5 | 12.3 | 13.1 | 12.8 | 11.7 | 12.8 | 12.8 | 14.7 | 17.1 | 18.9 | 18.0 | 20.6 | 22.5 | 21.2 | 18.2 | 15.9 | Diurnal Average | |
| | 40.2 | 53.0 | 46.0 | 89.7 | 84.4 | 53.9 | 54.1 | 52.3 | 44.7 | 32.6 | 31.9 | 34.8 | 41.9 | 47.4 | 54.0 | 61.6 | 47.0 | 39.9 | 56.8 | 97.5 | 100.8 | 60.5 | 51.9 | 42.5 | Diurnal Maximum | |

C - Calibration UO - Unstable Operation

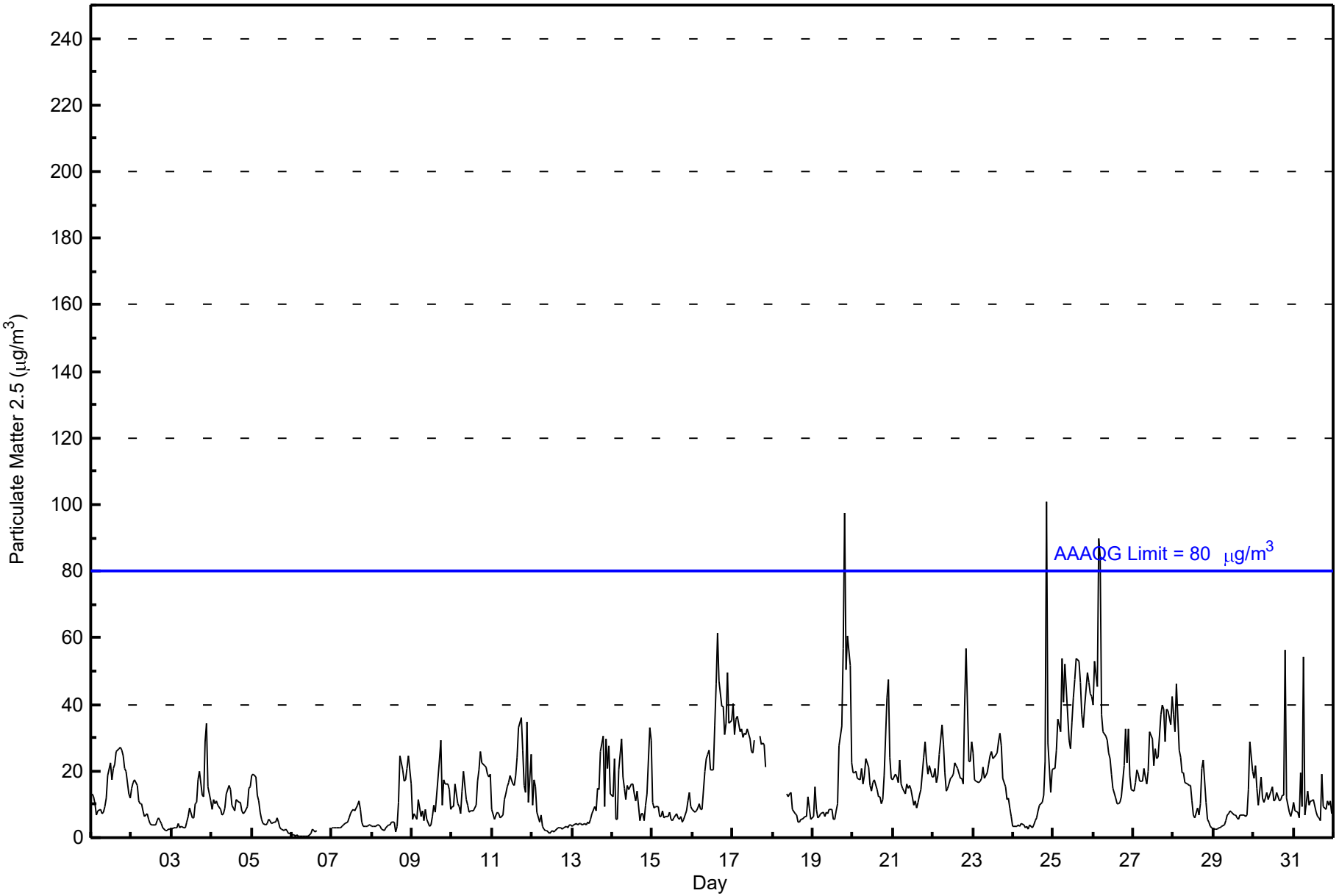
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort Hills - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort Hills - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 160 | 22.13 | 22.13 |
| 6 - 15 | 284 | 39.28 | 61.41 |
| 16 - 25 | 157 | 21.72 | 83.13 |
| 26 - 80 | 118 | 16.32 | 99.45 |
| > 81.0 | 4 | 0.55 | 100.00 |

Total Number of Valid Hours: 723

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Fort Hills - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 29 | 8 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 6 | 13 | 6 | 10 | 19 | 31 | 34 | 160 |
| 6 - 15 | 33 | 28 | 4 | 1 | 2 | 2 | 7 | 46 | 41 | 21 | 32 | 7 | 7 | 11 | 21 | 21 | 284 |
| 16 - 25 | 30 | 13 | 2 | 0 | 1 | 0 | 2 | 34 | 32 | 9 | 7 | 1 | 3 | 5 | 9 | 8 | 156 |
| 26 - 80 | 19 | 7 | 5 | 0 | 3 | 5 | 8 | 21 | 14 | 6 | 2 | 5 | 1 | 3 | 6 | 12 | 117 |
| > 81.0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| **Totals** | 113 | 56 | 12 | 2 | 6 | 7 | 17 | 103 | 88 | 42 | 54 | 19 | 21 | 38 | 67 | 76 | 721 |

Total Number of Valid Hours: 721

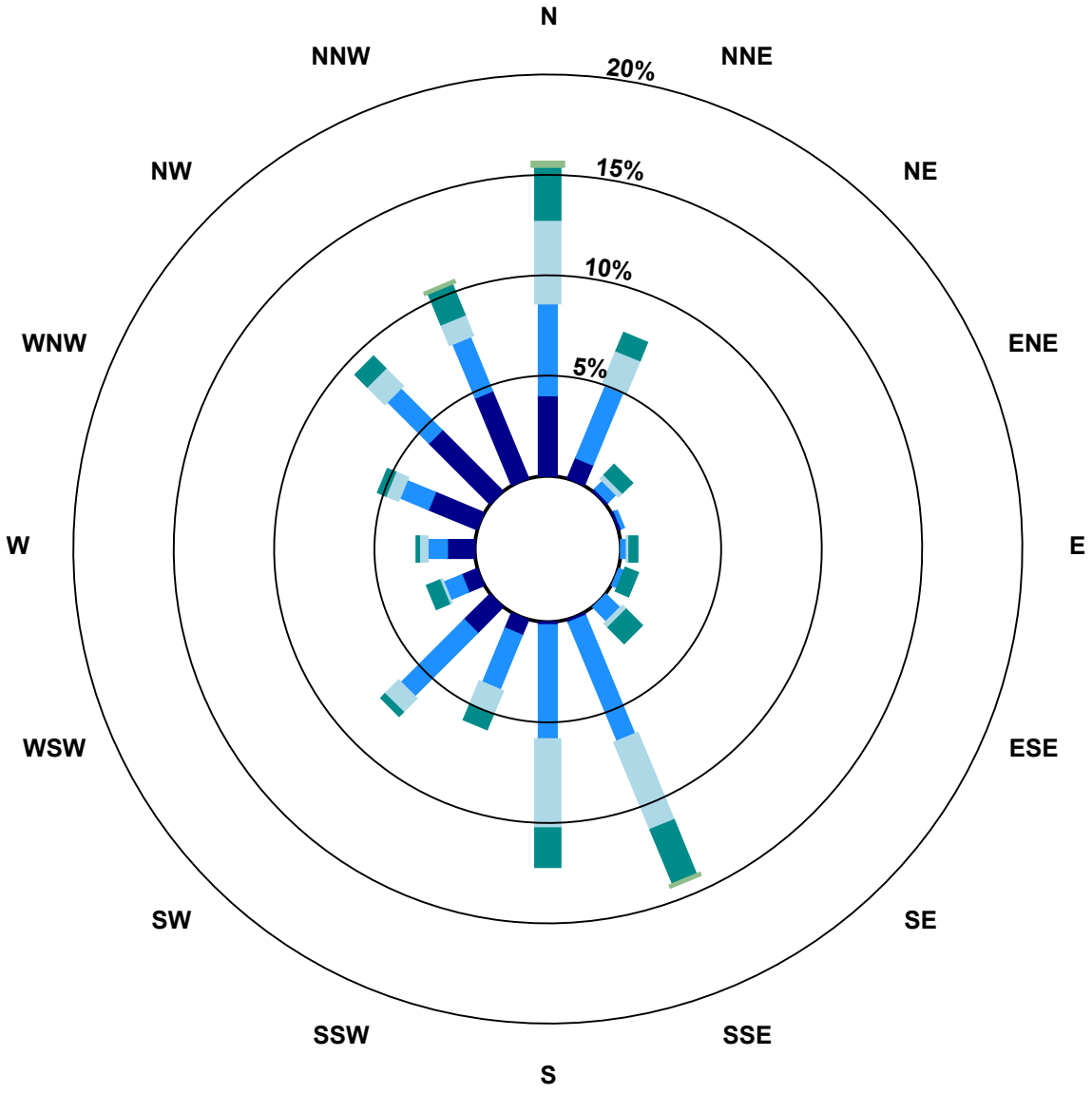
Total Number of Hours: 744

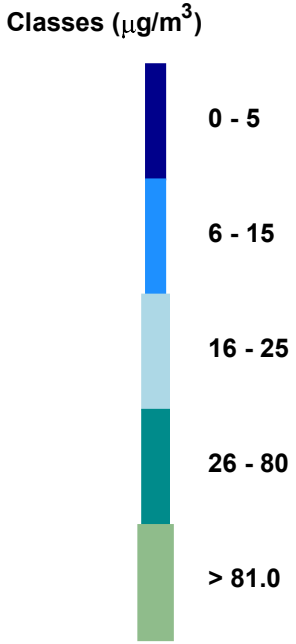
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Fort Hills




Total Number of Valid Hours: 721

Maximum Value: 28.8 C on Aug 26 17:00

Maximum Daily Average: 22.0 C on Aug 27

Minimum Value: 7.3 C on Aug 17 06:00

Minimum Daily Average: 13.8 C on Aug 12

Maximum Diurnal Average: 21.9 C at hour 16

Minimum Diurnal Average: 13.0 C at hour 6

Monthly Average: 17.35 C

Percentiles: $P_1$ = 10.0 $P_{10}$ = 11.9 $Q_1$ = 14.1 Median = 16.9 $Q_3$ = 20.5 $P_{90}$ = 23.3 $P_{99}$ = 27.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

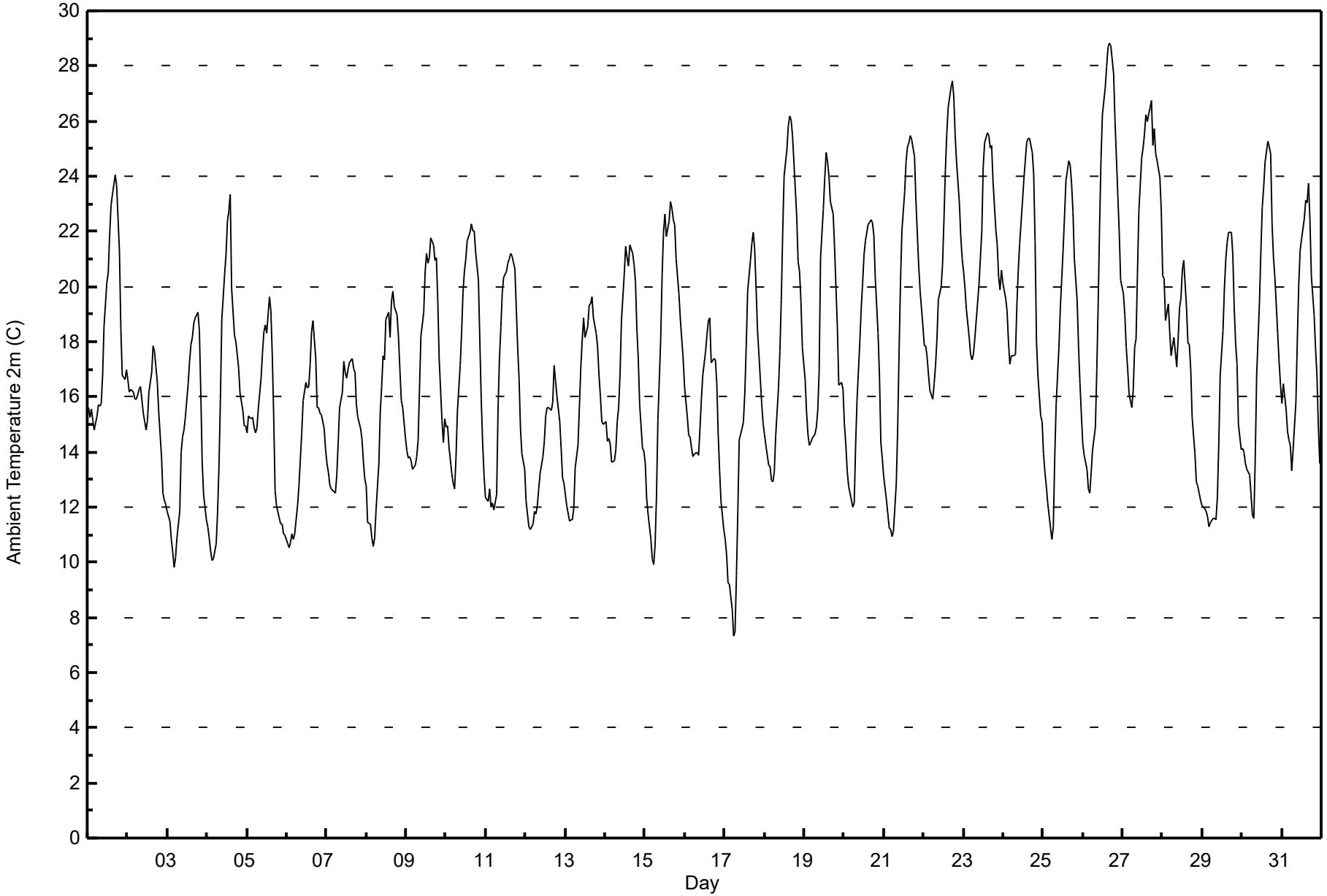
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.6 | 15.2 | 15.5 | 15.2 | 14.8 | 15.3 | 15.7 | 15.6 | 15.8 | 16.8 | 18.6 | 20.1 | 20.5 | 21.8 | 22.9 | 23.4 | 24.1 | 23.6 | 22.5 | 21.3 | 18.4 | 16.8 | 16.6 | 17.0 | 18.5 | 24.1 |
| 2-Aug | 16.6 | 16.2 | 16.3 | 16.2 | 15.9 | 15.9 | 16.1 | 16.3 | 16.4 | 15.4 | 15.1 | 14.8 | 15.2 | 16.2 | 16.9 | 17.9 | 17.7 | 17.1 | 16.5 | 15.4 | 13.8 | 12.5 | 12.3 | 12.1 | 15.6 | 17.9 |
| 3-Aug | 11.8 | 11.5 | 10.8 | 10.3 | 9.8 | 10.2 | 10.9 | 11.8 | 14.0 | 14.5 | 14.8 | 15.2 | 16.5 | 17.3 | 17.9 | 18.2 | 18.7 | 18.9 | 19.1 | 18.4 | 16.2 | 13.6 | 12.4 | 11.6 | 14.3 | 19.1 |
| 4-Aug | 11.3 | 10.9 | 10.4 | 10.1 | 10.1 | 10.7 | 11.9 | 13.5 | 15.9 | 18.8 | 20.5 | 21.1 | 22.4 | 22.7 | 23.3 | 19.9 | 18.3 | 18.0 | 17.5 | 17.0 | 16.1 | 15.5 | 14.9 | 14.9 | 16.1 | 23.3 |
| 5-Aug | 14.7 | 15.3 | 15.2 | 15.2 | 14.9 | 14.7 | 14.9 | 15.6 | 16.7 | 17.6 | 18.4 | 18.6 | 18.3 | 19.6 | 19.1 | 17.5 | 15.3 | 12.6 | 12.1 | 11.6 | 11.4 | 11.4 | 11.1 | 11.0 | 15.1 | 19.6 |
| 6-Aug | 10.7 | 10.5 | 10.8 | 11.0 | 10.8 | 11.0 | 12.0 | 12.8 | 13.7 | 14.7 | 15.9 | 16.5 | 16.3 | 16.4 | 17.2 | 18.3 | 18.8 | 17.4 | 15.6 | 15.6 | 15.4 | 15.4 | 14.8 | 14.1 | 14.4 | 18.8 |
| 7-Aug | 13.6 | 13.3 | 12.8 | 12.7 | 12.5 | 12.5 | 13.2 | 14.3 | 15.6 | 16.2 | 17.3 | 16.9 | 16.7 | 17.0 | 17.3 | 17.4 | 17.0 | 16.9 | 15.7 | 15.3 | 14.8 | 14.5 | 13.6 | 13.0 | 15.0 | 17.4 |
| 8-Aug | 12.8 | 11.5 | 11.4 | 10.9 | 10.6 | 10.9 | 11.9 | 13.6 | 15.5 | 16.4 | 17.5 | 17.4 | 18.8 | 19.1 | 18.2 | 19.5 | 19.8 | 19.3 | 19.0 | 18.2 | 17.0 | 15.9 | 15.6 | 14.5 | 15.6 | 19.8 |
| 9-Aug | 14.1 | 13.8 | 13.8 | 13.7 | 13.4 | 13.5 | 13.8 | 14.5 | 16.3 | 18.2 | 19.0 | 20.5 | 21.2 | 20.9 | 21.1 | 21.8 | 21.5 | 20.9 | 21.1 | 19.5 | 17.4 | 15.2 | 14.4 | 15.2 | 17.3 | 21.8 |
| 10-Aug | 14.9 | 14.9 | 14.2 | 13.2 | 12.9 | 12.7 | 13.8 | 15.4 | 17.1 | 18.3 | 19.8 | 20.5 | 21.0 | 21.7 | 22.0 | 22.3 | 22.0 | 22.0 | 21.2 | 20.2 | 18.0 | 15.9 | 14.3 | 13.2 | 17.6 | 22.3 |
| 11-Aug | 12.4 | 12.2 | 12.7 | 12.0 | 12.2 | 11.9 | 12.5 | 15.5 | 17.4 | 18.5 | 19.8 | 20.3 | 20.6 | 20.8 | 21.0 | 21.2 | 21.1 | 20.6 | 19.2 | 17.8 | 16.6 | 14.8 | 13.9 | 13.4 | 16.6 | 21.2 |
| 12-Aug | 12.2 | 11.8 | 11.3 | 11.2 | 11.4 | 11.9 | 11.8 | 12.1 | 12.7 | 13.2 | 13.8 | 14.4 | 15.3 | 15.6 | 15.6 | 15.5 | 15.8 | 17.1 | 16.6 | 16.0 | 15.1 | 14.1 | 13.1 | 12.9 | 13.8 | 17.1 |
| 13-Aug | 12.4 | 12.1 | 11.5 | 11.5 | 11.6 | 11.9 | 13.4 | 14.2 | 15.6 | 17.0 | 18.1 | 18.8 | 18.2 | 18.6 | 19.3 | 19.4 | 19.6 | 18.9 | 18.3 | 17.8 | 16.8 | 16.0 | 15.1 | 15.0 | 15.9 | 19.6 |
| 14-Aug | 15.1 | 14.4 | 14.5 | 14.3 | 13.7 | 13.7 | 14.1 | 15.1 | 15.6 | 16.8 | 18.8 | 20.5 | 21.5 | 21.0 | 20.7 | 21.5 | 21.2 | 20.8 | 20.2 | 18.5 | 17.4 | 15.7 | 14.1 | 14.0 | 17.2 | 21.5 |
| 15-Aug | 13.6 | 12.3 | 11.7 | 10.8 | 10.1 | 9.9 | 10.7 | 12.4 | 15.2 | 18.1 | 20.4 | 21.9 | 22.7 | 21.8 | 22.4 | 23.1 | 22.8 | 22.4 | 22.2 | 21.0 | 19.7 | 18.8 | 18.1 | 17.4 | 17.5 | 23.1 |
| 16-Aug | 16.3 | 15.2 | 14.6 | 14.5 | 14.2 | 13.8 | 13.9 | 14.0 | 13.9 | 14.9 | 15.9 | 16.8 | 17.6 | 18.3 | 18.8 | 18.9 | 17.3 | 17.4 | 17.4 | 16.5 | 14.7 | 13.3 | 12.2 | 11.2 | 15.5 | 18.9 |
| 17-Aug | 10.8 | 10.3 | 9.2 | 9.2 | 8.3 | 7.3 | 7.5 | 9.5 | 11.9 | 14.4 | 14.8 | 15.1 | 16.2 | 17.8 | 19.8 | 21.0 | 21.5 | 22.0 | 21.4 | 20.0 | 18.4 | 16.7 | 15.7 | 15.1 | 14.8 | 22.0 |
| 18-Aug | 14.7 | 14.2 | 13.5 | 13.5 | 13.0 | 12.9 | 13.2 | 14.6 | 16.3 | 17.6 | 19.5 | 22.0 | 24.0 | 25.0 | 25.8 | 26.2 | 26.0 | 25.5 | 24.5 | 22.5 | 20.9 | 20.6 | 19.5 | 17.8 | 19.3 | 26.2 |
| 19-Aug | 16.6 | 15.5 | 14.7 | 14.2 | 14.3 | 14.5 | 14.7 | 14.9 | 15.5 | 16.9 | 21.1 | 22.8 | 23.9 | 24.8 | 24.5 | 24.0 | 23.1 | 22.6 | 21.4 | 19.9 | 18.5 | 16.4 | 16.5 | 16.3 | 18.7 | 24.8 |
| 20-Aug | 15.0 | 14.3 | 13.3 | 12.8 | 12.3 | 12.0 | 12.2 | 14.2 | 15.9 | 18.0 | 19.2 | 20.1 | 21.1 | 21.6 | 22.3 | 22.3 | 22.4 | 22.3 | 21.8 | 20.4 | 18.3 | 16.8 | 14.3 | 13.8 | 17.4 | 22.4 |
| 21-Aug | 13.1 | 12.2 | 11.7 | 11.2 | 11.2 | 10.9 | 11.2 | 12.9 | 14.9 | 17.7 | 20.1 | 22.0 | 23.5 | 24.6 | 25.1 | 25.2 | 25.5 | 25.3 | 24.7 | 23.1 | 21.9 | 20.8 | 19.8 | 18.5 | 18.6 | 25.5 |
| 22-Aug | 17.8 | 17.8 | 17.5 | 16.8 | 16.2 | 15.9 | 16.5 | 17.1 | 18.1 | 19.5 | 20.0 | 20.8 | 22.4 | 24.2 | 25.5 | 26.5 | 27.2 | 27.5 | 26.9 | 25.5 | 24.5 | 23.0 | 21.8 | 21.0 | 21.2 | 27.5 |
| 23-Aug | 20.5 | 19.9 | 19.2 | 18.1 | 17.6 | 17.4 | 17.5 | 18.1 | 19.4 | 20.1 | 21.1 | 22.0 | 24.4 | 25.2 | 25.6 | 25.5 | 25.0 | 25.1 | 23.8 | 22.1 | 21.5 | 20.3 | 19.9 | 20.6 | 21.2 | 25.6 |
| 24-Aug | 20.1 | 19.6 | 19.1 | 18.0 | 17.2 | 17.5 | 17.5 | 17.5 | 19.3 | 20.6 | 21.6 | 23.1 | 23.9 | 24.6 | 25.2 | 25.3 | 25.4 | 24.9 | 24.1 | 21.6 | 18.0 | 16.8 | 15.3 | 15.1 | 20.5 | 25.4 |
| 25-Aug | 13.9 | 13.3 | 12.7 | 12.1 | 11.2 | 10.8 | 11.3 | 13.8 | 15.7 | 17.8 | 19.2 | 20.3 | 21.3 | 22.6 | 23.9 | 24.6 | 24.4 | 23.7 | 22.7 | 21.0 | 19.5 | 17.8 | 16.5 | 15.3 | 17.7 | 24.6 |
| 26-Aug | 14.3 | 13.9 | 13.4 | 12.6 | 12.5 | 13.3 | 14.1 | 14.9 | 17.0 | 19.4 | 22.2 | 24.6 | 26.2 | 27.2 | 28.0 | 28.7 | 28.8 | 28.7 | 27.7 | 26.0 | 24.7 | 23.3 | 22.0 | 20.2 | 21.0 | 28.8 |
| 27-Aug | 19.7 | 19.0 | 17.8 | 17.0 | 16.1 | 15.6 | 16.3 | 17.8 | 18.1 | 20.5 | 22.7 | 24.7 | 25.0 | 25.5 | 26.3 | 26.0 | 26.5 | 26.7 | 25.1 | 25.7 | 24.8 | 24.6 | 23.9 | 22.7 | 22.0 | 26.7 |
| 28-Aug | 20.4 | 20.3 | 18.8 | 19.4 | 18.3 | 17.5 | 17.8 | 18.1 | 17.1 | 18.1 | 19.2 | 19.6 | 20.6 | 20.9 | 19.2 | 17.9 | 17.9 | 17.0 | 15.3 | 13.9 | 12.9 | 12.8 | 12.5 | 12.2 | 17.4 | 20.9 |
| 29-Aug | 12.0 | 11.9 | 11.8 | 11.6 | 11.3 | 11.5 | 11.6 | 11.6 | 11.5 | 12.4 | 14.3 | 16.8 | 18.4 | 19.9 | 21.0 | 21.6 | 22.0 | 22.0 | 21.1 | 19.2 | 17.9 | 17.2 | 15.0 | 14.1 | 15.7 | 22.0 |
| 30-Aug | 14.2 | 14.0 | 13.6 | 13.4 | 13.2 | 12.4 | 11.7 | 11.6 | 13.8 | 16.8 | 19.4 | 21.3 | 22.9 | 23.6 | 24.5 | 25.3 | 25.1 | 24.8 | 22.3 | 21.0 | 20.3 | 18.3 | 17.3 | 16.4 | 18.2 | 25.3 |
| 31-Aug | 15.8 | 16.5 | 15.6 | 14.8 | 14.5 | 14.2 | 13.3 | 14.1 | 15.8 | 18.1 | 20.1 | 21.3 | 21.7 | 22.5 | 23.2 | 23.0 | 23.8 | 22.4 | 20.4 | 19.0 | 17.8 | 16.8 | 14.9 | 13.6 | 18.0 | 23.8 |
| | 14.7 | 14.3 | 13.9 | 13.5 | 13.1 | 13.0 | 13.4 | 14.4 | 15.7 | 17.2 | 18.7 | 19.7 | 20.6 | 21.3 | 21.7 | 21.9 | 21.8 | 21.4 | 20.6 | 19.4 | 18.0 | 16.8 | 15.9 | 15.3 | Diurnal Average | |
| | 20.5 | 20.3 | 19.2 | 19.4 | 18.3 | 17.5 | 17.8 | 18.1 | 19.4 | 20.6 | 22.7 | 24.7 | 26.2 | 27.2 | 28.0 | 28.7 | 28.8 | 28.7 | 27.7 | 26.0 | 24.8 | 24.6 | 23.9 | 22.7 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Fort Hills - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 8 | 1.08 | 1.08 |
| 10 - 20 | 529 | 71.10 | 72.18 |
| > 20 | 207 | 27.82 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Fort Hills - August 2026

Maximum Value: 97.5 % on Aug 1 04:00

Maximum Daily Average: 87.4 % on Aug 1

Minimum Value: 29.2 % on Aug 24 16:00

Minimum Daily Average: 49.5 % on Aug 24

Maximum Diurnal Average: 86.8 % at hour 5

Minimum Diurnal Average: 49.3 % at hour 16

Monthly Average: 69.29 %

Percentiles: $P_1$ = 35.2 $P_{10}$ = 44.4 $Q_1$ = 55.3 Median = 72.7 $Q_3$ = 83.4 $P_{90}$ = 90.9 $P_{99}$ = 96.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

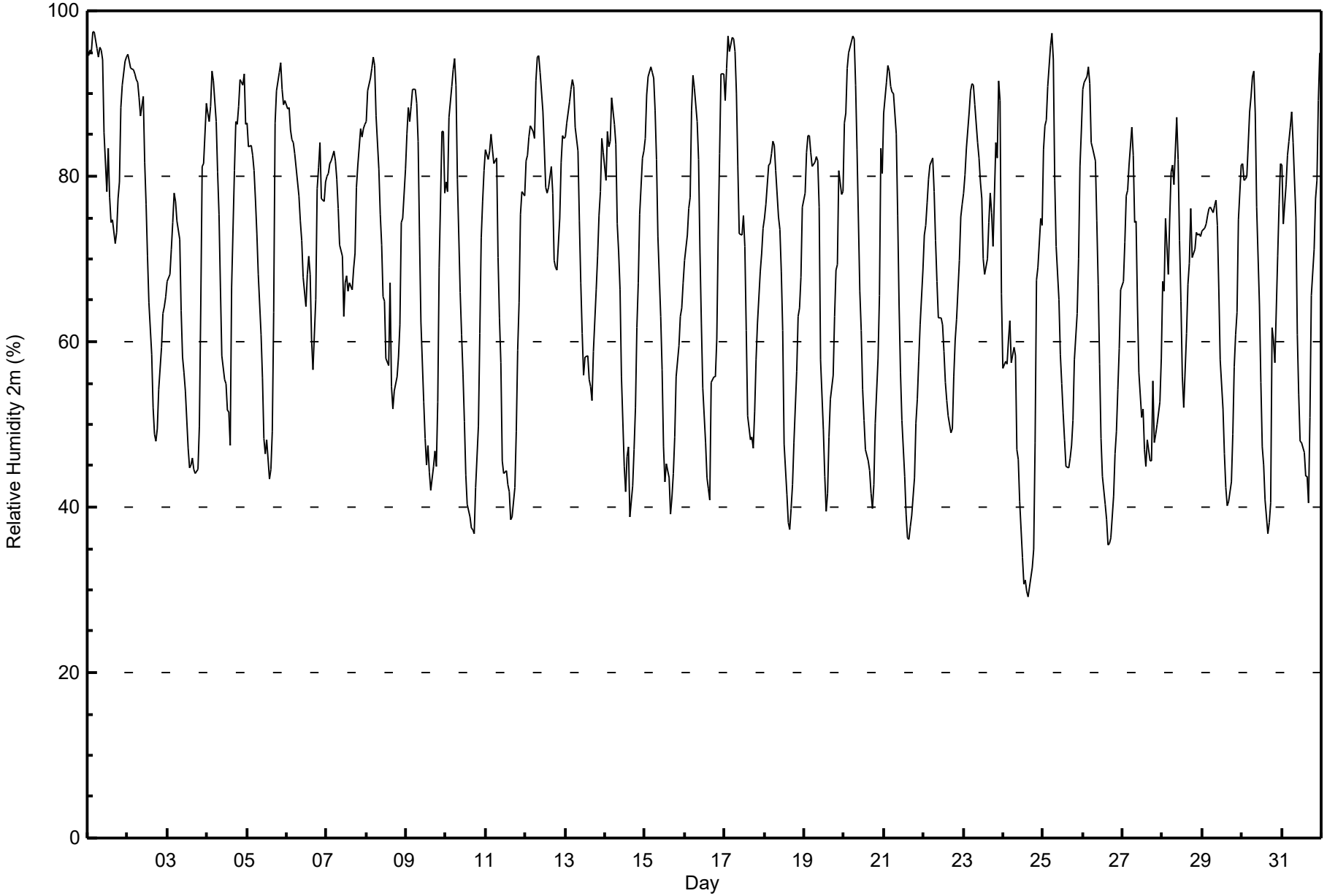
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 94.6 | 95.2 | 95.1 | 97.5 | 97.4 | 95.5 | 94.4 | 95.6 | 95.3 | 94.1 | 85.3 | 78.2 | 83.4 | 77.4 | 74.4 | 74.7 | 71.9 | 73.2 | 77.2 | 79.3 | 88.2 | 91.0 | 93.9 | 94.4 | 87.4 | 97.5 |
| 2-Aug | 94.7 | 93.9 | 93.1 | 93.0 | 92.3 | 91.7 | 91.3 | 89.4 | 87.3 | 89.7 | 81.8 | 76.6 | 70.4 | 64.8 | 58.4 | 52.0 | 48.8 | 48.0 | 49.5 | 54.2 | 59.3 | 63.4 | 64.3 | 65.4 | 73.9 | 94.7 |
| 3-Aug | 67.2 | 68.2 | 71.2 | 74.4 | 78.0 | 76.9 | 74.6 | 72.4 | 63.6 | 58.1 | 56.3 | 54.1 | 47.2 | 44.8 | 45.1 | 45.9 | 44.6 | 44.1 | 44.6 | 49.9 | 64.4 | 81.2 | 81.6 | 88.8 | 62.4 | 88.8 |
| 4-Aug | 87.6 | 86.6 | 88.6 | 92.7 | 91.5 | 86.6 | 80.4 | 75.5 | 66.6 | 58.4 | 55.5 | 54.9 | 51.7 | 51.5 | 47.5 | 66.6 | 80.6 | 86.7 | 86.2 | 88.4 | 91.6 | 91.0 | 92.4 | 86.2 | 76.9 | 92.7 |
| 5-Aug | 86.5 | 83.5 | 83.7 | 82.5 | 80.7 | 77.2 | 73.1 | 68.2 | 60.9 | 55.6 | 48.3 | 46.5 | 48.2 | 43.3 | 44.5 | 49.1 | 63.5 | 86.5 | 90.4 | 92.6 | 93.8 | 90.6 | 88.7 | 89.1 | 71.9 | 93.8 |
| 6-Aug | 88.1 | 88.3 | 85.6 | 84.4 | 84.0 | 82.8 | 79.3 | 77.7 | 74.6 | 72.3 | 67.7 | 64.2 | 68.1 | 70.4 | 68.1 | 60.4 | 56.7 | 65.0 | 78.5 | 80.9 | 84.1 | 77.2 | 76.9 | 79.3 | 75.6 | 88.3 |
| 7-Aug | 80.0 | 80.3 | 81.6 | 81.9 | 83.0 | 81.8 | 79.7 | 76.2 | 71.7 | 70.3 | 63.1 | 67.2 | 68.0 | 66.2 | 67.2 | 66.4 | 68.8 | 70.7 | 78.7 | 81.3 | 85.7 | 84.8 | 85.8 | 86.3 | 76.1 | 86.3 |
| 8-Aug | 86.7 | 90.3 | 91.8 | 93.0 | 94.4 | 93.4 | 87.3 | 80.8 | 75.4 | 71.7 | 65.4 | 64.8 | 57.9 | 57.1 | 67.2 | 54.7 | 51.9 | 54.1 | 55.8 | 58.1 | 62.0 | 74.4 | 74.8 | 80.8 | 72.7 | 94.4 |
| 9-Aug | 85.1 | 88.3 | 86.7 | 88.6 | 90.5 | 90.4 | 88.7 | 84.2 | 72.7 | 62.3 | 52.7 | 48.3 | 45.2 | 47.5 | 44.3 | 42.1 | 44.8 | 46.8 | 45.0 | 52.7 | 69.0 | 85.4 | 85.5 | 78.0 | 67.7 | 90.5 |
| 10-Aug | 79.3 | 78.1 | 87.2 | 90.9 | 92.9 | 94.3 | 91.1 | 79.7 | 66.0 | 60.8 | 56.0 | 50.3 | 43.9 | 40.4 | 38.8 | 37.5 | 37.2 | 36.8 | 42.4 | 49.8 | 61.1 | 72.5 | 76.9 | 80.7 | 64.4 | 94.3 |
| 11-Aug | 83.2 | 82.0 | 83.0 | 85.1 | 83.2 | 81.6 | 82.2 | 70.2 | 62.9 | 57.4 | 45.6 | 44.1 | 44.4 | 42.7 | 41.9 | 38.5 | 38.8 | 42.3 | 49.1 | 59.0 | 64.7 | 75.5 | 78.1 | 77.6 | 63.0 | 85.1 |
| 12-Aug | 81.8 | 82.5 | 84.7 | 86.1 | 85.4 | 84.7 | 91.6 | 94.3 | 94.6 | 92.5 | 87.8 | 83.4 | 78.6 | 78.0 | 78.7 | 81.1 | 78.0 | 69.9 | 68.9 | 68.6 | 74.9 | 81.6 | 84.9 | 84.6 | 82.4 | 94.6 |
| 13-Aug | 84.7 | 86.4 | 89.1 | 90.5 | 91.7 | 90.8 | 85.9 | 83.0 | 74.5 | 67.1 | 61.1 | 55.9 | 58.1 | 58.3 | 55.4 | 54.5 | 52.8 | 58.7 | 66.3 | 70.3 | 75.2 | 78.2 | 84.7 | 82.9 | 73.2 | 91.7 |
| 14-Aug | 79.5 | 85.3 | 83.5 | 84.3 | 89.5 | 86.2 | 83.9 | 74.2 | 70.8 | 66.3 | 55.8 | 45.0 | 41.8 | 46.0 | 47.3 | 38.8 | 42.6 | 47.0 | 52.0 | 61.7 | 67.1 | 75.4 | 82.3 | 83.0 | 66.2 | 89.5 |
| 15-Aug | 84.5 | 89.8 | 92.0 | 93.1 | 92.6 | 91.8 | 88.0 | 82.1 | 72.8 | 63.1 | 56.7 | 47.3 | 43.0 | 45.2 | 43.6 | 39.2 | 41.1 | 44.2 | 48.4 | 55.8 | 59.5 | 63.0 | 64.1 | 67.1 | 65.3 | 93.1 |
| 16-Aug | 69.8 | 72.9 | 76.2 | 77.5 | 87.9 | 92.3 | 90.7 | 86.7 | 82.1 | 70.9 | 62.1 | 54.4 | 47.8 | 43.5 | 42.2 | 40.8 | 55.0 | 55.7 | 55.8 | 60.3 | 72.9 | 82.6 | 92.5 | 92.5 | 69.4 | 92.5 |
| 17-Aug | 89.1 | 93.1 | 97.0 | 95.1 | 96.9 | 96.5 | 95.1 | 90.1 | 81.2 | 73.1 | 72.9 | 75.2 | 71.5 | 61.4 | 50.9 | 48.2 | 48.4 | 47.1 | 51.5 | 57.7 | 62.3 | 68.5 | 70.6 | 73.7 | 73.6 | 97.0 |
| 18-Aug | 74.9 | 76.5 | 81.4 | 81.5 | 82.6 | 84.3 | 83.8 | 80.7 | 75.1 | 73.6 | 68.5 | 61.4 | 47.6 | 41.5 | 38.1 | 37.3 | 39.9 | 42.7 | 47.9 | 56.4 | 63.1 | 64.1 | 67.8 | 76.3 | 64.5 | 84.3 |
| 19-Aug | 77.9 | 82.9 | 84.8 | 84.9 | 82.9 | 81.3 | 81.7 | 82.4 | 81.9 | 76.2 | 57.7 | 49.4 | 43.8 | 39.5 | 41.8 | 48.6 | 53.1 | 55.9 | 63.1 | 68.7 | 69.3 | 80.6 | 77.7 | 78.2 | 68.5 | 84.9 |
| 20-Aug | 86.4 | 87.6 | 93.1 | 95.0 | 96.2 | 97.0 | 96.7 | 91.1 | 83.2 | 66.2 | 61.3 | 54.3 | 50.5 | 46.9 | 45.6 | 44.4 | 41.7 | 39.9 | 42.7 | 50.2 | 57.9 | 65.7 | 83.4 | 80.4 | 69.1 | 97.0 |
| 21-Aug | 87.6 | 91.4 | 93.3 | 92.7 | 90.9 | 90.2 | 90.0 | 85.1 | 75.2 | 64.4 | 56.3 | 50.5 | 43.8 | 39.1 | 36.3 | 36.2 | 37.5 | 39.0 | 43.6 | 50.1 | 53.1 | 57.6 | 62.0 | 68.6 | 63.9 | 93.3 |
| 22-Aug | 72.8 | 74.1 | 76.7 | 79.6 | 81.4 | 82.1 | 78.1 | 72.3 | 67.3 | 62.9 | 62.8 | 62.0 | 58.9 | 55.1 | 53.0 | 51.0 | 49.0 | 49.5 | 55.7 | 60.1 | 62.8 | 69.8 | 75.2 | 76.6 | 66.2 | 82.1 |
| 23-Aug | 78.0 | 80.2 | 83.4 | 87.8 | 90.4 | 91.1 | 90.9 | 88.6 | 84.1 | 82.2 | 79.3 | 77.4 | 70.0 | 68.2 | 70.0 | 74.3 | 78.0 | 75.6 | 71.6 | 84.0 | 82.2 | 91.6 | 89.2 | 65.8 | 80.6 | 91.6 |
| 24-Aug | 56.8 | 57.6 | 57.2 | 60.2 | 62.5 | 57.4 | 59.3 | 58.4 | 47.0 | 45.7 | 40.7 | 33.9 | 30.6 | 31.2 | 29.9 | 29.2 | 30.4 | 32.7 | 34.9 | 47.9 | 67.5 | 69.0 | 74.9 | 74.0 | 49.5 | 74.9 |
| 25-Aug | 83.3 | 86.2 | 86.8 | 90.9 | 95.8 | 97.4 | 94.1 | 79.5 | 71.5 | 65.1 | 58.5 | 54.9 | 51.4 | 48.1 | 45.0 | 44.7 | 45.8 | 47.4 | 50.5 | 57.7 | 63.4 | 70.1 | 81.2 | 85.5 | 68.9 | 97.4 |
| 26-Aug | 90.5 | 91.3 | 92.1 | 93.2 | 91.2 | 84.1 | 83.5 | 81.8 | 74.6 | 67.0 | 57.3 | 48.3 | 43.7 | 40.3 | 38.5 | 35.5 | 35.5 | 36.3 | 41.4 | 46.5 | 49.2 | 54.2 | 59.1 | 66.3 | 62.6 | 93.2 |
| 27-Aug | 67.3 | 72.0 | 77.7 | 78.2 | 81.4 | 86.0 | 82.6 | 74.4 | 74.6 | 64.5 | 56.3 | 50.8 | 51.8 | 47.0 | 44.9 | 48.2 | 45.6 | 45.6 | 55.3 | 47.8 | 48.8 | 49.9 | 52.7 | 57.9 | 60.9 | 86.0 |
| 28-Aug | 67.3 | 66.1 | 74.9 | 68.1 | 75.0 | 80.6 | 81.3 | 79.0 | 87.2 | 82.1 | 72.3 | 65.0 | 55.8 | 52.0 | 61.0 | 67.0 | 69.5 | 76.1 | 70.2 | 71.2 | 73.1 | 72.8 | 73.0 | 72.6 | 71.4 | 87.2 |
| 29-Aug | 73.4 | 73.8 | 74.2 | 75.3 | 76.1 | 76.3 | 75.6 | 76.4 | 77.1 | 74.1 | 66.4 | 57.7 | 51.8 | 46.5 | 42.4 | 40.2 | 40.8 | 43.1 | 48.7 | 56.9 | 60.9 | 63.5 | 74.8 | 81.4 | 63.6 | 81.4 |
| 30-Aug | 81.5 | 79.4 | 79.7 | 80.0 | 87.8 | 89.7 | 92.1 | 92.8 | 87.6 | 76.3 | 64.4 | 55.1 | 47.3 | 45.1 | 40.9 | 36.7 | 38.2 | 40.5 | 61.7 | 60.1 | 57.5 | 70.3 | 76.6 | 81.6 | 67.6 | 92.8 |
| 31-Aug | 81.4 | 74.3 | 79.0 | 82.5 | 84.2 | 85.9 | 87.9 | 84.0 | 74.8 | 60.9 | 53.5 | 48.0 | 47.7 | 46.7 | 43.7 | 43.8 | 40.5 | 50.8 | 65.5 | 71.1 | 77.2 | 79.6 | 89.1 | 95.0 | 68.6 | 95.0 |
| | 80.7 | 81.9 | 84.0 | 85.2 | 86.8 | 86.4 | 85.0 | 80.9 | 75.3 | 69.2 | 62.2 | 57.4 | 53.7 | 51.1 | 49.9 | 49.3 | 50.7 | 53.3 | 57.8 | 62.9 | 68.4 | 74.0 | 77.9 | 79.1 | Diurnal Average | |
| | 94.7 | 95.2 | 97.0 | 97.5 | 97.4 | 97.4 | 96.7 | 95.6 | 95.3 | 94.1 | 87.8 | 83.4 | 83.4 | 78.0 | 78.7 | 81.1 | 80.6 | 86.7 | 90.4 | 92.6 | 93.8 | 91.6 | 93.9 | 95.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Fort Hills - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 32 | 4.30 | 4.30 |
| 40 - 60 | 206 | 27.69 | 31.99 |
| 60 - 80 | 250 | 33.60 | 65.59 |
| 80 - 100 | 256 | 34.41 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Fort Hills - August 2026

Maximum Speed: 35 km/h on Aug 2 16:00

Maximum Daily Speed Average: 22.8 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 31 11:00

Minimum Daily Speed Average: 1.4 km/h on Aug 19

Maximum Diurnal Speed Average: 4.0 km/h at hour 19

Minimum Diurnal Speed Average: 0.8 km/h at hour 21

Monthly Average Velocity: 1.5 km/h 294.6 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 3 $Q_1$ = 5 Median = 9 $Q_3$ = 13 $P_{90}$ = 18 $P_{99}$ = 30

Hours in Service: 744

Hours of Data: 742

Hours of Missing Data: 2

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | N2 | SSE2 | SSE4 | SSE6 | SE8 | SSE10 | SSE9 | S6 | ESE6 | SSE3 | SE4 | NE3 | N11 | N13 | N16 | N21 | N23 | N22 | N20 | N20 | N23 | N25 | N17 | NNE11 | N7.4 | N25 |
| 2-Aug | N14 | NNW13 | N16 | N21 | N16 | N11 | N17 | N20 | N22 | NNW27 | N30 | N30 | NNW31 | NNW33 | NNW35 | N35 | NNW30 | NNW30 | NNW27 | NNW29 | NW20 | NW13 | NNW17 | NNW18 | NNW22.8 | N35 |
| 3-Aug | NNW18 | NNW16 | NW14 | NW11 | NW10 | WNW9 | NW10 | NW10 | NNW14 | NNW17 | NNW13 | N12 | N9 | NNE8 | NE11 | NNE9 | NNE9 | NNE7 | NE6 | E3 | SE5 | S2 | S3 | W2 | NNW7.4 | NNW18 |
| 4-Aug | SSE4 | S9 | SSE7 | SSE8 | SSE10 | SSE12 | SSE10 | S11 | S10 | S11 | SSW14 | SSW17 | SSW18 | SW14 | SSW14 | ENE4 | SE13 | S4 | WNW7 | WSW5 | NW9 | NW9 | WNW8 | NW9 | SSW6.3 | SSW18 |
| 5-Aug | W6 | SW5 | WNW5 | WNW11 | WNW14 | NW14 | NW10 | NW11 | NW15 | NW17 | NW20 | NW21 | NW17 | NW17 | NNW14 | NNW18 | NNW16 | NW9 | NW12 | NW8 | W7 | W8 | WNW10 | NW10 | NW11.5 | NW21 |
| 6-Aug | WNW9 | WNW9 | WNW9 | NW10 | WNW10 | WNW10 | NW11 | NW13 | NNW18 | NNW15 | NNW13 | NNW14 | N11 | N12 | NNW11 | NW14 | NNW11 | NNE15 | N9 | W5 | SW6 | W8 | W6 | W7 | NW9.1 | NNW18 |
| 7-Aug | WNW6 | W5 | WNW5 | WNW5 | WNW3 | WNW5 | W3 | W6 | W12 | W12 | W11 | NNE10 | NNE6 | NW4 | WSW3 | NNE9 | NNE10 | NNE9 | NNE13 | NNW6 | N5 | NW7 | NNW3 | WNW4 | NW4.4 | NNE13 |
| 8-Aug | WSW3 | WNW3 | W4 | WSW6 | W4 | NW5 | NW5 | WNW5 | N8 | NNE10 | NNE9 | N8 | N7 | NW7 | SW9 | NNW7 | N8 | N10 | N11 | N8 | N5 | N4 | N6 | NW4 | NNW4.8 | N11 |
| 9-Aug | NNW3 | NW5 | NNW2 | WNW3 | NW3 | NW2 | NW2 | WNW2 | SW1 | S1 | WSW4 | ENE2 | E3 | NW8 | NW6 | NW9 | NNW7 | NNW7 | NNE7 | NNE6 | NNE1 | NW1 | NNW5 | N7 | NNW3.1 | NW9 |
| 10-Aug | N6 | NNW6 | NNW4 | NNW5 | SW2 | NW3 | NNW3 | NNW5 | N8 | NNE9 | NNE12 | N11 | N13 | N11 | N14 | NNE18 | N17 | N15 | N11 | NNW10 | N6 | NW5 | NNW5 | NW4 | N8.1 | NNE18 |
| 11-Aug | W4 | W3 | SW4 | SSE4 | SSE4 | SSE5 | S4 | SW2 | NNW7 | NNW11 | N18 | N20 | N22 | N23 | N24 | N22 | N20 | N20 | N23 | NNE17 | NNE10 | NW6 | NW5 | NNW8 | N9.6 | N24 |
| 12-Aug | NW7 | WNW8 | WNW5 | WNW7 | W5 | WNW6 | NW6 | NW5 | N9 | N10 | N14 | N17 | N16 | N18 | N17 | N13 | NNE8 | NNW9 | NNW16 | NNW11 | N8 | NNW10 | N9 | N13 | NNW9.4 | N18 |
| 13-Aug | N15 | N11 | N9 | N14 | N12 | NNW10 | N13 | N12 | NNE14 | NNE12 | NNE13 | N12 | N15 | N14 | NNE16 | NNE14 | NE11 | N9 | NW7 | NNW7 | NNW6 | NW5 | NW5 | NNW6 | N10.3 | NNE16 |
| 14-Aug | NNW7 | WNW5 | WSW2 | WSW4 | WNW3 | NW4 | NNE5 | NNE6 | NNE7 | N8 | NNE8 | NE6 | E5 | NW9 | NW14 | WNW12 | WSW12 | SW8 | S9 | S9 | SSW7 | S4 | S2 | S3 | WNW2.2 | NW14 |
| 15-Aug | SE7 | SSE6 | SSE6 | SSE7 | SSE7 | SSE8 | SSE10 | SSE10 | SSE11 | SSE10 | SSE10 | S12 | SSW14 | SW11 | SW6 | SW12 | SW12 | SSW13 | SSW11 | SSW8 | SW7 | SW7 | SW7 | SSW8 | S8.0 | SSW14 |
| 16-Aug | SSW6 | SSE5 | SE2 | SSW1 | ESE1 | NW7 | N13 | N23 | N24 | N21 | N19 | NNE18 | N16 | NNW14 | NNW9 | NNW8 | N18 | NNE13 | NNE10 | N7 | NW3 | WNW1 | WSW2 | NNW4 | N8.6 | N24 |
| 17-Aug | NW4 | WSW3 | S2 | SW4 | S7 | SSE6 | SSE6 | SSE6 | SE5 | SE4 | SSW5 | S8 | C | C | SSE11 | SSE11 | SSE12 | SSE13 | SSE12 | SSE12 | S11 | S7 | SSE6 | SSE10 | SSE6.9 | SSE13 |
| 18-Aug | SSE10 | SSE10 | SSE12 | SSE13 | SSE13 | SSE13 | S11 | S12 | S15 | SSW15 | S16 | S17 | SSW17 | SW17 | SW16 | SW19 | SW18 | SW14 | SW11 | SSW11 | SSW9 | WSW6 | WNW4 | WSW4 | SSW11.1 | SW19 |
| 19-Aug | WSW2 | SSE3 | S7 | S7 | SSE7 | SE6 | SSE7 | S7 | S3 | SSE4 | SE2 | NNW3 | NNW5 | NE5 | N5 | NNW13 | N18 | NNE18 | NNE17 | N11 | W2 | SSW1 | WNW6 | SSW7 | N1.4 | N18 |
| 20-Aug | NW3 | S1 | S3 | SSE5 | S4 | S3 | SSW1 | SSE3 | NW2 | NNE13 | NNE16 | NNE15 | NNE14 | NNE11 | NNE9 | NNE14 | NNE14 | NNE12 | N10 | NNE5 | NE9 | N5 | WNW4 | NNW5 | NNE5.5 | NNE16 |
| 21-Aug | WSW2 | SSW2 | SW2 | SSE3 | SSE4 | SSE5 | S6 | S8 | SSW9 | S7 | SSE8 | SSE9 | S12 | S12 | S14 | S16 | S17 | SSE16 | SSE14 | SSE13 | SSE16 | SSE14 | SSE10 | S5 | S9.1 | S17 |
| 22-Aug | SE6 | SSE8 | SSE9 | SSE10 | SSE10 | SSE11 | SSE11 | SSE12 | S15 | S15 | S15 | S14 | S11 | S12 | S11 | S15 | S13 | S10 | S6 | SSE8 | SSE12 | SSE9 | S12 | SSE8 | SSE10.8 | S15 |
| 23-Aug | SSE11 | SSE14 | SSE13 | S13 | SSE11 | SSE11 | S9 | S12 | S12 | S12 | S15 | S12 | SSW9 | S11 | S9 | SSW4 | SSW2 | SW7 | NW9 | NNW8 | N4 | NW3 | W3 | NNW8 | S6.3 | S15 |
| 24-Aug | NNW9 | N12 | N10 | NNW10 | NNW9 | NNW10 | NW6 | WNW10 | NNW10 | WNW5 | NW2 | WNW8 | N12 | NNE11 | N13 | N14 | NNE15 | NNE15 | NNE12 | N5 | NNW3 | NNW6 | NW4 | N5 | N8.2 | NNE15 |
| 25-Aug | NW4 | SW4 | SSW3 | WSW1 | NNW2 | WNW3 | NNW4 | N9 | N10 | NE7 | E3 | SE5 | ESE4 | ESE3 | E5 | E7 | NE10 | NE12 | NE11 | NNE9 | NNE7 | N5 | N7 | NNW6 | NNE3.8 | NE12 |
| 26-Aug | NNW3 | NNW2 | N1 | N3 | SSE1 | SSE6 | S9 | S11 | S12 | S10 | SSE12 | SSE13 | S16 | S19 | SSE21 | SSE22 | SSE21 | SSE21 | SSE18 | SSE17 | SSE17 | SE14 | SSE9 | SSE8 | SSE10.9 | SSE22 |
| 27-Aug | SSE11 | SSE10 | SSE8 | S8 | SSE6 | S7 | SSE5 | S9 | SSW7 | SSE8 | SSE8 | SSE7 | SW10 | S13 | S14 | S12 | SE4 | ESE7 | WSW6 | ESE12 | ESE15 | SE18 | SE17 | SSE13 | SSE8.5 | SE18 |
| 28-Aug | SSE3 | SSE7 | S5 | SSE12 | SSW11 | W8 | SSE19 | S21 | S17 | SSW20 | SW23 | SW24 | SW29 | SW33 | WSW29 | SW27 | SW26 | SW24 | SW28 | SW26 | SW22 | SW25 | SW23 | SW24 | SW18.5 | SW33 |
| 29-Aug | SW23 | SW22 | SW20 | SW18 | SSW17 | SSW20 | SSW19 | SSW19 | SSW23 | SW22 | SW20 | SW22 | SW25 | SW24 | SW22 | SW18 | SW17 | SSW19 | SSW12 | S11 | S12 | S8 | WSW3 | S3 | SW16.9 | SW25 |
| 30-Aug | SSE6 | S7 | SSE9 | SSE7 | SSE9 | S5 | S9 | S7 | S11 | S11 | SE11 | SSE10 | S8 | SSW8 | SSE9 | SSW5 | SSE6 | SSE6 | S4 | NNE3 | NNE15 | N11 | NNW8 | NNW5 | SSE4.3 | NNE15 |
| 31-Aug | N8 | N10 | WNW6 | W5 | W1 | SW3 | SSW2 | S2 | SSW6 | WSW5 | SW0 | NE2 | S6 | SSE9 | SW4 | SSW4 | SSE3 | NNE12 | NNW12 | N11 | N10 | NNE9 | NW5 | W4 | NW2.0 | NNW12 |
| | WNW1.9 | WSW1.7 | SW1.7 | SW2.0 | SSW2.1 | SW2.2 | SSW1.8 | SW2.0 | W1.3 | WNW1.7 | NW1.2 | NW1.6 | WNW2.7 | WNW3.3 | WNW2.9 | NNW3.5 | NNW2.9 | N3.0 | NNW4.0 | NNW1.9 | NNW0.8 | WNW1.8 | WNW2.4 | WNW2.5 | Diurnal Average | |
| | SW23 | SW22 | SW20 | N21 | SSW17 | SSW20 | SSW19 | N23 | N24 | NNW27 | N30 | N30 | NNW31 | NNW33 | NNW35 | N35 | NNW30 | NNW30 | SW28 | NNW29 | N23 | SW25 | SW23 | SW24 | Diurnal Maximum | |

C - Calibration

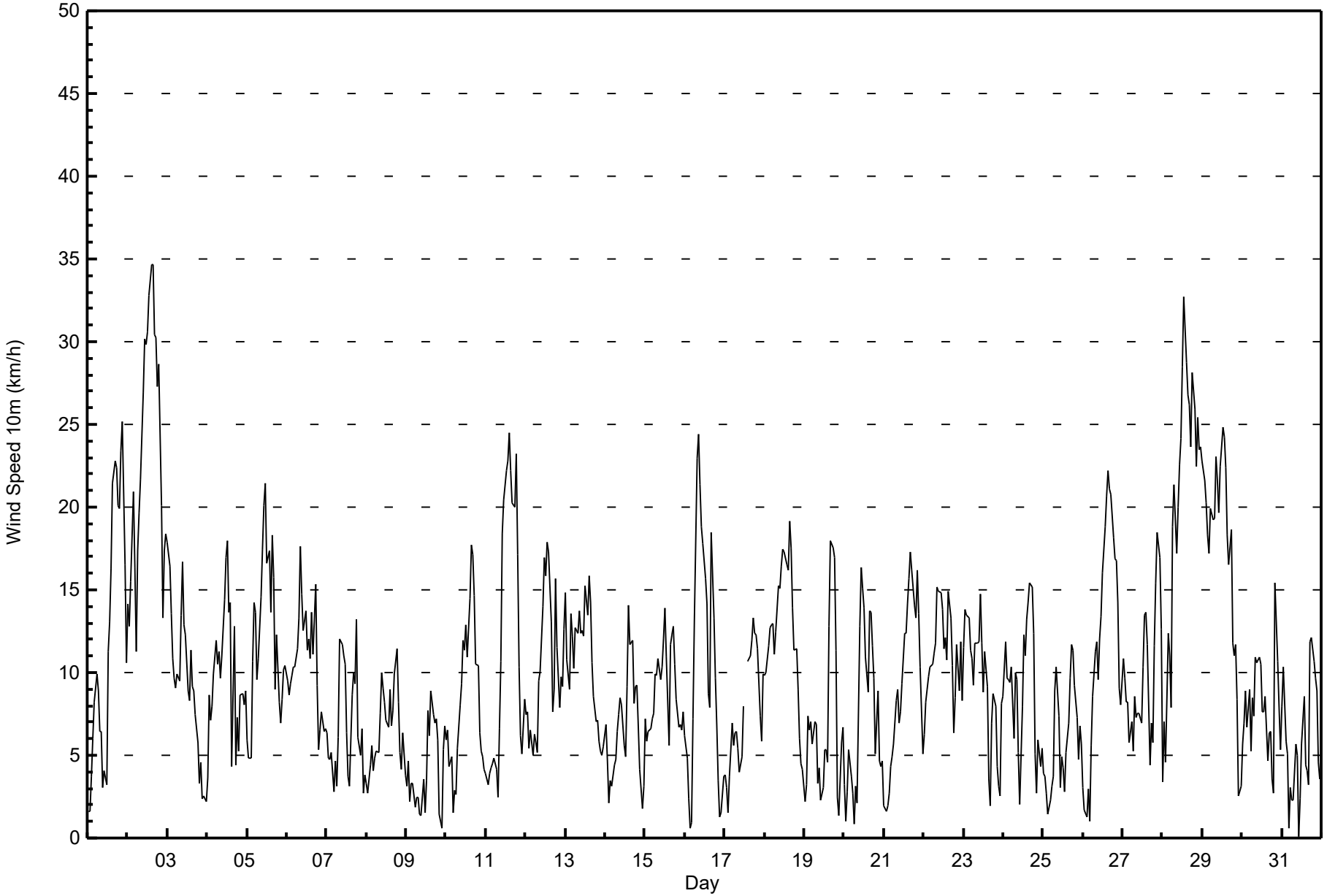
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Fort Hills - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 189 | 25.47 | 25.47 |
| 6 - 11 | 299 | 40.30 | 65.77 |
| 12 - 19 | 188 | 25.34 | 91.11 |
| 20 - 28 | 54 | 7.28 | 98.38 |
| 29 - 38 | 12 | 1.62 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 742

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Fort Hills - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 12 | 4 | 3 | 2 | 5 | 3 | 8 | 20 | 19 | 11 | 11 | 14 | 14 | 18 | 26 | 19 | 189 |
| 6 - 11 | 40 | 27 | 8 | 0 | 1 | 2 | 5 | 63 | 40 | 14 | 11 | 3 | 9 | 18 | 27 | 31 | 299 |
| 12 - 19 | 38 | 26 | 1 | 0 | 0 | 2 | 4 | 26 | 31 | 14 | 11 | 1 | 2 | 2 | 11 | 19 | 188 |
| 20 - 28 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 3 | 20 | 0 | 0 | 0 | 3 | 2 | 54 |
| 29 - 38 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 6 | 12 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 114 | 57 | 12 | 2 | 6 | 7 | 17 | 113 | 91 | 42 | 55 | 19 | 25 | 38 | 67 | 77 | 742 |

Total Number of Valid Hours: 742

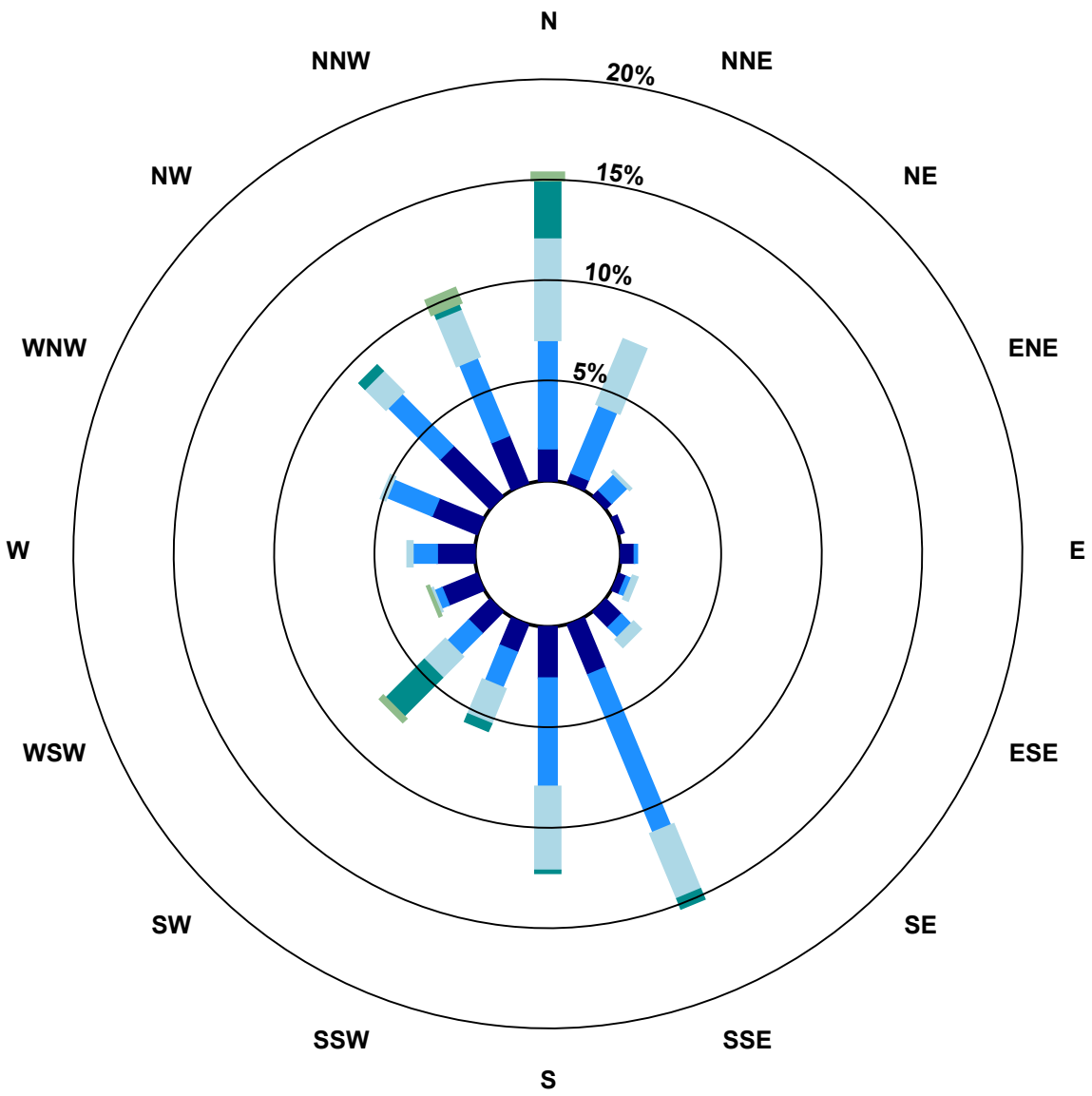
Total Number of Hours: 744

Wood Buffalo Environmental Association

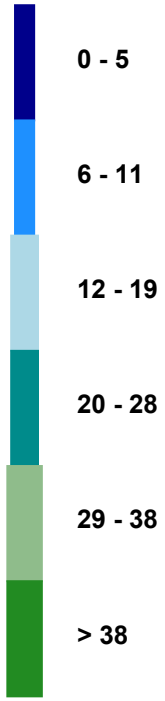
Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Fort Hills




Classes (km/h)




Total Number of Valid Hours: 742

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 8 km/h on Aug 2 14:00

Minimum Value: 1 km/h on Aug 25 07:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 2 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 6 | 6 | 4 | 2 | 6 |
| 2-Aug | 3 | 2 | 3 | 4 | 4 | 3 | 4 | 4 | 5 | 7 | 7 | 7 | 7 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 5 | 3 | 4 | 4 | 8 |
| 3-Aug | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 6 | 5 | 3 | 2 | 3 | 1 | 3 | 3 | 1 | 2 | 6 |
| 5-Aug | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 5 |
| 6-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 2 | 6 | 4 | 1 | 2 | 2 | 2 | 2 | 6 |
| 7-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 4 | 3 | 2 | 1 | 2 | 2 | 1 | 4 |
| 8-Aug | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 4 |
| 9-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 10-Aug | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 4 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 6 | 4 | 3 | 1 | 1 | 1 | 6 |
| 12-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 4 | 4 | 3 | 6 | 4 | 3 | 2 | 3 | 2 | 3 | 6 |
| 13-Aug | 2 | 3 | 2 | 2 | 2 | 2 | 4 | 3 | 2 | 2 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 14-Aug | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 4 | 3 | 3 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 7 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 2 | 2 | 3 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 16-Aug | 2 | 2 | 2 | 2 | 2 | 1 | 7 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 5 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 7 |
| 17-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | C | C | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 |
| 18-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 5 |
| 19-Aug | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 1 | 2 | 4 | 4 | 4 |
| 20-Aug | 3 | 1 | 2 | 2 | 2 | 1 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 3 | 1 | 1 | 5 |
| 21-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 5 |
| 22-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 2 | 3 | 2 | 2 | 3 |
| 23-Aug | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| 24-Aug | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 4 |
| 25-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 3 |
| 26-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 4 | 3 | 4 | 2 | 2 | 2 | 2 | 4 | 1 | 4 |
| 27-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 |
| 28-Aug | 2 | 3 | 4 | 2 | 2 | 4 | 7 | 4 | 2 | 3 | 5 | 4 | 6 | 7 | 7 | 6 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 7 |
| 29-Aug | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 5 |
| 30-Aug | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 6 | 3 | 3 | 3 | 2 | 6 |
| 31-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 3 | 2 | 3 | 4 | 3 | 2 | 1 | 2 | 1 | 2 | 4 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 7 | 4 | 5 | 7 | 7 | 7 | 7 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Fort Hills - August 2026

Direction of Maximum Speed: 351 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 345.7 deg on Aug 2

Direction of Minimum Speed: 228 deg on Aug 31 11:00

Direction of Minimum Daily Speed Average: 1.4 deg on Aug 19

Monthly Average Direction: 294.6 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 350 | 150 | 162 | 157 | 137 | 155 | 168 | 172 | 122 | 167 | 131 | 54 | 355 | 5 | 358 | 358 | 356 | 4 | 353 | 355 | 0 | 6 | 6 | 16 | 9.8 |
| 2-Aug | 351 | 339 | 358 | 358 | 353 | 355 | 358 | 0 | 351 | 345 | 352 | 350 | 348 | 348 | 345 | 351 | 342 | 342 | 342 | 334 | 325 | 319 | 328 | 334 | 345.7 |
| 3-Aug | 335 | 329 | 324 | 316 | 309 | 302 | 311 | 313 | 337 | 337 | 339 | 0 | 357 | 25 | 36 | 18 | 23 | 27 | 50 | 97 | 133 | 173 | 189 | 280 | 343.9 |
| 4-Aug | 152 | 171 | 154 | 167 | 147 | 164 | 163 | 172 | 184 | 183 | 204 | 209 | 203 | 215 | 205 | 67 | 137 | 176 | 284 | 255 | 317 | 311 | 303 | 305 | 195.5 |
| 5-Aug | 269 | 225 | 299 | 290 | 300 | 304 | 322 | 322 | 317 | 307 | 319 | 316 | 315 | 321 | 331 | 342 | 339 | 320 | 324 | 309 | 261 | 267 | 296 | 313 | 312.4 |
| 6-Aug | 293 | 285 | 297 | 314 | 293 | 297 | 309 | 320 | 329 | 334 | 339 | 334 | 1 | 352 | 335 | 309 | 345 | 23 | 4 | 267 | 232 | 268 | 268 | 278 | 320.4 |
| 7-Aug | 296 | 263 | 302 | 291 | 302 | 284 | 277 | 264 | 280 | 273 | 262 | 18 | 25 | 308 | 239 | 30 | 17 | 22 | 23 | 347 | 350 | 326 | 335 | 301 | 323.1 |
| 8-Aug | 246 | 300 | 273 | 252 | 279 | 321 | 325 | 298 | 2 | 24 | 33 | 359 | 10 | 321 | 222 | 343 | 4 | 352 | 2 | 3 | 354 | 355 | 2 | 314 | 342.2 |
| 9-Aug | 347 | 317 | 332 | 282 | 311 | 306 | 315 | 291 | 231 | 175 | 243 | 68 | 91 | 322 | 304 | 309 | 333 | 342 | 26 | 27 | 25 | 314 | 332 | 355 | 331.9 |
| 10-Aug | 356 | 348 | 342 | 329 | 222 | 326 | 338 | 345 | 9 | 14 | 18 | 7 | 355 | 359 | 5 | 13 | 6 | 10 | 350 | 347 | 349 | 315 | 333 | 306 | 357.5 |
| 11-Aug | 273 | 266 | 236 | 165 | 168 | 167 | 184 | 221 | 329 | 343 | 6 | 11 | 11 | 4 | 8 | 8 | 5 | 2 | 5 | 16 | 16 | 318 | 323 | 339 | 1.1 |
| 12-Aug | 304 | 284 | 303 | 295 | 281 | 296 | 321 | 309 | 356 | 350 | 3 | 2 | 352 | 356 | 354 | 5 | 13 | 348 | 347 | 345 | 3 | 343 | 350 | 352 | 344.6 |
| 13-Aug | 358 | 351 | 349 | 5 | 10 | 345 | 4 | 1 | 12 | 15 | 23 | 8 | 357 | 1 | 18 | 17 | 39 | 3 | 322 | 334 | 331 | 317 | 324 | 339 | 1.8 |
| 14-Aug | 346 | 297 | 250 | 253 | 292 | 316 | 14 | 18 | 17 | 7 | 14 | 52 | 92 | 307 | 305 | 283 | 245 | 225 | 187 | 181 | 202 | 185 | 172 | 171 | 292.2 |
| 15-Aug | 136 | 158 | 159 | 163 | 156 | 152 | 158 | 158 | 156 | 162 | 155 | 190 | 212 | 216 | 235 | 221 | 217 | 201 | 199 | 193 | 219 | 217 | 225 | 206 | 187.3 |
| 16-Aug | 201 | 167 | 140 | 205 | 102 | 326 | 349 | 1 | 2 | 358 | 5 | 14 | 354 | 348 | 335 | 338 | 9 | 21 | 29 | 359 | 324 | 296 | 250 | 343 | 359.1 |
| 17-Aug | 322 | 246 | 182 | 221 | 174 | 156 | 164 | 163 | 146 | 135 | 196 | 180 | C | C | 154 | 153 | 159 | 167 | 168 | 163 | 169 | 182 | 156 | 161 | 166.9 |
| 18-Aug | 165 | 166 | 152 | 158 | 162 | 162 | 184 | 184 | 191 | 193 | 188 | 191 | 211 | 217 | 221 | 230 | 233 | 230 | 216 | 203 | 207 | 258 | 303 | 252 | 199.3 |
| 19-Aug | 255 | 152 | 173 | 182 | 167 | 139 | 166 | 177 | 170 | 156 | 130 | 332 | 337 | 49 | 3 | 342 | 358 | 21 | 13 | 3 | 275 | 201 | 283 | 208 | 10.9 |
| 20-Aug | 309 | 181 | 188 | 166 | 180 | 183 | 204 | 156 | 314 | 16 | 12 | 21 | 24 | 12 | 28 | 15 | 19 | 19 | 10 | 31 | 38 | 10 | 282 | 344 | 17.2 |
| 21-Aug | 245 | 208 | 219 | 156 | 158 | 157 | 182 | 189 | 192 | 186 | 164 | 168 | 178 | 188 | 188 | 179 | 171 | 165 | 160 | 156 | 156 | 155 | 164 | 181 | 172.1 |
| 22-Aug | 146 | 151 | 155 | 156 | 158 | 162 | 153 | 167 | 169 | 179 | 177 | 183 | 177 | 170 | 174 | 171 | 176 | 186 | 176 | 150 | 147 | 165 | 171 | 148 | 166.8 |
| 23-Aug | 154 | 161 | 165 | 171 | 168 | 158 | 172 | 180 | 191 | 172 | 176 | 174 | 200 | 190 | 188 | 194 | 206 | 233 | 326 | 337 | 351 | 304 | 267 | 334 | 182.5 |
| 24-Aug | 348 | 357 | 354 | 338 | 332 | 343 | 314 | 293 | 340 | 300 | 307 | 303 | 354 | 17 | 10 | 7 | 20 | 27 | 14 | 356 | 347 | 329 | 321 | 358 | 351.2 |
| 25-Aug | 326 | 229 | 209 | 256 | 330 | 298 | 330 | 359 | 3 | 44 | 86 | 128 | 108 | 121 | 83 | 88 | 51 | 45 | 43 | 33 | 25 | 2 | 352 | 337 | 30.6 |
| 26-Aug | 333 | 328 | 357 | 356 | 148 | 165 | 189 | 176 | 175 | 169 | 166 | 167 | 181 | 171 | 164 | 163 | 164 | 161 | 152 | 149 | 148 | 145 | 161 | 165 | 163.7 |
| 27-Aug | 149 | 157 | 155 | 177 | 164 | 169 | 166 | 176 | 198 | 160 | 151 | 165 | 225 | 186 | 184 | 175 | 144 | 107 | 253 | 123 | 121 | 134 | 141 | 154 | 159.7 |
| 28-Aug | 153 | 152 | 175 | 161 | 205 | 261 | 157 | 177 | 172 | 192 | 215 | 217 | 221 | 220 | 237 | 221 | 221 | 225 | 236 | 223 | 227 | 232 | 223 | 223 | 213.9 |
| 29-Aug | 221 | 220 | 224 | 218 | 209 | 207 | 208 | 199 | 203 | 216 | 224 | 223 | 221 | 228 | 230 | 236 | 226 | 213 | 195 | 183 | 175 | 184 | 248 | 169 | 214.8 |
| 30-Aug | 155 | 169 | 158 | 157 | 154 | 169 | 176 | 173 | 173 | 182 | 146 | 154 | 183 | 202 | 157 | 207 | 163 | 164 | 176 | 22 | 19 | 1 | 345 | 334 | 162.2 |
| 31-Aug | 349 | 5 | 294 | 278 | 268 | 227 | 200 | 191 | 202 | 258 | 228 | 53 | 179 | 168 | 226 | 210 | 168 | 21 | 327 | 7 | 8 | 14 | 320 | 263 | 325.2 |
| | 294.0 | 242.7 | 226.8 | 226.3 | 207.2 | 222.2 | 207.8 | 222.1 | 274.4 | 294.2 | 316.0 | 321.6 | 301.6 | 295.1 | 298.2 | 327.3 | 347.9 | 0.1 | 343.0 | 344.4 | 340.9 | 286.9 | 288.5 | 294.3 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

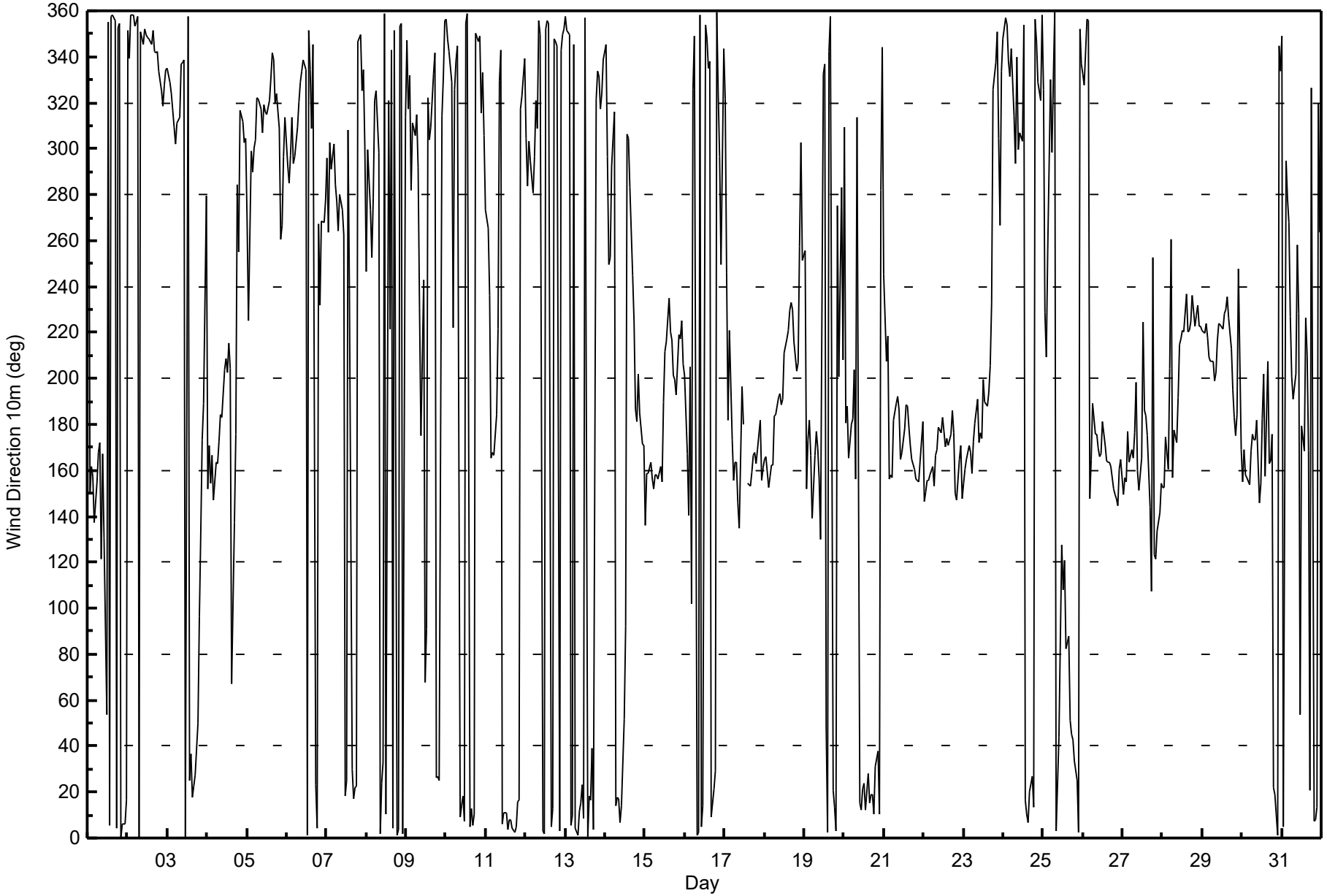
C - Calibration
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Fort Hills - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Fort Hills - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 102 deg on Aug 31 11:00

Minimum Value: 5 deg on Aug 22 04:00

Percentiles: $P_1$ = 6 $P_{10}$ = 10 $Q_1$ = 13 Median = 17 $Q_3$ = 28 $P_{90}$ = 50 $P_{99}$ = 85

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 2 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 32 | 63 | 18 | 23 | 12 | 11 | 18 | 18 | 45 | 66 | 49 | 52 | 14 | 19 | 18 | 15 | 16 | 14 | 15 | 16 | 29 | 18 | 16 | 15 | 66 |
| 2-Aug | 17 | 13 | 14 | 16 | 15 | 15 | 15 | 16 | 17 | 15 | 19 | 17 | 17 | 17 | 17 | 18 | 17 | 16 | 16 | 15 | 14 | 15 | 13 | 13 | 19 |
| 3-Aug | 13 | 11 | 11 | 11 | 9 | 12 | 11 | 17 | 18 | 18 | 19 | 20 | 43 | 43 | 23 | 34 | 25 | 28 | 24 | 32 | 17 | 33 | 28 | 34 | 43 |
| 4-Aug | 33 | 8 | 12 | 15 | 12 | 13 | 10 | 13 | 15 | 15 | 14 | 11 | 11 | 17 | 35 | 83 | 18 | 35 | 28 | 29 | 13 | 15 | 15 | 15 | 83 |
| 5-Aug | 30 | 26 | 41 | 13 | 13 | 13 | 17 | 18 | 18 | 18 | 17 | 16 | 18 | 21 | 22 | 16 | 18 | 14 | 12 | 22 | 13 | 12 | 19 | 18 | 41 |
| 6-Aug | 19 | 14 | 17 | 16 | 13 | 16 | 16 | 14 | 14 | 17 | 22 | 22 | 19 | 21 | 23 | 20 | 22 | 13 | 37 | 31 | 19 | 15 | 19 | 19 | 37 |
| 7-Aug | 17 | 23 | 18 | 19 | 52 | 22 | 33 | 29 | 14 | 16 | 24 | 33 | 26 | 45 | 60 | 15 | 11 | 16 | 12 | 21 | 20 | 13 | 40 | 16 | 60 |
| 8-Aug | 57 | 39 | 30 | 16 | 27 | 13 | 12 | 28 | 25 | 19 | 25 | 22 | 42 | 49 | 29 | 55 | 44 | 19 | 16 | 14 | 17 | 10 | 16 | 36 | 57 |
| 9-Aug | 32 | 21 | 55 | 42 | 37 | 47 | 43 | 52 | 76 | 78 | 56 | 85 | 77 | 27 | 35 | 26 | 35 | 33 | 17 | 9 | 52 | 79 | 7 | 18 | 85 |
| 10-Aug | 21 | 22 | 26 | 26 | 84 | 36 | 34 | 40 | 21 | 16 | 18 | 24 | 21 | 34 | 22 | 17 | 15 | 17 | 22 | 17 | 13 | 22 | 12 | 23 | 84 |
| 11-Aug | 19 | 33 | 41 | 15 | 18 | 12 | 34 | 63 | 24 | 25 | 16 | 17 | 17 | 19 | 16 | 19 | 17 | 17 | 16 | 10 | 12 | 16 | 16 | 12 | 63 |
| 12-Aug | 12 | 10 | 27 | 10 | 13 | 14 | 16 | 21 | 15 | 17 | 14 | 15 | 18 | 18 | 18 | 22 | 27 | 34 | 15 | 14 | 20 | 19 | 13 | 14 | 34 |
| 13-Aug | 15 | 13 | 13 | 10 | 12 | 17 | 15 | 15 | 14 | 18 | 19 | 29 | 17 | 18 | 16 | 19 | 22 | 32 | 10 | 12 | 6 | 17 | 18 | 11 | 32 |
| 14-Aug | 16 | 23 | 39 | 24 | 33 | 21 | 33 | 26 | 17 | 17 | 26 | 50 | 60 | 71 | 18 | 25 | 13 | 12 | 31 | 11 | 13 | 29 | 52 | 52 | 71 |
| 15-Aug | 13 | 16 | 14 | 15 | 14 | 13 | 9 | 10 | 7 | 16 | 20 | 20 | 22 | 16 | 34 | 13 | 13 | 9 | 7 | 6 | 16 | 10 | 10 | 11 | 34 |
| 16-Aug | 16 | 44 | 67 | 101 | 97 | 14 | 25 | 15 | 14 | 17 | 18 | 18 | 21 | 23 | 30 | 23 | 18 | 12 | 12 | 33 | 25 | 55 | 70 | 12 | 101 |
| 17-Aug | 16 | 25 | 76 | 34 | 16 | 23 | 28 | 29 | 28 | 51 | 39 | 9 | C | C | 15 | 14 | 12 | 9 | 7 | 6 | 8 | 20 | 11 | 8 | 76 |
| 18-Aug | 7 | 8 | 7 | 6 | 8 | 8 | 15 | 12 | 11 | 11 | 11 | 14 | 13 | 16 | 14 | 15 | 16 | 10 | 12 | 6 | 8 | 39 | 37 | 21 | 39 |
| 19-Aug | 70 | 51 | 21 | 20 | 29 | 31 | 20 | 27 | 54 | 25 | 58 | 68 | 75 | 58 | 50 | 14 | 17 | 13 | 12 | 18 | 52 | 56 | 47 | 63 | 75 |
| 20-Aug | 56 | 89 | 69 | 17 | 56 | 46 | 88 | 71 | 64 | 17 | 17 | 21 | 18 | 32 | 34 | 21 | 17 | 19 | 14 | 16 | 9 | 22 | 16 | 13 | 89 |
| 21-Aug | 44 | 22 | 60 | 49 | 20 | 19 | 17 | 11 | 16 | 21 | 21 | 22 | 16 | 23 | 23 | 17 | 12 | 8 | 7 | 5 | 5 | 5 | 16 | 16 | 60 |
| 22-Aug | 10 | 10 | 7 | 5 | 5 | 7 | 7 | 9 | 8 | 12 | 12 | 14 | 21 | 25 | 24 | 16 | 12 | 13 | 11 | 10 | 9 | 18 | 8 | 15 | 25 |
| 23-Aug | 8 | 6 | 9 | 7 | 9 | 9 | 13 | 9 | 13 | 11 | 11 | 10 | 22 | 14 | 8 | 46 | 58 | 34 | 34 | 27 | 44 | 46 | 56 | 19 | 58 |
| 24-Aug | 15 | 15 | 15 | 11 | 12 | 16 | 38 | 18 | 18 | 44 | 74 | 32 | 22 | 21 | 25 | 18 | 13 | 14 | 15 | 22 | 29 | 11 | 29 | 12 | 74 |
| 25-Aug | 17 | 53 | 24 | 57 | 29 | 17 | 21 | 16 | 17 | 27 | 69 | 48 | 63 | 81 | 46 | 34 | 19 | 11 | 9 | 7 | 10 | 12 | 11 | 16 | 81 |
| 26-Aug | 23 | 24 | 28 | 16 | 99 | 15 | 11 | 10 | 13 | 18 | 16 | 16 | 18 | 14 | 12 | 13 | 10 | 9 | 8 | 6 | 7 | 10 | 21 | 7 | 99 |
| 27-Aug | 7 | 7 | 9 | 12 | 11 | 10 | 15 | 21 | 21 | 25 | 29 | 45 | 17 | 17 | 17 | 30 | 70 | 29 | 68 | 19 | 13 | 10 | 8 | 9 | 70 |
| 28-Aug | 55 | 20 | 78 | 8 | 27 | 33 | 12 | 17 | 11 | 17 | 10 | 14 | 14 | 14 | 13 | 11 | 11 | 15 | 12 | 11 | 10 | 12 | 10 | 11 | 78 |
| 29-Aug | 10 | 11 | 11 | 11 | 11 | 10 | 9 | 10 | 10 | 11 | 13 | 16 | 14 | 15 | 19 | 14 | 16 | 12 | 8 | 7 | 6 | 9 | 65 | 68 | 68 |
| 30-Aug | 16 | 14 | 10 | 33 | 15 | 28 | 15 | 20 | 19 | 12 | 17 | 18 | 29 | 28 | 29 | 54 | 50 | 24 | 15 | 64 | 11 | 21 | 36 | 47 | 64 |
| 31-Aug | 22 | 17 | 39 | 36 | 89 | 48 | 68 | 66 | 26 | 41 | 102 | 85 | 54 | 32 | 64 | 44 | 78 | 28 | 23 | 14 | 10 | 9 | 28 | 38 | 102 |
| | 70 | 89 | 78 | 101 | 99 | 48 | 88 | 71 | 76 | 78 | 102 | 85 | 77 | 81 | 64 | 83 | 78 | 35 | 68 | 64 | 52 | 79 | 70 | 68 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS25
## WASKŌW OHCI PIMÂTISIWIN
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2(ppb) Average | 702 | 35 | 42 | 99.06 | 34 | 0 | 4.4 | 0 |
| H2S(ppb) Average | 700 | 38 | 44 | 99.19 | 8.5 | 0 | 1.8 | 0 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 29.1 | 0 | 20.6 | 0 |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 99 | - | 88.1 | - |
| Wind Speed 10 m (km/h) Average | 744 | 0 | 0 | 100 | 21 | 0 | 14 | 0 |
| Wind Direction 10 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 702 | 0.47 | 2.3 | - | 0 | 0 | 0 | 0 | 0.2 | 0.6 | 34 |
| H2S (ppb) Average | 700 | 0.41 | 0.7 | - | 0 | 0.1 | 0.1 | 0.2 | 0.4 | 1 | 8.5 |
| Temperature 2 m (C) Average | 744 | 16.6 | 5 | - | 5.4 | 10.4 | 12.6 | 16.1 | 20.3 | 23.8 | 29.1 |
| Relative Humidity (%) Average | 744 | 74.03 | 19 | - | 30.1 | 46.4 | 57.4 | 76.7 | 92.2 | 96.3 | 99 |
| Wind Speed 10 m (km/h) Average | 744 | 4.7 | 3 | - | 0 | 1 | 2 | 4 | 7 | 9 | 21 |
| Wind Direction 10 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)

AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| H2S, SO2 | 25 Aug 2026 16:00 | 25 Aug 2026 21:00 | 6 | Station power failure |
| SO2 | 28 Aug 2026 14:00 | 28 Aug 2026 14:00 | 1 | Maintenance - sample manifold cleaned |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Waskow ohci Pimatisiwin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 34.0 ppb on Aug 30 14:00
Maximum Daily Average: 4.4 ppb on Aug 30

Minimum Value: 0.0 ppb on Aug 2 07:00
Maximum Diurnal Average: 2.4 ppb at hour 14
Monthly Average: 0.47 ppb
Minimum Daily Average: 0.0 ppb on Aug 12
Minimum Diurnal Average: 0.0 ppb at hour 5
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.2 $P_{90}$ = 0.6 $P_{99}$ = 11.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 702 |
| Hours of Missing Data: | 42 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.7 | 1.1 | 1.0 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 1.1 |
| 2-Aug | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.5 | 0.3 | 0.0 | 0.1 | 0.0 | 0.1 | 0.5 |
| 3-Aug | 0.1 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 | 0.3 | 0.5 | 0.1 | 0.0 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6-Aug | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.6 | 0.7 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 |
| 7-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 8-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 |
| 9-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 15-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 | 2.3 | 2.2 | 0.9 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 3.6 |
| 18-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 1.6 | 0.8 | 0.7 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.6 |
| 19-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 20-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 21-Aug | 0.0 | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.8 | 0.8 | 0.2 | 0.3 | 0.2 | 2.0 | 1.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 2.0 |
| 22-Aug | 0.3 | 0.2 | 0.2 | 0.1 | Z | 0.1 | 0.0 | 0.2 | 0.2 | 0.5 | 3.1 | 8.0 | 12.9 | 18.1 | 11.8 | 7.2 | 2.4 | 1.1 | 0.9 | 0.6 | 0.3 | 0.2 | 0.3 | 0.3 | 3.0 | 18.1 |
| 23-Aug | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.3 | 0.3 | 0.8 | 0.6 | 0.3 | 6.4 | 2.3 | 1.3 | 0.3 | 0.1 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.6 | 6.4 |
| 24-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 25-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | PF | PF | PF | PF | PF | PF | 0.1 | 0.0 | 0.0 | -- | 0.3 |
| 26-Aug | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 1.3 | 7.3 | 12.9 | 11.8 | 6.0 | 1.8 | 2.4 | 0.7 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.2 | 2.1 | 12.9 |
| 27-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.5 | 2.2 | 3.6 | 0.7 | 6.1 | 1.9 | 2.0 | 5.6 | 1.1 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 1.2 | 6.1 |
| 28-Aug | 0.4 | 0.3 | 0.2 | 0.4 | Z | 0.4 | 0.4 | 0.6 | 0.4 | 0.3 | 0.2 | 0.0 | 0.1 | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.7 | 4.7 | 32.4 | 34.0 | 12.9 | 4.4 | 3.2 | 3.2 | 2.3 | 1.5 | 1.1 | 0.8 | 0.4 | 0.3 | 4.4 | 34.0 |
| 31-Aug | 0.3 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 1.2 | 1.4 | 0.6 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 1.4 |
| | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.7 | 1.1 | 2.2 | 2.4 | 1.1 | 1.0 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.4 | 0.3 | 0.2 | 0.4 | 0.2 | 0.4 | 0.4 | 1.2 | 1.6 | 2.2 | 7.3 | 12.9 | 32.4 | 34.0 | 12.9 | 7.2 | 3.2 | 3.2 | 2.3 | 1.5 | 1.1 | 0.8 | 0.4 | 0.3 | Diurnal Maximum | |

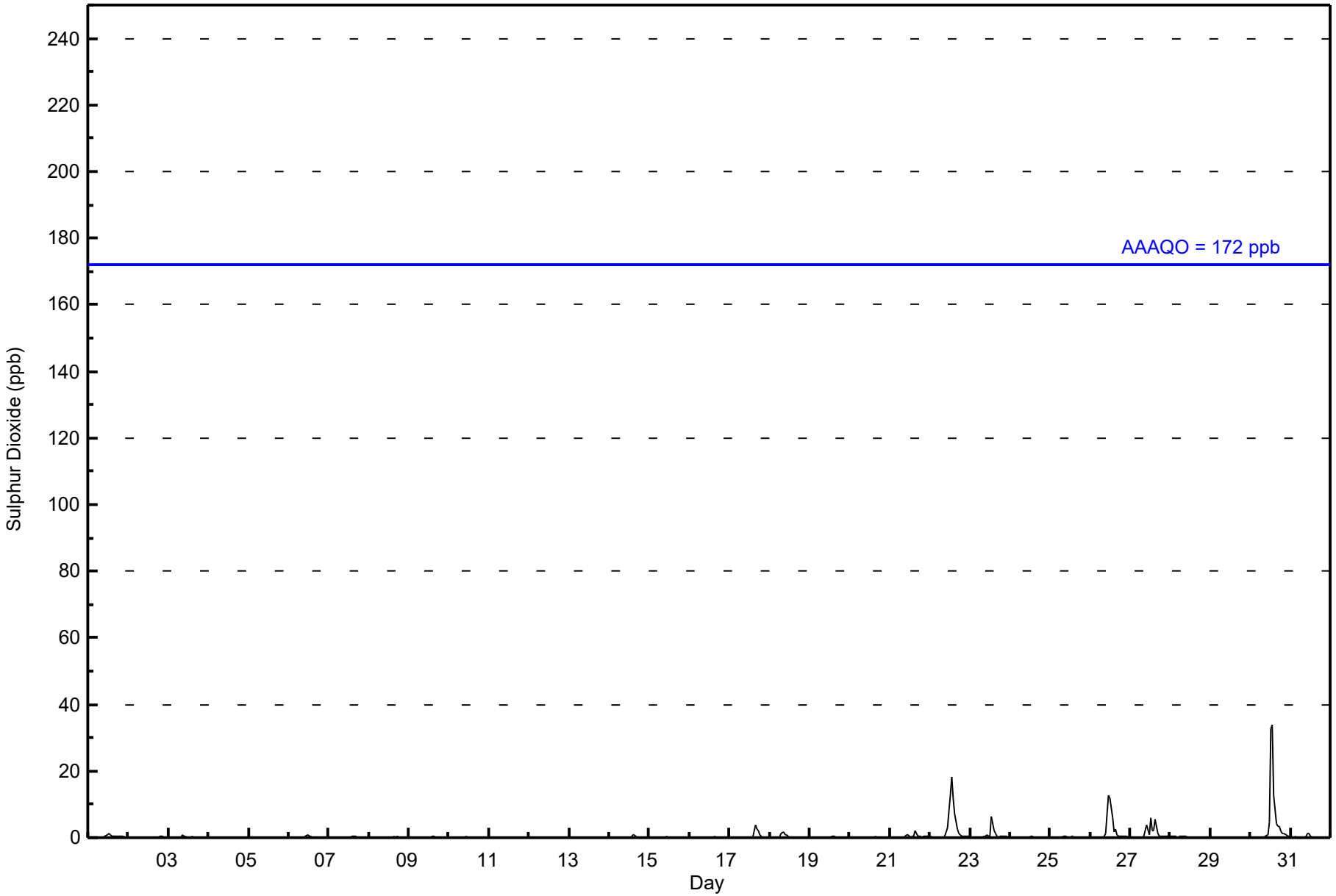
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 694 | 98.86 | 98.86 |
| 11 - 20 | 6 | 0.85 | 99.72 |
| 21 - 60 | 2 | 0.28 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 702

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 81 | 43 | 11 | 5 | 6 | 8 | 39 | 100 | 33 | 32 | 46 | 31 | 50 | 65 | 65 | 79 | 694 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 81 | 43 | 11 | 5 | 6 | 9 | 44 | 102 | 33 | 32 | 46 | 31 | 50 | 65 | 65 | 79 | 702 |

Total Number of Valid Hours: 702

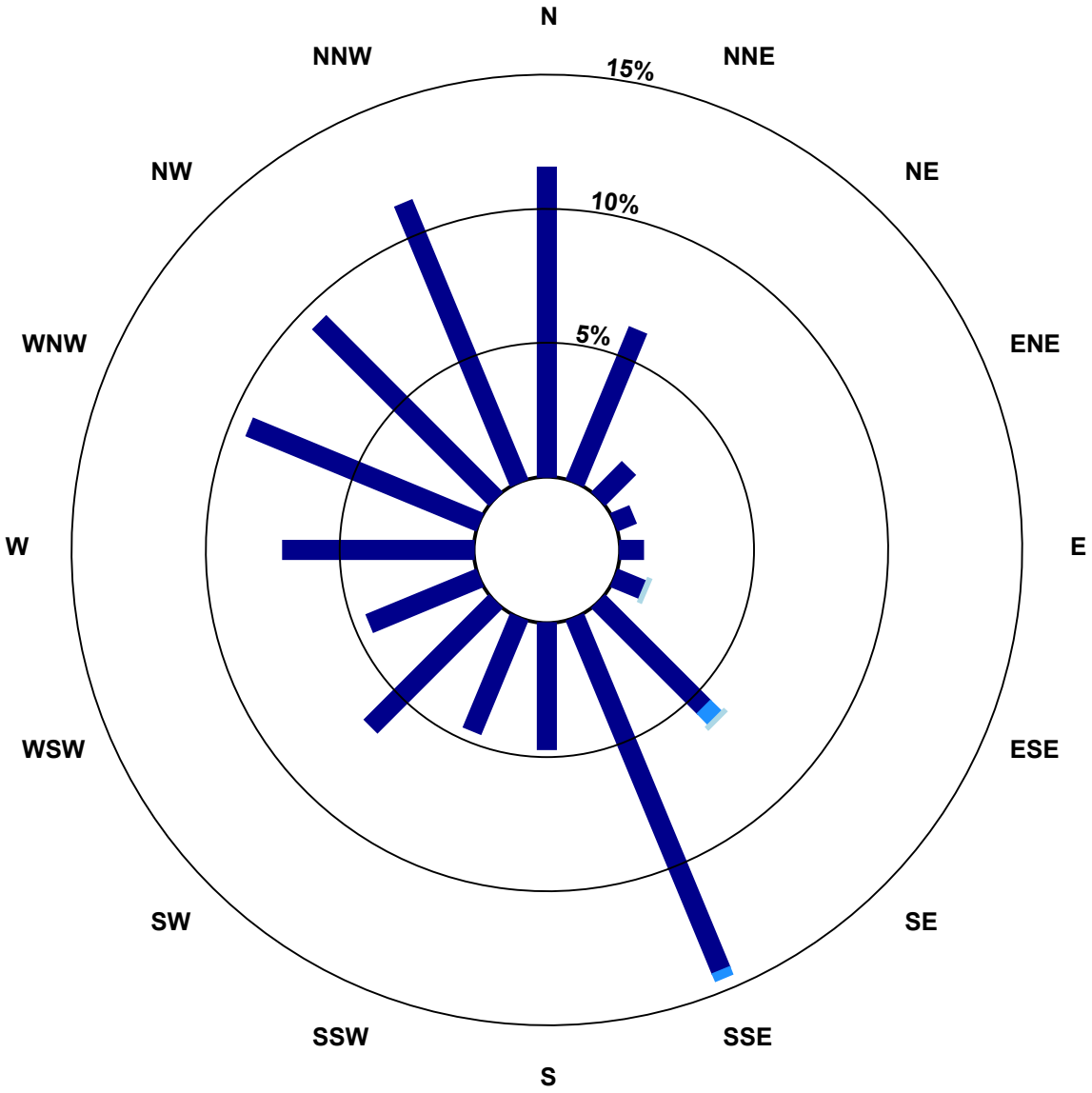
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Waskow ohci Pimatisiwin




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

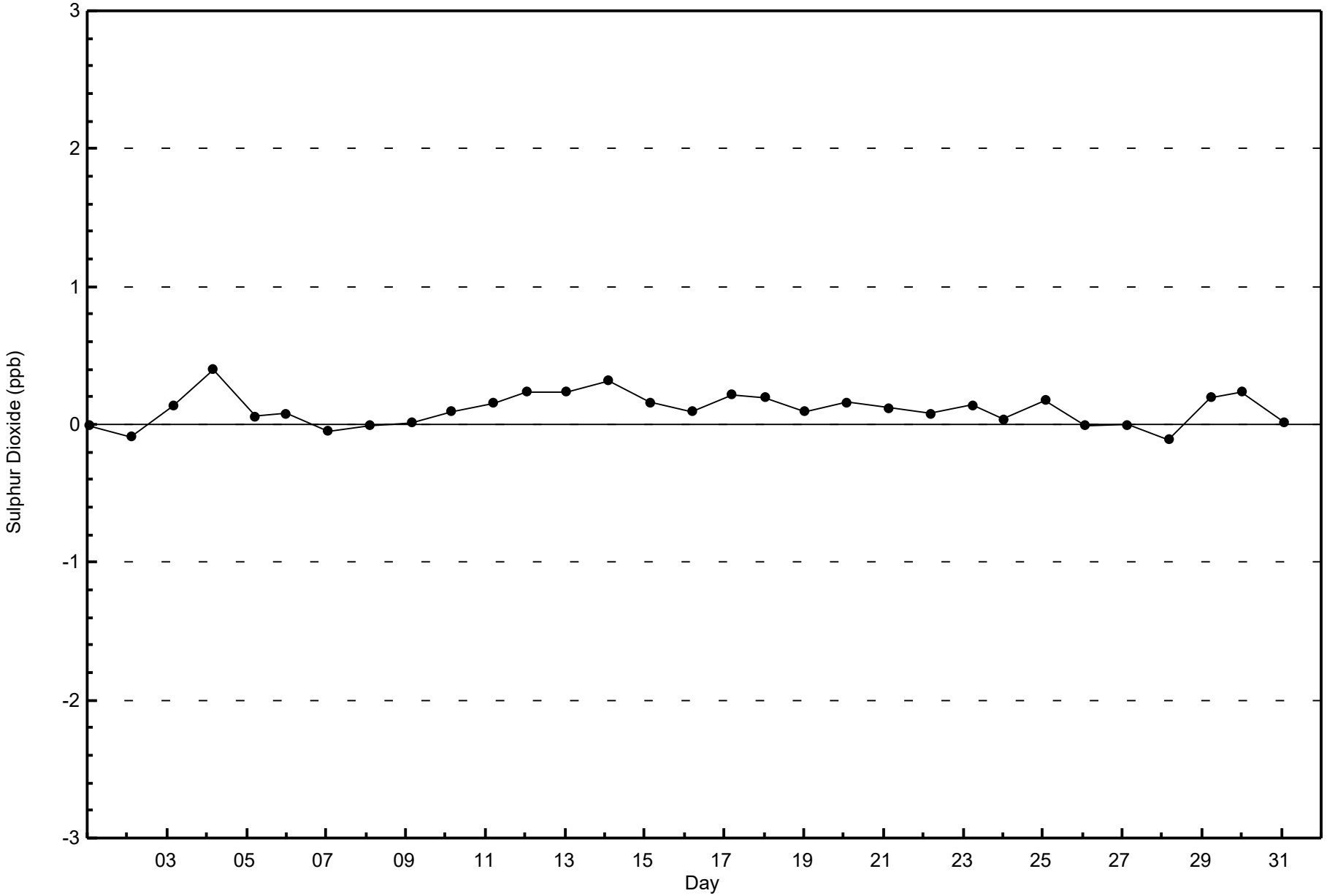
Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**

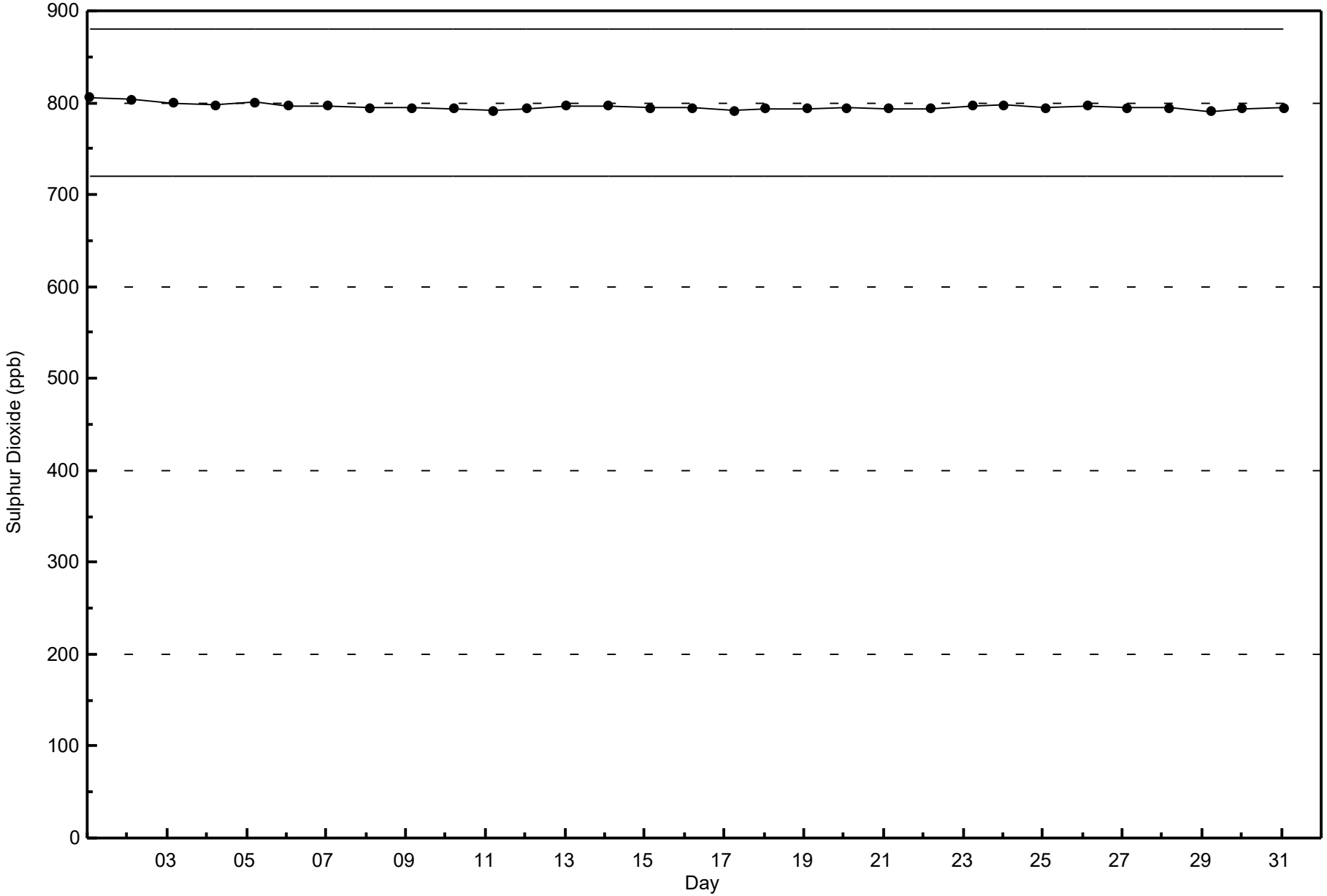


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Waskow ohci Pimatisiwin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8.5 ppb on Aug 27 07:00 Maximum Daily Average: 1.8 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 3 13:00 Minimum Daily Average: 0.1 ppb on Aug 2
Maximum Diurnal Average: 0.8 ppb at hour 8 Minimum Diurnal Average: 0.2 ppb at hour 18
Monthly Average: 0.41 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.4 $P_{90}$ = 1.0 $P_{99}$ = 2.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 38 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.1 | 0.8 | Z | 0.6 | 0.4 | 0.4 | 0.9 | 1.1 | 1.0 | 2.0 | 2.3 | 1.3 | 1.0 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.3 | 0.2 | 0.1 | 0.8 | 2.3 |
| 2-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| 3-Aug | 0.1 | 0.1 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 4-Aug | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | Z | 1.8 | 2.0 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 | 2.0 |
| 5-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 |
| 6-Aug | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 7-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 8-Aug | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 9-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 10-Aug | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | Z | 0.4 | 0.4 | 0.5 | 0.9 | 0.9 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.9 |
| 11-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 |
| 12-Aug | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 13-Aug | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 14-Aug | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| 15-Aug | 0.3 | 0.5 | 0.4 | 0.2 | Z | 1.0 | 0.6 | 0.6 | 0.4 | 0.7 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.0 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 17-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 1.0 | 1.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 0.6 | 0.4 | 0.1 | 0.2 | 6.1 | 4.1 | 1.6 | 0.6 | 0.8 | 6.1 |
| 18-Aug | 0.5 | Z | 0.6 | 0.6 | 1.0 | 1.1 | 0.7 | 5.2 | 0.9 | 1.7 | 1.0 | 0.9 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 5.2 |
| 19-Aug | 0.1 | 0.1 | Z | 0.4 | 0.7 | 1.1 | 1.8 | 1.7 | 0.5 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | 0.4 | 1.8 |
| 20-Aug | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 |
| 21-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.4 | 1.0 | 2.1 | 2.1 | 1.7 | 1.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.8 | 1.0 | 0.6 | 2.1 |
| 22-Aug | 0.9 | 0.7 | 0.7 | 0.9 | 0.8 | Z | 0.8 | 1.2 | 1.6 | 1.0 | 0.5 | 0.4 | 0.3 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.6 | 1.3 | 1.3 | 1.9 | 2.7 | 1.3 | 0.9 | 2.7 |
| 23-Aug | Z | 0.5 | 0.8 | 1.1 | 0.9 | 0.6 | 0.5 | 0.7 | 2.2 | 1.3 | 2.2 | 2.2 | 1.0 | 1.5 | 1.3 | 1.1 | 0.9 | 0.6 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.9 | 2.2 |
| 24-Aug | 0.3 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 25-Aug | 0.3 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | PF | PF | PF | PF | PF | PF | 0.5 | 0.5 | 0.4 | -- | 0.6 |
| 26-Aug | 0.4 | 0.4 | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.9 | 0.5 | 0.5 | 0.7 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.2 | 2.8 | 2.5 | 0.6 | 0.4 | 0.6 | 2.8 |
| 27-Aug | 4.5 | 2.9 | 2.6 | 2.8 | Z | 5.7 | 8.5 | 2.7 | 2.0 | 2.3 | 1.4 | 0.3 | 1.5 | 0.2 | 0.5 | 1.7 | 1.0 | 0.5 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 1.8 | 8.5 |
| 28-Aug | 0.9 | 1.3 | 0.7 | 1.0 | 0.8 | Z | 0.8 | 0.8 | 2.7 | 1.0 | C | C | C | C | C | C | C | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | -- | 2.7 |
| 29-Aug | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 4.1 | 1.8 | 0.4 | 4.1 |
| 30-Aug | 1.3 | Z | 0.9 | 0.5 | 0.3 | 0.2 | 0.3 | 0.7 | 1.2 | 2.1 | 1.2 | 1.1 | 0.5 | 0.4 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.6 | 2.1 |
| 31-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| | 0.5 | 0.4 | 0.4 | 0.5 | 0.3 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.5 | 0.5 | 0.3 | Diurnal Average | |
| | 4.5 | 2.9 | 2.6 | 2.8 | 1.0 | 5.7 | 8.5 | 5.2 | 2.7 | 2.3 | 2.3 | 2.2 | 1.5 | 1.5 | 1.3 | 1.7 | 1.0 | 0.6 | 0.6 | 1.3 | 6.1 | 4.1 | 4.1 | 1.8 | Diurnal Maximum | |

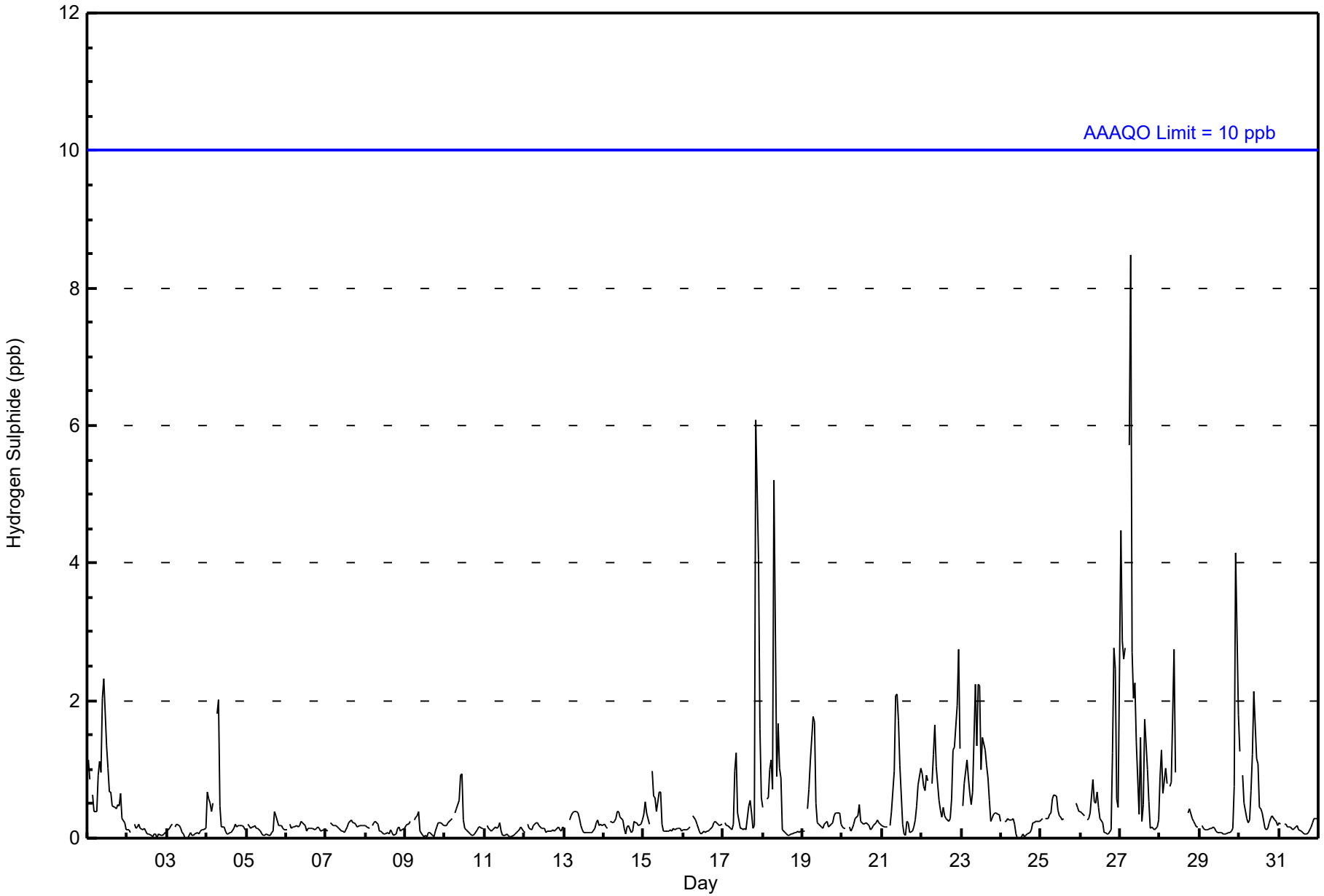
Z - zerospan C - Calibration PF - Power Failure
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 686 | 98.00 | 98.00 |
| 3 - 4 | 10 | 1.43 | 99.43 |
| 5 - 7 | 3 | 0.43 | 99.86 |
| 8 - 11 | 1 | 0.14 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 81 | 42 | 10 | 5 | 7 | 7 | 43 | 100 | 30 | 26 | 49 | 30 | 47 | 62 | 65 | 82 | 686 |
| 3 - 4 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 4 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 10 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 81 | 43 | 10 | 5 | 7 | 8 | 44 | 105 | 33 | 26 | 49 | 31 | 48 | 63 | 65 | 82 | 700 |

Total Number of Valid Hours: 700

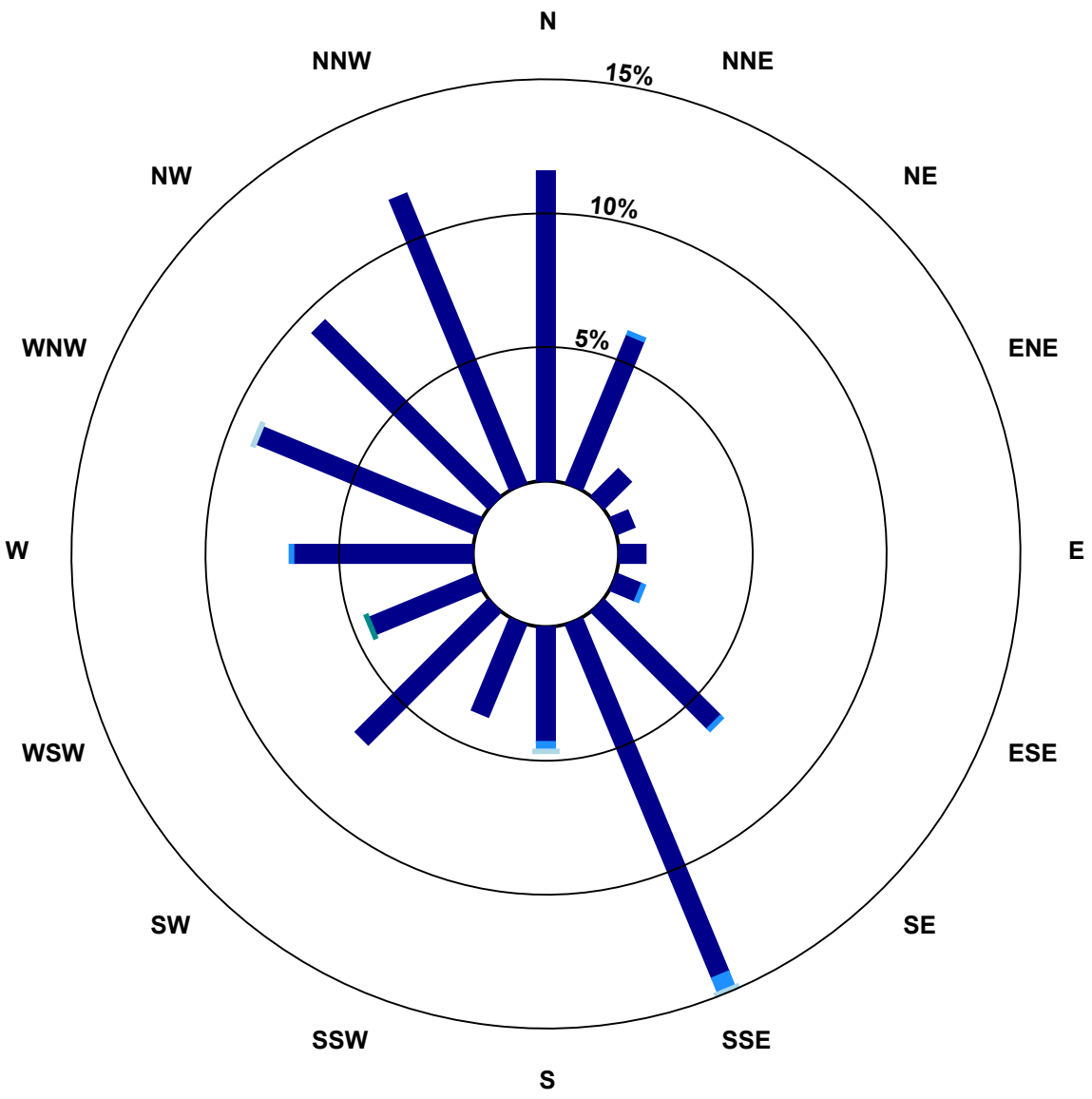
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Waskow ohci Pimatisiwin




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

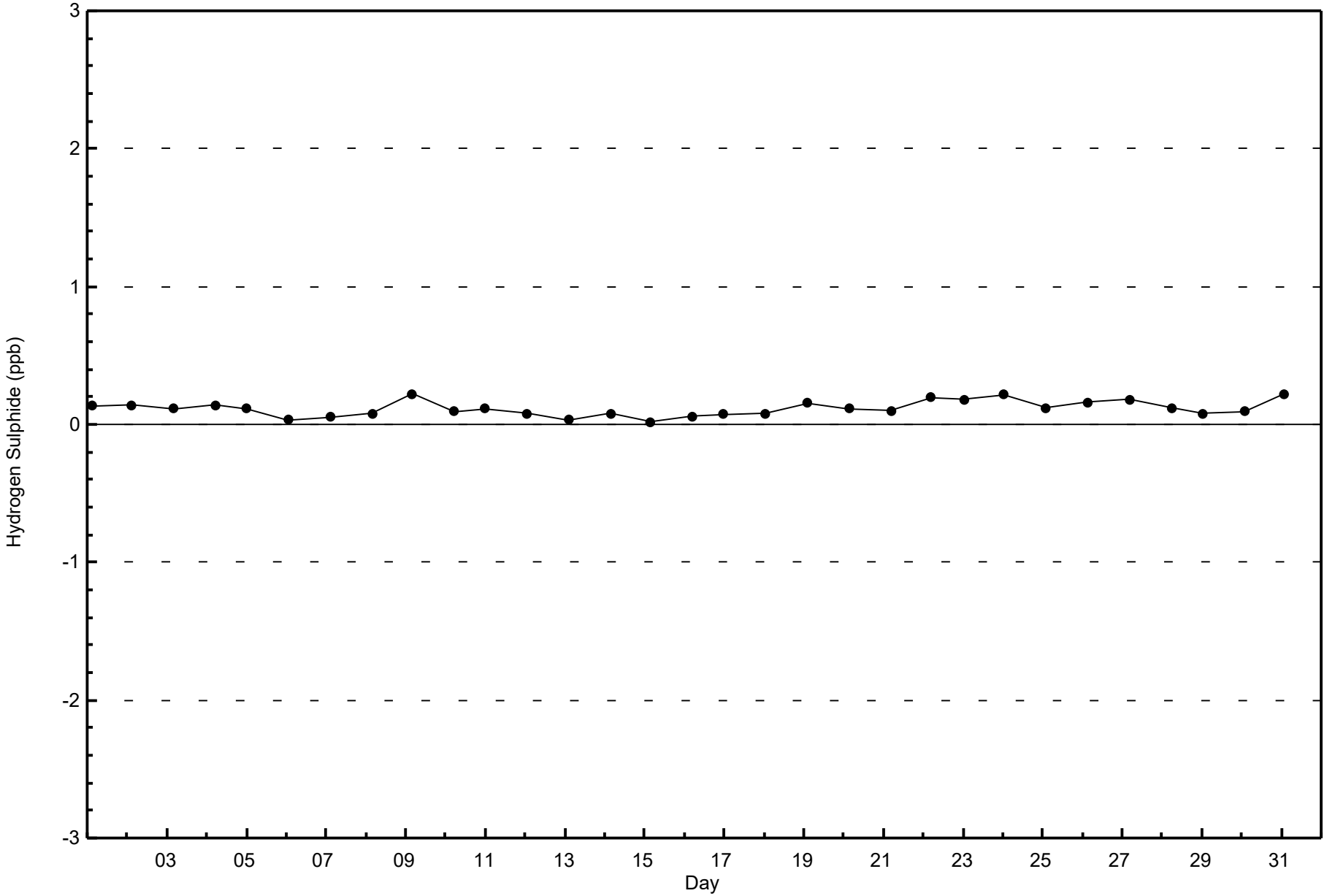
Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**

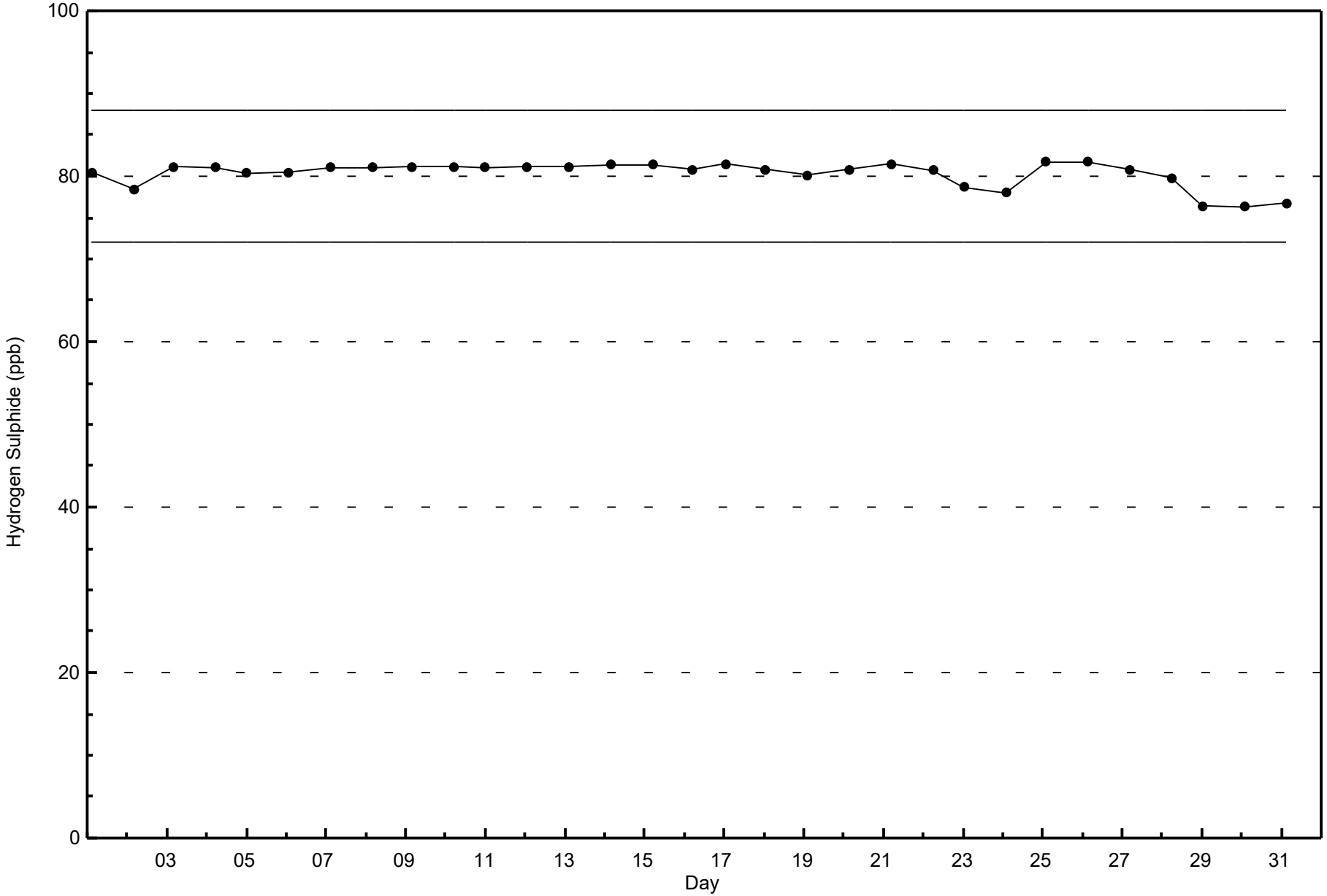


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Waskow ohci Pimatisiwin - August 2026**



Maximum Value: 29.1 C on Aug 26 16:00

Maximum Daily Average: 20.6 C on Aug 27

Minimum Value: 5.4 C on Aug 17 06:00

Minimum Daily Average: 13.5 C on Aug 12

Maximum Diurnal Average: 22.4 C at hour 16

Minimum Diurnal Average: 11.2 C at hour 6

Monthly Average: 16.60 C

Percentiles: $P_1$ = 7.2 $P_{10}$ = 10.4 $Q_1$ = 12.6 Median = 16.1 $Q_3$ = 20.3 $P_{90}$ = 23.8 $P_{99}$ = 27.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

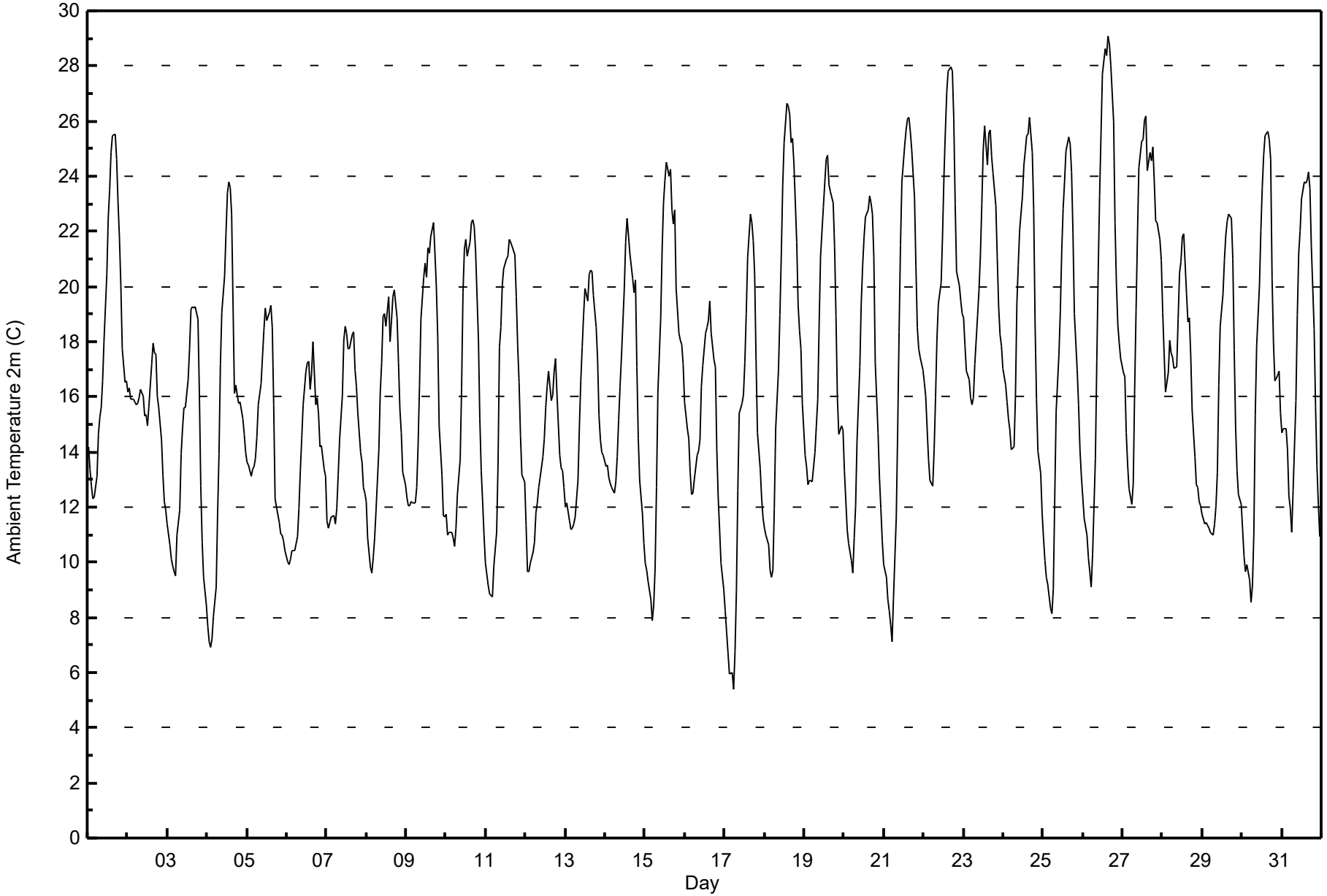
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 14.2 | 13.4 | 12.8 | 12.3 | 12.4 | 13.1 | 14.6 | 15.3 | 15.6 | 16.6 | 18.0 | 20.4 | 22.5 | 23.5 | 24.9 | 25.5 | 25.5 | 24.6 | 23.0 | 21.8 | 20.1 | 17.7 | 16.5 | 16.6 | 18.4 | 25.5 |
| 2-Aug | 16.1 | 16.3 | 15.9 | 15.9 | 15.8 | 15.7 | 15.8 | 16.0 | 16.3 | 16.0 | 15.3 | 15.3 | 15.0 | 15.7 | 17.2 | 17.9 | 17.6 | 17.6 | 16.0 | 15.6 | 14.4 | 13.2 | 12.2 | 11.9 | 15.6 | 17.9 |
| 3-Aug | 11.4 | 10.6 | 10.1 | 9.9 | 9.7 | 9.5 | 11.0 | 11.9 | 13.9 | 14.8 | 15.6 | 15.6 | 16.7 | 17.8 | 19.2 | 19.3 | 19.2 | 19.3 | 18.8 | 16.1 | 12.7 | 10.7 | 9.4 | 8.4 | 13.8 | 19.3 |
| 4-Aug | 7.7 | 7.1 | 6.9 | 7.2 | 8.0 | 9.1 | 11.8 | 13.9 | 17.2 | 19.1 | 20.4 | 22.0 | 23.4 | 23.8 | 23.6 | 22.6 | 16.1 | 16.4 | 16.0 | 15.8 | 15.8 | 15.2 | 14.7 | 14.0 | 15.3 | 23.8 |
| 5-Aug | 13.6 | 13.5 | 13.1 | 13.4 | 13.5 | 13.8 | 14.5 | 15.7 | 16.5 | 17.5 | 18.4 | 19.2 | 18.7 | 19.1 | 19.3 | 18.5 | 15.7 | 12.3 | 12.0 | 11.4 | 11.1 | 11.0 | 10.8 | 10.4 | 14.7 | 19.3 |
| 6-Aug | 10.0 | 9.9 | 10.1 | 10.4 | 10.4 | 10.4 | 11.0 | 12.0 | 13.3 | 14.5 | 15.7 | 16.9 | 17.2 | 17.3 | 16.3 | 16.9 | 18.0 | 15.7 | 16.0 | 15.4 | 14.2 | 14.2 | 13.4 | 13.1 | 13.8 | 18.0 |
| 7-Aug | 11.5 | 11.3 | 11.4 | 11.6 | 11.7 | 11.4 | 12.0 | 13.2 | 14.5 | 16.1 | 18.1 | 18.6 | 18.3 | 17.7 | 17.8 | 18.3 | 18.4 | 17.0 | 16.4 | 15.4 | 14.0 | 13.6 | 12.7 | 12.5 | 14.7 | 18.6 |
| 8-Aug | 12.2 | 10.9 | 9.8 | 9.6 | 10.2 | 10.9 | 11.9 | 14.1 | 16.2 | 17.2 | 18.9 | 19.0 | 18.6 | 19.6 | 18.0 | 18.8 | 19.7 | 19.9 | 18.9 | 17.2 | 15.6 | 14.7 | 13.3 | 12.8 | 15.3 | 19.9 |
| 9-Aug | 12.4 | 12.1 | 12.1 | 12.2 | 12.1 | 12.2 | 12.7 | 14.3 | 16.4 | 18.8 | 20.3 | 20.8 | 20.3 | 21.4 | 21.2 | 21.8 | 22.3 | 21.2 | 20.0 | 18.2 | 14.9 | 13.2 | 11.7 | 11.6 | 16.4 | 22.3 |
| 10-Aug | 11.7 | 11.0 | 11.1 | 11.1 | 10.9 | 10.6 | 11.3 | 12.5 | 13.8 | 16.3 | 19.8 | 21.4 | 21.7 | 21.1 | 21.6 | 22.3 | 22.4 | 22.2 | 21.2 | 18.1 | 15.2 | 13.3 | 12.2 | 11.0 | 16.0 | 22.4 |
| 11-Aug | 10.0 | 9.1 | 8.9 | 8.8 | 8.8 | 9.9 | 11.1 | 13.6 | 17.8 | 18.5 | 20.0 | 20.6 | 21.0 | 21.1 | 21.7 | 21.6 | 21.5 | 21.1 | 19.6 | 17.8 | 16.5 | 14.6 | 13.2 | 12.9 | 15.8 | 21.7 |
| 12-Aug | 11.4 | 9.7 | 9.6 | 10.0 | 10.4 | 10.7 | 11.8 | 12.1 | 12.7 | 13.1 | 13.8 | 14.5 | 15.6 | 16.4 | 16.9 | 15.9 | 16.1 | 16.9 | 17.4 | 16.1 | 13.9 | 13.4 | 13.3 | 12.7 | 13.5 | 17.4 |
| 13-Aug | 12.0 | 12.2 | 11.5 | 11.2 | 11.2 | 11.4 | 11.6 | 13.0 | 14.9 | 16.6 | 17.8 | 19.0 | 20.0 | 19.5 | 20.5 | 20.6 | 20.6 | 19.7 | 18.5 | 17.3 | 15.3 | 14.5 | 14.0 | 13.9 | 15.7 | 20.6 |
| 14-Aug | 13.5 | 13.5 | 13.1 | 12.9 | 12.7 | 12.5 | 12.9 | 13.9 | 15.1 | 16.4 | 17.4 | 19.9 | 21.6 | 22.5 | 21.9 | 21.2 | 20.3 | 19.8 | 20.2 | 17.1 | 14.5 | 13.0 | 11.7 | 10.7 | 16.2 | 22.5 |
| 15-Aug | 10.0 | 9.7 | 9.3 | 8.6 | 7.9 | 8.4 | 9.8 | 12.7 | 16.2 | 18.9 | 21.3 | 23.0 | 23.9 | 24.5 | 24.0 | 24.3 | 22.8 | 22.3 | 22.8 | 20.0 | 18.3 | 18.0 | 17.9 | 17.2 | 17.1 | 24.5 |
| 16-Aug | 15.8 | 14.9 | 14.5 | 13.3 | 12.4 | 12.5 | 13.0 | 13.9 | 14.0 | 14.5 | 16.4 | 17.1 | 18.3 | 18.5 | 18.8 | 19.5 | 18.3 | 17.4 | 17.1 | 14.1 | 12.4 | 11.2 | 10.0 | 9.0 | 14.9 | 19.5 |
| 17-Aug | 8.2 | 7.5 | 6.7 | 5.9 | 6.0 | 5.4 | 6.8 | 9.0 | 12.6 | 15.4 | 15.8 | 16.0 | 17.3 | 19.0 | 21.0 | 22.6 | 22.3 | 21.7 | 20.5 | 17.4 | 14.7 | 13.4 | 12.3 | 11.6 | 13.7 | 22.6 |
| 18-Aug | 11.2 | 11.0 | 10.6 | 9.7 | 9.4 | 9.7 | 12.0 | 14.8 | 17.0 | 19.0 | 21.2 | 23.6 | 25.2 | 26.7 | 26.5 | 26.2 | 25.2 | 25.4 | 24.4 | 21.6 | 19.3 | 18.4 | 17.8 | 15.7 | 18.4 | 26.7 |
| 19-Aug | 13.9 | 13.5 | 12.8 | 13.0 | 13.0 | 12.9 | 14.0 | 15.0 | 15.9 | 18.6 | 21.1 | 22.9 | 23.8 | 24.6 | 24.8 | 23.7 | 23.5 | 23.0 | 21.5 | 18.9 | 16.0 | 14.6 | 15.0 | 14.8 | 17.9 | 24.8 |
| 20-Aug | 13.3 | 12.3 | 11.2 | 10.7 | 10.1 | 9.6 | 10.9 | 12.1 | 14.4 | 17.1 | 19.4 | 20.8 | 21.7 | 22.5 | 22.8 | 23.3 | 23.0 | 22.6 | 21.0 | 17.3 | 14.7 | 13.1 | 11.9 | 10.8 | 16.1 | 23.3 |
| 21-Aug | 9.9 | 9.5 | 8.7 | 8.3 | 7.7 | 7.1 | 8.7 | 11.6 | 14.8 | 18.4 | 21.5 | 23.8 | 25.1 | 25.7 | 26.1 | 26.1 | 25.6 | 24.9 | 23.3 | 20.7 | 18.5 | 17.7 | 17.5 | 17.0 | 17.4 | 26.1 |
| 22-Aug | 16.5 | 16.0 | 14.8 | 13.7 | 13.0 | 12.8 | 14.1 | 16.0 | 18.1 | 19.4 | 20.2 | 21.8 | 24.0 | 25.6 | 27.1 | 27.8 | 28.0 | 27.8 | 26.1 | 23.0 | 20.5 | 20.1 | 19.5 | 19.0 | 20.2 | 28.0 |
| 23-Aug | 18.8 | 17.8 | 16.9 | 16.6 | 16.0 | 15.7 | 16.0 | 17.2 | 19.0 | 19.9 | 21.1 | 23.0 | 25.0 | 25.8 | 24.4 | 25.6 | 25.7 | 24.7 | 24.1 | 22.9 | 21.0 | 19.3 | 18.3 | 17.8 | 20.5 | 25.8 |
| 24-Aug | 17.1 | 16.4 | 15.8 | 15.2 | 14.8 | 14.1 | 14.2 | 16.1 | 19.4 | 20.8 | 22.1 | 23.3 | 24.4 | 24.9 | 25.5 | 25.5 | 26.1 | 24.9 | 22.8 | 18.6 | 15.9 | 14.1 | 13.2 | 11.8 | 19.0 | 26.1 |
| 25-Aug | 10.9 | 10.1 | 9.5 | 9.2 | 8.3 | 8.1 | 9.1 | 12.3 | 15.5 | 17.5 | 19.1 | 21.3 | 22.8 | 23.8 | 24.9 | 25.4 | 25.2 | 24.2 | 21.9 | 19.0 | 17.0 | 15.7 | 14.1 | 13.1 | 16.6 | 25.4 |
| 26-Aug | 12.4 | 11.6 | 11.0 | 10.2 | 9.7 | 9.1 | 10.3 | 13.8 | 17.3 | 20.6 | 23.3 | 25.5 | 27.7 | 28.6 | 28.4 | 29.1 | 28.8 | 28.0 | 26.0 | 22.3 | 20.1 | 18.6 | 18.0 | 17.4 | 19.5 | 29.1 |
| 27-Aug | 16.9 | 16.7 | 14.7 | 13.5 | 12.7 | 12.1 | 12.9 | 16.3 | 19.1 | 21.9 | 24.3 | 25.3 | 25.3 | 26.0 | 26.2 | 24.2 | 24.9 | 24.6 | 25.1 | 23.8 | 22.4 | 22.3 | 21.7 | 21.0 | 20.6 | 26.2 |
| 28-Aug | 19.1 | 17.6 | 16.2 | 16.9 | 18.0 | 17.6 | 17.4 | 17.0 | 17.1 | 18.8 | 20.5 | 20.9 | 21.8 | 21.9 | 19.7 | 18.7 | 18.9 | 17.5 | 15.5 | 13.8 | 12.8 | 12.7 | 12.2 | 12.1 | 17.3 | 21.9 |
| 29-Aug | 11.7 | 11.4 | 11.5 | 11.3 | 11.3 | 11.1 | 11.0 | 11.4 | 12.0 | 13.3 | 16.4 | 18.6 | 19.7 | 20.9 | 21.8 | 22.4 | 22.6 | 22.5 | 21.0 | 17.7 | 14.9 | 13.3 | 12.5 | 12.1 | 15.5 | 22.6 |
| 30-Aug | 11.2 | 10.2 | 9.7 | 9.9 | 9.3 | 8.6 | 9.2 | 11.0 | 15.3 | 17.9 | 20.1 | 22.0 | 23.6 | 24.8 | 25.5 | 25.6 | 25.3 | 24.6 | 20.3 | 17.9 | 16.6 | 16.8 | 16.9 | 15.4 | 17.0 | 25.6 |
| 31-Aug | 14.7 | 14.8 | 14.8 | 14.1 | 12.4 | 11.9 | 11.1 | 12.6 | 15.9 | 19.0 | 21.2 | 22.0 | 23.2 | 23.8 | 23.8 | 23.8 | 24.2 | 23.6 | 21.5 | 18.5 | 15.7 | 13.5 | 12.1 | 10.9 | 17.5 | 24.2 |
| | 12.9 | 12.3 | 11.8 | 11.5 | 11.3 | 11.2 | 12.1 | 13.7 | 15.7 | 17.5 | 19.2 | 20.5 | 21.4 | 22.1 | 22.3 | 22.4 | 22.1 | 21.4 | 20.3 | 18.1 | 16.1 | 15.0 | 14.2 | 13.5 | Diurnal Average | |
| | 19.1 | 17.8 | 16.9 | 16.9 | 18.0 | 17.6 | 17.4 | 17.2 | 19.4 | 21.9 | 24.3 | 25.5 | 27.7 | 28.6 | 28.4 | 29.1 | 28.8 | 28.0 | 26.1 | 23.8 | 22.4 | 22.3 | 21.7 | 21.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Waskow ohci Pimatisiwin - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 63 | 8.47 | 8.47 |
| 10 - 20 | 485 | 65.19 | 73.66 |
| > 20 | 196 | 26.34 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Waskow ohci Pimatisiwin - August 2026

Maximum Value: 99.0 % on Aug 1 07:00

Maximum Daily Average: 88.1 % on Aug 1

Minimum Value: 30.1 % on Aug 24 14:00

Minimum Daily Average: 64.5 % on Aug 24

Maximum Diurnal Average: 93.1 % at hour 6

Minimum Diurnal Average: 50.7 % at hour 14

Monthly Average: 74.03 %

Percentiles: $P_1$ = 35.6 $P_{10}$ = 46.4 $Q_1$ = 57.4 Median = 76.7 $Q_3$ = 92.2 $P_{90}$ = 96.3 $P_{99}$ = 98.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

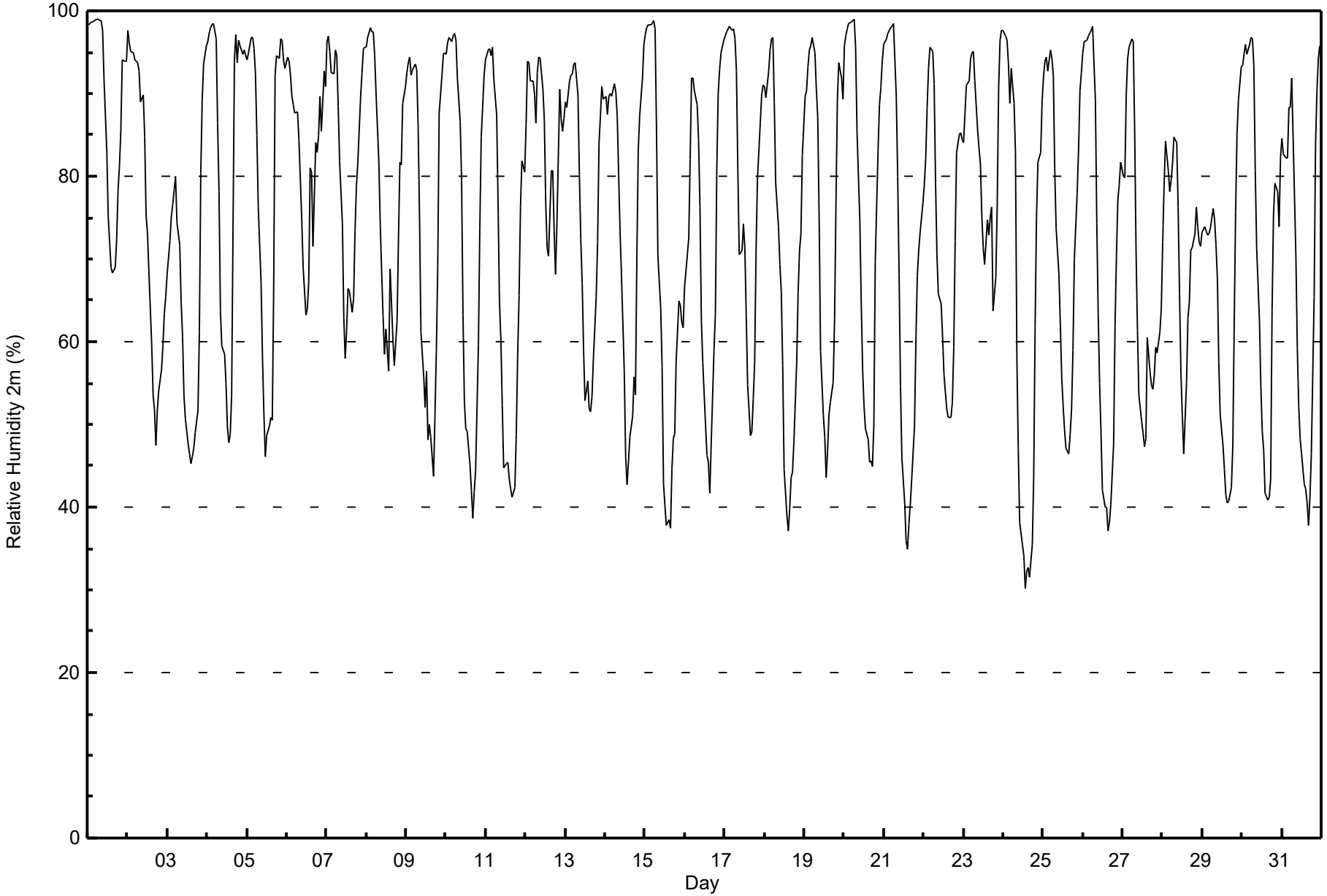
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 98.3 | 98.4 | 98.6 | 98.7 | 98.9 | 99.0 | 99.0 | 98.8 | 98.7 | 97.7 | 91.7 | 82.9 | 75.0 | 72.0 | 69.1 | 68.4 | 68.9 | 72.4 | 78.4 | 81.1 | 85.6 | 94.2 | 93.9 | 93.9 | 88.1 | 99.0 |
| 2-Aug | 97.7 | 96.0 | 95.1 | 94.8 | 94.0 | 93.9 | 93.8 | 92.8 | 89.1 | 89.8 | 84.8 | 75.3 | 73.0 | 68.5 | 59.7 | 53.5 | 51.7 | 47.4 | 51.7 | 54.1 | 56.6 | 59.5 | 63.4 | 65.4 | 75.1 | 97.7 |
| 3-Aug | 68.2 | 72.3 | 75.1 | 76.6 | 78.3 | 79.9 | 74.4 | 71.6 | 64.8 | 60.7 | 53.6 | 50.7 | 47.7 | 46.5 | 45.3 | 46.1 | 47.1 | 48.9 | 51.7 | 61.2 | 80.4 | 89.1 | 93.6 | 95.8 | 65.8 | 95.8 |
| 4-Aug | 96.3 | 97.2 | 98.0 | 98.4 | 98.4 | 96.6 | 86.4 | 78.2 | 63.7 | 59.6 | 58.5 | 54.9 | 49.7 | 47.7 | 48.8 | 53.4 | 94.1 | 97.1 | 93.7 | 96.5 | 95.8 | 94.7 | 95.3 | 94.5 | 81.1 | 98.4 |
| 5-Aug | 94.1 | 94.9 | 96.7 | 96.7 | 95.4 | 92.3 | 84.9 | 76.2 | 67.1 | 58.1 | 51.4 | 46.1 | 48.6 | 49.9 | 50.9 | 50.5 | 66.6 | 92.2 | 94.6 | 94.2 | 96.6 | 96.4 | 94.1 | 93.0 | 78.4 | 96.7 |
| 6-Aug | 94.5 | 93.9 | 92.2 | 89.7 | 88.7 | 87.6 | 87.7 | 84.3 | 79.6 | 74.7 | 69.0 | 63.3 | 64.1 | 67.4 | 81.0 | 80.5 | 71.6 | 84.1 | 82.8 | 85.0 | 89.6 | 85.5 | 92.8 | 90.8 | 82.5 | 94.5 |
| 7-Aug | 96.2 | 97.0 | 95.2 | 92.6 | 92.4 | 95.2 | 94.5 | 88.5 | 81.8 | 74.2 | 62.9 | 58.0 | 61.4 | 66.4 | 66.1 | 63.6 | 65.2 | 73.4 | 78.9 | 81.7 | 89.6 | 92.5 | 95.4 | 95.6 | 81.6 | 97.0 |
| 8-Aug | 95.6 | 96.8 | 98.0 | 97.5 | 97.4 | 94.8 | 90.0 | 81.7 | 74.1 | 68.6 | 63.1 | 58.4 | 61.6 | 56.5 | 68.8 | 64.7 | 60.4 | 57.2 | 62.6 | 72.6 | 81.6 | 81.4 | 88.9 | 90.8 | 77.6 | 98.0 |
| 9-Aug | 92.5 | 93.8 | 94.5 | 92.3 | 92.9 | 93.6 | 92.8 | 86.2 | 75.1 | 61.2 | 55.7 | 52.0 | 56.4 | 48.2 | 49.9 | 48.4 | 43.7 | 51.1 | 59.1 | 69.1 | 87.7 | 92.2 | 94.7 | 94.9 | 74.1 | 94.9 |
| 10-Aug | 94.7 | 96.1 | 96.8 | 96.3 | 97.0 | 97.4 | 96.4 | 91.8 | 86.7 | 79.6 | 63.2 | 52.7 | 49.4 | 49.2 | 45.1 | 42.0 | 38.6 | 41.8 | 44.4 | 59.7 | 73.7 | 84.8 | 88.4 | 92.0 | 73.2 | 97.4 |
| 11-Aug | 94.1 | 95.2 | 95.4 | 94.6 | 95.6 | 91.6 | 87.5 | 76.9 | 64.8 | 60.4 | 52.4 | 44.7 | 45.2 | 45.4 | 43.4 | 42.2 | 41.2 | 42.4 | 48.8 | 58.4 | 65.6 | 76.2 | 81.8 | 80.4 | 67.7 | 95.6 |
| 12-Aug | 86.3 | 93.9 | 93.8 | 91.5 | 91.5 | 90.1 | 86.4 | 92.5 | 94.3 | 94.3 | 90.6 | 86.8 | 76.9 | 71.4 | 70.4 | 80.7 | 80.7 | 73.3 | 68.1 | 74.5 | 90.6 | 87.0 | 85.5 | 87.0 | 84.9 | 94.3 |
| 13-Aug | 89.0 | 88.4 | 91.6 | 92.2 | 92.4 | 93.5 | 93.7 | 89.9 | 80.2 | 72.4 | 67.1 | 58.9 | 52.9 | 55.3 | 51.9 | 51.5 | 53.3 | 57.9 | 65.5 | 72.0 | 83.8 | 87.3 | 90.8 | 89.3 | 75.9 | 93.7 |
| 14-Aug | 89.7 | 87.4 | 89.7 | 90.0 | 89.7 | 91.1 | 90.1 | 87.3 | 80.1 | 73.4 | 68.2 | 56.4 | 46.2 | 42.7 | 45.4 | 48.5 | 51.0 | 55.7 | 53.5 | 70.4 | 83.3 | 87.3 | 91.8 | 95.9 | 73.5 | 95.9 |
| 15-Aug | 97.1 | 98.0 | 98.3 | 98.3 | 98.5 | 98.8 | 97.9 | 85.6 | 70.4 | 64.0 | 57.0 | 42.9 | 40.3 | 37.7 | 38.4 | 37.5 | 44.5 | 48.3 | 48.9 | 57.5 | 65.0 | 64.5 | 62.4 | 61.7 | 67.2 | 98.8 |
| 16-Aug | 66.6 | 70.5 | 72.6 | 82.0 | 91.9 | 91.8 | 90.3 | 88.7 | 84.4 | 76.3 | 62.5 | 57.4 | 49.8 | 46.2 | 45.5 | 41.7 | 47.7 | 59.0 | 63.3 | 80.9 | 90.0 | 92.9 | 94.9 | 96.4 | 72.6 | 96.4 |
| 17-Aug | 97.0 | 97.4 | 97.8 | 98.1 | 97.6 | 97.8 | 96.7 | 92.6 | 80.8 | 70.5 | 71.1 | 74.2 | 71.4 | 63.0 | 54.7 | 48.7 | 49.2 | 53.1 | 57.4 | 71.0 | 79.6 | 86.5 | 89.8 | 91.0 | 78.6 | 98.1 |
| 18-Aug | 90.8 | 89.5 | 92.7 | 95.3 | 96.6 | 96.9 | 89.0 | 79.2 | 74.0 | 69.4 | 65.9 | 57.2 | 44.5 | 38.9 | 37.1 | 39.9 | 43.6 | 44.3 | 48.0 | 57.6 | 66.0 | 70.9 | 73.0 | 82.5 | 68.4 | 96.9 |
| 19-Aug | 89.6 | 90.3 | 93.3 | 95.3 | 95.7 | 96.8 | 95.0 | 90.5 | 87.1 | 74.8 | 58.8 | 50.9 | 48.5 | 43.6 | 46.7 | 51.2 | 52.8 | 55.1 | 62.8 | 76.7 | 89.4 | 93.7 | 91.8 | 89.4 | 75.8 | 96.8 |
| 20-Aug | 95.8 | 97.0 | 97.9 | 98.5 | 98.7 | 98.8 | 99.0 | 95.6 | 85.4 | 74.8 | 64.7 | 56.7 | 52.2 | 49.5 | 48.2 | 45.4 | 45.6 | 44.9 | 49.8 | 69.6 | 83.1 | 88.6 | 90.6 | 93.8 | 76.0 | 99.0 |
| 21-Aug | 95.9 | 96.6 | 97.3 | 97.7 | 97.9 | 98.1 | 98.6 | 89.7 | 80.1 | 68.2 | 54.6 | 45.9 | 40.6 | 35.9 | 35.0 | 37.9 | 40.3 | 43.4 | 49.9 | 60.2 | 67.9 | 71.1 | 73.1 | 76.8 | 68.9 | 98.6 |
| 22-Aug | 78.9 | 82.2 | 88.2 | 93.0 | 95.5 | 95.2 | 91.1 | 79.3 | 70.5 | 65.8 | 64.6 | 60.6 | 56.2 | 53.9 | 51.8 | 50.8 | 50.9 | 52.8 | 59.3 | 72.3 | 82.9 | 85.0 | 85.2 | 84.5 | 72.9 | 95.5 |
| 23-Aug | 84.0 | 87.7 | 91.0 | 91.5 | 94.3 | 95.0 | 95.2 | 91.6 | 85.6 | 83.4 | 81.5 | 75.3 | 71.4 | 69.3 | 74.7 | 72.9 | 75.1 | 76.2 | 63.8 | 67.8 | 76.8 | 90.6 | 96.5 | 97.6 | 82.9 | 97.6 |
| 24-Aug | 97.6 | 97.0 | 96.4 | 93.6 | 88.8 | 93.1 | 88.9 | 82.8 | 58.2 | 47.0 | 38.2 | 35.5 | 34.1 | 30.1 | 32.2 | 32.8 | 31.5 | 35.5 | 43.6 | 61.7 | 75.1 | 81.7 | 82.9 | 89.2 | 64.5 | 97.6 |
| 25-Aug | 92.0 | 94.0 | 94.5 | 92.6 | 95.2 | 94.3 | 92.2 | 80.8 | 73.7 | 68.1 | 62.1 | 55.6 | 52.3 | 49.3 | 47.1 | 46.4 | 48.8 | 51.8 | 59.0 | 69.9 | 78.0 | 83.3 | 90.3 | 92.5 | 73.5 | 95.2 |
| 26-Aug | 94.9 | 96.2 | 96.4 | 96.9 | 97.3 | 97.6 | 98.1 | 89.1 | 74.2 | 63.5 | 55.0 | 49.1 | 42.1 | 40.0 | 40.0 | 37.1 | 38.2 | 40.4 | 47.7 | 61.9 | 70.3 | 77.1 | 78.9 | 81.6 | 69.3 | 98.1 |
| 27-Aug | 80.0 | 79.8 | 89.9 | 94.2 | 95.6 | 96.6 | 96.3 | 85.6 | 70.8 | 61.3 | 53.6 | 50.4 | 49.0 | 47.3 | 48.4 | 60.6 | 56.2 | 54.8 | 54.2 | 56.0 | 59.4 | 58.6 | 61.1 | 64.0 | 67.7 | 96.6 |
| 28-Aug | 72.0 | 79.0 | 84.3 | 80.6 | 78.1 | 79.5 | 81.5 | 84.8 | 84.1 | 76.3 | 65.8 | 56.3 | 51.1 | 46.4 | 55.1 | 62.9 | 64.8 | 71.0 | 71.4 | 73.0 | 76.2 | 73.9 | 72.0 | 71.6 | 71.3 | 84.8 |
| 29-Aug | 73.2 | 73.8 | 73.4 | 73.0 | 73.0 | 73.8 | 76.1 | 74.8 | 71.7 | 67.6 | 57.5 | 51.2 | 47.5 | 44.7 | 41.5 | 40.5 | 40.7 | 42.5 | 47.5 | 62.2 | 75.7 | 85.0 | 89.1 | 93.2 | 64.5 | 93.2 |
| 30-Aug | 93.3 | 94.7 | 96.0 | 94.8 | 95.9 | 96.8 | 96.6 | 93.3 | 80.6 | 71.4 | 62.6 | 54.6 | 49.2 | 47.0 | 41.7 | 40.8 | 41.1 | 43.4 | 63.8 | 75.2 | 79.1 | 78.1 | 73.8 | 82.2 | 72.7 | 96.8 |
| 31-Aug | 84.6 | 82.7 | 82.2 | 82.2 | 88.3 | 88.3 | 91.8 | 84.8 | 70.1 | 59.2 | 52.2 | 48.3 | 46.4 | 42.6 | 42.2 | 40.6 | 37.8 | 41.2 | 46.5 | 65.5 | 83.7 | 90.4 | 94.2 | 95.7 | 68.4 | 95.7 |
| | 89.4 | 90.6 | 92.0 | 92.2 | 92.9 | 93.1 | 91.3 | 86.0 | 77.5 | 70.5 | 63.2 | 56.9 | 53.4 | 50.7 | 50.8 | 51.0 | 53.0 | 56.5 | 60.3 | 70.0 | 79.3 | 83.2 | 85.5 | 87.2 | Diurnal Average | |
| | 98.3 | 98.4 | 98.6 | 98.7 | 98.9 | 99.0 | 99.0 | 98.8 | 98.7 | 97.7 | 91.7 | 86.8 | 76.9 | 72.0 | 81.0 | 80.7 | 94.1 | 97.1 | 94.6 | 96.5 | 96.6 | 96.4 | 96.5 | 97.6 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Waskow ohci Pimatisiwin - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 22 | 2.96 | 2.96 |
| 40 - 60 | 188 | 25.27 | 28.23 |
| 60 - 80 | 187 | 25.13 | 53.36 |
| 80 - 100 | 347 | 46.64 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Waskow ohci Pimatisiwin - August 2026

Maximum Speed: 21 km/h on Aug 2 11:00

Maximum Daily Speed Average: 13.7 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 31 07:00

Minimum Daily Speed Average: 0.8 km/h on Aug 9

Maximum Diurnal Speed Average: 2.0 km/h at hour 19

Minimum Diurnal Speed Average: 0.5 km/h at hour 8

Monthly Average Velocity: 1.2 km/h 312.0 deg

Percentiles: $P_1 = 0$ $P_{10} = 1$ $Q_1 = 2$ Median = 4 $Q_3 = 7$ $P_{90} = 9$ $P_{99} = 17$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | W2 | SW1 | W2 | WSW1 | SSE1 | SSW1 | SSE3 | SSW0 | N1 | S1 | NNE0 | N3 | N7 | N9 | N8 | NNW10 | NNW10 | NNW10 | NNW8 | NNW9 | NNW11 | NNW8 | N6 | N6 | NNW4.2 | NNW11 |
| 2-Aug | WNW2 | NNW10 | NNW11 | NNW12 | N9 | NNW7 | NNW9 | N10 | NNW12 | N17 | N21 | NNW20 | NNW15 | NNW16 | NNW20 | NNW20 | NNW18 | NNW19 | NNW15 | NNW17 | NNW16 | NW13 | NW12 | NW10 | NNW13.7 | NNW21 |
| 3-Aug | NW9 | NW7 | NW6 | NW7 | NW6 | NW6 | NW8 | NW8 | NNW8 | NNW10 | NNW13 | NNW10 | NNW7 | N6 | NE5 | NE5 | NNE5 | NE4 | NE2 | E1 | SSW1 | WSW1 | W2 | W2 | NNW4.8 | NNW13 |
| 4-Aug | WSW2 | S1 | SSE1 | SSW1 | S1 | S3 | SSE6 | SSE6 | S5 | S4 | SW6 | SW7 | SW8 | SW8 | SSW6 | WSW6 | NNE2 | W2 | WNW5 | W3 | NW6 | NW5 | NW4 | WNW5 | SW2.7 | SW8 |
| 5-Aug | WNW4 | W3 | SW2 | W3 | WNW5 | WNW6 | NW7 | NNW6 | NW11 | NW15 | NW14 | NW15 | NW13 | NW9 | NW7 | NNW8 | N8 | NNW5 | NW5 | NW6 | WNW5 | WNW6 | WNW6 | WNW6 | NW6.9 | NW15 |
| 6-Aug | WNW5 | WNW6 | WNW7 | NW7 | WNW7 | NW6 | WNW4 | NW7 | NW10 | NW10 | NNW10 | NW8 | N8 | N6 | NNE3 | SE1 | NW6 | WNW4 | NNW4 | WNW1 | W3 | WNW7 | W5 | NW4 | NW5.2 | NNW10 |
| 7-Aug | N0 | E1 | NW1 | WNW4 | NNW2 | SE2 | SE2 | W3 | WNW7 | WNW8 | WNW10 | WNW8 | N6 | NNE4 | NW1 | NW1 | NNE4 | NNE4 | NNE4 | N3 | SW2 | WNW2 | W2 | WNW2 | NW2.3 | WNW10 |
| 8-Aug | NW0 | WSW1 | WNW2 | NW3 | NNE1 | NW1 | NNW3 | NNW3 | NNE5 | NNE5 | NE4 | NNE4 | NNE3 | N4 | NNW4 | WSW2 | N1 | N3 | NNW4 | NNW3 | NNW3 | N3 | WNW1 | W2 | N2.2 | NNE5 |
| 9-Aug | W1 | NW1 | W3 | WNW2 | WNW1 | NW2 | WSW2 | NNW1 | SE2 | SE4 | E4 | ENE2 | ESE2 | WNW1 | N5 | NNE2 | N4 | NNE4 | NNW2 | N2 | W2 | W1 | WSW2 | NW2 | NNW0.8 | N5 |
| 10-Aug | WSW1 | W1 | WSW1 | SW1 | SW2 | WNW2 | WNW1 | SW2 | N2 | NE1 | NNE4 | NNE4 | NNE6 | N7 | NNW8 | N6 | N8 | N7 | NNW6 | NNW4 | NNW3 | WNW3 | WNW2 | NW0 | NNW2.6 | NNW8 |
| 11-Aug | NW0 | NNW1 | N1 | SE1 | SSW0 | SSW1 | S1 | NNE1 | ENE2 | N7 | N8 | N12 | N10 | N10 | N11 | N11 | N9 | N9 | N9 | N8 | N6 | NNW4 | NNW4 | NNW5 | N5.1 | N12 |
| 12-Aug | NW3 | NW3 | NW3 | NW4 | NNW1 | NW3 | NNW3 | NW2 | NNW5 | NNW7 | NNW8 | NNW8 | N10 | N10 | N10 | N8 | N7 | NNW7 | NNW8 | N6 | NW4 | NW7 | NNW7 | NNW7 | NNW5.7 | N10 |
| 13-Aug | NNW6 | NNW6 | WNW4 | NW5 | NNW5 | NNW4 | NW3 | N4 | N6 | NNE6 | NNE6 | NE5 | NNE7 | N9 | NNE7 | NNE6 | NE4 | NNE5 | N4 | NNW4 | NW2 | WNW1 | WNW2 | WNW3 | N4.0 | N9 |
| 14-Aug | WNW2 | WNW2 | NNW2 | WNW3 | WNW3 | NW3 | WNW2 | WNW2 | NNW3 | N4 | N4 | NNE4 | NNE3 | ENE3 | N7 | NW9 | WNW5 | S4 | S4 | SSW1 | S1 | SSE2 | S1 | W1 | NW1.6 | NW9 |
| 15-Aug | SSW1 | SSE2 | SSE2 | SSE2 | SSW2 | S3 | S4 | S4 | SSE5 | SSE6 | SE7 | SW7 | SSW7 | SW6 | SSW7 | WSW4 | W3 | SW2 | S3 | SSW3 | SW2 | WSW3 | WSW4 | WSW4 | SSW3.1 | SSW7 |
| 16-Aug | W4 | W4 | NW3 | NE1 | SW1 | WNW4 | WNW4 | N10 | N11 | N12 | N12 | N9 | NNE9 | N8 | N7 | NW6 | NNW5 | NNE5 | ENE1 | SW1 | WSW2 | W2 | WSW1 | W1 | NNW4.2 | N12 |
| 17-Aug | W2 | W3 | W2 | WSW3 | WSW2 | S2 | SSE3 | SSE4 | SSE3 | SW2 | SW2 | SSE1 | SE3 | SE3 | SE4 | SE4 | SSE5 | SSE5 | SSE5 | SSE2 | S2 | S3 | SSE2 | ESE1 | S2.2 | SSE5 |
| 18-Aug | SSE2 | ESE1 | N0 | SW1 | SSE1 | SSE2 | SSE4 | SSE5 | SSE6 | SSE6 | SSE6 | S6 | SW7 | SSW7 | SW8 | SW7 | SW6 | SW6 | SW5 | SW3 | S3 | SW2 | NW2 | NE1 | SSW3.2 | SW8 |
| 19-Aug | W1 | SE1 | SE2 | S2 | SE2 | S2 | SE2 | SSE2 | SSW2 | NW2 | WNW4 | NW3 | N4 | N6 | NNE3 | NNW6 | N11 | N7 | N5 | NNW3 | WSW3 | W1 | WNW4 | WNW3 | NNW1.6 | N11 |
| 20-Aug | S2 | NNE1 | W1 | SSW1 | SW1 | WSW1 | SW1 | WNW2 | NNW2 | N3 | N8 | N8 | NNE5 | N6 | NNE8 | NNE7 | NNE6 | NNE5 | N3 | NW1 | WNW2 | W2 | WSW2 | WNW1 | N2.4 | N8 |
| 21-Aug | WSW2 | W1 | WSW2 | SW1 | S1 | SW2 | SSE3 | SSE4 | SSE5 | SE5 | SE5 | SSE6 | SSE7 | SSE7 | S7 | SE7 | SSE7 | SSE7 | SSE6 | SSE4 | SSE4 | SSE4 | SSE6 | SSE5 | SSE4.2 | S7 |
| 22-Aug | SSE5 | SSE3 | SE0 | SE1 | SSE1 | NE1 | SE2 | SSE4 | SSE4 | SSE6 | SSE7 | SSE7 | SE7 | SE6 | SE6 | SE6 | SE6 | SSE5 | SSE4 | E1 | SSE2 | SE3 | SSE3 | SSE3 | SSE3.8 | SE7 |
| 23-Aug | SSE4 | SSE3 | SSE4 | SSE5 | SSE4 | SSE4 | SSE3 | SSE5 | SSE4 | SSE6 | SSE4 | SE4 | SSE5 | SSE5 | SSE6 | SSW1 | SSE4 | WNW2 | NW9 | NNW6 | NW3 | W1 | WNW0 | NNE1 | SSE2.2 | NW9 |
| 24-Aug | SW1 | SSW0 | W2 | NW3 | SW1 | W1 | S1 | WNW2 | NW4 | NW5 | NW8 | NW9 | N6 | NNW10 | N8 | N5 | NNE6 | NNE6 | N4 | NW2 | W1 | WNW2 | NNW2 | W2 | NNW3.1 | NNW10 |
| 25-Aug | W2 | W4 | W3 | WNW1 | NNW2 | WNW3 | W2 | N2 | N3 | NNE4 | N3 | E4 | E3 | ESE4 | E3 | NE4 | NE4 | NE4 | NNE3 | NNW3 | NNW4 | WNW3 | W2 | WNW2 | N1.5 | NE4 |
| 26-Aug | WNW2 | W2 | WNW2 | W3 | W3 | W2 | S2 | SSE4 | SSE7 | SSE7 | SSE7 | SSE8 | SSE9 | SE9 | SSE8 | SSE10 | SSE9 | SSE8 | SSE4 | SSE2 | ESE2 | SE3 | SE3 | SE3 | SSE4.1 | SSE10 |
| 27-Aug | SSE4 | SE2 | NNE1 | W2 | WSW1 | WNW0 | WSW0 | SSE2 | SSE4 | SSE4 | SSE4 | SSE6 | SSE8 | SSE8 | SSE6 | SE3 | NE1 | SE6 | ESE7 | SE4 | SE5 | SE6 | SSE6 | SE5 | SSE3.6 | SSE8 |
| 28-Aug | SSE2 | NE1 | S2 | SSE6 | SSW4 | NW2 | SSE9 | SSE8 | SSE7 | S8 | SSW9 | SW11 | SW12 | SSW15 | SSW13 | SW11 | SSW10 | SW9 | WSW10 | SW9 | SW7 | SW9 | SW8 | SW9 | SSW7.1 | SSW15 |
| 29-Aug | SSW7 | SSW6 | SSW7 | SSW8 | SSW8 | SSW8 | S7 | S8 | SSW8 | SW8 | SW8 | SW8 | SW10 | SW9 | SSW9 | SW8 | SW8 | SSW7 | SSW4 | SSE2 | SSE2 | S2 | S2 | S1 | SSW6.3 | SW10 |
| 30-Aug | WSW1 | SSW1 | W2 | WNW1 | W2 | W2 | WNW3 | SE2 | SE4 | SSE6 | SE5 | SE5 | SE5 | ESE4 | SE5 | SSE4 | SE4 | SE2 | WSW1 | WSW1 | N3 | N2 | NNW4 | WNW4 | SSE1.1 | SSE6 |
| 31-Aug | NNW3 | NNW2 | W3 | WNW4 | NNW1 | WNW1 | NNE0 | S2 | SW0 | WSW2 | E4 | ESE4 | SE5 | SSE3 | SSW3 | SW4 | SW6 | WSW4 | NW7 | NNW5 | WNW2 | W2 | WSW2 | W2 | W1.1 | NW7 |
| | W1.4 | WNW1.2 | WNW1.5 | W1.6 | W1.2 | W1.3 | SW0.8 | WSW0.5 | NNW0.6 | NNW1.3 | NNW2.0 | NNW1.8 | N1.2 | N1.2 | N1.3 | NNW1.7 | NNW1.9 | NNW1.6 | NNW2.0 | NW1.9 | WNW1.7 | WNW1.7 | WNW1.7 | WNW1.7 | Diurnal Average | |
| | NW9 | NNW10 | NNW11 | NNW12 | N9 | SSW8 | SSE9 | N10 | NNW12 | N17 | NNW21 | NNW20 | NNW15 | NNW16 | NNW20 | NNW20 | NNW18 | NNW19 | NNW15 | NNW17 | NNW16 | NW13 | NW12 | NW10 | Diurnal Maximum | |

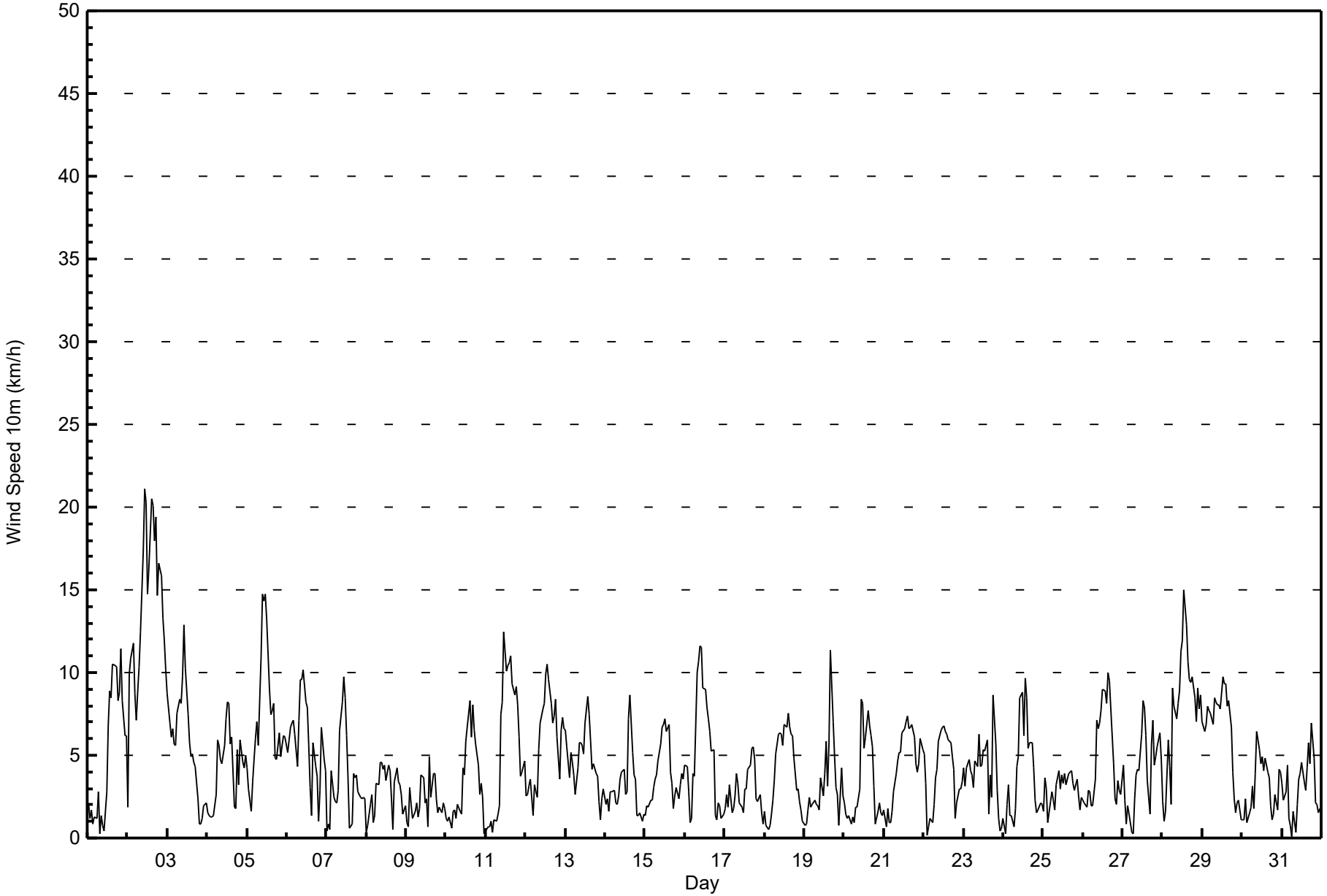
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Waskow ohci Pimatisiwin - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 486 | 65.32 | 65.32 |
| 6 - 11 | 231 | 31.05 | 96.37 |
| 12 - 19 | 23 | 3.09 | 99.46 |
| 20 - 28 | 4 | 0.54 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Waskow ohci Pimatisiwin - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 29 | 32 | 14 | 5 | 7 | 8 | 35 | 69 | 30 | 18 | 24 | 30 | 53 | 58 | 37 | 37 | 486 |
| 6 - 11 | 48 | 12 | 0 | 0 | 0 | 1 | 10 | 37 | 5 | 15 | 27 | 2 | 0 | 12 | 28 | 34 | 231 |
| 12 - 19 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 6 | 10 | 23 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 81 | 44 | 14 | 5 | 7 | 9 | 45 | 106 | 35 | 36 | 51 | 32 | 53 | 70 | 71 | 85 | 744 |

Total Number of Valid Hours: 744

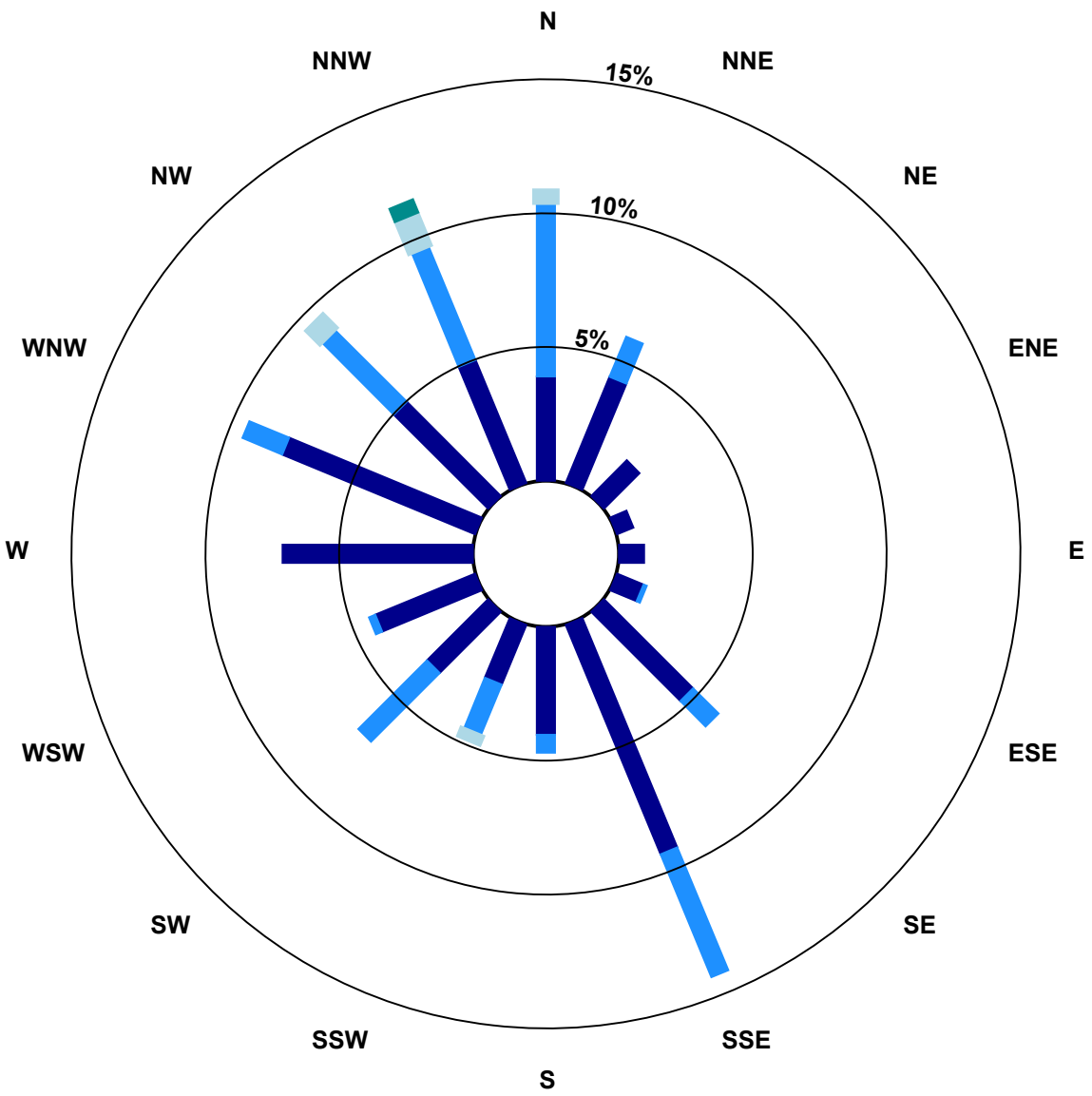
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Waskow ohci Pimatisiwin




Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 744

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 7 km/h on Aug 1 21:00

Minimum Value: 0 km/h on Aug 10 22:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 7 | 4 | 2 | 4 | 7 |
| 2-Aug | 1 | 4 | 3 | 3 | 3 | 2 | 4 | 3 | 4 | 6 | 6 | 6 | 5 | 5 | 7 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 3 | 3 | 7 |
| 3-Aug | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 5 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 5 |
| 5-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 5 | 4 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 5 |
| 6-Aug | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 |
| 7-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 3 |
| 8-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 9-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| 10-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 0 | 1 | 1 | 3 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 2 | 4 |
| 12-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 4 |
| 13-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 3 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 15-Aug | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 16-Aug | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 18-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 19-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 3 | 4 |
| 20-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 3 |
| 22-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 23-Aug | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 3 |
| 24-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 26-Aug | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 27-Aug | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 4 | 3 | 2 | 2 | 2 | 3 | 2 | 4 |
| 28-Aug | 1 | 1 | 1 | 4 | 3 | 2 | 4 | 3 | 3 | 3 | 4 | 5 | 5 | 7 | 6 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 7 |
| 29-Aug | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 30-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 |
| 31-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 6 | 6 | 6 | 5 | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Waskow ohci Pimatisiwin - August 2026

Direction of Maximum Speed: 349 deg on Aug 2 11:00
Direction of Maximum Daily Speed Average: 340.8 deg on Aug 2

Direction of Minimum Speed: 30 deg on Aug 31 07:00

Direction of Minimum Daily Speed Average: 0.8 deg on Aug 9

Monthly Average Direction: 312.0 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 260 | 221 | 266 | 243 | 167 | 203 | 167 | 201 | 11 | 179 | 18 | 355 | 8 | 354 | 350 | 346 | 339 | 345 | 340 | 328 | 346 | 337 | 353 | 356 | 343.0 |
| 2-Aug | 290 | 335 | 343 | 347 | 350 | 342 | 346 | 350 | 348 | 349 | 349 | 348 | 347 | 342 | 346 | 347 | 335 | 335 | 342 | 340 | 330 | 323 | 322 | 316 | 340.8 |
| 3-Aug | 319 | 313 | 316 | 313 | 306 | 309 | 317 | 321 | 346 | 346 | 344 | 327 | 342 | 356 | 45 | 39 | 23 | 34 | 45 | 101 | 199 | 246 | 264 | 263 | 335.7 |
| 4-Aug | 256 | 188 | 161 | 211 | 179 | 185 | 164 | 161 | 172 | 171 | 215 | 222 | 222 | 215 | 200 | 249 | 14 | 279 | 296 | 263 | 311 | 306 | 310 | 300 | 228.7 |
| 5-Aug | 293 | 266 | 216 | 267 | 290 | 299 | 317 | 333 | 324 | 317 | 320 | 318 | 321 | 310 | 308 | 337 | 352 | 337 | 323 | 317 | 295 | 285 | 295 | 297 | 313.8 |
| 6-Aug | 290 | 292 | 302 | 308 | 300 | 304 | 301 | 310 | 318 | 326 | 327 | 324 | 351 | 6 | 15 | 145 | 308 | 296 | 345 | 294 | 269 | 297 | 272 | 309 | 313.7 |
| 7-Aug | 2 | 98 | 312 | 297 | 345 | 141 | 144 | 280 | 289 | 298 | 296 | 294 | 2 | 20 | 304 | 324 | 33 | 13 | 19 | 4 | 236 | 291 | 276 | 283 | 316.2 |
| 8-Aug | 315 | 248 | 283 | 312 | 19 | 322 | 337 | 344 | 25 | 20 | 51 | 32 | 17 | 8 | 328 | 253 | 10 | 351 | 341 | 337 | 329 | 350 | 283 | 269 | 349.3 |
| 9-Aug | 261 | 319 | 269 | 289 | 288 | 323 | 255 | 338 | 135 | 145 | 101 | 71 | 117 | 294 | 360 | 21 | 356 | 13 | 336 | 358 | 277 | 260 | 248 | 325 | 340.1 |
| 10-Aug | 246 | 269 | 239 | 215 | 226 | 298 | 295 | 235 | 4 | 37 | 24 | 28 | 17 | 356 | 347 | 8 | 3 | 2 | 348 | 329 | 337 | 292 | 282 | 318 | 347.8 |
| 11-Aug | 308 | 336 | 360 | 132 | 201 | 196 | 181 | 31 | 68 | 358 | 350 | 359 | 1 | 359 | 10 | 357 | 9 | 4 | 5 | 7 | 356 | 345 | 348 | 331 | 0.4 |
| 12-Aug | 324 | 306 | 307 | 320 | 327 | 323 | 343 | 308 | 341 | 339 | 344 | 344 | 354 | 357 | 356 | 356 | 352 | 342 | 341 | 349 | 325 | 321 | 340 | 342 | 341.6 |
| 13-Aug | 332 | 332 | 301 | 312 | 337 | 347 | 312 | 354 | 2 | 14 | 17 | 40 | 16 | 9 | 19 | 32 | 44 | 25 | 0 | 331 | 314 | 282 | 291 | 287 | 356.0 |
| 14-Aug | 302 | 292 | 334 | 302 | 296 | 304 | 285 | 299 | 343 | 358 | 7 | 22 | 26 | 72 | 359 | 316 | 297 | 173 | 188 | 208 | 174 | 149 | 188 | 274 | 323.0 |
| 15-Aug | 203 | 152 | 163 | 166 | 198 | 174 | 169 | 174 | 165 | 149 | 144 | 216 | 207 | 219 | 193 | 258 | 269 | 215 | 177 | 194 | 222 | 245 | 247 | 250 | 197.8 |
| 16-Aug | 265 | 262 | 324 | 55 | 230 | 294 | 297 | 352 | 355 | 354 | 356 | 355 | 12 | 3 | 353 | 318 | 331 | 16 | 66 | 233 | 256 | 266 | 256 | 268 | 340.9 |
| 17-Aug | 269 | 263 | 261 | 250 | 242 | 184 | 163 | 156 | 159 | 233 | 221 | 152 | 140 | 134 | 137 | 132 | 147 | 157 | 164 | 155 | 175 | 178 | 162 | 119 | 169.2 |
| 18-Aug | 160 | 115 | 358 | 233 | 159 | 165 | 168 | 152 | 155 | 150 | 154 | 179 | 230 | 206 | 218 | 230 | 229 | 226 | 219 | 215 | 188 | 215 | 317 | 56 | 195.3 |
| 19-Aug | 266 | 138 | 128 | 179 | 138 | 183 | 146 | 168 | 208 | 306 | 287 | 309 | 5 | 11 | 27 | 337 | 350 | 359 | 9 | 348 | 247 | 260 | 282 | 289 | 337.0 |
| 20-Aug | 175 | 15 | 272 | 199 | 219 | 254 | 229 | 301 | 346 | 0 | 0 | 4 | 25 | 10 | 22 | 13 | 21 | 13 | 354 | 311 | 291 | 271 | 246 | 283 | 358.9 |
| 21-Aug | 240 | 260 | 244 | 215 | 176 | 227 | 152 | 151 | 147 | 138 | 145 | 150 | 153 | 168 | 179 | 143 | 150 | 152 | 160 | 162 | 163 | 147 | 160 | 154 | 158.5 |
| 22-Aug | 162 | 154 | 124 | 145 | 160 | 48 | 146 | 167 | 159 | 158 | 151 | 149 | 144 | 142 | 144 | 145 | 146 | 152 | 162 | 94 | 149 | 139 | 154 | 155 | 149.8 |
| 23-Aug | 164 | 149 | 155 | 159 | 165 | 160 | 149 | 165 | 147 | 157 | 148 | 142 | 152 | 153 | 161 | 194 | 165 | 284 | 314 | 331 | 316 | 263 | 292 | 12 | 165.1 |
| 24-Aug | 217 | 200 | 280 | 307 | 220 | 273 | 179 | 302 | 310 | 305 | 312 | 320 | 354 | 341 | 2 | 4 | 20 | 14 | 354 | 308 | 261 | 287 | 339 | 262 | 331.2 |
| 25-Aug | 263 | 268 | 266 | 288 | 328 | 303 | 280 | 358 | 7 | 14 | 359 | 94 | 84 | 118 | 79 | 45 | 47 | 35 | 24 | 343 | 334 | 303 | 275 | 303 | 1.9 |
| 26-Aug | 282 | 273 | 285 | 269 | 266 | 260 | 173 | 154 | 150 | 148 | 156 | 147 | 150 | 145 | 148 | 152 | 151 | 153 | 149 | 150 | 114 | 143 | 131 | 142 | 155.8 |
| 27-Aug | 150 | 127 | 19 | 274 | 258 | 284 | 240 | 166 | 158 | 153 | 154 | 163 | 161 | 152 | 166 | 140 | 56 | 132 | 120 | 125 | 140 | 140 | 151 | 146 | 148.3 |
| 28-Aug | 165 | 38 | 180 | 157 | 210 | 312 | 160 | 160 | 161 | 190 | 194 | 219 | 214 | 206 | 211 | 215 | 211 | 219 | 247 | 228 | 221 | 215 | 221 | 216 | 206.2 |
| 29-Aug | 208 | 199 | 213 | 208 | 196 | 197 | 185 | 188 | 197 | 218 | 224 | 218 | 227 | 223 | 208 | 215 | 220 | 204 | 196 | 163 | 155 | 171 | 172 | 185 | 206.3 |
| 30-Aug | 258 | 211 | 280 | 297 | 260 | 264 | 285 | 141 | 143 | 148 | 141 | 138 | 143 | 112 | 127 | 149 | 145 | 142 | 241 | 254 | 353 | 352 | 327 | 303 | 158.8 |
| 31-Aug | 330 | 343 | 277 | 294 | 344 | 285 | 30 | 182 | 232 | 243 | 95 | 105 | 139 | 165 | 194 | 234 | 214 | 237 | 313 | 339 | 298 | 275 | 244 | 269 | 259.0 |
| | 261.5 | 282.1 | 283.9 | 279.9 | 270.5 | 276.9 | 233.8 | 255.0 | 340.4 | 334.5 | 340.6 | 332.3 | 355.7 | 349.4 | 355.0 | 335.5 | 346.3 | 346.9 | 333.1 | 323.5 | 301.0 | 283.2 | 282.3 | 288.5 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

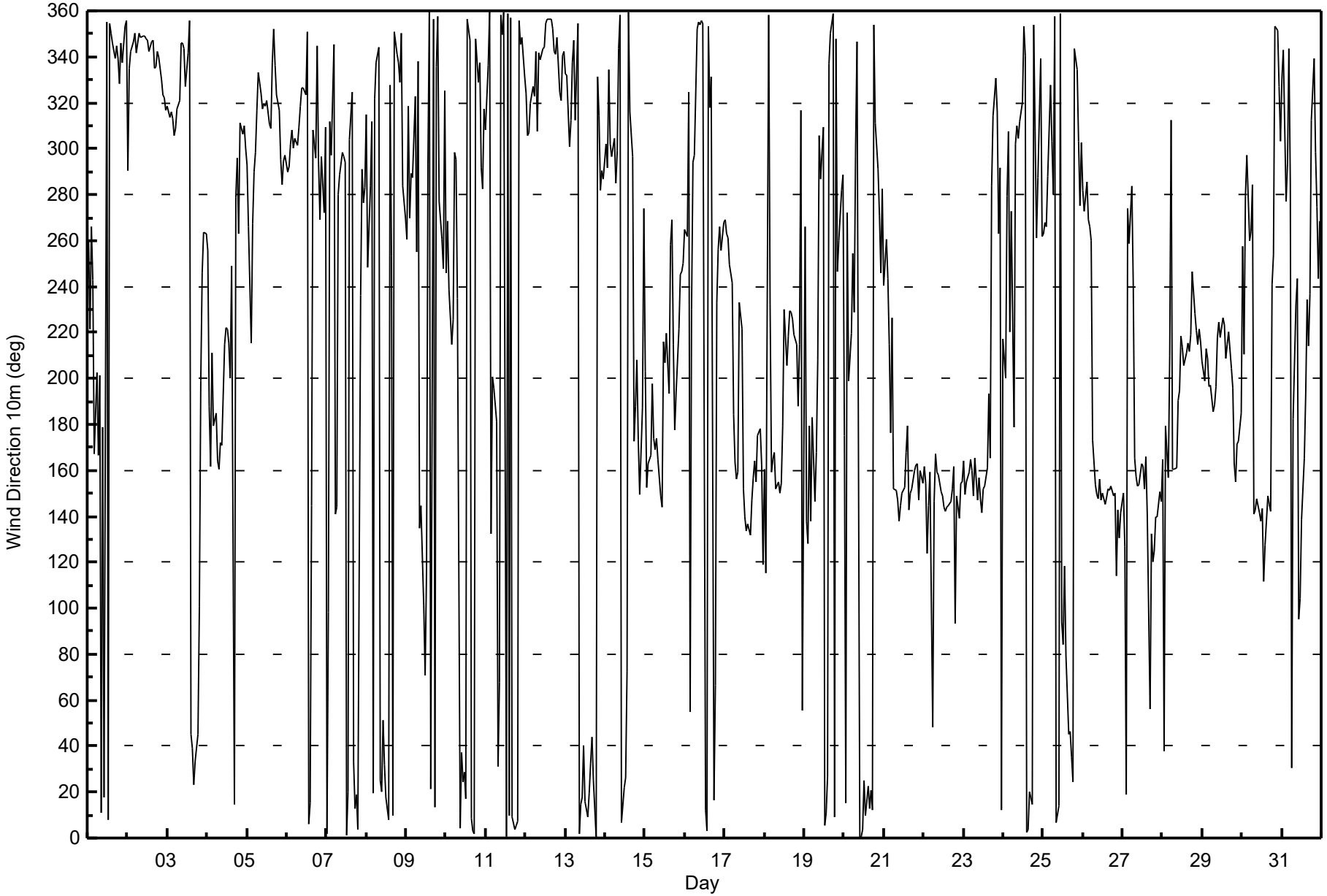
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Waskow ohci Pimatisiwin - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Waskow ohci Pimatisiwin - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 109 deg on Aug 31 09:00

Minimum Value: 10 deg on Aug 8 21:00

Percentiles: $P_1$ = 15 $P_{10}$ = 23 $Q_1$ = 30 Median = 40 $Q_3$ = 55 $P_{90}$ = 74 $P_{99}$ = 99

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 62 | 42 | 21 | 64 | 49 | 60 | 30 | 94 | 78 | 83 | 95 | 74 | 32 | 24 | 27 | 21 | 24 | 23 | 23 | 25 | 43 | 46 | 33 | 68 | 95 |
| 2-Aug | 78 | 22 | 21 | 22 | 23 | 21 | 22 | 23 | 22 | 24 | 23 | 25 | 24 | 24 | 25 | 25 | 24 | 25 | 23 | 23 | 23 | 21 | 21 | 24 | 78 |
| 3-Aug | 22 | 22 | 19 | 19 | 25 | 24 | 24 | 23 | 32 | 33 | 25 | 32 | 44 | 51 | 56 | 50 | 53 | 43 | 53 | 65 | 55 | 42 | 43 | 26 | 65 |
| 4-Aug | 31 | 56 | 24 | 41 | 47 | 61 | 24 | 27 | 44 | 52 | 58 | 60 | 50 | 47 | 44 | 56 | 76 | 75 | 34 | 51 | 34 | 27 | 22 | 30 | 76 |
| 5-Aug | 35 | 56 | 60 | 59 | 38 | 30 | 31 | 39 | 28 | 26 | 27 | 28 | 28 | 33 | 34 | 24 | 23 | 43 | 33 | 28 | 40 | 47 | 38 | 34 | 60 |
| 6-Aug | 38 | 41 | 40 | 30 | 38 | 38 | 47 | 30 | 23 | 24 | 25 | 28 | 37 | 38 | 77 | 78 | 52 | 50 | 40 | 85 | 50 | 37 | 43 | 48 | 85 |
| 7-Aug | 83 | 74 | 108 | 58 | 51 | 26 | 35 | 77 | 42 | 43 | 38 | 47 | 39 | 43 | 103 | 104 | 39 | 31 | 33 | 51 | 23 | 29 | 36 | 31 | 108 |
| 8-Aug | 93 | 86 | 40 | 36 | 53 | 67 | 31 | 55 | 48 | 50 | 58 | 58 | 66 | 44 | 63 | 64 | 92 | 57 | 19 | 17 | 10 | 33 | 59 | 36 | 93 |
| 9-Aug | 71 | 69 | 13 | 30 | 79 | 40 | 42 | 65 | 49 | 47 | 41 | 85 | 56 | 100 | 32 | 62 | 61 | 31 | 29 | 46 | 57 | 59 | 46 | 37 | 100 |
| 10-Aug | 85 | 80 | 59 | 87 | 59 | 59 | 57 | 54 | 73 | 74 | 53 | 65 | 43 | 31 | 28 | 46 | 32 | 32 | 22 | 14 | 21 | 15 | 18 | 68 | 87 |
| 11-Aug | 95 | 85 | 94 | 55 | 98 | 84 | 78 | 78 | 58 | 31 | 33 | 30 | 34 | 33 | 38 | 33 | 34 | 33 | 30 | 28 | 21 | 18 | 22 | 23 | 98 |
| 12-Aug | 74 | 72 | 20 | 22 | 45 | 33 | 31 | 27 | 28 | 22 | 23 | 25 | 27 | 28 | 34 | 36 | 36 | 26 | 24 | 51 | 33 | 18 | 20 | 20 | 74 |
| 13-Aug | 20 | 22 | 31 | 19 | 19 | 21 | 35 | 36 | 35 | 40 | 42 | 49 | 45 | 36 | 43 | 45 | 50 | 40 | 29 | 14 | 14 | 27 | 19 | 19 | 50 |
| 14-Aug | 30 | 28 | 47 | 23 | 17 | 16 | 37 | 40 | 33 | 41 | 44 | 50 | 83 | 57 | 53 | 42 | 74 | 32 | 39 | 50 | 54 | 72 | 59 | 62 | 83 |
| 15-Aug | 48 | 32 | 22 | 22 | 31 | 20 | 18 | 32 | 40 | 35 | 35 | 50 | 50 | 59 | 48 | 65 | 64 | 71 | 43 | 19 | 45 | 45 | 47 | 69 | 71 |
| 16-Aug | 56 | 60 | 85 | 78 | 88 | 24 | 28 | 22 | 25 | 26 | 30 | 31 | 37 | 38 | 28 | 53 | 34 | 40 | 49 | 54 | 46 | 27 | 62 | 44 | 88 |
| 17-Aug | 40 | 16 | 34 | 24 | 69 | 59 | 20 | 29 | 48 | 74 | 75 | 43 | 35 | 44 | 42 | 43 | 34 | 29 | 23 | 22 | 30 | 28 | 45 | 61 | 75 |
| 18-Aug | 40 | 45 | 89 | 74 | 42 | 24 | 34 | 37 | 33 | 34 | 36 | 49 | 53 | 61 | 50 | 55 | 51 | 51 | 52 | 45 | 29 | 54 | 80 | 55 | 89 |
| 19-Aug | 97 | 72 | 69 | 29 | 36 | 61 | 65 | 67 | 86 | 91 | 72 | 85 | 75 | 43 | 69 | 27 | 21 | 28 | 32 | 24 | 47 | 96 | 39 | 89 | 97 |
| 20-Aug | 57 | 81 | 79 | 46 | 66 | 65 | 80 | 68 | 85 | 79 | 31 | 40 | 55 | 55 | 39 | 40 | 38 | 35 | 27 | 58 | 32 | 52 | 38 | 42 | 85 |
| 21-Aug | 56 | 77 | 45 | 69 | 46 | 43 | 20 | 24 | 33 | 33 | 33 | 36 | 40 | 49 | 43 | 36 | 38 | 29 | 25 | 23 | 22 | 27 | 24 | 31 | 77 |
| 22-Aug | 32 | 35 | 92 | 61 | 69 | 39 | 47 | 27 | 33 | 29 | 28 | 33 | 35 | 33 | 33 | 37 | 35 | 32 | 25 | 39 | 36 | 38 | 32 | 34 | 92 |
| 23-Aug | 24 | 32 | 30 | 28 | 24 | 40 | 27 | 26 | 32 | 25 | 42 | 41 | 40 | 32 | 26 | 74 | 26 | 77 | 26 | 43 | 38 | 72 | 81 | 81 | 81 |
| 24-Aug | 66 | 98 | 50 | 16 | 33 | 43 | 82 | 57 | 38 | 43 | 33 | 34 | 42 | 30 | 36 | 32 | 39 | 28 | 27 | 53 | 62 | 68 | 30 | 26 | 98 |
| 25-Aug | 48 | 11 | 33 | 83 | 61 | 28 | 32 | 34 | 37 | 48 | 73 | 50 | 55 | 54 | 56 | 46 | 41 | 39 | 36 | 30 | 18 | 28 | 63 | 50 | 83 |
| 26-Aug | 30 | 30 | 45 | 12 | 22 | 39 | 22 | 31 | 27 | 30 | 32 | 34 | 34 | 34 | 34 | 32 | 30 | 31 | 27 | 27 | 27 | 29 | 32 | 33 | 45 |
| 27-Aug | 26 | 50 | 38 | 31 | 57 | 100 | 77 | 46 | 38 | 43 | 57 | 33 | 33 | 33 | 30 | 52 | 84 | 83 | 36 | 43 | 38 | 36 | 33 | 34 | 100 |
| 28-Aug | 58 | 65 | 67 | 34 | 75 | 96 | 24 | 34 | 30 | 48 | 46 | 45 | 48 | 44 | 47 | 54 | 51 | 54 | 54 | 53 | 48 | 47 | 55 | 42 | 96 |
| 29-Aug | 47 | 42 | 50 | 45 | 40 | 46 | 33 | 40 | 47 | 54 | 52 | 58 | 56 | 51 | 51 | 47 | 52 | 45 | 29 | 28 | 49 | 37 | 32 | 48 | 58 |
| 30-Aug | 81 | 77 | 49 | 87 | 93 | 74 | 40 | 74 | 34 | 29 | 40 | 46 | 44 | 52 | 40 | 42 | 45 | 47 | 64 | 33 | 56 | 73 | 30 | 16 | 93 |
| 31-Aug | 31 | 42 | 37 | 42 | 72 | 102 | 103 | 61 | 109 | 95 | 51 | 49 | 59 | 87 | 94 | 69 | 51 | 66 | 23 | 21 | 62 | 51 | 60 | 46 | 109 |
| | 97 | 98 | 108 | 87 | 98 | 102 | 103 | 94 | 109 | 95 | 95 | 85 | 83 | 100 | 103 | 104 | 92 | 83 | 64 | 85 | 62 | 96 | 81 | 89 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS27
## JACKFISH 2/3
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 709 | 35 | 35 | 100 | 12.4 | 0 | 4.3 | 0 |
| H2S (ppb) Average | 708 | 36 | 36 | 100 | 2.3 | 0 | 0.3 | 0 |
| NO2 (ppb) Average | 708 | 36 | 36 | 100 | 5.4 | 0 | 1.9 | - |
| NO (ppb) Average | 708 | 36 | 36 | 100 | 4.3 | - | 0.4 | - |
| NOX (ppb) Average | 708 | 36 | 36 | 100 | 7.7 | - | 2.2 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 28.2 | - | 21.4 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 98.7 | - | 94 | - |
| Wind Speed 10 m (km/h) Average | 743 | 0 | 1 | 99.87 | 16 | - | 9 | - |
| Wind Direction 10 m (deg) Average | 743 | 0 | 1 | 99.87 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 709 | 0.82 | 1.7 | - | 0 | 0 | 0.1 | 0.3 | 0.7 | 2.2 | 12.4 |
| H2S (ppb) Average | 708 | 0.17 | 0.2 | - | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 2.3 |
| NO2 (ppb) Average | 708 | 0.98 | 0.7 | - | 0.1 | 0.3 | 0.5 | 0.8 | 1.2 | 1.8 | 5.4 |
| NO (ppb) Average | 708 | 0.13 | 0.3 | - | 0 | 0 | 0 | 0 | 0.1 | 0.4 | 4.3 |
| NOX (ppb) Average | 708 | 1.1 | 0.9 | - | 0.1 | 0.3 | 0.5 | 0.8 | 1.4 | 2.1 | 7.7 |
| Temperature 2 m (C) Average | 744 | 15.34 | 4.6 | - | 4.9 | 9.8 | 11.9 | 14.9 | 18.3 | 21.7 | 28.2 |
| Relative Humidity (%) Average | 744 | 73.79 | 17.9 | - | 32.6 | 47.5 | 59.7 | 77.1 | 89.3 | 95.6 | 98.7 |
| Wind Speed 10 m (km/h) Average | 743 | 5.4 | 3 | - | 0 | 2 | 3 | 5 | 7 | 9 | 16 |
| Wind Direction 10 m (deg) Average | 743 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| Wind Speed, Wind Direction | 13 Aug 2026 21:00 | 13 Aug 2026 21:00 | 1 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Jackfish 2/3 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 12.4 ppb on Aug 31 08:00

Maximum Daily Average: 4.3 ppb on Aug 5

Minimum Value: 0.0 ppb on Aug 1 03:00

Minimum Daily Average: 0.0 ppb on Aug 29

Maximum Diurnal Average: 1.5 ppb at hour 13

Minimum Diurnal Average: 0.3 ppb at hour 21

Monthly Average: 0.82 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.3 $Q_3$ = 0.7 $P_{90}$ = 2.2 $P_{99}$ = 9.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | Z | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 2.9 | 0.0 | 0.4 | 2.9 |
| 2-Aug | 0.8 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 3.4 |
| 3-Aug | 0.1 | 0.1 | 0.3 | Z | 6.2 | 4.8 | 10.0 | 3.2 | 2.9 | 2.6 | 0.2 | 0.0 | 0.1 | 0.6 | 1.5 | 0.9 | 0.5 | 0.2 | 3.1 | 2.7 | 0.3 | 0.2 | 0.1 | 0.0 | 1.8 | 10.0 |
| 4-Aug | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.5 | 0.0 | 0.0 | 0.0 | 1.8 | 0.9 | 0.2 | 1.8 |
| 5-Aug | 3.6 | 7.3 | 11.9 | 12.1 | 3.4 | Z | 0.0 | 0.9 | 9.5 | 7.2 | 6.5 | 4.2 | 9.9 | 9.4 | 1.5 | 6.3 | 4.6 | 1.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.1 | 0.1 | 4.3 | 12.1 |
| 6-Aug | Z | 0.0 | 0.1 | 5.2 | 10.0 | 2.4 | 1.9 | 0.9 | 0.0 | 0.0 | 0.6 | 3.6 | 6.3 | 0.6 | 4.6 | 5.9 | 1.6 | 1.2 | 0.2 | 0.7 | 0.1 | 0.1 | 0.1 | 0.0 | 2.0 | 10.0 |
| 7-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 4.4 | 5.4 | 4.0 | 6.2 | 2.0 | 0.9 | 0.9 | 2.0 | 0.1 | 0.0 | 0.0 | 0.0 | 1.3 | 0.8 | 1.2 | 6.2 |
| 8-Aug | 0.2 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.5 | 0.6 | 0.9 | 0.8 | 0.6 | 0.7 | 1.3 | 1.4 | 0.6 | 0.2 | 0.5 | 0.4 | 1.1 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.4 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 1.5 | 2.4 | 1.2 | 1.9 | 0.3 | 0.5 | 4.4 | 0.9 | 0.3 | 0.3 | 0.1 | 0.0 | 0.1 | 0.5 | 0.1 | 0.7 | 4.4 |
| 10-Aug | 0.1 | 0.1 | 0.2 | 0.1 | Z | 0.0 | 0.3 | 0.1 | 0.0 | 0.9 | 0.8 | 1.0 | 0.9 | 0.9 | 0.3 | 0.0 | 0.0 | 0.4 | 0.9 | 0.5 | 0.0 | 0.1 | 0.2 | 0.6 | 0.4 | 1.0 |
| 11-Aug | 0.7 | 0.4 | 0.7 | 0.5 | 0.5 | Z | 0.4 | 0.8 | 0.8 | 0.3 | 0.8 | 1.0 | 1.1 | 1.1 | 0.4 | 0.6 | 0.2 | 1.3 | 3.1 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.7 | 3.1 |
| 12-Aug | Z | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | C | C | C | C | 0.0 | 0.1 | 0.0 | 1.7 | 0.5 | 0.3 | 0.3 | 0.2 | 0.5 | 0.5 | 0.3 | 0.3 | 1.7 |
| 13-Aug | 0.3 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.5 | 0.8 | 0.8 | 0.2 | 0.6 | 1.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 1.0 |
| 14-Aug | 0.2 | 0.4 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 1.1 | 1.1 | 1.4 | 1.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.8 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 1.4 |
| 15-Aug | 0.1 | 0.1 | 0.2 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.0 | 0.0 | 0.0 | 4.1 | 2.7 | 0.4 | 4.7 | 1.2 | 0.7 | 0.4 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.7 | 4.7 |
| 17-Aug | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.9 | 3.3 | 1.4 | 2.2 | 0.1 | 0.7 | 0.2 | 0.9 | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.5 | 3.3 |
| 18-Aug | Z | 0.0 | 0.0 | 0.4 | 0.3 | 0.3 | 1.3 | 1.1 | 0.4 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 1.2 | 0.1 | 0.3 | 3.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 3.8 |
| 19-Aug | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 | 1.3 | 1.5 | 4.9 | 4.4 | 2.7 | 0.7 | 0.5 | 3.0 | 4.7 | 1.6 | 0.7 | 1.2 | 4.9 |
| 20-Aug | 0.5 | 0.4 | Z | 0.2 | 0.3 | 0.0 | 0.4 | 0.6 | 0.4 | 2.3 | 0.2 | 0.4 | 1.9 | 4.1 | 0.2 | 0.1 | 2.2 | 1.0 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.8 | 4.1 |
| 21-Aug | 0.4 | 0.5 | 0.3 | Z | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.8 |
| 22-Aug | 0.4 | 0.4 | 0.6 | 0.8 | Z | 0.5 | 0.5 | 0.6 | 1.0 | 0.5 | 0.4 | 0.9 | 1.1 | 0.4 | 0.2 | 0.5 | 0.7 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 1.1 |
| 23-Aug | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | Z | 0.2 | 0.3 | 0.3 | 0.6 | 0.7 | 2.5 | 2.4 | 3.9 | 6.0 | 1.8 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 1.1 | 6.0 |
| 24-Aug | Z | 3.1 | 2.5 | 0.5 | 0.2 | 1.5 | 0.5 | 0.4 | 0.4 | 0.8 | 1.3 | 1.6 | 0.4 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.9 | 0.7 | 3.1 |
| 25-Aug | 0.8 | Z | 0.3 | 0.7 | 0.7 | 0.5 | 0.4 | 0.0 | 8.4 | 7.8 | 0.6 | 0.2 | 2.6 | 0.3 | 2.0 | 2.1 | 0.7 | 0.2 | 0.3 | 0.3 | 0.6 | 0.2 | 0.2 | 0.2 | 1.3 | 8.4 |
| 26-Aug | 0.2 | 0.2 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.6 | 0.7 | 0.5 | 0.3 | 0.8 |
| 27-Aug | 0.6 | 0.6 | 0.8 | Z | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 |
| 28-Aug | 0.2 | 0.3 | 4.3 | 0.1 | Z | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 4.3 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.0 | 0.3 |
| 30-Aug | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 0.5 | 2.3 | 3.3 | 3.7 | 0.7 | 0.4 | 1.5 | 1.7 | 1.1 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.7 | 3.7 |
| 31-Aug | 0.2 | Z | 0.0 | 0.0 | 1.3 | 10.6 | 6.0 | 12.4 | 5.4 | 1.0 | 1.2 | 3.8 | 1.5 | 1.1 | 3.9 | 4.2 | 2.1 | 3.3 | 0.7 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 2.6 | 12.4 |
| | 0.4 | 0.6 | 0.9 | 0.9 | 1.0 | 0.8 | 0.8 | 0.8 | 1.3 | 1.2 | 1.0 | 1.4 | 1.5 | 1.2 | 1.0 | 1.2 | 0.9 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.3 | Diurnal Average | |
| | 3.6 | 7.3 | 11.9 | 12.1 | 10.0 | 10.6 | 10.0 | 12.4 | 9.5 | 7.8 | 6.5 | 5.4 | 9.9 | 9.4 | 6.0 | 6.3 | 4.6 | 3.3 | 3.1 | 3.8 | 3.0 | 4.7 | 2.9 | 0.9 | Diurnal Maximum | |

Z - zerospan C - Calibration

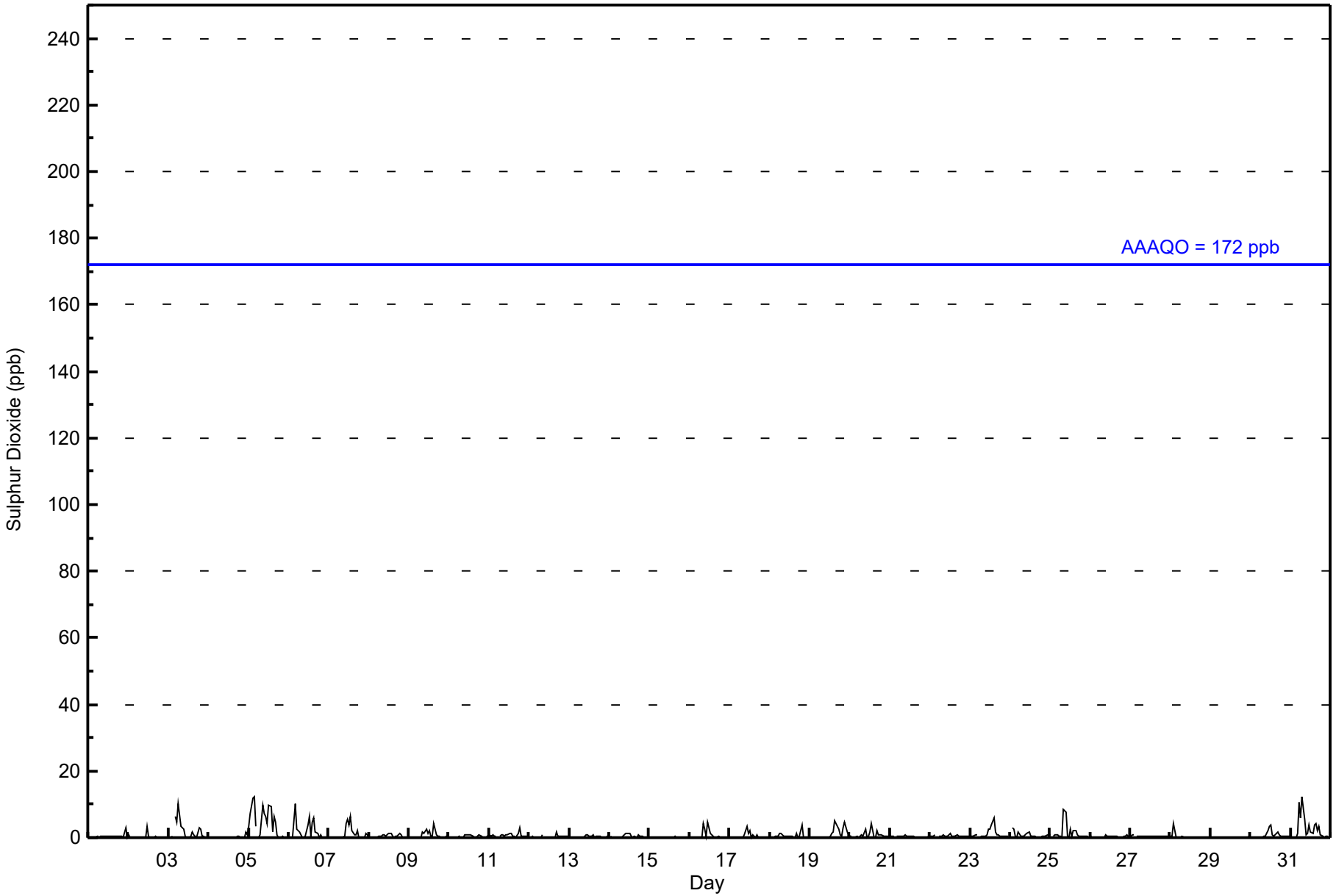
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 2/3 - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Jackfish 2/3 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 705 | 99.44 | 99.44 |
| 11 - 20 | 4 | 0.56 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 2/3 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 14 | 35 | 27 | 23 | 16 | 7 | 11 | 16 | 65 | 69 | 78 | 123 | 55 | 53 | 79 | 33 | 704 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 14 | 35 | 27 | 23 | 16 | 7 | 11 | 16 | 65 | 69 | 78 | 123 | 56 | 56 | 79 | 33 | 708 |

Total Number of Valid Hours: 708

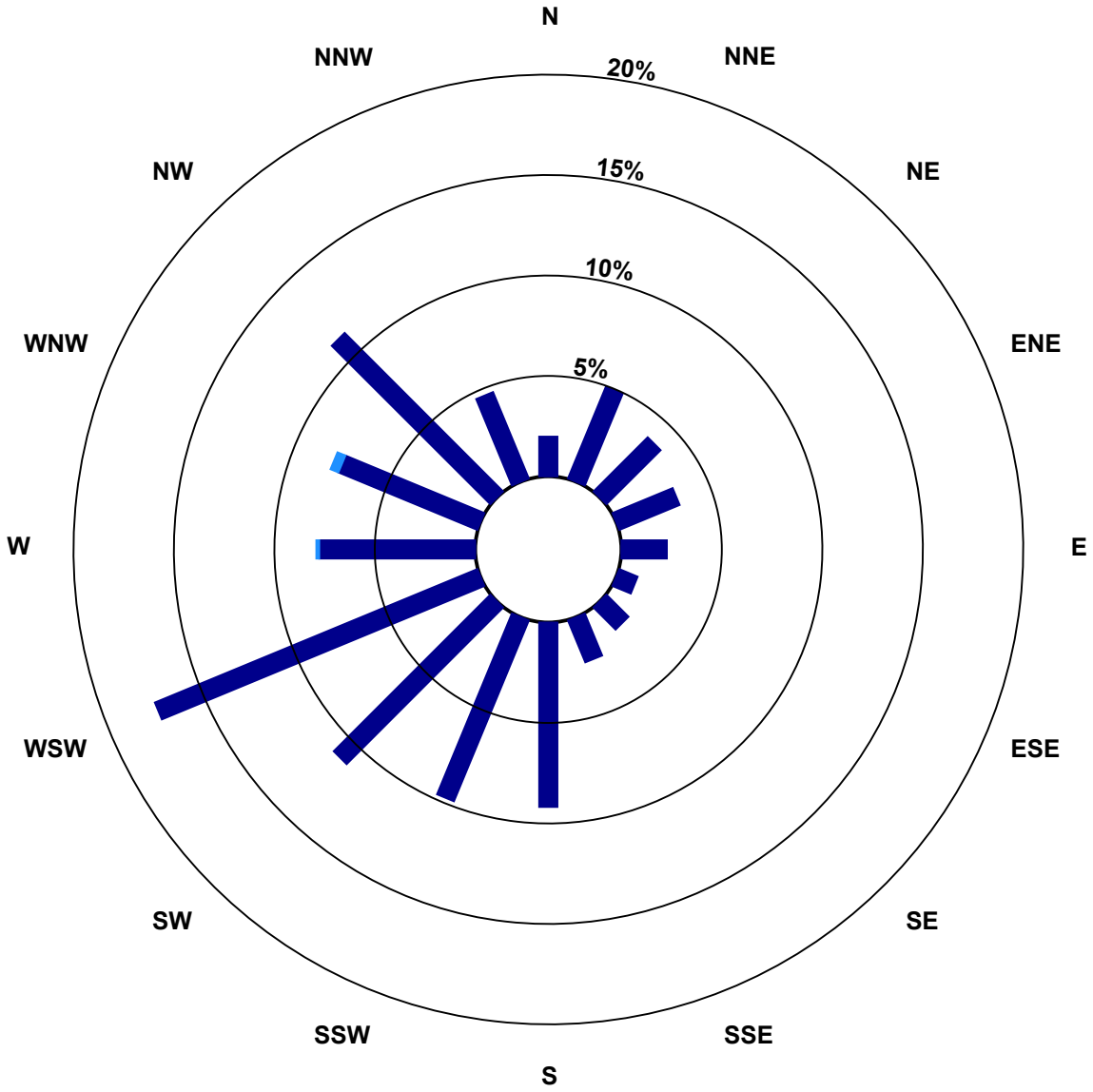
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Jackfish 2/3




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

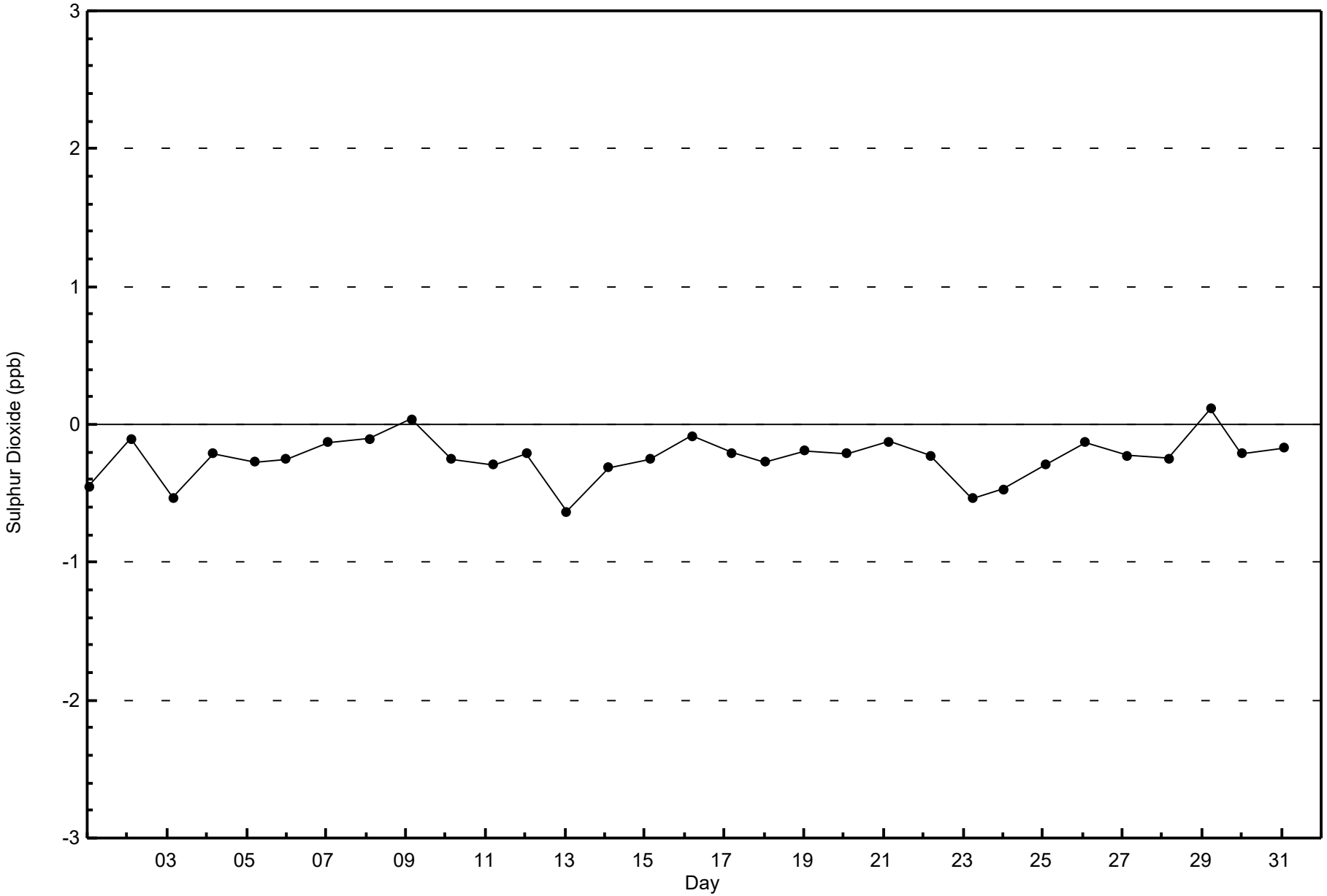
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 2/3 - August 2026**

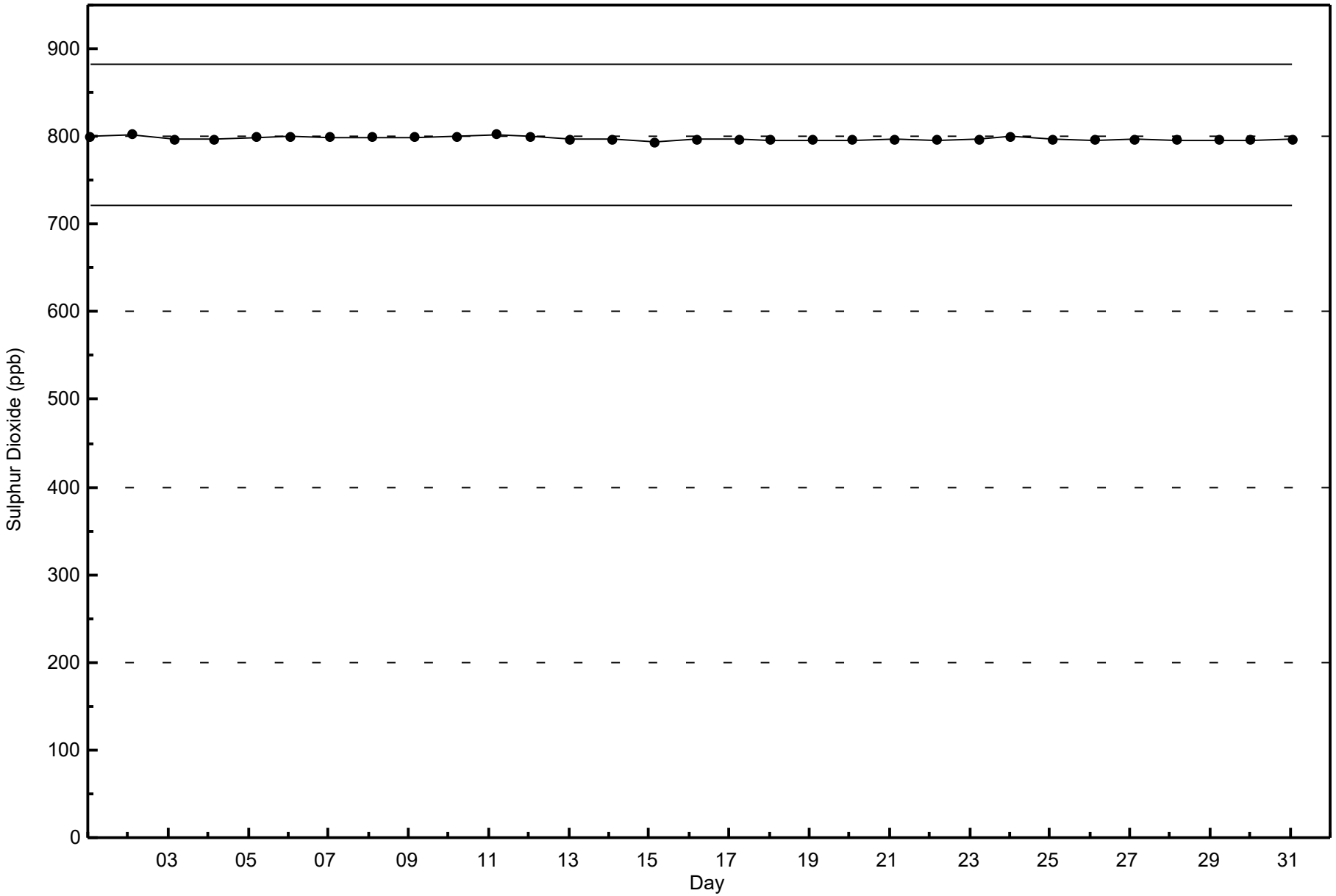


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 2/3 - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide (H2S) - ppb

## Jackfish 2/3 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.3 ppb on Aug 10 00:00

Maximum Daily Average: 0.3 ppb on Aug 3

Minimum Value: 0.0 ppb on Aug 24 14:00

Minimum Daily Average: 0.1 ppb on Aug 13

Maximum Diurnal Average: 0.3 ppb at hour 3

Minimum Diurnal Average: 0.1 ppb at hour 18

Monthly Average: 0.17 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 |
| 2-Aug | 0.2 | 0.1 | 0.1 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 3-Aug | 0.0 | 0.1 | 0.2 | 1.0 | Z | 0.3 | 0.5 | 0.6 | 0.5 | 0.3 | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.0 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 1.0 |
| 4-Aug | 0.4 | 0.2 | 0.1 | 0.2 | 0.5 | Z | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 5-Aug | Z | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.2 | 0.4 |
| 6-Aug | 0.1 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 |
| 7-Aug | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 |
| 8-Aug | 0.3 | 0.7 | 1.4 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.7 | 0.1 | 0.2 | 1.4 |
| 9-Aug | 0.2 | 0.4 | 0.2 | 0.2 | Z | 0.6 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.5 | 2.3 | 0.3 | 2.3 |
| 10-Aug | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| 11-Aug | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 12-Aug | 0.1 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 13-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 14-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 0.3 | 0.3 | 0.1 | 0.4 |
| 15-Aug | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.1 | 0.3 | 0.3 | 0.2 | 0.5 |
| 16-Aug | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 0.1 | 0.1 | 0.2 | 0.5 |
| 17-Aug | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 18-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 |
| 19-Aug | 0.1 | 0.3 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 0.7 | 0.7 | 0.2 | 0.7 |
| 20-Aug | 1.0 | 0.3 | 0.5 | Z | 0.2 | 0.6 | 0.3 | 0.4 | C | C | C | C | C | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 |
| 21-Aug | 0.1 | 0.1 | 0.5 | 0.7 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 23-Aug | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 |
| 24-Aug | 0.1 | Z | 0.5 | 0.2 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.1 | 0.5 |
| 25-Aug | 0.8 | 0.2 | Z | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 0.2 | 0.1 | 0.1 | 0.2 | 0.8 |
| 26-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.8 | 0.2 | 0.1 | 0.1 | 0.2 | 0.8 |
| 28-Aug | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 29-Aug | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 30-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.6 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| 31-Aug | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.4 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.6 |
| | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 1.0 | 0.7 | 1.4 | 1.0 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.8 | 0.6 | 0.7 | 2.3 | Diurnal Maximum | |

Z - zerospan C - Calibration

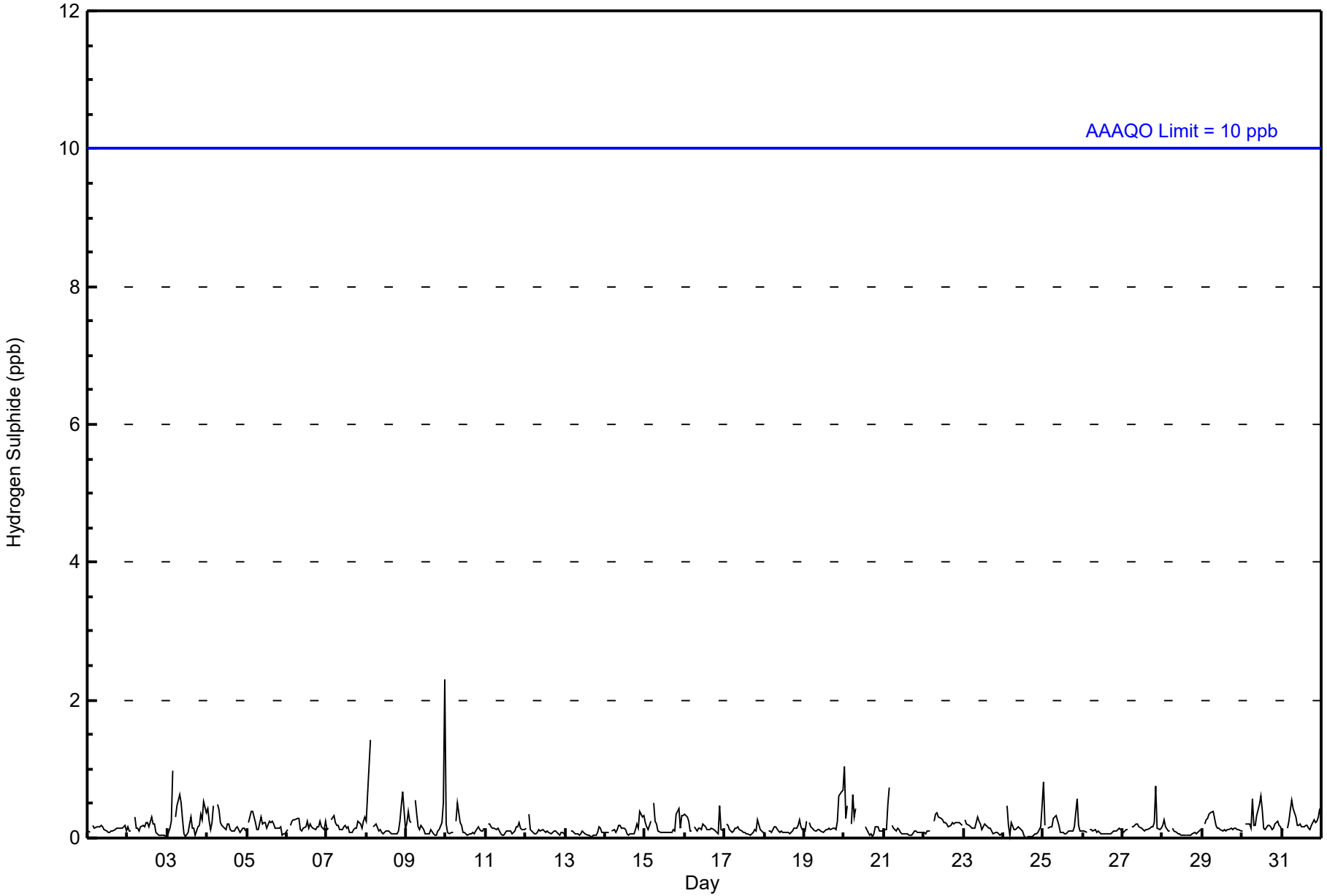
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 2/3 - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 708 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 2/3 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 14 | 36 | 26 | 22 | 16 | 8 | 10 | 16 | 66 | 70 | 79 | 121 | 55 | 56 | 76 | 36 | 707 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 14 | 36 | 26 | 22 | 16 | 8 | 10 | 16 | 66 | 70 | 79 | 121 | 55 | 56 | 76 | 36 | 707 |

Total Number of Valid Hours: 707

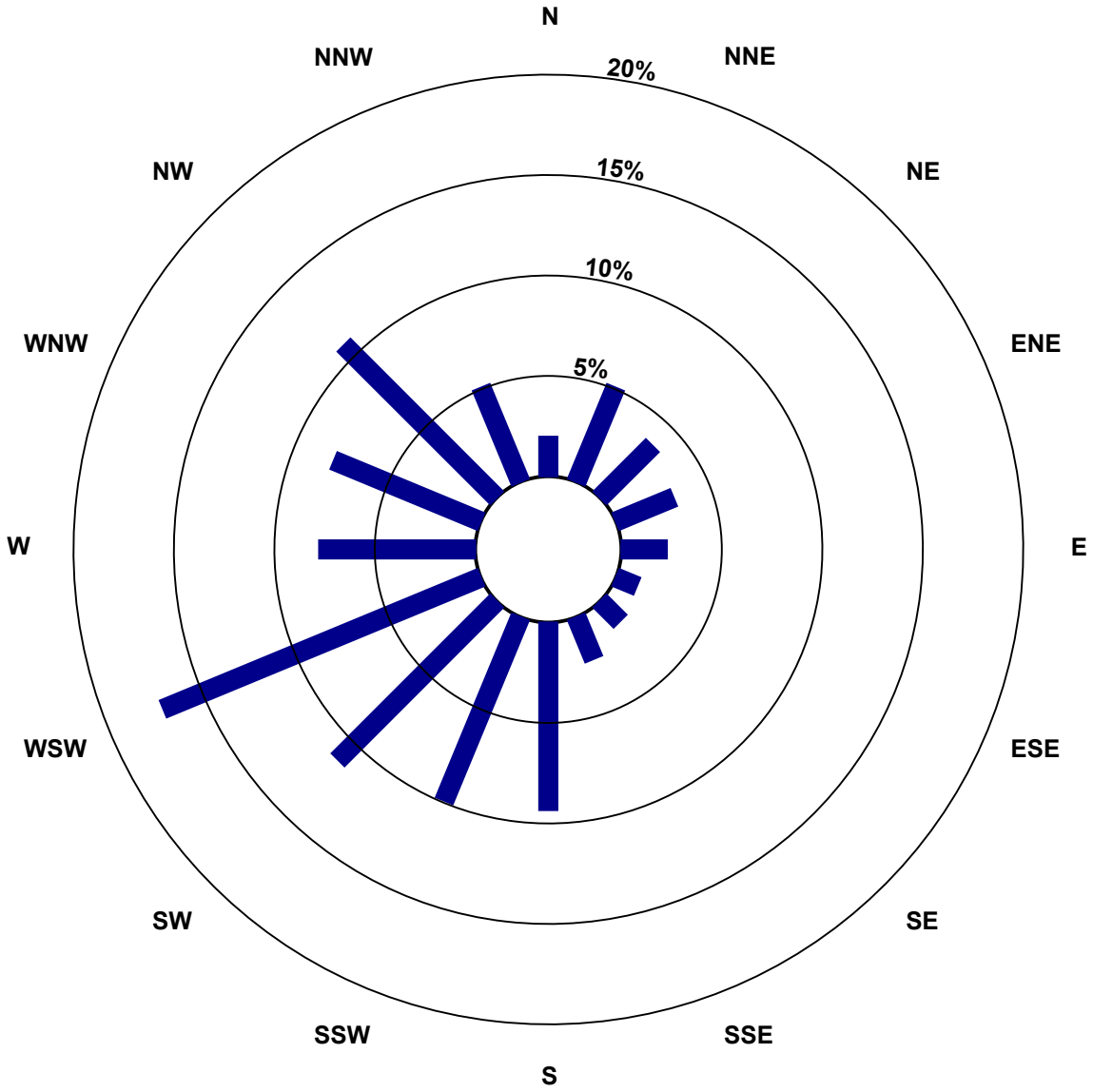
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 2/3**




**Classes (ppb)**

- 0 - 2
- 3 - 4
- 5 - 7
- 8 - 11
- > 11

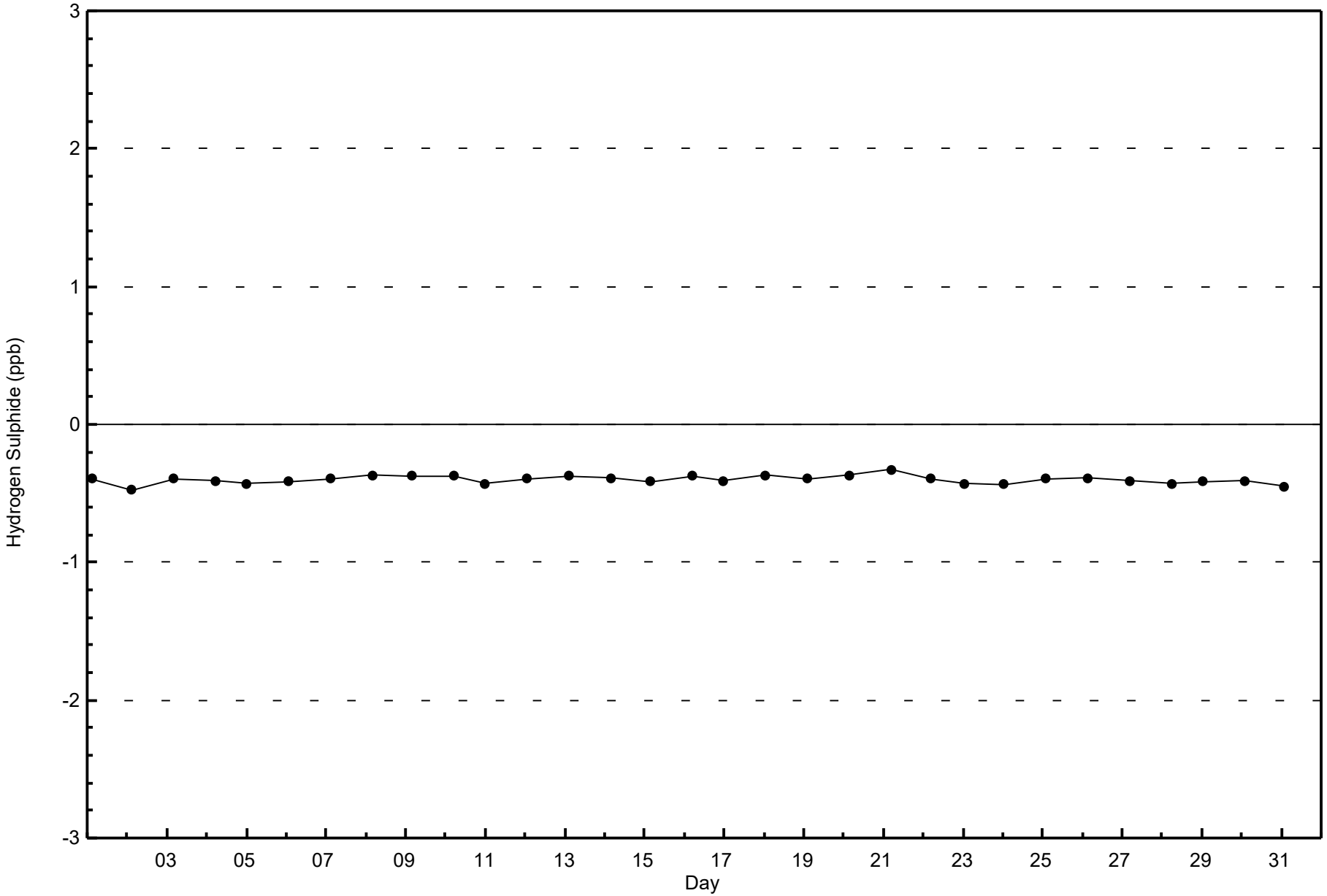
**Total Number of Valid Hours: 707**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 2/3 - August 2026**

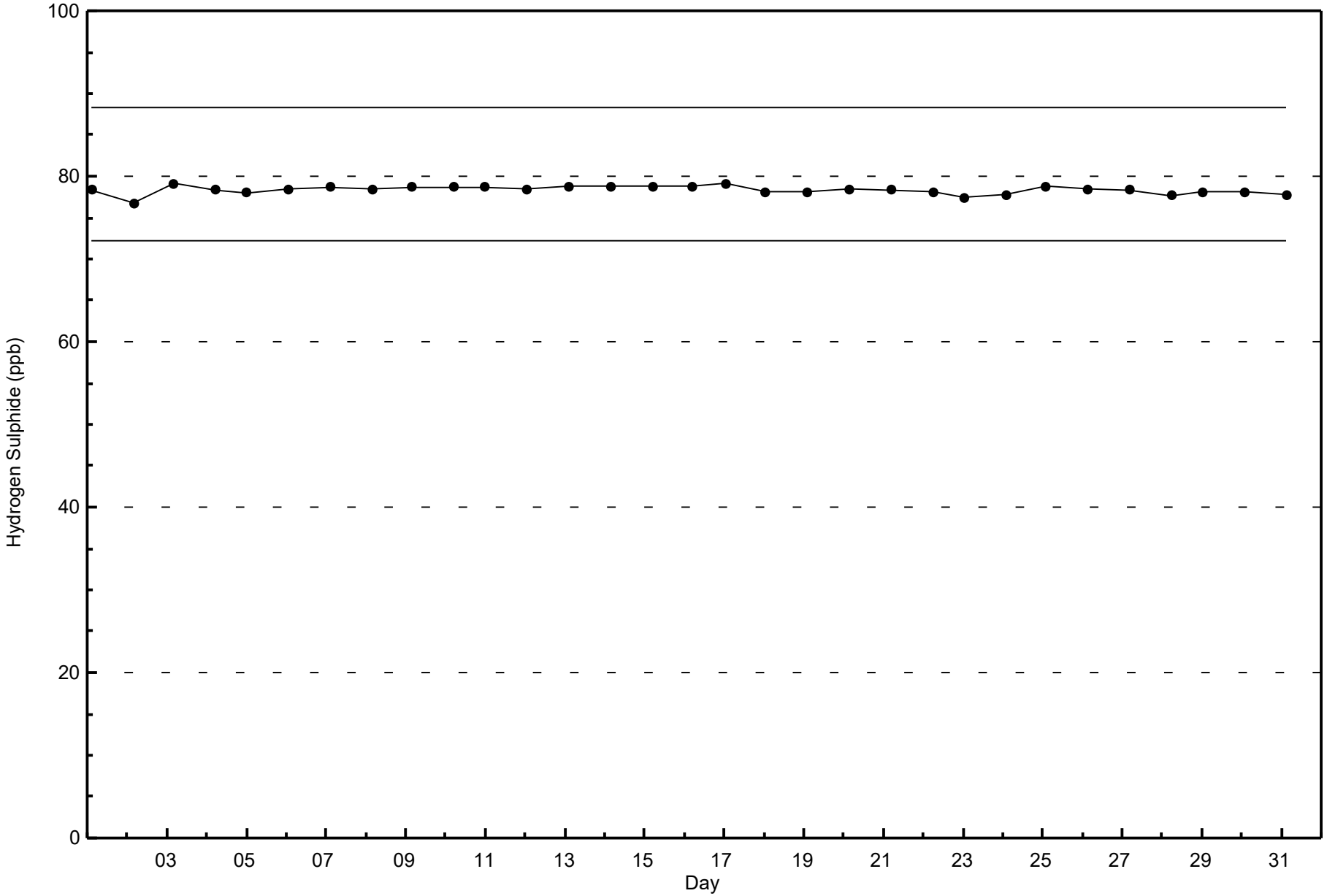


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 2/3 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Jackfish 2/3 - August 2026

Maximum Value: 4.3 ppb on Aug 26 08:00

Maximum Daily Average: 0.4 ppb on Aug 5

Minimum Value: 0.0 ppb on Aug 1 01:00

Minimum Daily Average: 0.0 ppb on Aug 28

Maximum Diurnal Average: 0.4 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 22

Monthly Average: 0.13 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.4 $P_{99}$ = 1.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 2-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 3-Aug | 0.0 | Z | 0.0 | 0.4 | 0.5 | 0.8 | 1.3 | 0.4 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 1.3 |
| 4-Aug | 0.3 | 0.8 | Z | 0.0 | 0.6 | 0.0 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.8 |
| 5-Aug | 0.2 | 0.4 | 0.5 | Z | 0.2 | 0.1 | 0.0 | 0.2 | 1.3 | 0.9 | 0.8 | 0.5 | 1.1 | 0.9 | 0.1 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.3 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.6 | 0.9 | 0.1 | 0.8 | 0.8 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.9 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.2 | 0.5 | 0.5 | 0.3 | 0.5 | 0.2 | 0.1 | 0.1 | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 |
| 8-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.5 | 0.5 | 0.6 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 9-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.1 | 0.1 | 0.0 | 0.1 | 0.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 10-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.8 | 0.3 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 11-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.4 | 0.8 | 0.5 | 0.1 | 0.4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 14-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.8 | 0.8 | 0.5 | 0.5 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.8 |
| 15-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| 16-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.8 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 17-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.5 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.7 | 0.8 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 20-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.6 | 0.2 | 0.3 | 0.0 | 0.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 21-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 22-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 23-Aug | 0.0 | 0.0 | 0.0 | Z | 0.2 | 1.0 | 0.2 | 0.1 | 0.6 | 0.6 | 0.9 | 0.3 | 0.2 | 0.6 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 |
| 24-Aug | 0.0 | 0.3 | 0.4 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.3 | 2.1 | 1.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.1 |
| 26-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 4.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 4.3 |
| 27-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 28-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.5 | 0.8 | 1.4 | 0.8 | 0.8 | 0.1 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 1.4 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.7 | 2.3 | 1.7 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 2.3 |
| | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.3 | 0.8 | 0.5 | 0.4 | 0.6 | 1.0 | 1.3 | 4.3 | 2.1 | 1.2 | 1.4 | 0.8 | 1.1 | 0.9 | 0.8 | 0.8 | 0.4 | 1.1 | 0.5 | 0.2 | 0.2 | 0.0 | 0.1 | 0.0 | Diurnal Maximum | |

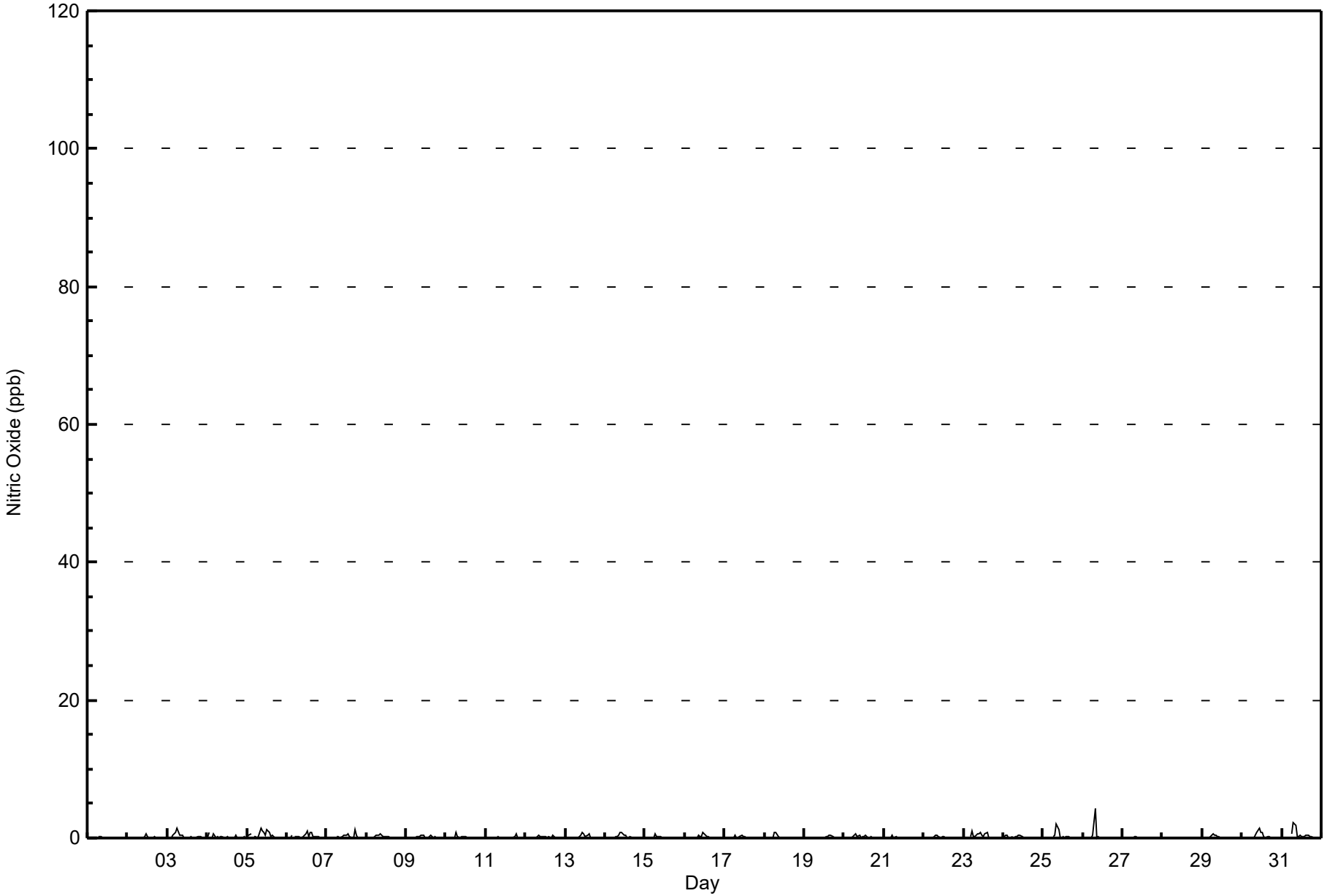
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Jackfish 2/3 - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Jackfish 2/3 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 14 | 33 | 26 | 23 | 16 | 8 | 11 | 15 | 65 | 70 | 78 | 121 | 57 | 55 | 80 | 35 | 707 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 14 | 33 | 26 | 23 | 16 | 8 | 11 | 15 | 65 | 70 | 78 | 121 | 57 | 55 | 80 | 35 | 707 |

Total Number of Valid Hours: 707

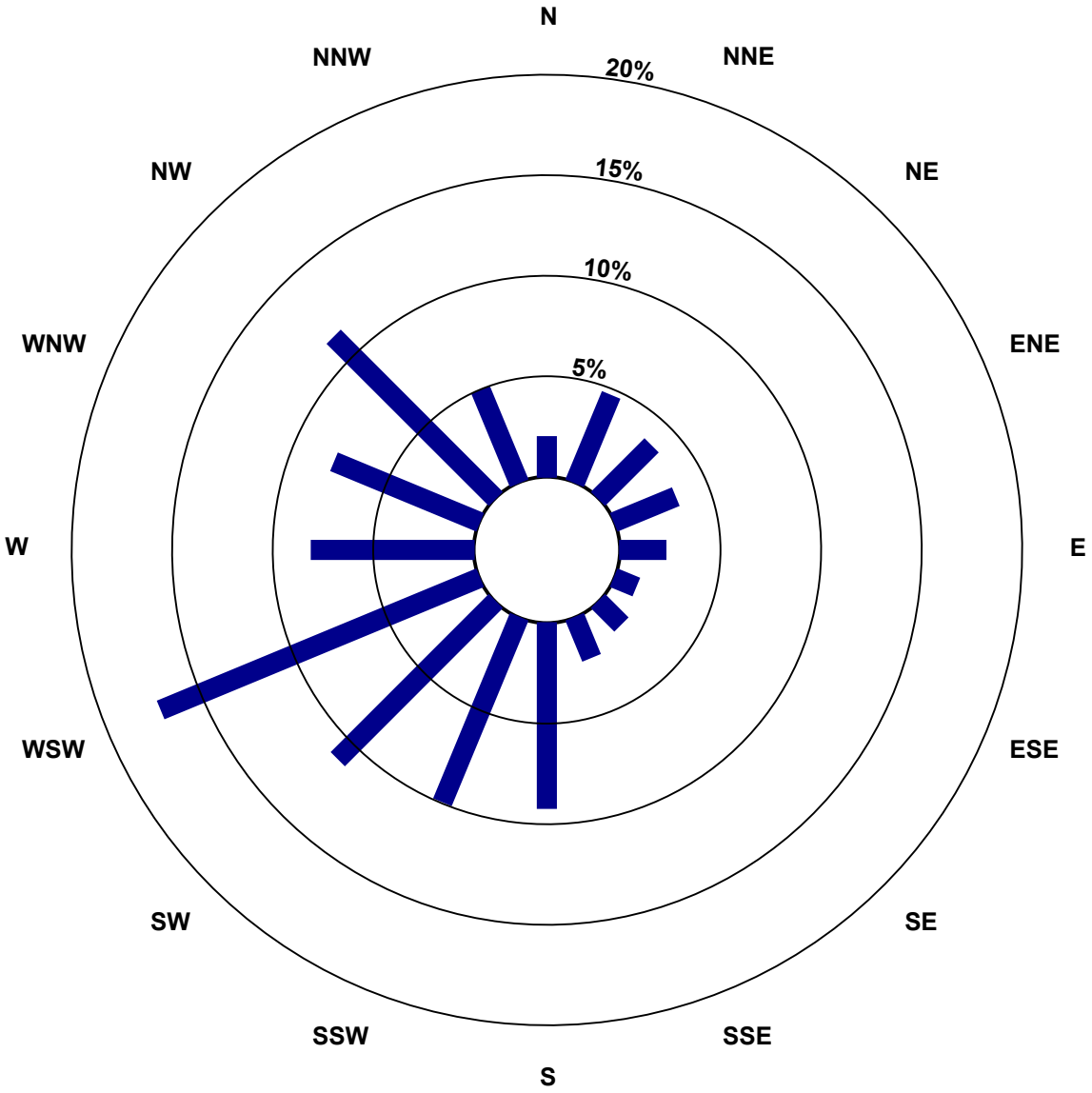
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Jackfish 2/3




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

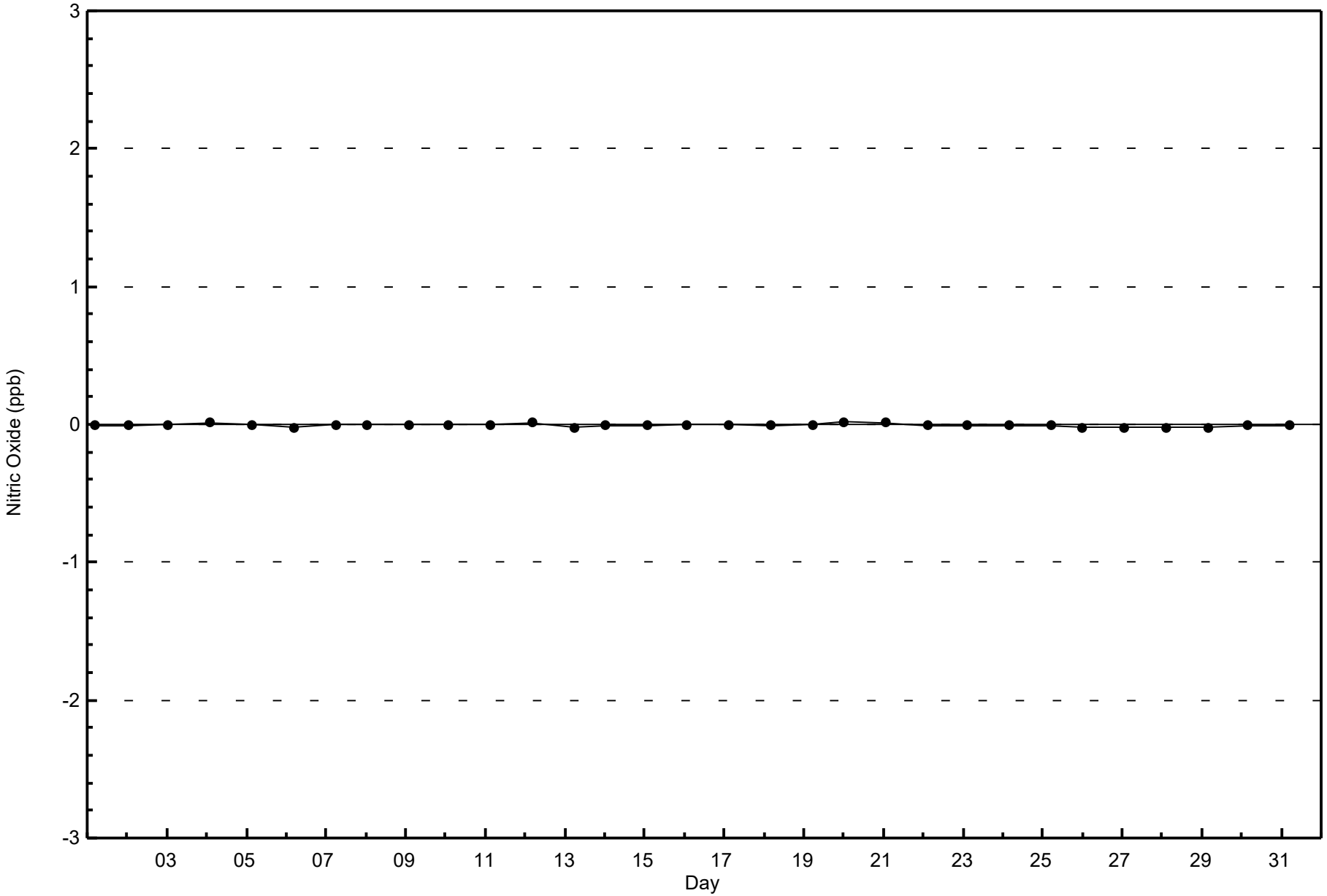
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Jackfish 2/3 - August 2026**

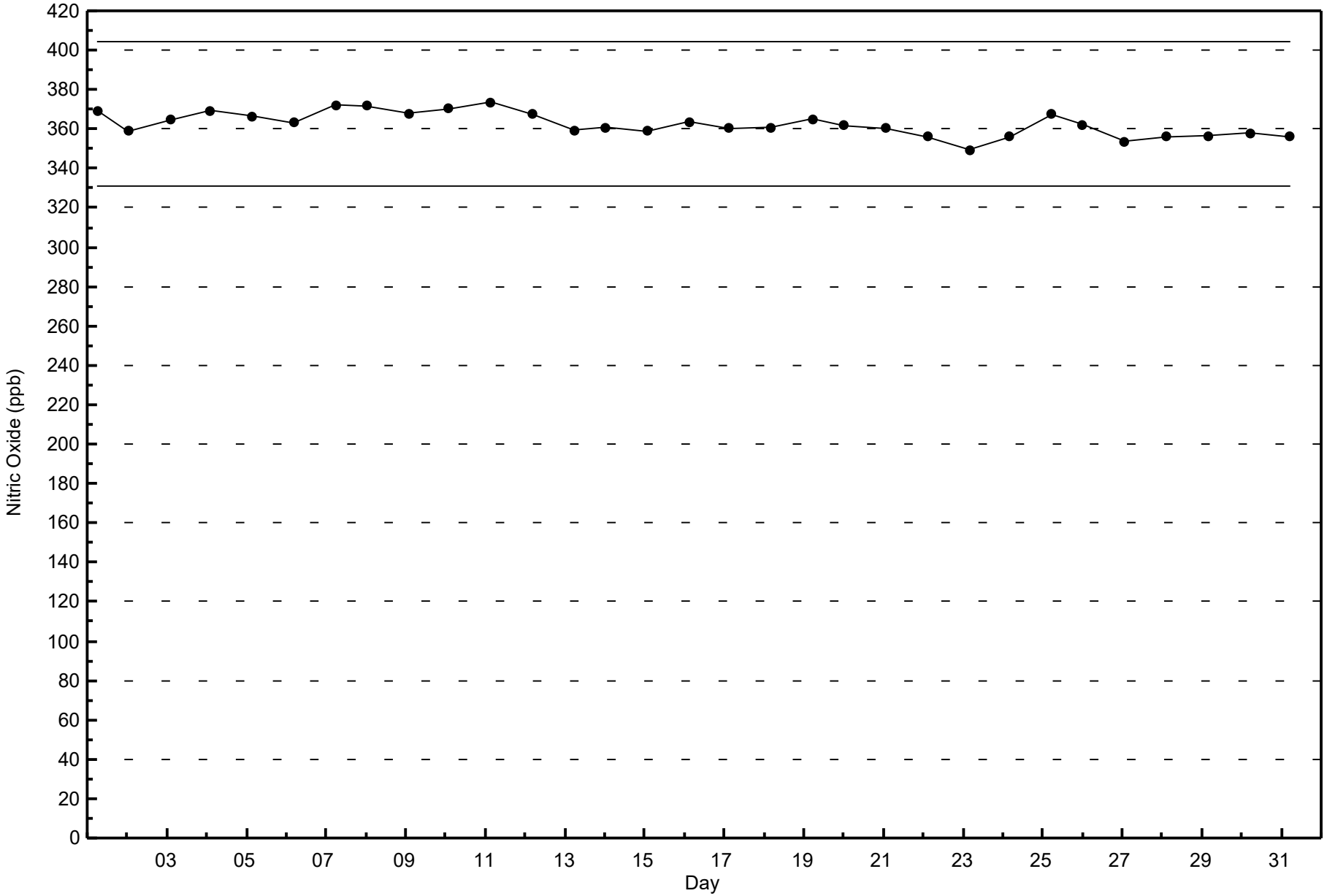


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Jackfish 2/3 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Jackfish 2/3 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 5.4 ppb on Aug 23 15:00

Maximum Daily Average: 1.9 ppb on Aug 23

Minimum Value: 0.1 ppb on Aug 6 22:00

Minimum Daily Average: 0.4 ppb on Aug 15

Maximum Diurnal Average: 1.3 ppb at hour 7

Minimum Diurnal Average: 0.7 ppb at hour 20

Monthly Average: 0.98 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 0.8 $Q_3 = 1.2$ $P_{90} = 1.8$ $P_{99} = 4.0$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.8 | 0.9 | 1.0 | 1.6 | 2.4 | Z | 1.9 | 1.2 | 1.1 | 1.1 | 1.1 | 0.6 | 0.6 | 0.7 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.8 | 3.1 | 1.1 | 1.1 | 3.1 |
| 2-Aug | Z | 1.4 | 0.8 | 0.6 | 0.9 | 0.4 | 0.4 | 0.6 | 0.4 | 0.7 | 1.2 | 2.1 | 0.9 | 0.6 | 0.7 | 0.9 | 1.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.6 | 0.2 | 0.7 | 2.1 |
| 3-Aug | 0.2 | Z | 0.5 | 3.5 | 3.2 | 2.9 | 3.7 | 1.5 | 1.1 | 0.8 | 0.3 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.2 | 1.0 | 1.4 | 0.6 | 0.2 | 0.4 | 0.7 | 1.1 | 3.7 |
| 4-Aug | 0.7 | 1.0 | Z | 0.4 | 0.9 | 0.3 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 | 0.7 | 0.7 | 0.6 | 0.3 | 0.4 | 0.5 | 1.2 | 1.2 | 0.7 | 0.4 | 0.7 | 2.0 | 1.3 | 0.8 | 2.0 |
| 5-Aug | 2.4 | 3.4 | 4.7 | Z | 2.1 | 1.0 | 0.8 | 0.8 | 2.6 | 1.8 | 1.6 | 1.1 | 2.2 | 2.1 | 0.7 | 1.5 | 1.3 | 0.6 | 0.3 | 0.3 | 0.5 | 0.4 | 0.6 | 0.7 | 1.5 | 4.7 |
| 6-Aug | 0.4 | 0.3 | 0.4 | 2.4 | Z | 1.1 | 0.8 | 0.4 | 0.2 | 0.3 | 0.3 | 1.0 | 1.3 | 0.4 | 0.9 | 1.1 | 0.5 | 0.6 | 0.6 | 1.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.6 | 2.4 |
| 7-Aug | 0.2 | 0.2 | 0.1 | 0.4 | 0.5 | Z | 0.5 | 0.5 | 0.4 | 0.5 | 1.4 | 1.5 | 1.3 | 1.8 | 0.8 | 0.6 | 0.7 | 1.9 | 0.7 | 0.2 | 0.2 | 0.3 | 1.2 | 1.4 | 0.8 | 1.9 |
| 8-Aug | Z | 2.5 | 1.6 | 1.4 | 1.0 | 1.4 | 1.4 | 1.1 | 1.3 | 1.1 | 1.2 | 1.2 | 1.2 | 1.5 | 1.0 | 0.8 | 1.0 | 0.9 | 1.2 | 1.4 | 0.7 | 0.6 | 0.6 | 0.7 | 1.2 | 2.5 |
| 9-Aug | 1.4 | Z | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 1.0 | 1.3 | 1.8 | 2.2 | 1.2 | 1.0 | 1.1 | 1.3 | 1.9 | 1.1 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 1.9 | 0.5 | 1.1 | 2.2 |
| 10-Aug | 0.2 | 0.2 | Z | 0.4 | 0.3 | 1.3 | 2.3 | 1.0 | 0.5 | 0.8 | 1.1 | 1.4 | 1.3 | 1.1 | 0.9 | 0.5 | 0.5 | 0.6 | 1.2 | 0.9 | 0.5 | 0.7 | 0.8 | 1.2 | 0.9 | 2.3 |
| 11-Aug | 1.4 | 1.2 | 1.5 | Z | 1.1 | 1.1 | 0.9 | 1.2 | 0.8 | C | C | C | C | C | 0.4 | 0.6 | 0.3 | 2.4 | 4.6 | 0.8 | 1.8 | 1.4 | 0.8 | 1.0 | 1.3 | 4.6 |
| 12-Aug | 0.7 | 0.6 | 1.9 | 0.6 | Z | 0.7 | 0.7 | 0.7 | 1.2 | 0.8 | 1.2 | 0.9 | 0.8 | 0.8 | 0.5 | 0.5 | 1.7 | 1.0 | 0.9 | 0.8 | 0.7 | 1.1 | 1.2 | 0.8 | 0.9 | 1.9 |
| 13-Aug | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | Z | 0.6 | 0.5 | 0.6 | 0.7 | 1.2 | 1.1 | 0.5 | 0.8 | 1.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.4 | 0.7 | 0.4 | 0.5 | 1.2 |
| 14-Aug | Z | 1.5 | 1.0 | 0.8 | 1.2 | 0.7 | 0.6 | 0.8 | 1.3 | 1.9 | 1.6 | 1.4 | 1.1 | 0.5 | 0.3 | 0.7 | 0.3 | 0.7 | 0.5 | 0.4 | 0.7 | 0.8 | 0.5 | 0.8 | 0.9 | 1.9 |
| 15-Aug | 0.9 | Z | 0.6 | 0.5 | 0.6 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.4 | 0.9 |
| 16-Aug | 0.8 | 0.8 | Z | 1.1 | 0.6 | 0.6 | 1.0 | 0.5 | 1.7 | 1.5 | 1.1 | 2.5 | 1.3 | 1.0 | 1.1 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.3 | 0.8 | 0.3 | 0.7 | 0.9 | 2.5 |
| 17-Aug | 0.7 | 0.6 | 0.4 | Z | 0.6 | 0.6 | 0.8 | 0.4 | 0.4 | 0.8 | 1.2 | 0.6 | 0.8 | 0.3 | 0.4 | 0.3 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.2 |
| 18-Aug | 0.3 | 0.3 | 0.4 | 1.5 | Z | 2.1 | 3.2 | 2.4 | 1.2 | 0.9 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.7 | 0.3 | 1.0 | 2.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.0 | 3.2 |
| 19-Aug | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | Z | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 1.4 | 1.5 | 1.3 | 0.8 | 0.6 | 3.3 | 4.5 | 2.1 | 1.3 | 1.1 | 4.5 |
| 20-Aug | Z | 0.9 | 1.0 | 1.3 | 1.7 | 1.5 | 1.9 | 2.0 | 1.0 | 1.2 | 0.6 | 0.9 | 0.8 | 1.0 | 0.4 | 0.5 | 0.9 | 0.7 | 0.8 | 1.6 | 2.2 | 1.6 | 1.5 | 1.6 | 1.2 | 2.2 |
| 21-Aug | 1.2 | Z | 1.5 | 1.8 | 1.5 | 1.7 | 1.1 | 1.4 | 1.1 | 1.5 | 1.1 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.3 | 1.0 | 1.8 |
| 22-Aug | 1.4 | 1.3 | Z | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 1.7 | 1.1 | 0.9 | 1.4 | 1.5 | 0.8 | 0.8 | 0.9 | 1.1 | 1.2 | 1.5 | 1.2 | 1.2 | 1.3 | 1.4 | 1.5 | 1.3 | 1.8 |
| 23-Aug | 1.4 | 1.3 | 1.6 | Z | 2.4 | 2.3 | 1.7 | 1.5 | 2.5 | 3.0 | 3.4 | 2.3 | 2.0 | 4.4 | 5.4 | 2.3 | 1.8 | 1.1 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 1.9 | 5.4 |
| 24-Aug | 0.4 | 2.8 | 2.9 | 0.5 | Z | 3.4 | 1.2 | 1.4 | 1.8 | 2.3 | 1.9 | 1.1 | 0.4 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.7 | 0.5 | 0.7 | 0.6 | 0.9 | 2.9 | 1.2 | 3.4 |
| 25-Aug | 4.0 | 1.0 | 1.0 | 1.1 | 1.7 | Z | 1.5 | 1.1 | 4.2 | 2.5 | 0.5 | 0.3 | 0.8 | 0.2 | 0.8 | 0.9 | 0.8 | 0.3 | 0.4 | 0.6 | 1.4 | 0.5 | 0.4 | 0.4 | 1.1 | 4.2 |
| 26-Aug | Z | 0.6 | 0.6 | 0.8 | 0.6 | 0.5 | 1.1 | 0.6 | 0.4 | 1.2 | 0.5 | 0.6 | 0.7 | 0.9 | 0.8 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 1.2 | 1.9 | 1.3 | 0.8 | 1.9 |
| 27-Aug | 0.9 | Z | 1.5 | 1.5 | 1.6 | 1.4 | 1.2 | 1.2 | 1.1 | 0.9 | 0.9 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 1.6 |
| 28-Aug | 0.6 | 1.1 | Z | 1.0 | 1.1 | 1.1 | 1.5 | 1.3 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.8 | 0.8 | 0.6 | 1.5 |
| 29-Aug | 0.7 | 0.4 | 0.7 | Z | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 1.1 |
| 30-Aug | 0.5 | 0.5 | 0.9 | 1.5 | Z | 0.8 | 1.4 | 0.7 | 1.9 | 1.8 | 2.4 | 2.1 | 2.0 | 1.1 | 0.9 | 2.2 | 2.7 | 1.6 | 0.7 | 1.1 | 1.0 | 0.9 | 1.3 | 1.1 | 1.4 | 2.7 |
| 31-Aug | 0.6 | 1.7 | 0.5 | 0.4 | 1.1 | Z | 3.1 | 5.4 | 2.5 | 0.7 | 0.6 | 0.9 | 0.5 | 0.5 | 1.2 | 1.0 | 1.1 | 1.3 | 2.7 | 0.4 | 0.4 | 0.3 | 0.2 | 0.4 | 1.2 | 5.4 |
| | 0.9 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 | 1.1 | 1.2 | 1.2 | 1.1 | 1.1 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 | Diurnal Average | |
| | 4.0 | 3.4 | 4.7 | 3.5 | 3.2 | 3.4 | 3.7 | 5.4 | 4.2 | 3.0 | 3.4 | 2.5 | 2.2 | 4.4 | 5.4 | 2.3 | 2.7 | 2.4 | 4.6 | 2.4 | 3.3 | 4.5 | 3.1 | 2.9 | Diurnal Maximum | |

Z - zerospan C - Calibration

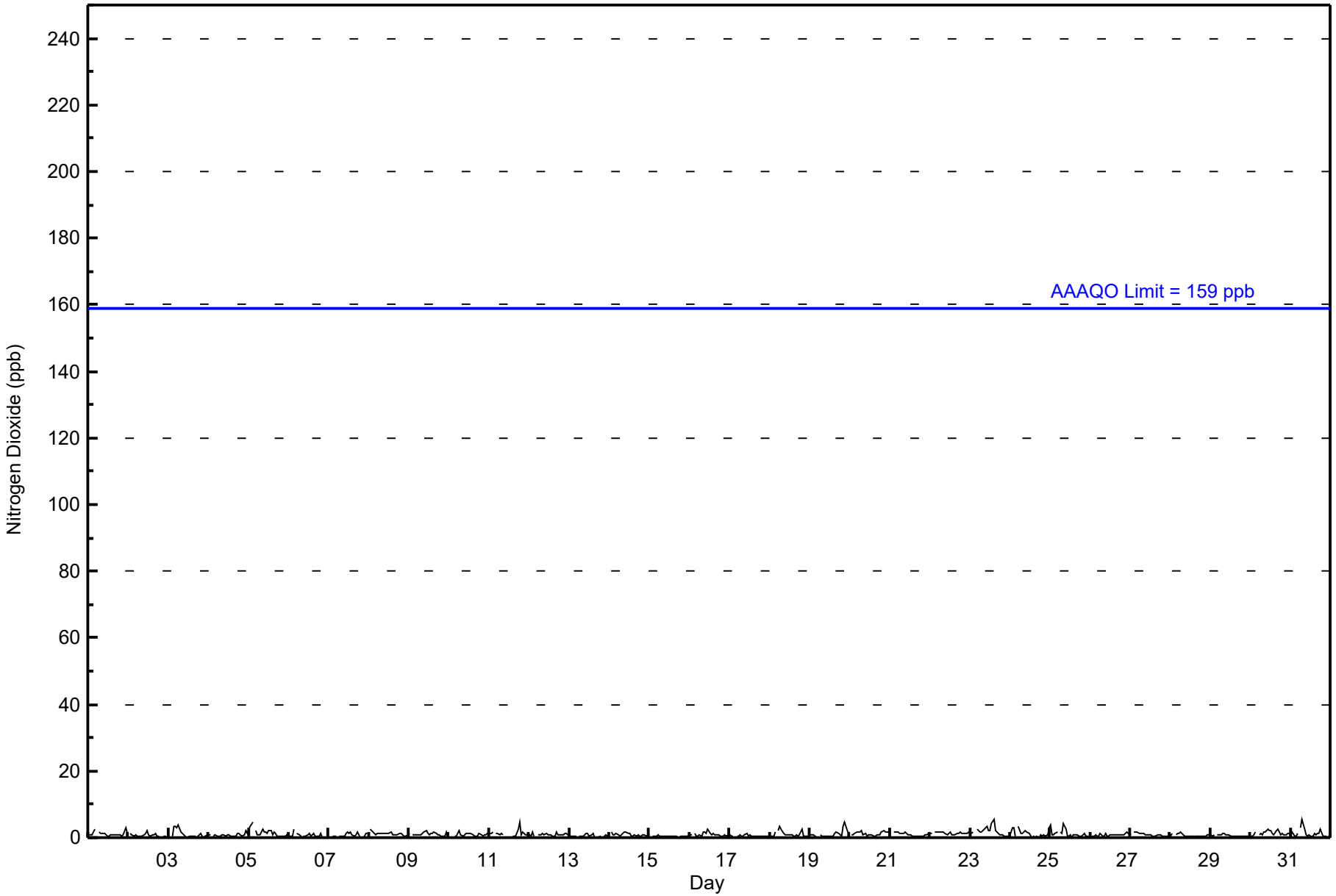
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 2/3 - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Jackfish 2/3 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 2/3 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 14 | 33 | 26 | 23 | 16 | 8 | 11 | 15 | 65 | 70 | 78 | 121 | 57 | 55 | 80 | 35 | 707 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 14 | 33 | 26 | 23 | 16 | 8 | 11 | 15 | 65 | 70 | 78 | 121 | 57 | 55 | 80 | 35 | 707 |

Total Number of Valid Hours: 707

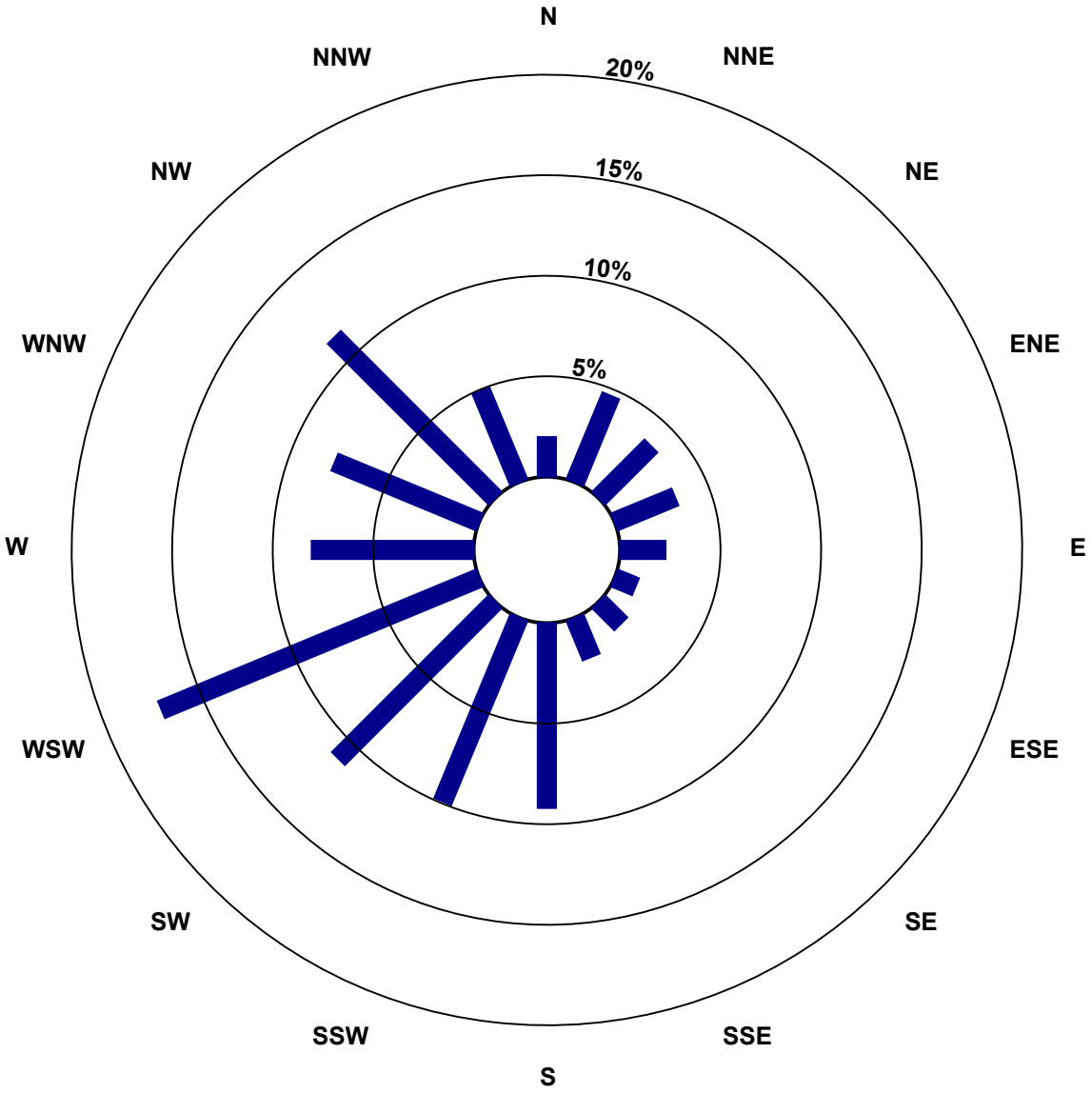
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Jackfish 2/3




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

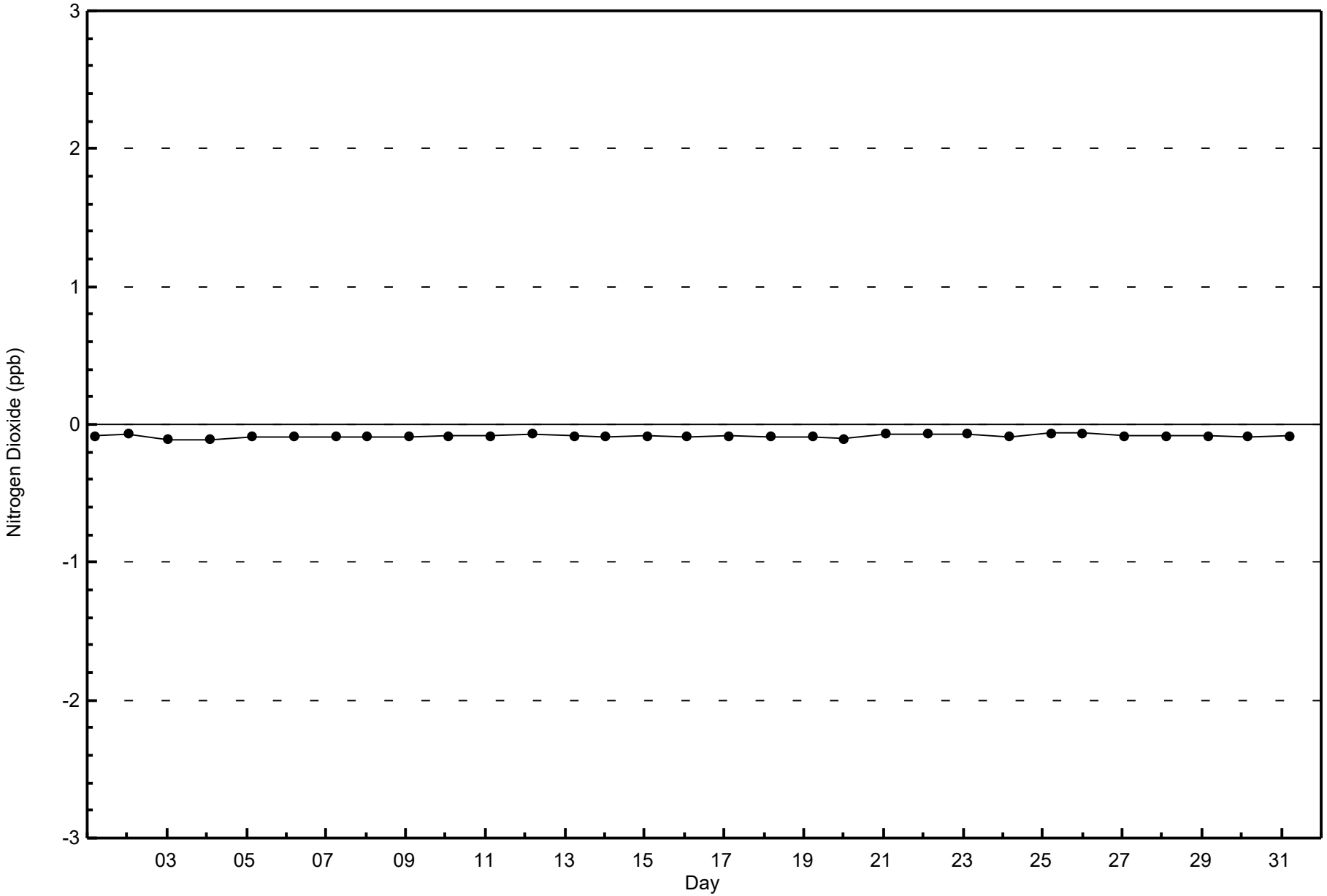
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 2/3 - August 2026**



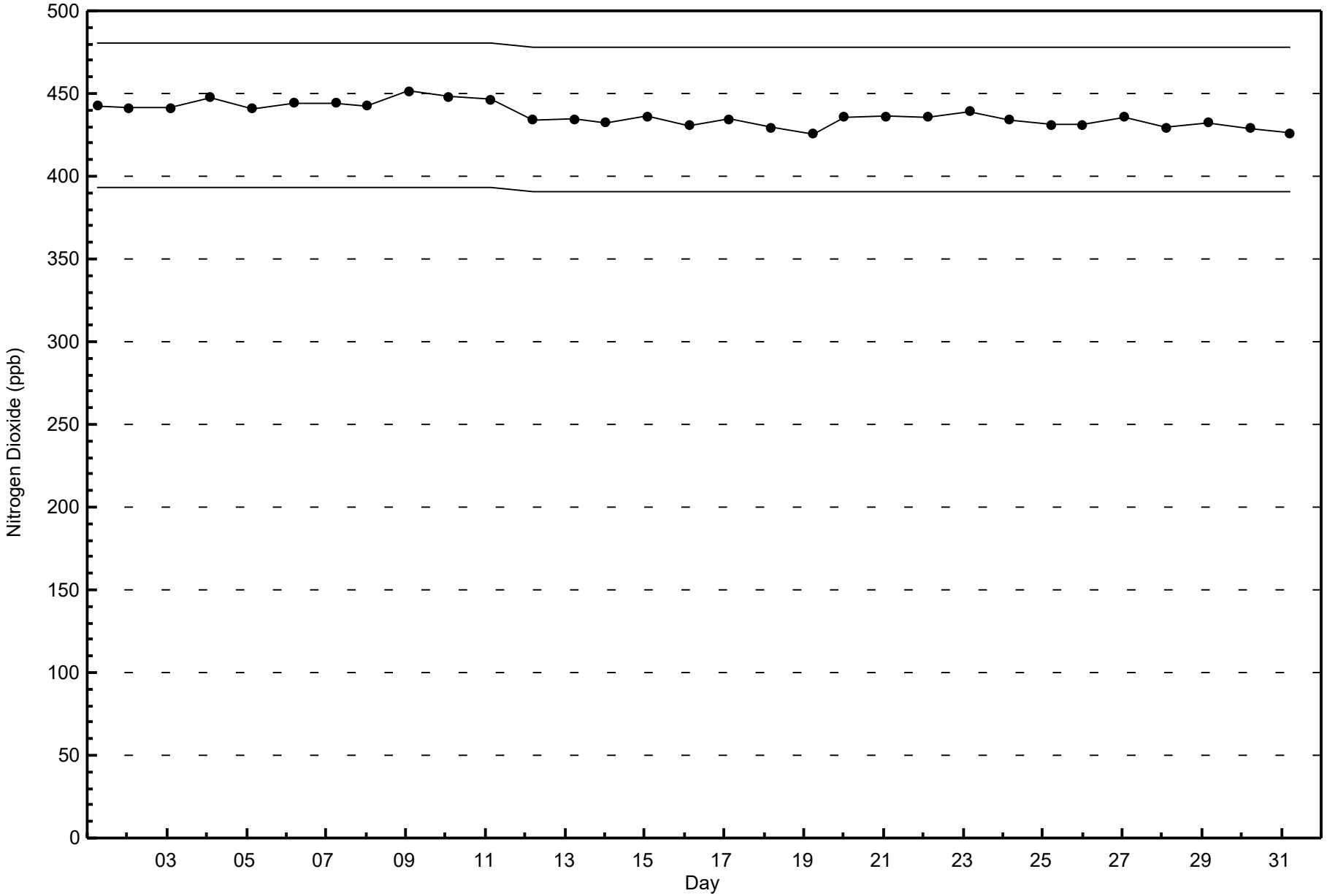

27 - 31

**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 2/3 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Jackfish 2/3 - August 2026

Maximum Value: 7.7 ppb on Aug 31 08:00

Maximum Daily Average: 2.2 ppb on Aug 23

Minimum Value: 0.1 ppb on Aug 13 17:00

Minimum Daily Average: 0.5 ppb on Aug 15

Maximum Diurnal Average: 1.6 ppb at hour 9

Minimum Diurnal Average: 0.7 ppb at hour 20

Monthly Average: 1.10 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 0.8 $Q_3 = 1.4$ $P_{90} = 2.1$ $P_{99} = 4.9$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.8 | 0.9 | 1.0 | 1.6 | 2.4 | Z | 2.0 | 1.3 | 1.3 | 1.2 | 1.1 | 0.6 | 0.6 | 0.7 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.8 | 3.1 | 1.1 | 1.1 | 3.1 |
| 2-Aug | Z | 1.4 | 0.8 | 0.6 | 0.9 | 0.4 | 0.5 | 0.6 | 0.4 | 0.8 | 1.4 | 2.6 | 1.1 | 0.6 | 0.7 | 0.9 | 1.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.6 | 0.2 | 0.8 | 2.6 |
| 3-Aug | 0.2 | Z | 0.5 | 3.9 | 3.7 | 3.7 | 5.0 | 1.9 | 1.6 | 1.2 | 0.3 | 0.2 | 0.3 | 0.5 | 0.7 | 0.5 | 0.5 | 0.2 | 1.1 | 1.6 | 0.8 | 0.2 | 0.4 | 0.7 | 1.3 | 5.0 |
| 4-Aug | 1.0 | 1.8 | Z | 0.4 | 1.5 | 0.3 | 0.8 | 0.7 | 0.9 | 0.9 | 0.7 | 0.7 | 0.8 | 0.7 | 0.3 | 0.4 | 0.5 | 1.5 | 1.2 | 0.7 | 0.4 | 0.7 | 2.1 | 1.3 | 0.9 | 2.1 |
| 5-Aug | 2.6 | 3.8 | 5.2 | Z | 2.3 | 1.1 | 0.8 | 1.0 | 3.9 | 2.7 | 2.4 | 1.6 | 3.3 | 3.0 | 0.8 | 2.0 | 1.6 | 0.6 | 0.3 | 0.3 | 0.5 | 0.4 | 0.6 | 0.7 | 1.8 | 5.2 |
| 6-Aug | 0.4 | 0.3 | 0.4 | 2.7 | Z | 1.3 | 1.0 | 0.6 | 0.2 | 0.3 | 0.5 | 1.6 | 2.2 | 0.5 | 1.7 | 1.9 | 0.7 | 0.8 | 0.8 | 1.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.9 | 2.7 |
| 7-Aug | 0.2 | 0.2 | 0.1 | 0.4 | 0.5 | Z | 0.6 | 0.6 | 0.4 | 0.7 | 1.9 | 2.0 | 1.6 | 2.3 | 1.0 | 0.7 | 0.8 | 3.0 | 1.1 | 0.2 | 0.2 | 0.3 | 1.2 | 1.4 | 0.9 | 3.0 |
| 8-Aug | Z | 2.5 | 1.6 | 1.4 | 1.0 | 1.7 | 1.9 | 1.6 | 1.9 | 1.5 | 1.4 | 1.4 | 1.3 | 1.6 | 1.1 | 0.8 | 1.0 | 0.9 | 1.2 | 1.4 | 0.7 | 0.6 | 0.6 | 0.7 | 1.3 | 2.5 |
| 9-Aug | 1.4 | Z | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 1.1 | 1.4 | 2.1 | 2.7 | 1.3 | 1.1 | 1.1 | 1.4 | 2.4 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 1.9 | 0.5 | 1.2 | 2.7 |
| 10-Aug | 0.2 | 0.2 | Z | 0.4 | 0.3 | 1.4 | 3.1 | 1.3 | 0.5 | 1.0 | 1.3 | 1.6 | 1.4 | 1.2 | 0.9 | 0.5 | 0.5 | 0.6 | 1.2 | 0.9 | 0.5 | 0.7 | 0.8 | 1.2 | 0.9 | 3.1 |
| 11-Aug | 1.4 | 1.2 | 1.5 | Z | 1.1 | 1.1 | 1.0 | 1.4 | 0.9 | C | C | C | C | C | 0.4 | 0.6 | 0.3 | 2.6 | 5.1 | 0.8 | 1.8 | 1.4 | 0.8 | 1.0 | 1.4 | 5.1 |
| 12-Aug | 0.7 | 0.6 | 1.9 | 0.6 | Z | 0.7 | 0.7 | 0.9 | 1.6 | 1.0 | 1.4 | 1.0 | 0.9 | 0.9 | 0.6 | 0.5 | 2.1 | 1.1 | 1.0 | 0.8 | 0.7 | 1.1 | 1.2 | 0.8 | 1.0 | 2.1 |
| 13-Aug | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | Z | 0.6 | 0.6 | 0.7 | 1.1 | 2.0 | 1.6 | 0.6 | 1.2 | 1.6 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.4 | 0.7 | 0.4 | 0.7 | 2.0 |
| 14-Aug | Z | 1.5 | 1.0 | 0.8 | 1.2 | 0.7 | 0.7 | 1.0 | 1.7 | 2.7 | 2.4 | 1.9 | 1.6 | 0.5 | 0.3 | 0.9 | 0.3 | 0.8 | 0.5 | 0.4 | 0.7 | 0.8 | 0.5 | 0.8 | 1.0 | 2.7 |
| 15-Aug | 0.9 | Z | 0.6 | 0.5 | 0.6 | 0.7 | 1.2 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 1.2 |
| 16-Aug | 0.8 | 0.8 | Z | 1.1 | 0.6 | 0.6 | 1.1 | 0.6 | 2.1 | 1.7 | 1.2 | 3.3 | 1.7 | 1.3 | 1.2 | 1.0 | 0.9 | 0.8 | 0.6 | 0.5 | 0.3 | 0.8 | 0.3 | 0.7 | 1.0 | 3.3 |
| 17-Aug | 0.7 | 0.6 | 0.4 | Z | 0.6 | 0.7 | 1.3 | 0.5 | 0.5 | 1.0 | 1.5 | 0.7 | 1.0 | 0.3 | 0.5 | 0.3 | 0.6 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 1.5 |
| 18-Aug | 0.3 | 0.3 | 0.4 | 1.5 | Z | 2.2 | 3.9 | 3.2 | 1.5 | 1.0 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.8 | 0.3 | 1.0 | 2.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.1 | 3.9 |
| 19-Aug | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | Z | 0.7 | 0.6 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 1.8 | 1.9 | 1.4 | 0.8 | 0.6 | 3.3 | 4.5 | 2.1 | 1.3 | 1.1 | 4.5 |
| 20-Aug | Z | 0.9 | 1.0 | 1.3 | 1.7 | 1.6 | 2.4 | 2.6 | 1.2 | 1.5 | 0.6 | 1.0 | 1.0 | 1.3 | 0.4 | 0.5 | 1.0 | 0.7 | 0.8 | 1.6 | 2.2 | 1.6 | 1.5 | 1.6 | 1.3 | 2.6 |
| 21-Aug | 1.2 | Z | 1.5 | 1.8 | 1.5 | 2.1 | 1.1 | 1.6 | 1.2 | 1.6 | 1.2 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.3 | 1.0 | 2.1 |
| 22-Aug | 1.4 | 1.3 | Z | 1.8 | 1.7 | 1.6 | 1.6 | 1.9 | 2.2 | 1.3 | 1.0 | 1.5 | 1.6 | 0.8 | 0.8 | 0.9 | 1.1 | 1.2 | 1.5 | 1.2 | 1.2 | 1.3 | 1.4 | 1.5 | 1.4 | 2.2 |
| 23-Aug | 1.4 | 1.3 | 1.6 | Z | 2.6 | 3.3 | 1.9 | 1.6 | 3.1 | 3.6 | 4.3 | 2.6 | 2.2 | 5.0 | 6.2 | 2.3 | 1.8 | 1.1 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 2.2 | 6.2 |
| 24-Aug | 0.4 | 3.1 | 3.3 | 0.5 | Z | 3.5 | 1.2 | 1.5 | 2.0 | 2.6 | 2.2 | 1.3 | 0.4 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.7 | 0.5 | 0.7 | 0.6 | 0.9 | 2.9 | 1.3 | 3.5 |
| 25-Aug | 4.0 | 1.0 | 1.0 | 1.1 | 1.7 | Z | 1.7 | 1.4 | 6.3 | 3.7 | 0.5 | 0.3 | 1.0 | 0.2 | 0.9 | 1.1 | 0.9 | 0.3 | 0.4 | 0.6 | 1.4 | 0.5 | 0.4 | 0.4 | 1.3 | 6.3 |
| 26-Aug | Z | 0.6 | 0.6 | 0.8 | 0.6 | 0.5 | 1.5 | 4.9 | 0.4 | 1.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.8 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 1.2 | 1.9 | 1.3 | 1.0 | 4.9 |
| 27-Aug | 0.9 | Z | 1.5 | 1.5 | 1.6 | 1.4 | 1.2 | 1.4 | 1.2 | 1.0 | 1.0 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 1.6 |
| 28-Aug | 0.6 | 1.1 | Z | 1.0 | 1.1 | 1.1 | 1.5 | 1.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.8 | 0.8 | 0.7 | 1.5 |
| 29-Aug | 0.7 | 0.4 | 0.7 | Z | 0.9 | 1.0 | 1.5 | 1.5 | 1.4 | 1.1 | 0.8 | 0.8 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.5 |
| 30-Aug | 0.5 | 0.5 | 0.9 | 1.5 | Z | 0.8 | 1.4 | 0.7 | 2.4 | 2.6 | 3.8 | 2.9 | 2.8 | 1.2 | 0.9 | 2.4 | 2.9 | 1.7 | 0.7 | 1.1 | 1.0 | 0.9 | 1.4 | 1.1 | 1.6 | 3.8 |
| 31-Aug | 0.6 | 1.7 | 0.5 | 0.4 | 1.1 | Z | 3.8 | 7.7 | 4.2 | 0.8 | 0.7 | 1.3 | 0.7 | 0.6 | 1.7 | 1.4 | 1.4 | 1.6 | 3.0 | 0.4 | 0.4 | 0.3 | 0.2 | 0.4 | 1.5 | 7.7 |
| | 0.9 | 1.1 | 1.2 | 1.1 | 1.3 | 1.4 | 1.6 | 1.6 | 1.6 | 1.5 | 1.4 | 1.3 | 1.1 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 | Diurnal Average | |
| | 4.0 | 3.8 | 5.2 | 3.9 | 3.7 | 3.7 | 5.0 | 7.7 | 6.3 | 3.7 | 4.3 | 3.3 | 3.3 | 5.0 | 6.2 | 2.4 | 2.9 | 3.0 | 5.1 | 2.4 | 3.3 | 4.5 | 3.1 | 2.9 | Diurnal Maximum | |

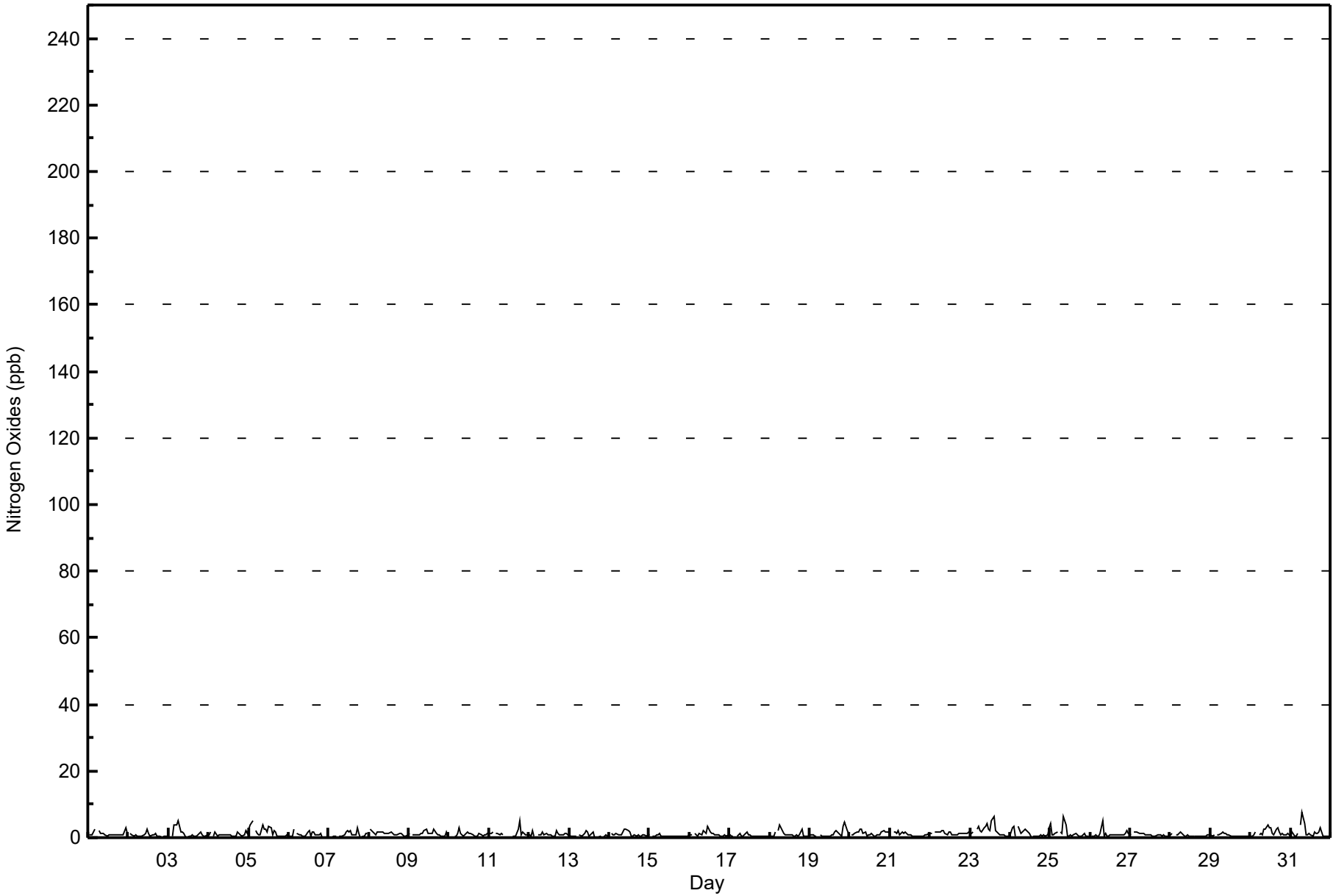
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 2/3 - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Jackfish 2/3 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 2/3 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 14 | 33 | 26 | 23 | 16 | 8 | 11 | 15 | 65 | 70 | 78 | 121 | 57 | 55 | 80 | 35 | 707 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 14 | 33 | 26 | 23 | 16 | 8 | 11 | 15 | 65 | 70 | 78 | 121 | 57 | 55 | 80 | 35 | 707 |

Total Number of Valid Hours: 707

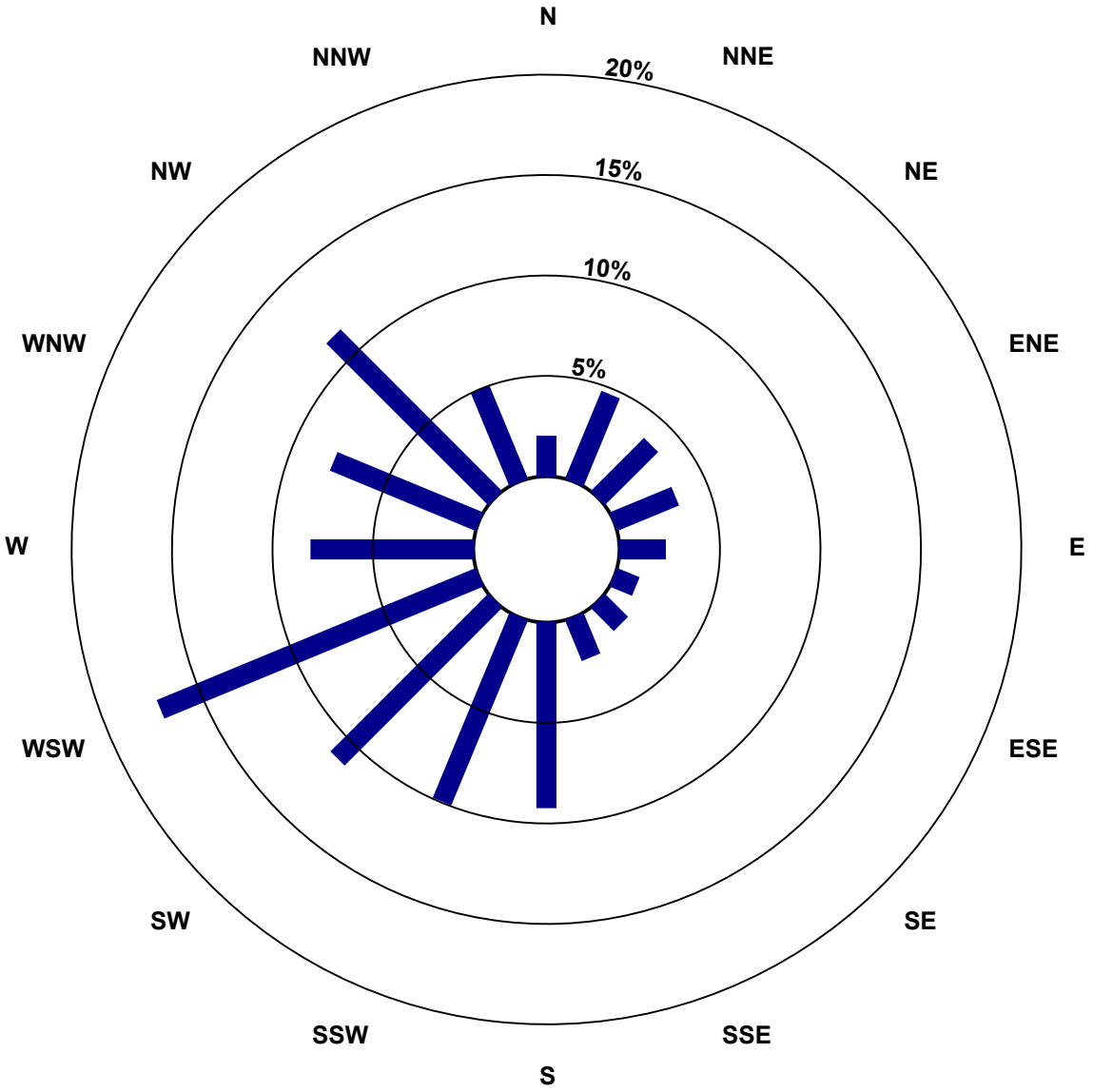
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Jackfish 2/3




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

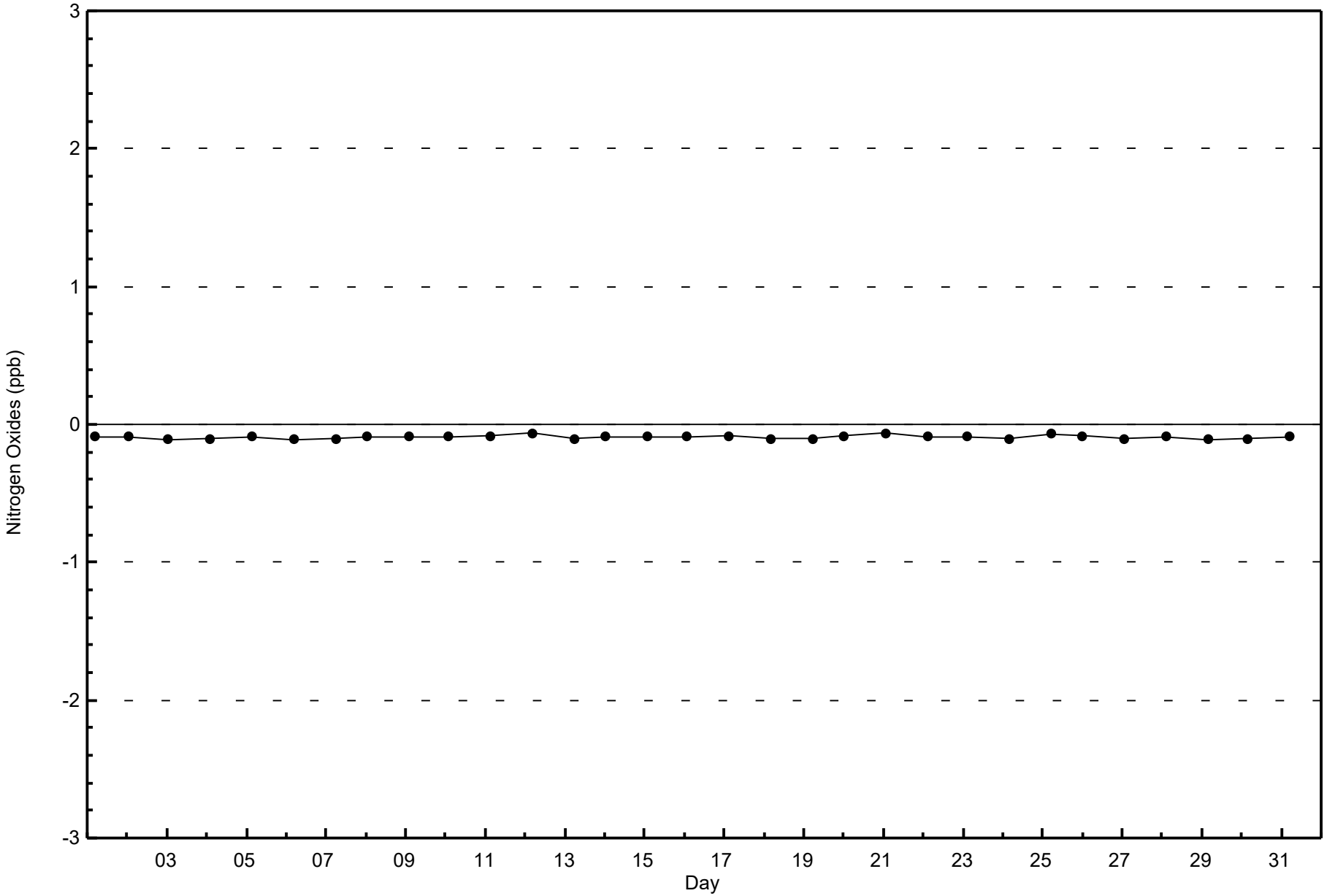
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 2/3 - August 2026**

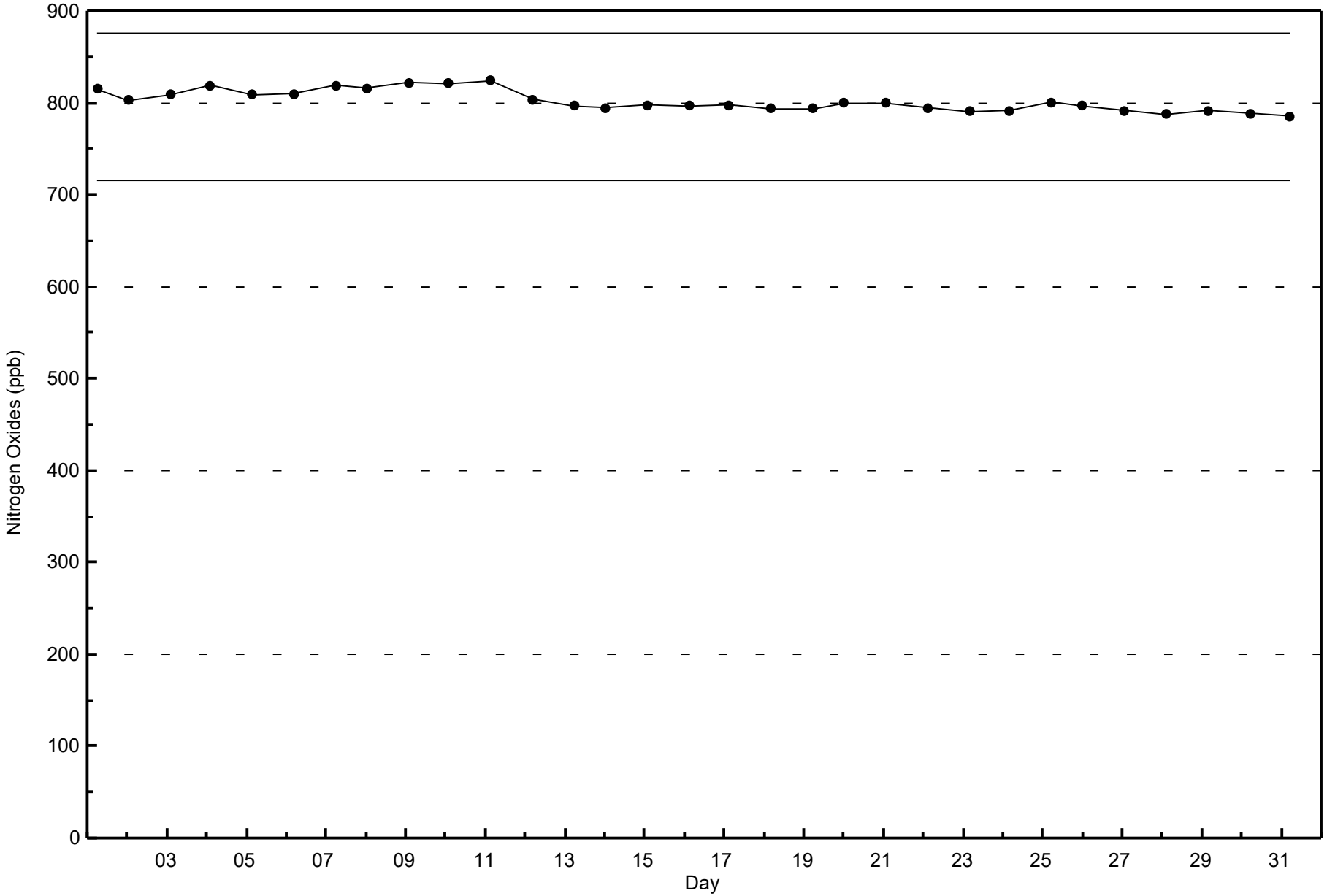


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 2/3 - August 2026**



Maximum Value: 28.2 C on Aug 1 16:00

Maximum Daily Average: 21.4 C on Aug 1

Minimum Value: 4.9 C on Aug 3 05:00

Minimum Daily Average: 10.7 C on Aug 6

Maximum Diurnal Average: 19.9 C at hour 15

Minimum Diurnal Average: 11.0 C at hour 6

Monthly Average: 15.34 C

Percentiles: $P_1$ = 7.3 $P_{10}$ = 9.8 $Q_1$ = 11.9 Median = 14.9 $Q_3$ = 18.3 $P_{90}$ = 21.7 $P_{99}$ = 27.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

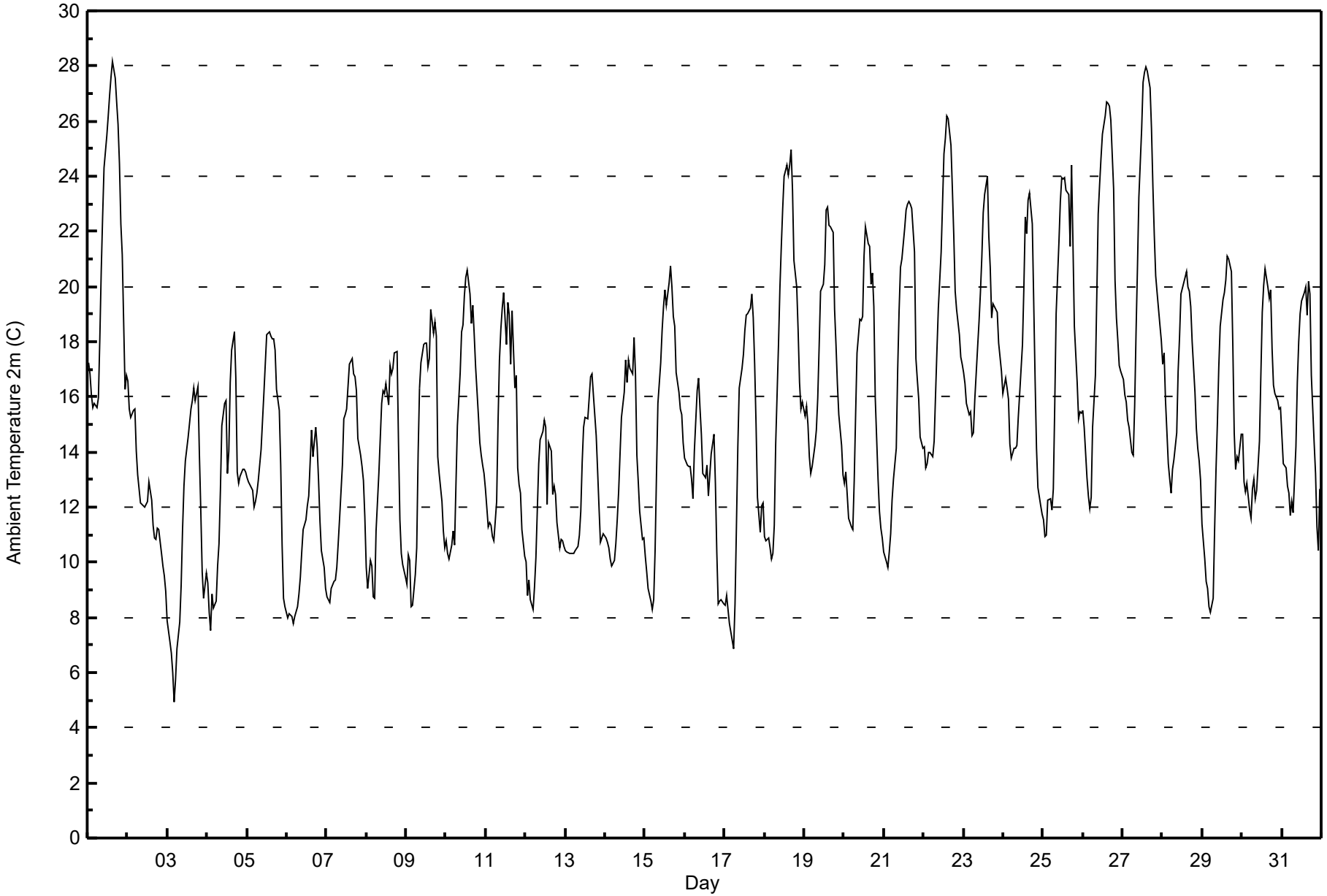
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.2 | 16.8 | 16.0 | 15.6 | 15.8 | 15.6 | 16.0 | 18.1 | 20.6 | 22.5 | 24.3 | 25.5 | 26.2 | 26.9 | 27.6 | 28.2 | 27.6 | 26.7 | 25.9 | 24.5 | 22.3 | 21.2 | 16.3 | 16.8 | 21.4 | 28.2 |
| 2-Aug | 16.6 | 15.6 | 15.3 | 15.5 | 15.6 | 14.1 | 13.2 | 12.7 | 12.2 | 12.1 | 12.0 | 12.1 | 12.2 | 12.9 | 12.3 | 11.3 | 10.9 | 10.8 | 11.2 | 11.2 | 10.3 | 9.8 | 9.5 | 8.9 | 12.4 | 16.6 |
| 3-Aug | 7.9 | 7.1 | 6.7 | 6.0 | 4.9 | 5.8 | 6.9 | 7.8 | 9.2 | 11.2 | 12.8 | 13.7 | 14.5 | 15.0 | 15.6 | 15.9 | 16.3 | 15.9 | 16.4 | 13.9 | 11.9 | 9.7 | 8.7 | 9.6 | 11.0 | 16.4 |
| 4-Aug | 9.2 | 8.2 | 7.5 | 8.9 | 8.3 | 8.6 | 9.8 | 10.7 | 12.6 | 15.0 | 15.8 | 15.9 | 13.2 | 14.0 | 16.5 | 17.7 | 18.4 | 16.7 | 13.2 | 12.8 | 13.1 | 13.4 | 13.4 | 13.2 | 12.8 | 18.4 |
| 5-Aug | 13.0 | 12.9 | 12.7 | 12.6 | 12.0 | 12.2 | 12.5 | 12.9 | 14.1 | 15.1 | 16.1 | 17.2 | 18.3 | 18.3 | 18.2 | 18.1 | 18.1 | 17.7 | 16.3 | 15.5 | 13.5 | 10.6 | 8.7 | 8.4 | 14.4 | 18.3 |
| 6-Aug | 8.0 | 8.1 | 8.1 | 8.0 | 7.8 | 8.0 | 8.4 | 8.8 | 9.5 | 10.4 | 11.2 | 11.6 | 12.0 | 12.4 | 13.6 | 14.8 | 13.9 | 14.9 | 14.2 | 13.0 | 11.5 | 10.4 | 9.8 | 9.1 | 10.7 | 14.9 |
| 7-Aug | 8.8 | 8.7 | 8.6 | 9.1 | 9.3 | 9.3 | 9.8 | 10.7 | 11.6 | 13.5 | 15.2 | 15.4 | 15.6 | 16.4 | 17.2 | 17.4 | 16.8 | 16.8 | 16.2 | 14.5 | 13.9 | 13.5 | 13.0 | 11.7 | 13.0 | 17.4 |
| 8-Aug | 9.8 | 9.1 | 10.1 | 9.9 | 8.8 | 8.7 | 11.1 | 13.2 | 14.5 | 15.7 | 16.2 | 16.1 | 16.5 | 15.7 | 17.1 | 16.8 | 17.0 | 17.6 | 17.6 | 14.3 | 11.6 | 10.3 | 9.9 | 9.5 | 13.2 | 17.6 |
| 9-Aug | 9.2 | 10.3 | 10.0 | 8.4 | 8.4 | 9.6 | 10.5 | 13.9 | 16.3 | 17.2 | 17.9 | 18.0 | 17.9 | 17.1 | 17.4 | 19.2 | 18.3 | 18.7 | 18.2 | 13.9 | 13.2 | 12.2 | 11.1 | 10.5 | 14.1 | 19.2 |
| 10-Aug | 10.8 | 10.3 | 10.1 | 10.6 | 11.2 | 10.6 | 12.8 | 15.0 | 16.9 | 18.3 | 18.6 | 19.7 | 20.4 | 20.6 | 19.7 | 18.7 | 19.3 | 18.2 | 17.1 | 15.3 | 14.3 | 13.9 | 13.5 | 13.2 | 15.4 | 20.6 |
| 11-Aug | 12.7 | 11.3 | 11.5 | 11.3 | 10.9 | 10.8 | 12.2 | 15.1 | 17.3 | 18.5 | 19.2 | 19.8 | 17.9 | 19.4 | 19.0 | 17.2 | 19.1 | 16.3 | 16.8 | 13.4 | 12.8 | 12.5 | 11.2 | 10.2 | 14.8 | 19.8 |
| 12-Aug | 10.0 | 8.8 | 9.4 | 8.7 | 8.3 | 9.1 | 10.2 | 11.9 | 13.6 | 14.4 | 14.7 | 15.2 | 14.9 | 12.1 | 14.3 | 14.0 | 12.5 | 12.8 | 12.4 | 11.4 | 10.5 | 10.8 | 10.8 | 10.6 | 11.7 | 15.2 |
| 13-Aug | 10.4 | 10.4 | 10.3 | 10.3 | 10.3 | 10.3 | 10.4 | 10.6 | 11.0 | 11.9 | 13.6 | 14.9 | 15.3 | 15.2 | 16.0 | 16.7 | 16.8 | 16.1 | 14.6 | 13.3 | 12.0 | 10.7 | 10.9 | 11.1 | 12.6 | 16.8 |
| 14-Aug | 10.9 | 10.7 | 10.5 | 10.1 | 9.8 | 10.1 | 10.7 | 11.6 | 12.6 | 13.9 | 15.2 | 16.2 | 17.3 | 16.5 | 17.3 | 17.0 | 16.8 | 18.1 | 16.8 | 13.9 | 12.9 | 11.9 | 10.8 | 10.9 | 13.4 | 18.1 |
| 15-Aug | 10.2 | 9.7 | 9.1 | 8.6 | 8.3 | 8.6 | 10.4 | 13.2 | 15.8 | 17.3 | 18.4 | 19.3 | 19.9 | 19.3 | 20.2 | 20.8 | 20.0 | 18.9 | 18.6 | 16.9 | 16.2 | 15.6 | 15.4 | 14.3 | 15.2 | 20.8 |
| 16-Aug | 13.8 | 13.5 | 13.5 | 13.5 | 13.0 | 12.3 | 14.0 | 16.2 | 16.7 | 15.6 | 14.6 | 13.2 | 13.1 | 13.5 | 12.4 | 13.2 | 13.9 | 14.6 | 12.9 | 10.4 | 8.5 | 8.6 | 8.7 | 8.5 | 12.8 | 16.7 |
| 17-Aug | 8.4 | 8.8 | 8.3 | 7.8 | 7.2 | 6.8 | 8.5 | 11.3 | 14.2 | 16.3 | 17.0 | 17.5 | 18.4 | 19.0 | 19.0 | 19.2 | 19.7 | 18.9 | 17.2 | 15.0 | 12.4 | 11.1 | 12.1 | 12.1 | 13.6 | 19.7 |
| 18-Aug | 11.0 | 10.8 | 10.9 | 10.5 | 10.1 | 10.3 | 11.3 | 14.3 | 17.9 | 20.0 | 21.4 | 22.9 | 24.0 | 24.4 | 24.0 | 24.4 | 25.0 | 23.5 | 21.0 | 20.0 | 18.4 | 16.5 | 15.5 | 15.8 | 17.7 | 25.0 |
| 19-Aug | 15.3 | 15.7 | 15.0 | 13.8 | 13.2 | 13.5 | 14.2 | 14.8 | 16.0 | 17.9 | 19.8 | 20.1 | 20.8 | 22.8 | 22.9 | 22.2 | 22.2 | 22.0 | 19.2 | 17.9 | 16.5 | 15.3 | 14.2 | 13.2 | 17.4 | 22.9 |
| 20-Aug | 12.9 | 13.3 | 12.4 | 11.6 | 11.3 | 11.2 | 13.0 | 15.3 | 17.6 | 18.8 | 18.7 | 18.9 | 21.1 | 22.2 | 21.5 | 21.5 | 20.1 | 20.5 | 19.3 | 15.9 | 13.0 | 11.9 | 11.2 | 10.9 | 16.0 | 22.2 |
| 21-Aug | 10.4 | 10.0 | 9.8 | 10.4 | 11.0 | 12.3 | 13.0 | 14.1 | 17.0 | 19.1 | 20.7 | 21.0 | 22.1 | 22.8 | 23.0 | 23.1 | 23.0 | 22.8 | 21.2 | 17.4 | 16.6 | 15.9 | 14.5 | 14.1 | 16.9 | 23.1 |
| 22-Aug | 14.2 | 13.4 | 13.6 | 14.0 | 14.0 | 13.8 | 14.4 | 16.1 | 17.7 | 19.2 | 21.3 | 23.1 | 24.8 | 25.3 | 26.2 | 26.1 | 25.1 | 23.5 | 21.9 | 19.9 | 19.2 | 18.3 | 17.4 | 17.2 | 19.1 | 26.2 |
| 23-Aug | 16.9 | 16.5 | 15.8 | 15.4 | 15.5 | 14.6 | 14.7 | 15.9 | 17.8 | 18.7 | 19.8 | 21.1 | 22.7 | 23.4 | 24.0 | 21.8 | 20.7 | 18.9 | 19.4 | 19.2 | 19.1 | 17.9 | 17.5 | 17.0 | 18.5 | 24.0 |
| 24-Aug | 16.1 | 16.7 | 16.3 | 15.9 | 14.3 | 13.8 | 14.1 | 14.1 | 14.3 | 15.2 | 16.1 | 17.9 | 20.0 | 22.5 | 21.9 | 23.2 | 23.4 | 22.3 | 19.5 | 16.6 | 14.1 | 12.7 | 12.0 | 11.7 | 16.9 | 23.4 |
| 25-Aug | 11.6 | 10.9 | 11.0 | 12.3 | 12.3 | 11.9 | 12.7 | 15.6 | 19.0 | 21.6 | 23.1 | 24.0 | 23.9 | 23.9 | 23.5 | 23.4 | 21.5 | 24.4 | 21.5 | 18.6 | 16.5 | 15.2 | 15.4 | 15.4 | 17.9 | 24.4 |
| 26-Aug | 15.5 | 14.9 | 13.1 | 12.4 | 12.0 | 12.3 | 14.9 | 16.8 | 19.7 | 22.7 | 23.7 | 24.6 | 25.5 | 26.2 | 26.7 | 26.7 | 26.6 | 26.0 | 23.5 | 20.2 | 18.9 | 18.1 | 17.2 | 17.0 | 19.8 | 26.7 |
| 27-Aug | 16.6 | 16.1 | 15.8 | 15.1 | 14.9 | 14.0 | 13.9 | 15.7 | 18.4 | 20.7 | 23.2 | 25.7 | 27.4 | 27.7 | 28.0 | 27.8 | 27.2 | 25.8 | 23.7 | 21.9 | 20.4 | 19.8 | 18.6 | 18.1 | 20.7 | 28.0 |
| 28-Aug | 17.2 | 17.6 | 15.9 | 13.6 | 13.0 | 12.5 | 13.4 | 13.7 | 14.7 | 16.9 | 18.1 | 19.7 | 19.9 | 20.1 | 20.5 | 20.0 | 19.8 | 19.2 | 18.0 | 16.2 | 14.8 | 14.2 | 13.7 | 12.9 | 16.5 | 20.5 |
| 29-Aug | 11.4 | 10.1 | 9.3 | 9.0 | 8.4 | 8.2 | 8.7 | 11.1 | 13.3 | 15.1 | 17.1 | 18.6 | 19.5 | 19.8 | 20.2 | 21.1 | 21.0 | 20.5 | 17.9 | 14.7 | 13.4 | 13.8 | 13.7 | 14.6 | 14.6 | 21.1 |
| 30-Aug | 14.6 | 12.9 | 12.6 | 12.9 | 11.9 | 11.6 | 12.7 | 13.0 | 12.3 | 12.6 | 14.4 | 16.8 | 19.1 | 20.0 | 20.7 | 20.0 | 19.6 | 19.9 | 17.7 | 16.4 | 16.1 | 15.9 | 15.6 | 15.6 | 15.6 | 20.7 |
| 31-Aug | 14.6 | 13.6 | 13.4 | 12.8 | 12.5 | 11.7 | 12.2 | 11.8 | 14.2 | 16.5 | 18.0 | 19.0 | 19.5 | 19.8 | 20.0 | 18.9 | 20.2 | 19.7 | 16.8 | 14.4 | 13.2 | 11.3 | 10.4 | 12.7 | 15.3 | 20.2 |
| | 12.4 | 12.0 | 11.7 | 11.4 | 11.1 | 11.0 | 12.0 | 13.4 | 15.1 | 16.6 | 17.7 | 18.5 | 19.2 | 19.5 | 19.9 | 19.9 | 19.7 | 19.3 | 17.9 | 15.9 | 14.6 | 13.6 | 12.9 | 12.7 | Diurnal Average | |
| | 17.2 | 17.6 | 16.3 | 15.9 | 15.8 | 15.6 | 16.0 | 18.1 | 20.6 | 22.7 | 24.3 | 25.7 | 27.4 | 27.7 | 28.0 | 28.2 | 27.6 | 26.7 | 25.9 | 24.5 | 22.3 | 21.2 | 18.6 | 18.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Jackfish 2/3 - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 81 | 10.89 | 10.89 |
| 10 - 20 | 551 | 74.06 | 84.95 |
| > 20 | 112 | 15.05 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 98.7 % on Aug 13 08:00

Maximum Daily Average: 94.0 % on Aug 2

Minimum Value: 32.6 % on Aug 26 16:00

Minimum Daily Average: 56.4 % on Aug 27

Maximum Diurnal Average: 89.8 % at hour 6

Minimum Diurnal Average: 54.6 % at hour 15

Monthly Average: 73.79 %

Percentiles: $P_1$ = 35.3 $P_{10}$ = 47.5 $Q_1$ = 59.7 Median = 77.1 $Q_3$ = 89.3 $P_{90}$ = 95.6 $P_{99}$ = 98.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

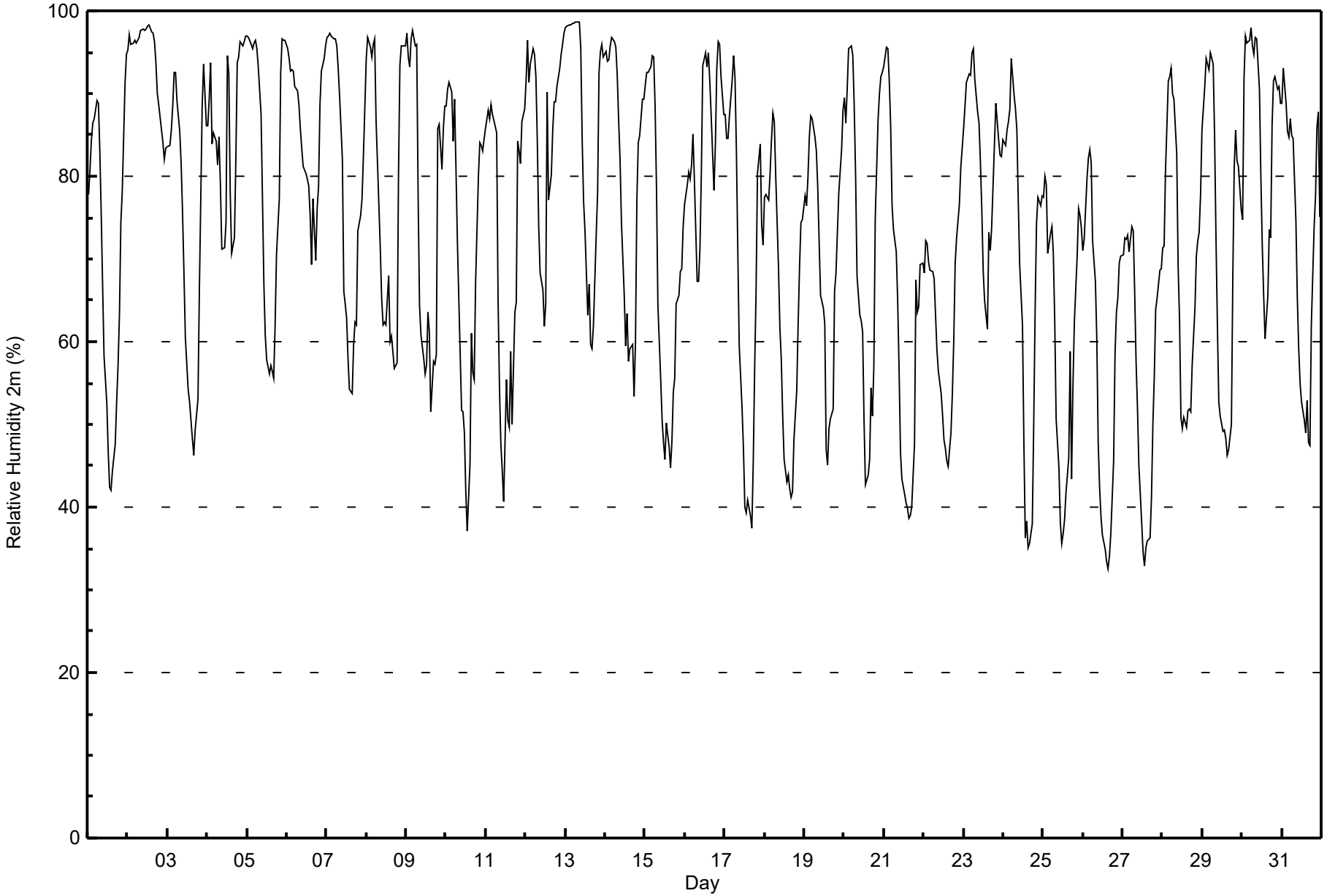
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 77.8 | 80.8 | 84.4 | 86.5 | 87.0 | 89.2 | 88.8 | 83.1 | 75.5 | 66.8 | 58.2 | 52.5 | 46.6 | 42.4 | 42.0 | 44.4 | 47.6 | 52.7 | 57.2 | 63.2 | 74.4 | 78.1 | 91.4 | 94.8 | 69.4 | 94.8 |
| 2-Aug | 95.3 | 97.1 | 95.9 | 96.0 | 96.5 | 96.2 | 96.5 | 96.8 | 97.6 | 97.8 | 97.6 | 97.8 | 98.1 | 98.3 | 97.5 | 97.3 | 96.3 | 93.7 | 90.1 | 88.7 | 85.6 | 84.1 | 82.0 | 83.4 | 94.0 | 98.3 |
| 3-Aug | 83.5 | 83.8 | 85.5 | 88.5 | 92.6 | 92.5 | 89.2 | 85.5 | 81.5 | 75.7 | 68.3 | 60.6 | 54.2 | 52.8 | 50.6 | 48.3 | 46.3 | 49.3 | 53.1 | 66.3 | 77.4 | 88.5 | 93.6 | 86.0 | 73.1 | 93.6 |
| 4-Aug | 86.0 | 89.4 | 93.7 | 84.0 | 85.3 | 84.3 | 81.3 | 84.7 | 79.0 | 71.2 | 71.3 | 74.4 | 94.6 | 92.3 | 78.0 | 70.6 | 72.5 | 81.9 | 93.7 | 94.4 | 96.3 | 95.8 | 96.3 | 96.9 | 85.3 | 96.9 |
| 5-Aug | 97.0 | 96.8 | 95.9 | 95.5 | 96.1 | 96.4 | 95.4 | 93.3 | 87.5 | 77.4 | 66.9 | 60.8 | 57.8 | 56.2 | 57.1 | 56.4 | 55.6 | 61.9 | 70.5 | 77.2 | 92.6 | 96.5 | 96.4 | 96.5 | 80.6 | 97.0 |
| 6-Aug | 95.4 | 94.2 | 92.7 | 92.8 | 92.8 | 90.8 | 90.3 | 88.6 | 85.8 | 83.4 | 81.2 | 80.4 | 79.6 | 78.9 | 75.3 | 69.4 | 77.3 | 69.7 | 76.1 | 78.8 | 88.6 | 92.7 | 94.3 | 95.8 | 85.2 | 95.8 |
| 7-Aug | 96.8 | 96.9 | 97.2 | 96.9 | 96.7 | 96.7 | 95.8 | 93.1 | 89.7 | 82.0 | 66.1 | 64.6 | 62.8 | 58.0 | 54.2 | 53.8 | 59.7 | 62.4 | 62.1 | 73.3 | 75.3 | 77.3 | 82.5 | 88.3 | 78.4 | 97.2 |
| 8-Aug | 94.2 | 96.8 | 95.6 | 94.4 | 96.0 | 96.6 | 86.8 | 76.6 | 71.3 | 65.3 | 62.0 | 62.4 | 62.1 | 68.0 | 60.0 | 60.7 | 58.9 | 56.8 | 57.5 | 80.0 | 93.4 | 95.7 | 95.7 | 95.8 | 78.4 | 96.8 |
| 9-Aug | 97.3 | 94.5 | 93.2 | 96.6 | 97.6 | 95.8 | 95.9 | 77.6 | 64.4 | 60.8 | 57.9 | 56.0 | 57.1 | 63.5 | 61.2 | 51.6 | 57.6 | 57.2 | 58.6 | 85.8 | 86.2 | 80.9 | 85.8 | 88.5 | 75.9 | 97.6 |
| 10-Aug | 88.5 | 90.6 | 91.3 | 90.2 | 84.3 | 89.3 | 80.9 | 72.3 | 58.4 | 51.7 | 51.6 | 49.0 | 41.9 | 37.0 | 45.2 | 61.0 | 56.2 | 55.4 | 67.2 | 80.0 | 84.1 | 83.7 | 83.1 | 84.4 | 69.9 | 91.3 |
| 11-Aug | 85.8 | 87.9 | 87.0 | 88.7 | 87.4 | 86.7 | 85.3 | 65.2 | 54.6 | 47.7 | 44.5 | 40.7 | 55.4 | 50.4 | 49.6 | 58.9 | 50.0 | 63.6 | 64.8 | 84.3 | 83.0 | 81.5 | 86.6 | 88.1 | 69.9 | 88.7 |
| 12-Aug | 91.5 | 96.4 | 91.3 | 93.6 | 95.5 | 94.7 | 92.1 | 84.3 | 73.9 | 68.3 | 66.3 | 61.9 | 64.6 | 90.2 | 77.2 | 80.2 | 85.7 | 89.0 | 89.0 | 90.9 | 93.0 | 94.7 | 96.0 | 97.3 | 85.7 | 97.3 |
| 13-Aug | 98.0 | 98.2 | 98.2 | 98.3 | 98.4 | 98.6 | 98.7 | 98.7 | 98.6 | 95.5 | 84.4 | 76.9 | 73.4 | 63.2 | 66.9 | 59.7 | 59.1 | 61.9 | 72.8 | 78.0 | 92.5 | 95.1 | 95.9 | 94.5 | 85.6 | 98.7 |
| 14-Aug | 95.1 | 93.9 | 94.1 | 95.8 | 96.8 | 96.3 | 95.6 | 92.3 | 86.8 | 82.0 | 74.3 | 65.6 | 59.5 | 63.3 | 57.7 | 59.2 | 59.7 | 53.4 | 59.8 | 77.1 | 84.1 | 84.8 | 89.3 | 89.3 | 79.4 | 96.8 |
| 15-Aug | 91.0 | 92.6 | 92.6 | 93.2 | 94.6 | 94.4 | 88.4 | 78.5 | 64.4 | 55.4 | 50.6 | 47.9 | 45.7 | 50.1 | 47.3 | 44.7 | 47.9 | 53.9 | 55.6 | 64.5 | 65.7 | 68.4 | 68.8 | 73.8 | 67.9 | 94.6 |
| 16-Aug | 76.6 | 78.9 | 80.5 | 79.7 | 81.3 | 85.1 | 79.7 | 67.4 | 67.2 | 71.4 | 80.5 | 93.4 | 95.0 | 93.3 | 94.9 | 91.5 | 87.3 | 78.3 | 84.0 | 93.1 | 96.2 | 96.0 | 92.1 | 87.5 | 84.6 | 96.2 |
| 17-Aug | 87.4 | 84.6 | 84.6 | 87.3 | 91.7 | 94.6 | 91.9 | 83.0 | 70.6 | 59.5 | 52.1 | 47.1 | 40.0 | 39.3 | 40.9 | 39.0 | 37.4 | 45.5 | 56.7 | 65.9 | 80.3 | 84.0 | 74.1 | 71.8 | 67.1 | 94.6 |
| 18-Aug | 77.4 | 77.8 | 77.1 | 80.4 | 84.5 | 87.7 | 86.6 | 80.2 | 69.0 | 61.7 | 57.7 | 51.0 | 45.8 | 43.1 | 43.9 | 42.1 | 41.3 | 41.9 | 48.1 | 54.0 | 62.1 | 69.0 | 74.4 | 74.8 | 63.8 | 87.7 |
| 19-Aug | 77.6 | 76.5 | 79.9 | 84.8 | 87.3 | 86.9 | 84.7 | 83.0 | 78.7 | 72.1 | 65.6 | 64.1 | 62.2 | 46.9 | 45.1 | 49.5 | 50.6 | 51.9 | 66.1 | 68.3 | 73.2 | 78.0 | 83.2 | 88.0 | 71.0 | 88.0 |
| 20-Aug | 89.4 | 86.4 | 90.5 | 95.4 | 95.8 | 94.7 | 88.5 | 80.0 | 67.9 | 63.2 | 62.5 | 61.2 | 50.6 | 42.8 | 44.0 | 45.8 | 54.4 | 51.0 | 57.0 | 74.9 | 86.8 | 90.1 | 92.1 | 92.6 | 73.2 | 95.8 |
| 21-Aug | 93.3 | 95.7 | 95.4 | 91.5 | 86.2 | 76.4 | 73.5 | 70.9 | 64.9 | 56.6 | 46.5 | 43.3 | 41.6 | 40.4 | 39.8 | 38.7 | 38.9 | 40.0 | 47.6 | 67.4 | 63.6 | 64.2 | 69.3 | 69.5 | 63.1 | 95.7 |
| 22-Aug | 68.3 | 72.3 | 71.9 | 69.6 | 68.6 | 68.5 | 67.6 | 63.2 | 58.9 | 56.4 | 53.7 | 51.1 | 48.1 | 47.2 | 45.6 | 44.9 | 49.0 | 53.6 | 60.1 | 69.6 | 72.6 | 76.6 | 81.1 | 83.3 | 62.6 | 83.3 |
| 23-Aug | 85.8 | 88.4 | 91.3 | 92.4 | 92.2 | 94.8 | 95.4 | 91.7 | 87.7 | 86.4 | 81.7 | 75.9 | 68.4 | 64.9 | 61.5 | 73.3 | 71.0 | 73.7 | 78.8 | 88.8 | 86.6 | 84.3 | 82.5 | 82.4 | 82.5 | 95.4 |
| 24-Aug | 84.4 | 83.7 | 85.6 | 86.7 | 88.1 | 94.2 | 89.8 | 88.2 | 85.6 | 76.9 | 69.4 | 62.0 | 47.8 | 36.3 | 38.4 | 35.2 | 35.5 | 37.9 | 49.9 | 63.6 | 74.3 | 77.4 | 76.5 | 77.6 | 68.5 | 94.2 |
| 25-Aug | 77.4 | 80.1 | 79.0 | 70.7 | 73.0 | 73.9 | 70.7 | 62.6 | 50.7 | 44.7 | 38.2 | 35.6 | 36.8 | 38.5 | 41.7 | 45.9 | 58.8 | 43.5 | 54.8 | 62.4 | 70.4 | 76.2 | 75.3 | 73.7 | 59.8 | 80.1 |
| 26-Aug | 71.1 | 72.4 | 79.7 | 82.2 | 83.3 | 81.7 | 72.3 | 67.3 | 60.3 | 47.9 | 42.4 | 38.7 | 36.7 | 34.9 | 33.3 | 32.6 | 34.1 | 36.7 | 45.5 | 58.5 | 63.5 | 65.2 | 69.4 | 70.3 | 57.5 | 83.3 |
| 27-Aug | 70.6 | 72.5 | 72.4 | 72.8 | 70.9 | 73.9 | 73.5 | 66.2 | 57.6 | 52.0 | 45.0 | 38.2 | 34.5 | 32.8 | 35.2 | 35.9 | 36.3 | 41.1 | 50.1 | 55.8 | 63.9 | 65.3 | 68.7 | 68.8 | 56.4 | 73.9 |
| 28-Aug | 71.4 | 71.6 | 80.8 | 91.5 | 92.1 | 93.0 | 89.9 | 89.3 | 82.8 | 69.2 | 62.7 | 50.8 | 49.5 | 50.9 | 49.6 | 51.7 | 51.9 | 51.6 | 57.1 | 64.0 | 70.4 | 72.2 | 73.3 | 77.7 | 69.4 | 93.0 |
| 29-Aug | 85.7 | 90.8 | 94.2 | 93.5 | 92.9 | 95.0 | 93.6 | 85.0 | 72.5 | 62.1 | 52.8 | 51.0 | 49.2 | 49.3 | 48.2 | 46.2 | 46.9 | 49.9 | 67.7 | 80.9 | 85.5 | 81.8 | 81.2 | 75.9 | 72.2 | 95.0 |
| 30-Aug | 74.8 | 91.9 | 96.9 | 96.1 | 96.4 | 98.0 | 95.8 | 94.7 | 96.8 | 96.7 | 90.5 | 80.1 | 71.7 | 65.7 | 60.4 | 65.5 | 73.6 | 72.5 | 86.2 | 91.5 | 92.0 | 90.5 | 90.9 | 88.8 | 85.7 | 98.0 |
| 31-Aug | 88.8 | 93.0 | 88.9 | 85.5 | 84.8 | 86.9 | 84.9 | 84.6 | 74.7 | 65.3 | 59.2 | 55.0 | 52.7 | 50.4 | 49.0 | 52.9 | 47.7 | 47.5 | 62.0 | 73.8 | 77.7 | 86.0 | 87.9 | 75.1 | 71.4 | 93.0 |
| | 85.6 | 87.3 | 88.3 | 88.7 | 89.2 | 89.8 | 87.1 | 81.5 | 74.7 | 68.5 | 63.3 | 59.7 | 57.5 | 56.2 | 54.6 | 55.1 | 56.3 | 57.4 | 64.5 | 74.7 | 80.4 | 82.4 | 84.2 | 84.2 | Diurnal Average | |
| | 98.0 | 98.2 | 98.2 | 98.3 | 98.4 | 98.6 | 98.7 | 98.7 | 98.6 | 97.8 | 97.6 | 97.8 | 98.1 | 98.3 | 97.5 | 97.3 | 96.3 | 93.7 | 93.7 | 94.4 | 96.3 | 96.5 | 96.4 | 97.3 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Jackfish 2/3 - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 31 | 4.17 | 4.17 |
| 40 - 60 | 157 | 21.10 | 25.27 |
| 60 - 80 | 221 | 29.70 | 54.97 |
| 80 - 100 | 335 | 45.03 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Jackfish 2/3 - August 2026

Maximum Speed: 16 km/h on Aug 28 15:00

Maximum Daily Speed Average: 9.3 km/h on Aug 28

Minimum Speed Value: 0 km/h on Aug 11 06:00

Minimum Daily Speed Average: 0.6 km/h on Aug 14

Maximum Diurnal Speed Average: 4.0 km/h at hour 11

Minimum Diurnal Speed Average: 1.9 km/h at hour 20

Monthly Average Velocity: 2.9 km/h 255.0 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 3 Median = 5 $Q_3$ = 7 $P_{90}$ = 9 $P_{99}$ = 12

Hours in Service: 744

Hours of Data: 743

Hours of Missing Data: 1

Percent Operational Time: 99.9

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSW5 | SSW4 | SSW4 | S5 | S5 | S5 | S5 | S4 | S6 | SSE8 | SSE8 | SSE9 | SSE9 | SE10 | SSE10 | S9 | S10 | S7 | S6 | S5 | S1 | WSW5 | NW4 | NW7 | S5.1 | S10 |
| 2-Aug | NNW5 | NE1 | SW5 | WSW6 | W7 | WSW13 | WSW12 | WSW12 | W9 | W9 | W11 | W8 | WNW6 | NNW7 | NNW10 | NNW11 | NW9 | NW9 | NW7 | NW6 | NW6 | NW6 | NW7 | NW7 | WNW6.5 | WSW13 |
| 3-Aug | NW6 | NW7 | NW7 | WNW7 | W5 | W5 | WNW6 | NW6 | NW6 | NW6 | NNW7 | NW7 | NW7 | NW7 | NW7 | NW7 | NW8 | NNW5 | NW3 | W3 | WSW4 | W2 | SW3 | WSW5 | WNW5.1 | NW8 |
| 4-Aug | WSW5 | WSW3 | SW3 | SW6 | SW7 | SW7 | SW7 | SW7 | SW8 | WSW8 | WSW11 | W9 | SW10 | SW9 | SW12 | WSW12 | WSW9 | WSW8 | SW6 | WSW8 | WSW7 | W7 | W7 | W7 | WSW7.3 | SW12 |
| 5-Aug | WNW7 | WNW7 | WNW7 | WNW6 | WNW6 | W7 | WNW9 | WNW9 | WNW8 | WNW9 | NW10 | WNW10 | WNW12 | WNW11 | NW10 | WNW9 | NW8 | W8 | WSW9 | WSW5 | NNW2 | N8 | NNW6 | NW8 | WNW7.4 | WNW12 |
| 6-Aug | NW9 | NW8 | NW9 | NW9 | WNW9 | NW11 | NW9 | NW10 | NW8 | NW8 | NW7 | NW7 | NW7 | NW8 | WNW8 | WNW8 | W9 | W8 | W7 | W6 | WSW6 | WSW6 | WSW6 | WSW5 | WNW7.3 | NW11 |
| 7-Aug | W5 | W4 | W5 | W5 | W4 | WSW5 | W6 | WSW7 | WSW7 | W6 | WNW7 | WNW6 | WNW6 | WNW7 | WNW6 | WNW6 | NW3 | WNW3 | WSW5 | WSW5 | WSW5 | WSW6 | WNW3 | WSW3 | W5.0 | WSW7 |
| 8-Aug | WSW2 | SW3 | WSW3 | N1 | NE1 | NW1 | NNE2 | NE4 | NNE5 | N4 | WNW5 | WNW3 | WNW4 | NNE4 | NNE3 | N4 | NNE3 | NNW2 | NE4 | E1 | S2 | SE2 | ESE2 | S2 | N1.2 | NNE5 |
| 9-Aug | S2 | SSW4 | SW2 | S2 | S1 | SSW2 | ENE0 | SW1 | N2 | NNE3 | NNW2 | NNW1 | ENE4 | NE4 | ENE4 | SSW2 | NE4 | NE3 | ENE4 | E2 | E3 | ENE4 | E4 | ESE3 | E1.3 | NE4 |
| 10-Aug | SE2 | S2 | SSE2 | S2 | ESE2 | ENE2 | ENE4 | ESE2 | E5 | E4 | NE3 | NNW4 | NE3 | NE2 | NNE4 | NE2 | N2 | NNE3 | NNE3 | NE1 | SW1 | S1 | SE1 | ESE1 | ENE1.5 | E5 |
| 11-Aug | SSW1 | SSW1 | WSW2 | SW1 | SSE0 | NNE0 | N1 | NNW2 | NE4 | NNE5 | N4 | NNW3 | ENE6 | NNE4 | NNW4 | ENE4 | NNW5 | NE7 | NW1 | SW2 | SW3 | SW2 | SW1 | ENE1 | N1.4 | NE7 |
| 12-Aug | ENE2 | WSW2 | WSW3 | S1 | S1 | S1 | WSW1 | NW2 | NNW4 | N5 | NW5 | NNW5 | NNW5 | NNE5 | NNW4 | NNW4 | NNW4 | NNW3 | NNW3 | NNW2 | N2 | N3 | NNW3 | N3 | NNW2.2 | NNW5 |
| 13-Aug | N4 | N4 | NNE3 | NNE3 | NNE4 | NNE5 | NNE4 | NNE4 | NNE5 | NNE5 | ENE6 | NE6 | ENE8 | ENE10 | ENE8 | ENE10 | ENE9 | ENE7 | NE4 | SE3 | UO | ENE2 | NE2 | NNE3 | NE4.8 | ENE10 |
| 14-Aug | NNE2 | NNE3 | NNE3 | NE1 | NE1 | NNE3 | NNE2 | NNE3 | NE3 | NE3 | NNE2 | WNW1 | E3 | NNE6 | NNE8 | E6 | SSW5 | S1 | SW4 | WSW3 | SW2 | SW5 | SW5 | WSW5 | NNE0.6 | NNE8 |
| 15-Aug | WSW5 | SW5 | WSW5 | WSW5 | WSW4 | WSW4 | WSW4 | WSW4 | WSW7 | WSW5 | WSW6 | W7 | WSW8 | WSW6 | WNW6 | W5 | WSW9 | WSW7 | WSW6 | SW5 | SW6 | SW7 | SW8 | SW7 | WSW5.7 | WSW9 |
| 16-Aug | SW7 | SW7 | SW8 | WSW9 | WSW8 | WSW8 | WSW9 | WSW10 | WNW8 | W6 | WNW7 | WNW6 | WNW6 | WNW6 | N5 | NNW4 | N4 | NW3 | WSW2 | SW2 | SSW2 | SW4 | SW5 | WSW7 | WSW4.7 | WSW10 |
| 17-Aug | WSW8 | WSW8 | WSW8 | WSW8 | WSW7 | WSW5 | WSW6 | WSW6 | WSW6 | W7 | WNW6 | NW5 | NW5 | WSW8 | W5 | WSW6 | WSW6 | WSW5 | SW4 | SW5 | SSW4 | S5 | SSW7 | SSW6 | WSW5.2 | WSW8 |
| 18-Aug | SSW6 | SSW6 | SSW6 | S6 | SSW7 | S7 | S6 | SSW7 | SSW8 | SW9 | SW8 | SW8 | WSW8 | WSW9 | W8 | WSW8 | W8 | W8 | W6 | W4 | W4 | W4 | WSW6 | WSW6 | SW5.8 | SW9 |
| 19-Aug | SW7 | SW7 | SW7 | WSW6 | WSW7 | WSW7 | WSW6 | WSW7 | WSW8 | W7 | W7 | W7 | W8 | WNW8 | NW8 | WNW8 | WNW7 | WNW7 | NNW4 | WNW4 | W4 | W4 | WSW3 | WSW3 | W5.6 | W8 |
| 20-Aug | WSW4 | WSW4 | SW3 | ENE1 | S2 | SW4 | SW6 | WSW6 | W6 | NW5 | NW4 | NNW4 | NW4 | WNW8 | NW7 | NW7 | WNW3 | NNE5 | NE4 | E3 | SE2 | SSW2 | S3 | S1 | WNW2.1 | WNW8 |
| 21-Aug | S2 | SSW3 | SSW4 | SW6 | SSW6 | SSW7 | SSW7 | SSW6 | SW6 | WSW7 | WSW6 | WSW5 | SW7 | SW7 | WSW7 | SW8 | SW7 | SW7 | SW5 | SSW3 | SSW4 | SSW4 | SSW4 | S5 | SW5.2 | SW8 |
| 22-Aug | SSW5 | S4 | S5 | S5 | S6 | S6 | SSW7 | SSW9 | SSW11 | SSW10 | SSW8 | SSW6 | SSW6 | S6 | S5 | SSW9 | SSW7 | SSW7 | SSW6 | SW5 | SSW6 | SSW6 | SSW6 | SSW7 | SSW6.6 | SSW11 |
| 23-Aug | SW6 | SSW8 | SSW7 | SSW9 | SSW5 | S3 | S4 | SSW5 | WSW4 | WSW7 | W5 | NNW6 | NE4 | E3 | NNE2 | WSW5 | W7 | NNE4 | NW4 | NW4 | NW6 | NW5 | NW5 | NW4 | WSW2.5 | SSW9 |
| 24-Aug | WNW3 | WNW5 | WSW4 | SW7 | SW9 | WNW4 | NW4 | NNW4 | NW5 | NW5 | NW6 | NW6 | NNW6 | NNW10 | NW9 | NNW9 | NW8 | NW5 | WNW4 | WSW1 | S2 | SSW3 | SSW3 | SSW3 | WNW3.9 | NNW10 |
| 25-Aug | SW3 | SSW4 | SW5 | SW8 | SW8 | SW7 | WSW8 | W4 | WNW4 | WNW4 | NW5 | NW5 | NW3 | NNW3 | W2 | W1 | SW1 | NNE3 | ENE4 | E5 | ESE3 | S3 | S3 | S4 | WSW2.0 | WSW8 |
| 26-Aug | S5 | S6 | S6 | S6 | SSW7 | SSW7 | SSW7 | S5 | SSW5 | SSW6 | SSW9 | SSW9 | SSW9 | SSW8 | SW8 | SSW8 | SSW7 | S6 | S5 | SSE2 | SE3 | SSE4 | S4 | SSW6 | SSW5.8 | SSW9 |
| 27-Aug | S6 | S6 | S7 | S6 | S7 | S6 | S5 | S6 | S6 | S6 | S6 | SW9 | S6 | SSE8 | SSE9 | SSE9 | SSE10 | SSE7 | SE5 | ESE6 | ESE7 | SE7 | SSE5 | SSE5 | SSE6.1 | SSE10 |
| 28-Aug | SW4 | WSW9 | WNW7 | NW1 | SSW4 | SW6 | SW6 | WSW9 | W10 | W12 | WSW13 | WSW14 | WSW15 | WSW16 | WSW16 | WSW12 | WSW12 | WSW13 | WSW9 | WSW7 | WSW8 | WSW9 | WSW8 | SW8 | WSW9.3 | WSW16 |
| 29-Aug | WSW4 | SW5 | WSW5 | WSW7 | SW6 | SW7 | SW7 | WSW8 | WSW8 | WSW9 | W9 | W9 | WSW11 | SW11 | WSW10 | WSW8 | SW8 | SW5 | SSW3 | S2 | S2 | S3 | S3 | SE3 | SW5.8 | WSW11 |
| 30-Aug | SSW3 | SE3 | NE3 | E6 | NE3 | ENE4 | E5 | NE2 | NNE3 | E2 | SW3 | W1 | E3 | SSW3 | SW4 | W2 | ENE1 | SSW1 | S0 | ENE2 | E2 | SSW3 | W2 | NNE4 | E0.8 | E6 |
| 31-Aug | NE6 | NNW1 | NW5 | NW4 | WNW5 | W5 | WNW6 | WNW6 | NW6 | NW7 | NW7 | NW6 | NW7 | NW6 | WNW6 | NW5 | WNW4 | W6 | WSW3 | WSW4 | WSW3 | W1 | SW2 | SW7 | WNW4.1 | NW7 |
| | WSW2.5 | SW3.0 | WSW3.2 | SW3.3 | SW3.4 | WSW3.6 | WSW3.4 | WSW3.6 | W3.4 | W3.5 | W4.0 | W4.0 | W3.2 | W2.8 | WNW3.2 | W3.2 | W3.3 | W2.3 | WSW2.0 | WSW1.9 | SW2.0 | SW2.3 | WSW2.4 | WSW2.6 | Diurnal Average | |
| | NW9 | WSW9 | NW9 | NW9 | WNW9 | WSW13 | WSW12 | WSW12 | SSW11 | W12 | WSW13 | WSW14 | WSW15 | WSW16 | WSW16 | WSW12 | WSW12 | WSW13 | WSW9 | WSW8 | WSW8 | WSW9 | WSW8 | SW8 | Diurnal Maximum | |

UO - Unstable Operation

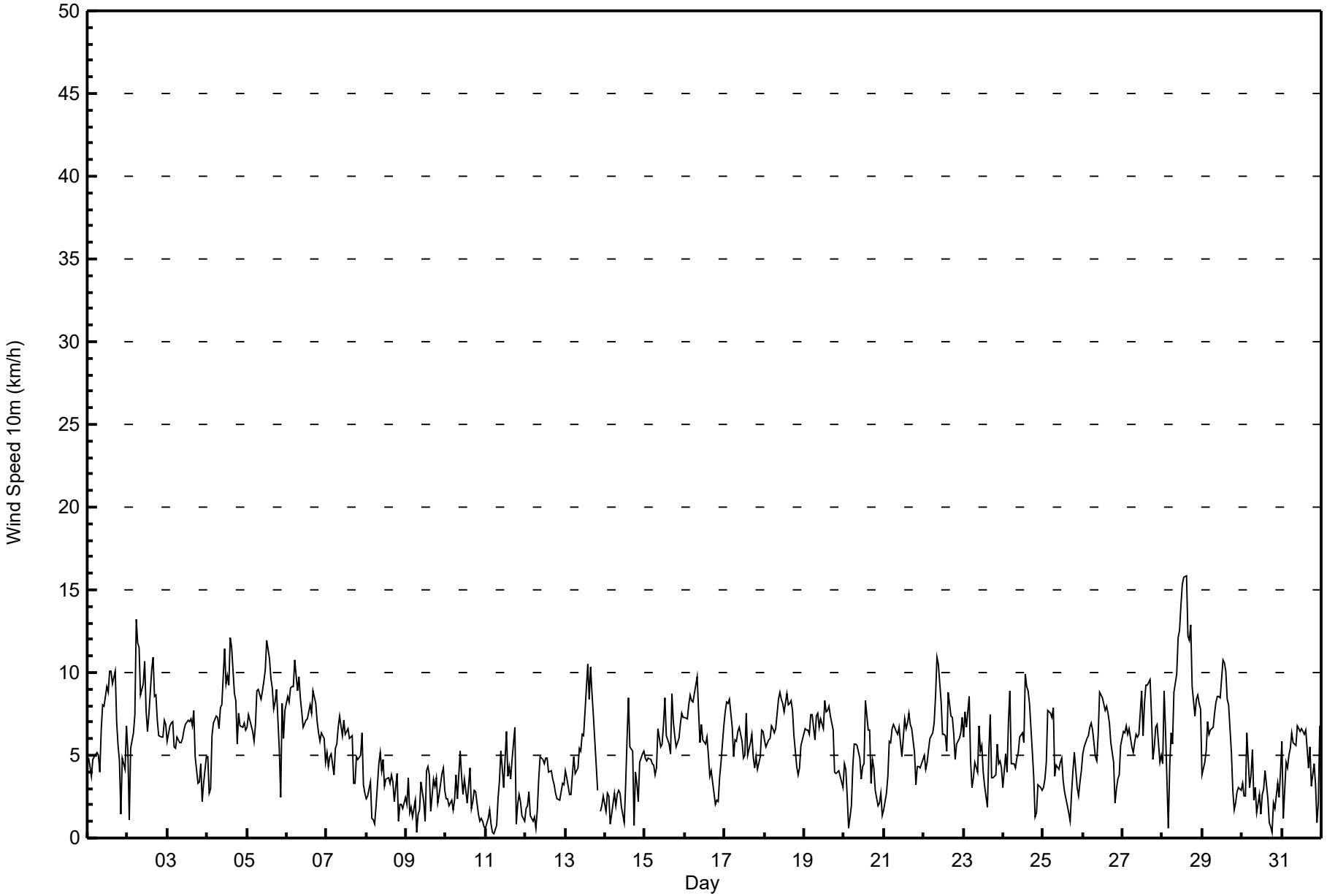
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Jackfish 2/3 - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 380 | 51.14 | 51.14 |
| 6 - 11 | 348 | 46.84 | 97.98 |
| 12 - 19 | 15 | 2.02 | 100.00 |
| 20 - 28 | 0 | 0.00 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Jackfish 2/3 - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 14 | 35 | 24 | 16 | 14 | 6 | 9 | 6 | 44 | 33 | 36 | 45 | 25 | 16 | 29 | 28 | 380 |
| 6 - 11 | 1 | 2 | 3 | 8 | 2 | 2 | 2 | 10 | 26 | 41 | 47 | 70 | 32 | 41 | 52 | 9 | 348 |
| 12 - 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 1 | 1 | 0 | 0 | 15 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 15 | 37 | 27 | 24 | 16 | 8 | 11 | 16 | 70 | 74 | 84 | 127 | 58 | 58 | 81 | 37 | 743 |

Total Number of Valid Hours: 743

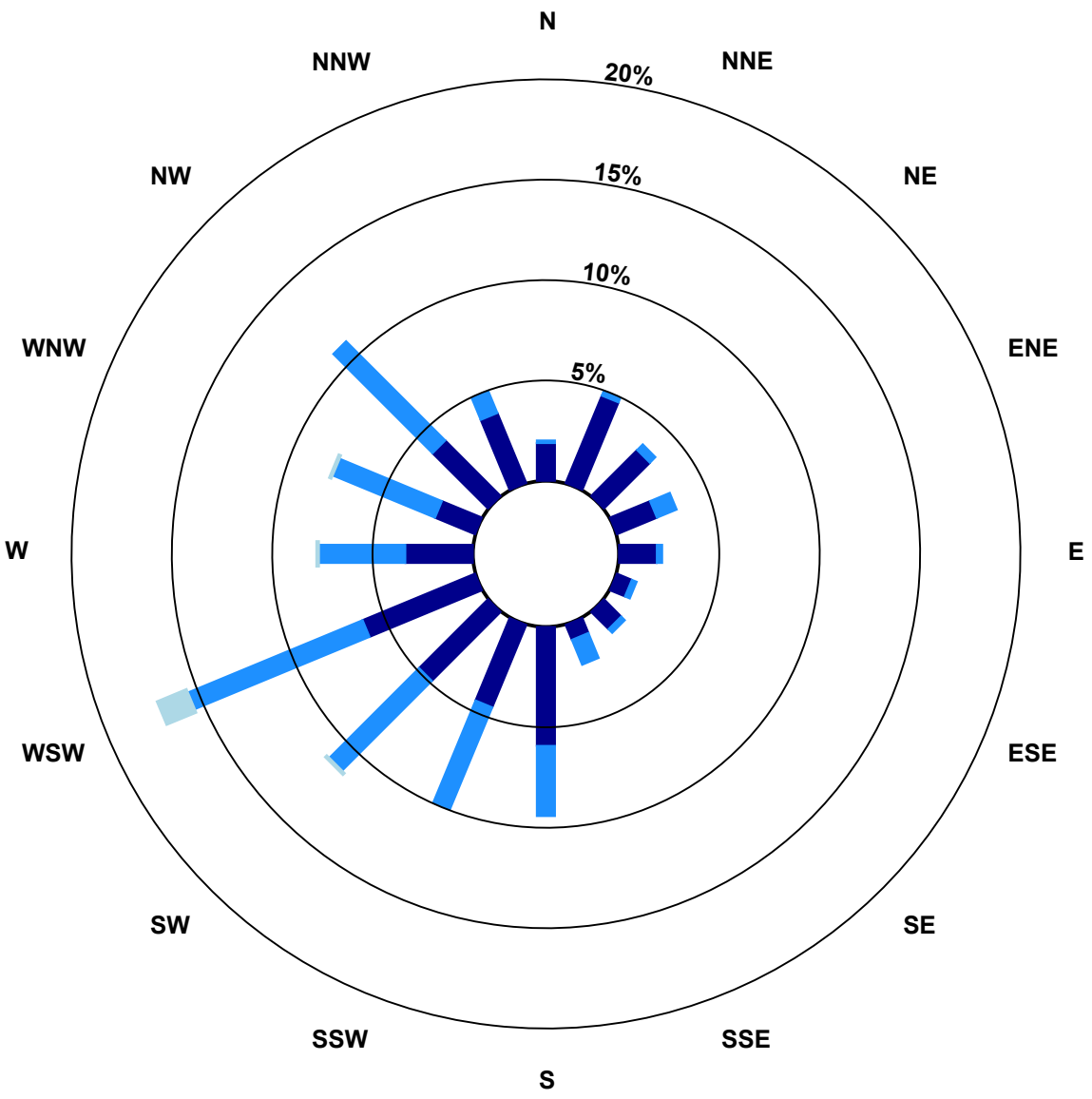
Total Number of Hours: 744

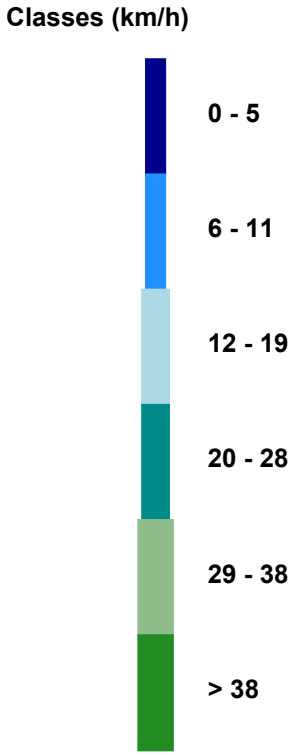
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Jackfish 2/3**




**Total Number of Valid Hours: 743**

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Jackfish 2/3 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6 km/h on Aug 1 22:00

Minimum Value: 0 km/h on Aug 20 23:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 1$ Median = 2 $Q_3 = 3$ $P_{90} = 4$ $P_{99} = 5$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 1 | 6 | 3 | 3 | 6 |
| 2-Aug | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 3 | 4 | 5 | 3 | 3 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 5 |
| 3-Aug | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 4 |
| 5-Aug | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 5 | 4 | 4 | 6 |
| 6-Aug | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 4 |
| 7-Aug | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 3 |
| 8-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2 |
| 9-Aug | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 |
| 10-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 12-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 |
| 13-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | UO | 1 | 1 | 1 | 4 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 4 |
| 16-Aug | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 17-Aug | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 3 |
| 18-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 4 |
| 19-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 4 |
| 20-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 1 | 0 | 1 | 4 |
| 21-Aug | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 3 | 2 | 3 | 4 | 4 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 4 |
| 23-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 |
| 24-Aug | 2 | 2 | 1 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 5 |
| 25-Aug | 0 | 0 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 3 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 4 |
| 27-Aug | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 5 | 4 | 4 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 5 |
| 28-Aug | 2 | 4 | 4 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 3 | 2 | 2 | 3 | 3 | 2 | 6 |
| 29-Aug | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 30-Aug | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 31-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 3 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 5 | 3 | 3 | 3 | 6 | 4 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Jackfish 2/3 - August 2026

Direction of Maximum Speed: 248 deg on Aug 28 15:00
Direction of Maximum Daily Speed Average: 246.8 deg on Aug 28

Direction of Minimum Speed: 30 deg on Aug 11 06:00

Direction of Minimum Daily Speed Average: 0.6 deg on Aug 14

Monthly Average Direction: 255.0 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 199 | 199 | 194 | 190 | 189 | 185 | 189 | 173 | 177 | 164 | 167 | 162 | 150 | 145 | 149 | 174 | 184 | 172 | 176 | 191 | 182 | 245 | 308 | 321 | 177.6 |
| 2-Aug | 341 | 55 | 225 | 239 | 268 | 248 | 249 | 246 | 261 | 272 | 278 | 274 | 284 | 334 | 336 | 329 | 321 | 316 | 326 | 316 | 314 | 307 | 312 | 308 | 289.7 |
| 3-Aug | 312 | 308 | 309 | 287 | 273 | 272 | 291 | 308 | 314 | 314 | 327 | 326 | 311 | 316 | 315 | 322 | 314 | 331 | 314 | 268 | 247 | 274 | 219 | 238 | 302.0 |
| 4-Aug | 244 | 247 | 234 | 222 | 219 | 216 | 223 | 225 | 235 | 237 | 251 | 261 | 233 | 234 | 235 | 238 | 245 | 247 | 230 | 251 | 245 | 269 | 281 | 279 | 241.6 |
| 5-Aug | 285 | 284 | 294 | 292 | 285 | 276 | 284 | 284 | 294 | 294 | 309 | 303 | 290 | 301 | 312 | 302 | 313 | 261 | 250 | 247 | 328 | 352 | 333 | 313 | 294.8 |
| 6-Aug | 314 | 308 | 310 | 306 | 301 | 310 | 309 | 308 | 315 | 320 | 313 | 314 | 306 | 317 | 301 | 299 | 274 | 278 | 274 | 274 | 258 | 258 | 257 | 257 | 297.9 |
| 7-Aug | 265 | 267 | 262 | 266 | 269 | 251 | 259 | 250 | 252 | 274 | 297 | 299 | 298 | 296 | 286 | 300 | 304 | 288 | 256 | 248 | 249 | 258 | 291 | 245 | 272.4 |
| 8-Aug | 240 | 225 | 246 | 359 | 38 | 320 | 21 | 37 | 32 | 4 | 303 | 284 | 294 | 16 | 16 | 6 | 18 | 348 | 43 | 88 | 180 | 133 | 102 | 189 | 357.8 |
| 9-Aug | 184 | 196 | 215 | 170 | 175 | 206 | 67 | 220 | 10 | 26 | 342 | 331 | 59 | 53 | 64 | 211 | 43 | 54 | 62 | 92 | 96 | 68 | 96 | 110 | 79.7 |
| 10-Aug | 140 | 169 | 156 | 181 | 102 | 57 | 63 | 113 | 93 | 98 | 49 | 347 | 48 | 51 | 30 | 48 | 9 | 16 | 23 | 50 | 219 | 191 | 131 | 116 | 71.0 |
| 11-Aug | 197 | 204 | 248 | 217 | 154 | 30 | 2 | 344 | 36 | 19 | 356 | 342 | 57 | 23 | 348 | 59 | 331 | 40 | 317 | 219 | 236 | 230 | 222 | 61 | 8.0 |
| 12-Aug | 63 | 240 | 242 | 187 | 190 | 180 | 248 | 321 | 329 | 349 | 313 | 327 | 331 | 29 | 335 | 331 | 338 | 331 | 337 | 337 | 0 | 358 | 346 | 6 | 335.5 |
| 13-Aug | 3 | 9 | 19 | 14 | 26 | 32 | 30 | 12 | 31 | 29 | 58 | 42 | 62 | 60 | 61 | 74 | 66 | 60 | 36 | 125 | UO | 59 | 56 | 26 | 47.6 |
| 14-Aug | 20 | 33 | 33 | 53 | 51 | 30 | 32 | 24 | 34 | 37 | 32 | 293 | 81 | 28 | 26 | 94 | 201 | 179 | 228 | 239 | 221 | 234 | 219 | 239 | 29.1 |
| 15-Aug | 245 | 236 | 247 | 250 | 244 | 243 | 246 | 250 | 250 | 245 | 254 | 266 | 247 | 251 | 283 | 265 | 256 | 256 | 240 | 229 | 228 | 226 | 227 | 229 | 246.2 |
| 16-Aug | 220 | 220 | 234 | 237 | 238 | 241 | 248 | 257 | 288 | 278 | 282 | 298 | 282 | 282 | 10 | 327 | 10 | 323 | 258 | 234 | 208 | 226 | 234 | 237 | 258.4 |
| 17-Aug | 240 | 247 | 250 | 252 | 256 | 258 | 256 | 255 | 258 | 271 | 297 | 325 | 307 | 255 | 276 | 247 | 252 | 249 | 225 | 224 | 201 | 188 | 194 | 200 | 249.3 |
| 18-Aug | 196 | 196 | 198 | 190 | 194 | 189 | 189 | 198 | 210 | 221 | 224 | 225 | 242 | 248 | 259 | 256 | 272 | 277 | 275 | 279 | 263 | 260 | 244 | 239 | 230.8 |
| 19-Aug | 235 | 227 | 231 | 251 | 248 | 252 | 257 | 254 | 255 | 260 | 263 | 279 | 279 | 299 | 315 | 294 | 295 | 287 | 331 | 301 | 272 | 264 | 258 | 240 | 268.3 |
| 20-Aug | 240 | 241 | 229 | 63 | 180 | 229 | 233 | 243 | 265 | 307 | 325 | 341 | 304 | 300 | 320 | 311 | 286 | 30 | 36 | 83 | 126 | 194 | 188 | 173 | 282.2 |
| 21-Aug | 173 | 198 | 211 | 220 | 210 | 211 | 204 | 211 | 226 | 240 | 251 | 248 | 234 | 234 | 238 | 236 | 219 | 222 | 223 | 206 | 203 | 198 | 196 | 191 | 220.3 |
| 22-Aug | 193 | 187 | 181 | 182 | 188 | 186 | 192 | 203 | 204 | 210 | 203 | 197 | 206 | 180 | 184 | 203 | 200 | 194 | 208 | 219 | 209 | 202 | 199 | 204 | 198.3 |
| 23-Aug | 216 | 207 | 196 | 202 | 212 | 185 | 188 | 196 | 248 | 243 | 278 | 329 | 53 | 81 | 14 | 249 | 263 | 22 | 313 | 313 | 314 | 318 | 316 | 314 | 254.3 |
| 24-Aug | 299 | 293 | 245 | 228 | 235 | 283 | 318 | 331 | 319 | 324 | 320 | 322 | 329 | 339 | 319 | 332 | 323 | 322 | 287 | 238 | 185 | 193 | 194 | 209 | 300.7 |
| 25-Aug | 214 | 210 | 220 | 232 | 229 | 236 | 245 | 273 | 300 | 302 | 321 | 326 | 316 | 342 | 274 | 271 | 219 | 30 | 69 | 87 | 120 | 184 | 189 | 188 | 249.1 |
| 26-Aug | 183 | 184 | 188 | 190 | 193 | 198 | 203 | 188 | 199 | 203 | 204 | 195 | 206 | 198 | 217 | 204 | 193 | 180 | 190 | 157 | 135 | 155 | 176 | 194 | 193.4 |
| 27-Aug | 178 | 181 | 180 | 183 | 182 | 177 | 181 | 180 | 180 | 172 | 182 | 217 | 183 | 167 | 168 | 165 | 160 | 164 | 140 | 112 | 105 | 133 | 156 | 147 | 168.0 |
| 28-Aug | 226 | 245 | 287 | 323 | 205 | 232 | 230 | 252 | 259 | 261 | 247 | 251 | 249 | 250 | 248 | 258 | 247 | 245 | 239 | 237 | 240 | 237 | 240 | 235 | 246.8 |
| 29-Aug | 256 | 233 | 245 | 244 | 227 | 217 | 232 | 237 | 243 | 251 | 260 | 259 | 251 | 233 | 239 | 246 | 235 | 224 | 204 | 182 | 177 | 184 | 190 | 140 | 236.1 |
| 30-Aug | 197 | 140 | 48 | 82 | 50 | 72 | 89 | 55 | 21 | 80 | 226 | 269 | 81 | 207 | 218 | 264 | 73 | 200 | 171 | 77 | 93 | 204 | 260 | 16 | 97.0 |
| 31-Aug | 42 | 328 | 305 | 306 | 298 | 281 | 293 | 284 | 304 | 320 | 321 | 317 | 317 | 317 | 300 | 305 | 284 | 281 | 253 | 244 | 254 | 269 | 230 | 220 | 296.3 |
| | 239.3 | 234.7 | 241.3 | 234.4 | 233.7 | 236.9 | 243.2 | 250.5 | 262.7 | 269.4 | 274.0 | 279.7 | 272.7 | 281.1 | 286.7 | 271.7 | 266.2 | 270.8 | 257.1 | 239.4 | 231.7 | 235.3 | 236.8 | 238.1 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

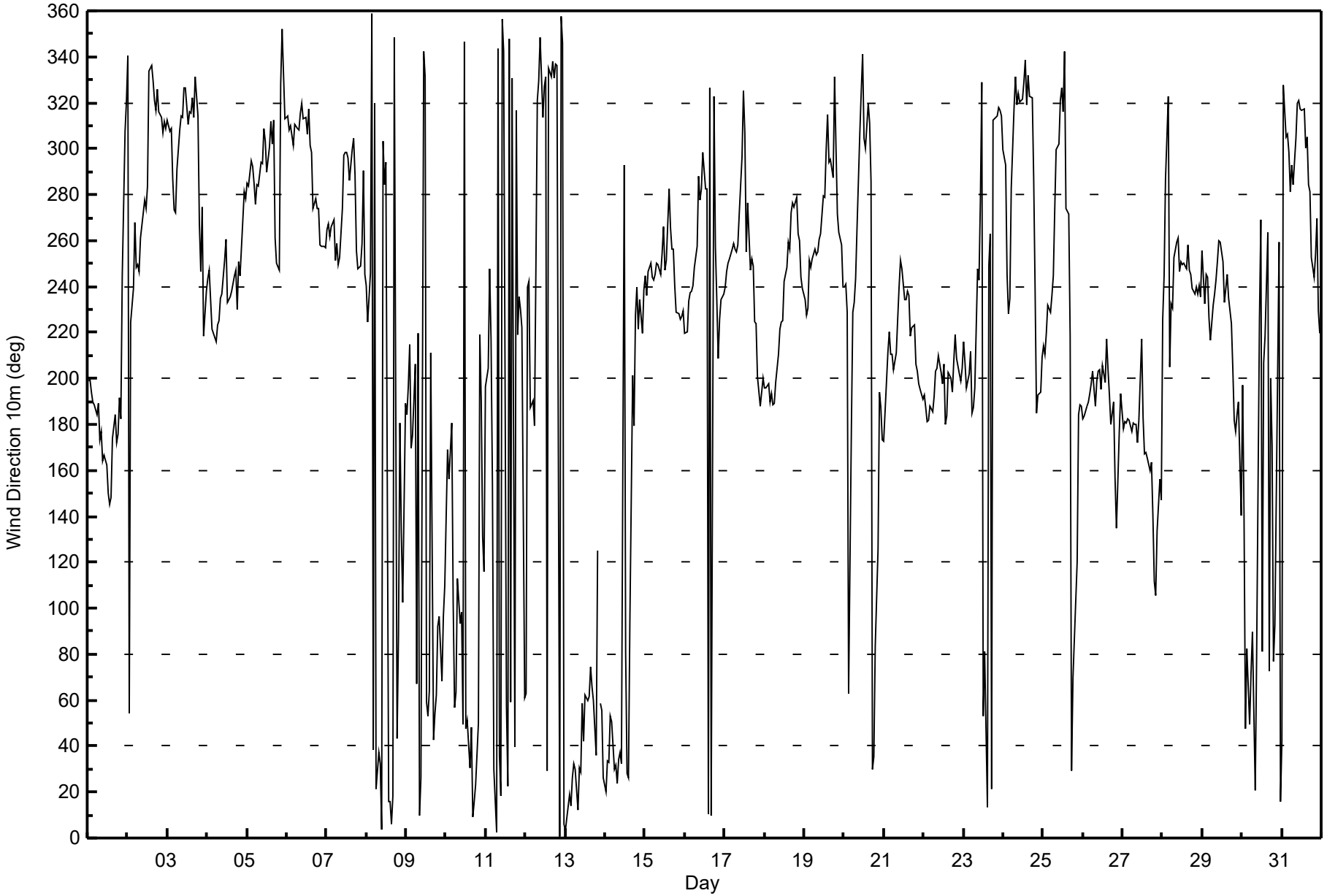
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Jackfish 2/3 - August 2026**



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 105 deg on Aug 12 07:00

Minimum Value: 7 deg on Aug 21 03:00

Percentiles: $P_1$ = 10 $P_{10}$ = 19 $Q_1$ = 28 Median = 45 $Q_3$ = 58 $P_{90}$ = 71 $P_{99}$ = 94

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 38 | 32 | 29 | 27 | 26 | 35 | 29 | 57 | 51 | 58 | 56 | 49 | 57 | 54 | 54 | 59 | 46 | 59 | 58 | 44 | 60 | 64 | 69 | 56 | 69 |
| 2-Aug | 62 | 91 | 24 | 24 | 41 | 26 | 25 | 28 | 35 | 40 | 43 | 42 | 50 | 63 | 58 | 59 | 58 | 53 | 64 | 63 | 61 | 55 | 53 | 52 | 91 |
| 3-Aug | 57 | 47 | 47 | 38 | 26 | 34 | 45 | 53 | 51 | 57 | 65 | 66 | 61 | 64 | 60 | 64 | 55 | 59 | 73 | 53 | 15 | 48 | 17 | 17 | 73 |
| 4-Aug | 14 | 22 | 23 | 18 | 17 | 20 | 17 | 20 | 21 | 27 | 32 | 36 | 26 | 26 | 29 | 30 | 30 | 37 | 38 | 27 | 30 | 43 | 45 | 46 | 46 |
| 5-Aug | 45 | 42 | 43 | 46 | 42 | 43 | 42 | 42 | 51 | 50 | 52 | 52 | 49 | 53 | 48 | 49 | 51 | 41 | 29 | 69 | 78 | 66 | 58 | 54 | 78 |
| 6-Aug | 55 | 56 | 55 | 48 | 49 | 47 | 49 | 49 | 53 | 56 | 62 | 53 | 48 | 53 | 52 | 55 | 44 | 43 | 41 | 45 | 33 | 22 | 26 | 24 | 62 |
| 7-Aug | 33 | 34 | 27 | 41 | 31 | 21 | 30 | 24 | 31 | 53 | 51 | 53 | 54 | 51 | 69 | 54 | 73 | 58 | 37 | 18 | 20 | 34 | 57 | 36 | 73 |
| 8-Aug | 45 | 19 | 18 | 80 | 92 | 85 | 69 | 46 | 56 | 77 | 53 | 73 | 66 | 54 | 71 | 60 | 57 | 73 | 37 | 61 | 32 | 34 | 42 | 8 | 92 |
| 9-Aug | 50 | 16 | 56 | 52 | 50 | 70 | 91 | 74 | 69 | 66 | 85 | 97 | 49 | 28 | 38 | 104 | 37 | 26 | 28 | 25 | 28 | 17 | 19 | 26 | 104 |
| 10-Aug | 44 | 40 | 41 | 30 | 68 | 25 | 23 | 53 | 39 | 64 | 84 | 74 | 96 | 87 | 55 | 79 | 63 | 77 | 40 | 23 | 59 | 46 | 80 | 79 | 96 |
| 11-Aug | 88 | 44 | 42 | 66 | 100 | 94 | 59 | 58 | 69 | 56 | 70 | 88 | 43 | 79 | 68 | 67 | 73 | 43 | 90 | 31 | 26 | 42 | 83 | 79 | 100 |
| 12-Aug | 57 | 27 | 35 | 62 | 45 | 59 | 105 | 84 | 65 | 58 | 61 | 64 | 57 | 53 | 59 | 77 | 49 | 72 | 60 | 80 | 82 | 72 | 59 | 70 | 105 |
| 13-Aug | 50 | 60 | 62 | 64 | 49 | 42 | 48 | 51 | 43 | 51 | 42 | 39 | 36 | 37 | 43 | 35 | 35 | 35 | 45 | 60 | UO | 31 | 28 | 16 | 64 |
| 14-Aug | 40 | 21 | 25 | 29 | 24 | 22 | 13 | 37 | 36 | 48 | 80 | 90 | 77 | 45 | 52 | 59 | 40 | 97 | 29 | 50 | 62 | 15 | 17 | 15 | 97 |
| 15-Aug | 15 | 15 | 19 | 12 | 14 | 14 | 23 | 30 | 30 | 48 | 53 | 55 | 43 | 43 | 50 | 71 | 47 | 31 | 29 | 18 | 22 | 23 | 23 | 21 | 71 |
| 16-Aug | 23 | 22 | 22 | 23 | 22 | 19 | 22 | 31 | 45 | 49 | 46 | 49 | 49 | 46 | 54 | 62 | 56 | 76 | 53 | 34 | 37 | 14 | 16 | 16 | 76 |
| 17-Aug | 18 | 18 | 18 | 18 | 21 | 25 | 26 | 29 | 38 | 53 | 61 | 61 | 62 | 49 | 69 | 53 | 44 | 43 | 22 | 18 | 21 | 13 | 16 | 18 | 69 |
| 18-Aug | 16 | 20 | 20 | 21 | 18 | 18 | 19 | 27 | 29 | 37 | 34 | 35 | 41 | 40 | 41 | 39 | 50 | 45 | 43 | 44 | 23 | 21 | 18 | 21 | 50 |
| 19-Aug | 17 | 24 | 28 | 24 | 19 | 21 | 21 | 19 | 29 | 37 | 41 | 51 | 49 | 54 | 60 | 55 | 57 | 48 | 68 | 65 | 28 | 22 | 16 | 19 | 68 |
| 20-Aug | 13 | 12 | 60 | 76 | 51 | 25 | 16 | 27 | 41 | 49 | 74 | 58 | 64 | 51 | 60 | 56 | 72 | 49 | 37 | 24 | 41 | 47 | 8 | 68 | 76 |
| 21-Aug | 28 | 8 | 7 | 11 | 14 | 18 | 18 | 21 | 27 | 38 | 54 | 50 | 36 | 47 | 45 | 46 | 33 | 33 | 21 | 35 | 29 | 42 | 40 | 43 | 54 |
| 22-Aug | 59 | 58 | 57 | 70 | 48 | 44 | 33 | 36 | 33 | 31 | 37 | 49 | 50 | 53 | 66 | 39 | 53 | 48 | 37 | 28 | 26 | 22 | 21 | 22 | 70 |
| 23-Aug | 22 | 18 | 19 | 18 | 60 | 23 | 38 | 38 | 39 | 32 | 48 | 55 | 64 | 61 | 84 | 34 | 33 | 80 | 77 | 88 | 52 | 64 | 60 | 73 | 88 |
| 24-Aug | 70 | 45 | 26 | 32 | 30 | 43 | 59 | 66 | 64 | 61 | 61 | 57 | 71 | 66 | 64 | 65 | 60 | 86 | 65 | 76 | 55 | 9 | 9 | 20 | 86 |
| 25-Aug | 9 | 11 | 12 | 14 | 15 | 16 | 17 | 53 | 52 | 60 | 62 | 58 | 70 | 78 | 84 | 93 | 91 | 64 | 27 | 19 | 41 | 31 | 28 | 23 | 93 |
| 26-Aug | 22 | 17 | 10 | 10 | 12 | 15 | 19 | 19 | 36 | 48 | 42 | 44 | 48 | 45 | 47 | 44 | 48 | 54 | 58 | 88 | 77 | 76 | 76 | 55 | 88 |
| 27-Aug | 53 | 48 | 46 | 48 | 48 | 46 | 59 | 52 | 51 | 61 | 60 | 41 | 60 | 57 | 52 | 51 | 54 | 55 | 57 | 33 | 30 | 55 | 75 | 64 | 75 |
| 28-Aug | 49 | 44 | 72 | 98 | 33 | 45 | 31 | 29 | 38 | 37 | 29 | 34 | 30 | 32 | 30 | 38 | 32 | 26 | 27 | 26 | 22 | 22 | 23 | 23 | 98 |
| 29-Aug | 18 | 18 | 17 | 20 | 21 | 21 | 20 | 26 | 31 | 35 | 42 | 43 | 35 | 36 | 35 | 38 | 37 | 30 | 31 | 51 | 21 | 23 | 17 | 56 | 56 |
| 30-Aug | 57 | 80 | 61 | 27 | 27 | 18 | 27 | 52 | 53 | 82 | 52 | 82 | 88 | 66 | 52 | 84 | 81 | 84 | 89 | 26 | 38 | 35 | 51 | 66 | 89 |
| 31-Aug | 45 | 82 | 56 | 59 | 57 | 37 | 40 | 32 | 49 | 56 | 64 | 62 | 62 | 62 | 51 | 48 | 69 | 48 | 61 | 17 | 22 | 26 | 43 | 15 | 82 |
| | 88 | 91 | 72 | 98 | 100 | 94 | 105 | 84 | 69 | 82 | 85 | 97 | 96 | 87 | 84 | 104 | 91 | 97 | 90 | 88 | 82 | 76 | 83 | 79 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS29
## SURMONT 2
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT2 (AMS29)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 710 | 34 | 34 | 100 | 11.3 | 0 | 0.8 | 0 |
| H2S (ppb) Average | 708 | 36 | 36 | 100 | 0.9 | 0 | 0.3 | 0 |
| THC(ppm) Average | 710 | 34 | 34 | 100 | 2.6 | - | 2.4 | - |
| NO2 (ppb) Average | 686 | 39 | 58 | 97.45 | 6.1 | 0 | 2.6 | - |
| NO (ppb) Average | 686 | 39 | 58 | 97.45 | 2.8 | - | 0.5 | - |
| NOX (ppb) Average | 686 | 39 | 58 | 97.45 | 7.1 | - | 2.8 | - |
| PM2.5 (ug/m3) Average | 743 | 1 | 1 | 100 | 78.1 | 0 | 27.9 | 0 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 28.3 | - | 20.9 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 99.6 | - | 90 | - |
| Wind Speed 10 m (km/h) Average | 684 | 0 | 60 | 91.94 | 13 | - | 8 | - |
| Wind Direction 10 m (deg) Average | 684 | 0 | 60 | 91.94 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT 2 (AMS29)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 710 | 0.3 | 0.6 | - | 0 | 0 | 0 | 0.1 | 0.4 | 0.8 | 11.3 |
| H2S (ppb) Average | 708 | 0.13 | 0.1 | - | 0 | 0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.9 |
| THC (ppm) Average | 710 | 2.25 | 0.1 | - | 2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.6 |
| NO2 (ppb) Average | 686 | 0.93 | 0.9 | - | 0.1 | 0.2 | 0.4 | 0.7 | 1.1 | 1.9 | 6.1 |
| NO (ppb) Average | 686 | 0.12 | 0.2 | - | 0 | 0 | 0 | 0.1 | 0.1 | 0.2 | 2.8 |
| NOX (ppb) Average | 686 | 1.05 | 1 | - | 0.1 | 0.3 | 0.4 | 0.8 | 1.3 | 2.1 | 7.1 |
| PM2.5 (ug/m3) Average | 743 | 9.91 | 9.2 | - | 0.5 | 3 | 4.3 | 7.1 | 12.6 | 19.8 | 78.1 |
| Temperature 2 m (C) Average | 744 | 15.41 | 5.2 | - | 4.1 | 8.8 | 11.5 | 15 | 19.3 | 22.2 | 28.3 |
| Relative Humidity (%) Average | 744 | 75.1 | 19.2 | - | 31 | 47.4 | 57.5 | 79.4 | 93 | 97.3 | 99.6 |
| Wind Speed 10 m (km/h) Average | 684 | 4.8 | 3 | - | 0 | 1 | 2 | 4 | 7 | 9 | 13 |
| Wind Direction 10 m (deg) Average | 684 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT 2 (AMS29)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| NO/NO2/NOx | 12 Aug 2026 14:00 | 13 Aug 2026 08:00 | 19 | Maintenance - replaced reaction cell and o-rings |
| Wind Speed, Wind Direction | 01 Aug 2026 05:00 | 31 Aug 2026 23:00 | 60 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 11.3 ppb on Aug 11 10:00

Maximum Daily Average: 0.8 ppb on Aug 11

Minimum Value: 0.0 ppb on Aug 3 16:00

Minimum Daily Average: 0.0 ppb on Aug 14

Maximum Diurnal Average: 0.9 ppb at hour 10

Minimum Diurnal Average: 0.2 ppb at hour 23

Monthly Average: 0.30 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.4 $P_{90}$ = 0.8 $P_{99}$ = 1.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | Z | 0.2 | 0.5 | 0.6 | 0.4 | 0.4 | 0.2 | 0.2 | 0.5 | 1.4 | 0.6 | 0.4 | 0.3 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 1.5 | 0.4 | 1.5 |
| 2-Aug | 0.0 | 0.1 | Z | 0.2 | 0.8 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.6 | 0.3 | 0.2 | 0.4 | 0.5 | 0.2 | 0.7 | 0.7 | 0.3 | 0.8 |
| 3-Aug | 1.0 | 1.8 | 1.5 | Z | 1.2 | 1.2 | 0.9 | 0.9 | 1.1 | 1.5 | 1.0 | 1.3 | 0.7 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.8 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.1 | 0.4 |
| 5-Aug | 0.9 | 0.8 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.9 |
| 6-Aug | Z | 0.1 | 0.2 | 0.2 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.5 | 0.6 | 0.8 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.8 |
| 7-Aug | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.2 | 0.5 | 0.4 | 0.1 | 1.2 |
| 8-Aug | 0.3 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.3 | 1.9 | 0.6 | 0.4 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 | 0.5 | 0.4 | 0.1 | 0.0 | 0.4 | 1.9 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.7 | 1.7 | 1.3 | 1.3 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.7 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.2 | 1.0 | 0.8 | 0.2 | 0.3 | 0.4 | 0.2 | 0.5 | 0.6 | 0.2 | 0.1 | 0.1 | 0.7 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 1.0 |
| 11-Aug | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.2 | 0.9 | 11.3 | 1.3 | 0.3 | 1.0 | 1.4 | 0.6 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 11.3 |
| 12-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.8 | 1.1 | 0.4 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 1.8 |
| 13-Aug | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 15-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 |
| 16-Aug | 0.1 | 0.1 | 0.6 | 0.6 | Z | 0.6 | 0.8 | 0.4 | 0.6 | 0.7 | 0.2 | 0.2 | 0.2 | 0.3 | 0.9 | 0.6 | 0.6 | 0.9 | 1.0 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 1.0 |
| 17-Aug | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 18-Aug | Z | 1.7 | 3.4 | 2.3 | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 0.6 | 1.1 | 1.1 | 0.4 | 0.4 | 1.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.6 | 3.4 |
| 19-Aug | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 20-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.3 | 0.9 | 2.2 | 1.4 | 1.5 | 1.3 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 | 2.2 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 3.5 | 1.3 | 0.9 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 3.5 |
| 22-Aug | 0.2 | 0.2 | 0.3 | 0.6 | Z | 0.7 | 1.1 | 1.5 | 0.9 | 0.9 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 0.6 | 0.5 | 0.4 | 0.9 | 0.9 | 0.6 | 1.5 | 0.7 | 1.5 |
| 23-Aug | 0.8 | 0.4 | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.6 | 0.9 | 1.8 | 0.7 | 0.6 | 0.4 | 0.2 | 0.1 | 0.2 | 0.8 | 0.7 | 0.5 | 1.8 |
| 24-Aug | Z | 0.7 | 2.0 | 1.3 | 0.6 | 0.5 | 0.4 | 0.9 | 1.7 | 1.4 | 3.0 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.9 | 1.2 | 0.4 | 0.3 | 0.2 | 0.1 | 0.0 | 0.7 | 3.0 |
| 25-Aug | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 |
| 26-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.2 | C | C | C | 0.3 | 0.4 | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.2 |
| 27-Aug | 0.0 | 0.0 | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.1 | 0.3 | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.5 | 0.7 | 0.2 | 1.0 | 0.3 | 1.0 |
| 28-Aug | 0.4 | 0.7 | 0.3 | 0.3 | Z | 0.2 | 1.8 | 0.4 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 1.8 |
| 29-Aug | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.5 | 0.4 | 0.1 | 0.4 | 0.5 | 0.5 | 0.0 | 0.1 | 0.1 | 0.5 | 0.0 | 0.0 | 0.2 | 0.5 |
| 30-Aug | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 |
| 31-Aug | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 |
| | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.9 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 1.0 | 1.8 | 3.4 | 2.3 | 1.2 | 1.2 | 1.8 | 1.5 | 1.8 | 11.3 | 3.0 | 1.7 | 1.3 | 1.4 | 1.0 | 2.2 | 1.4 | 1.5 | 1.3 | 0.4 | 0.9 | 1.2 | 0.8 | 1.5 | Diurnal Maximum | |

Z - zerospan C - Calibration

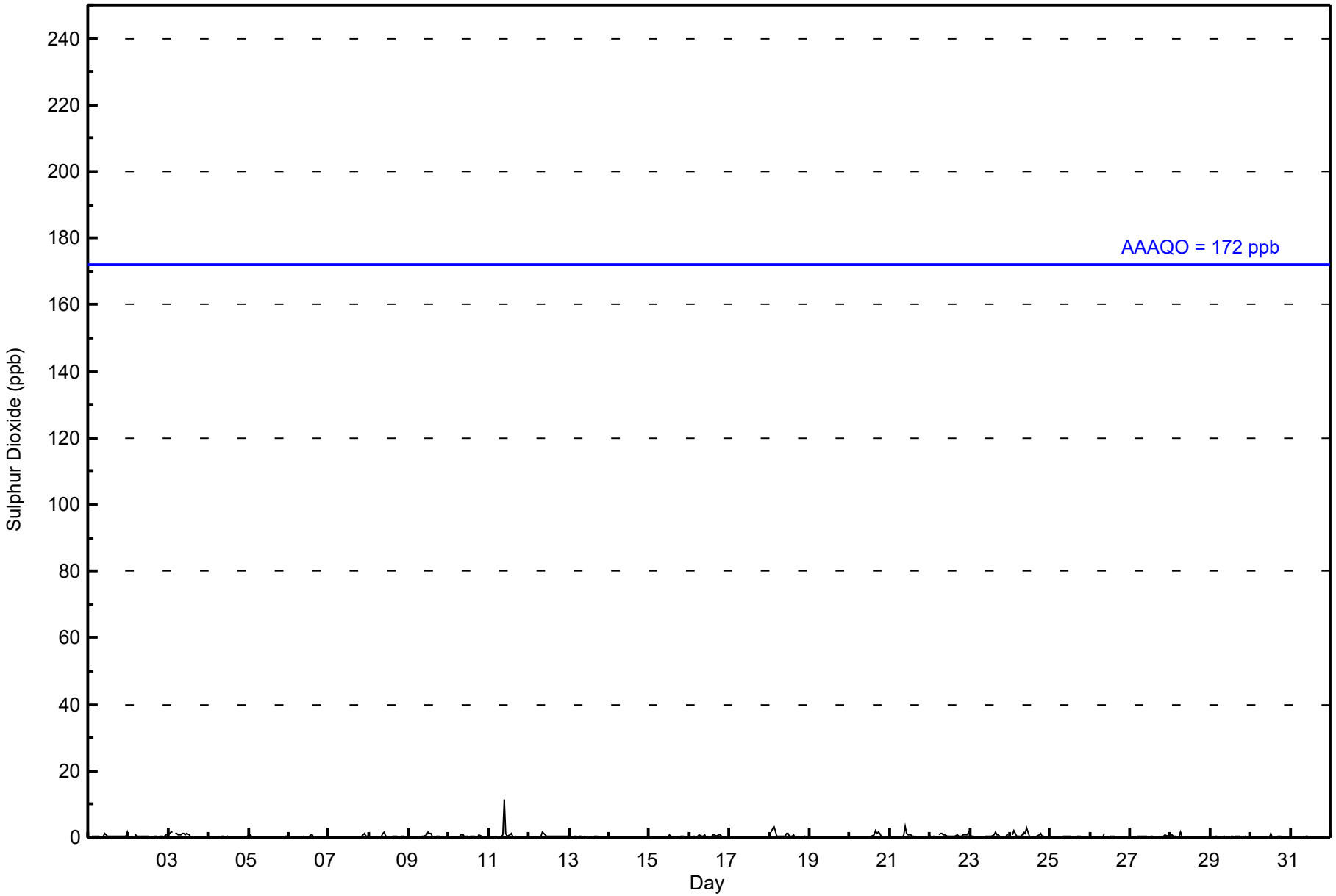
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Surmont 2 - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Surmont 2 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 709 | 99.86 | 99.86 |
| 11 - 20 | 1 | 0.14 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Surmont 2 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 24 | 26 | 10 | 8 | 9 | 24 | 41 | 20 | 14 | 15 | 19 | 106 | 122 | 100 | 66 | 52 | 656 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 26 | 10 | 8 | 9 | 24 | 41 | 20 | 14 | 15 | 19 | 106 | 122 | 100 | 66 | 53 | 657 |

Total Number of Valid Hours: 657

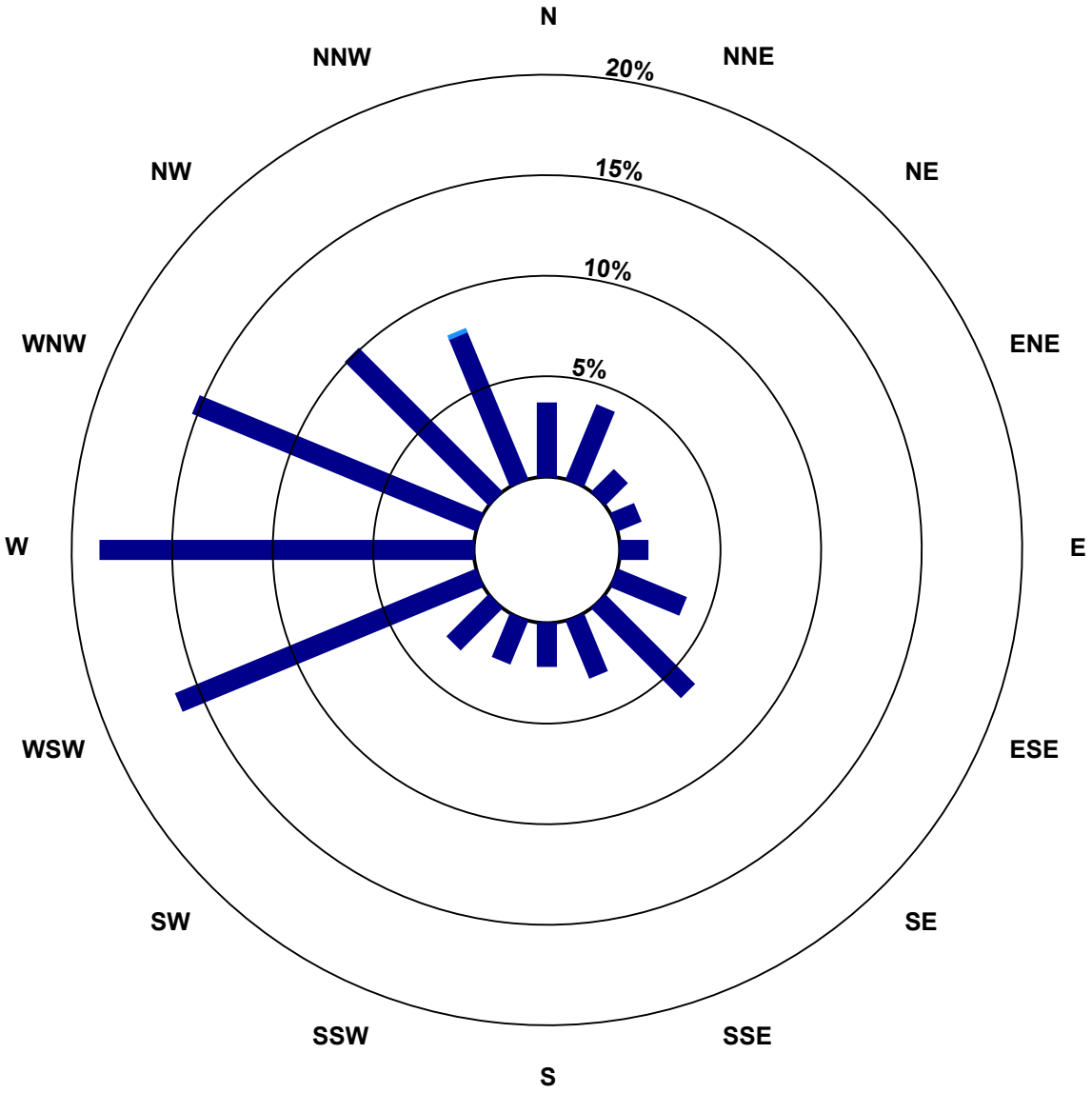
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Surmont 2




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

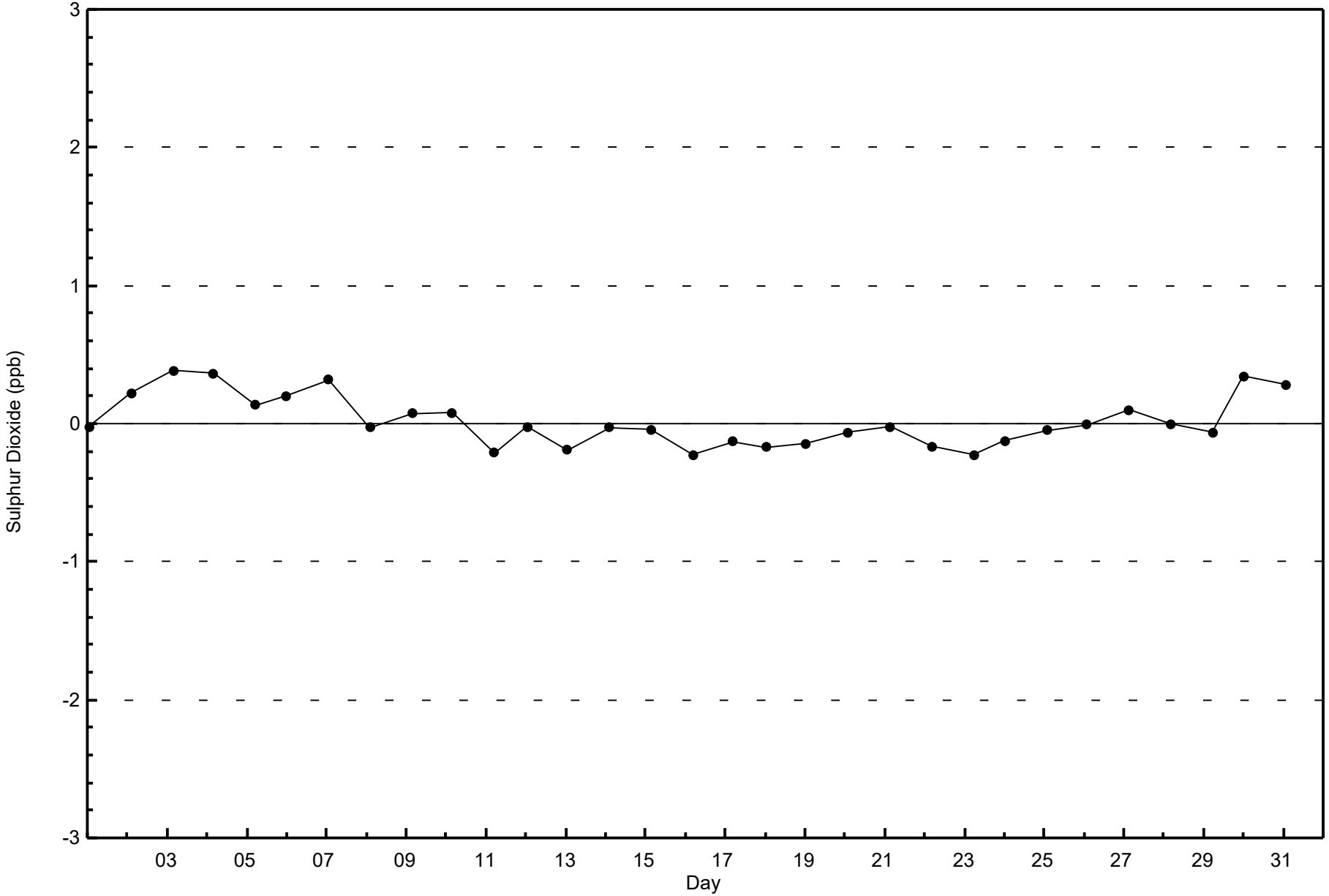
Total Number of Valid Hours: 657

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Surmont 2 - August 2026**

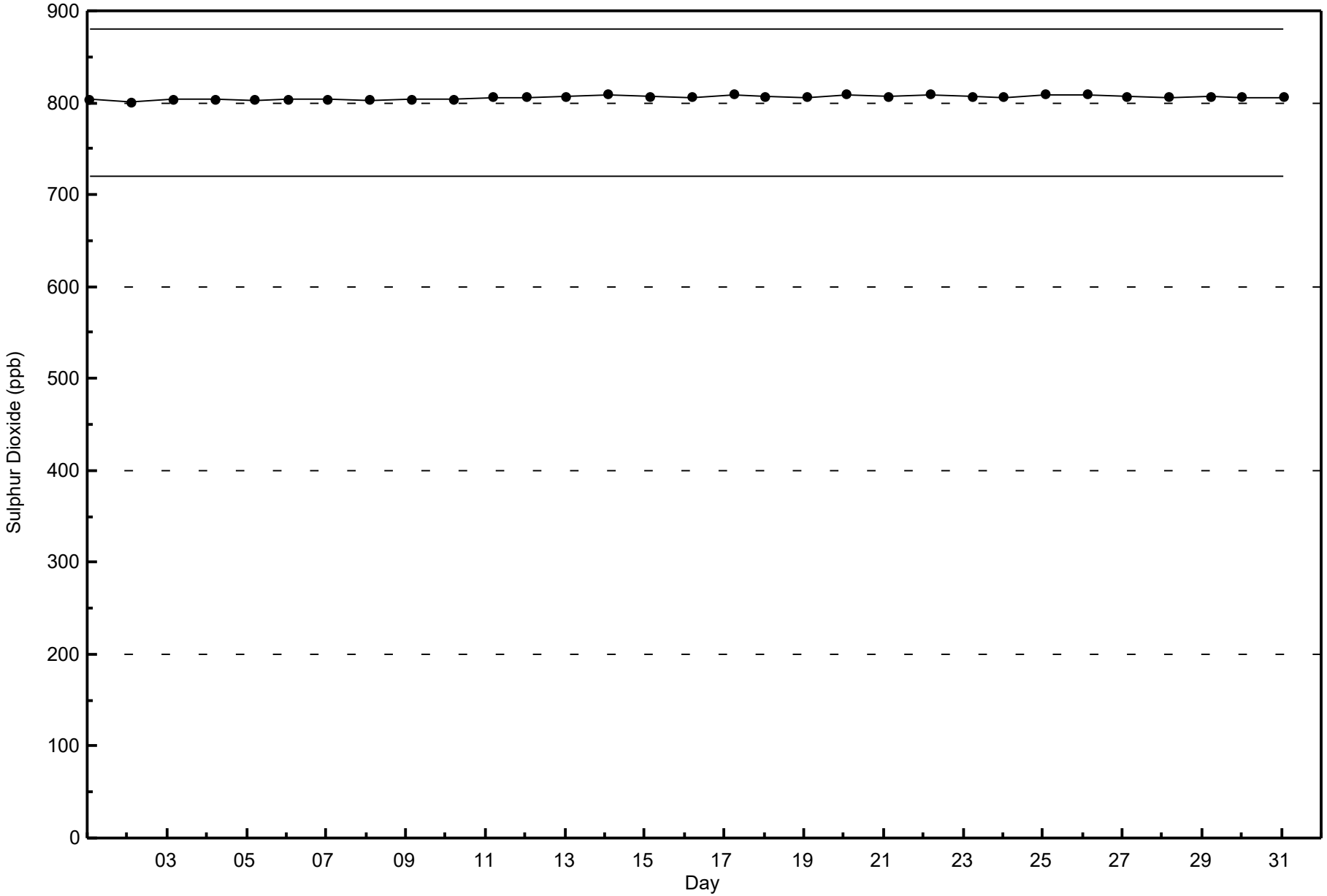


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Surmont 2 - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 0.9 ppb on Aug 2 05:00 Maximum Daily Average: 0.3 ppb on Aug 2

Minimum Value: 0.0 ppb on Aug 3 17:00 Minimum Daily Average: 0.1 ppb on Aug 6

Maximum Diurnal Average: 0.2 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 14

Monthly Average: 0.13 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.2 $P_{99}$ = 0.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 2-Aug | 0.1 | 0.3 | 0.2 | Z | 0.9 | 0.9 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.3 | 0.4 | 0.4 | 0.1 | 0.3 | 0.9 |
| 3-Aug | 0.1 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| 4-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 5-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.1 | 0.1 | 0.4 |
| 6-Aug | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | C | C | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 7-Aug | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 | 0.6 | 0.5 | 0.1 | 0.7 |
| 8-Aug | 0.3 | 0.3 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 9-Aug | 0.1 | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 10-Aug | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 |
| 11-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 |
| 12-Aug | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 |
| 13-Aug | 0.1 | 0.1 | Z | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 14-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 |
| 15-Aug | 0.2 | 0.1 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 |
| 17-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 18-Aug | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 19-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 20-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 |
| 21-Aug | 0.1 | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| 23-Aug | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 |
| 24-Aug | 0.3 | Z | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.5 |
| 25-Aug | 0.2 | 0.2 | Z | 0.5 | 0.2 | 0.1 | 0.6 | 0.3 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 26-Aug | 0.1 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 28-Aug | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | Z | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 |
| 29-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 |
| 30-Aug | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| 31-Aug | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | Diurnal Average | |
| | 0.3 | 0.3 | 0.5 | 0.5 | 0.9 | 0.9 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 0.6 | 0.3 | 0.7 | 0.6 | 0.5 | Diurnal Maximum | |

Z - zerospan C - Calibration

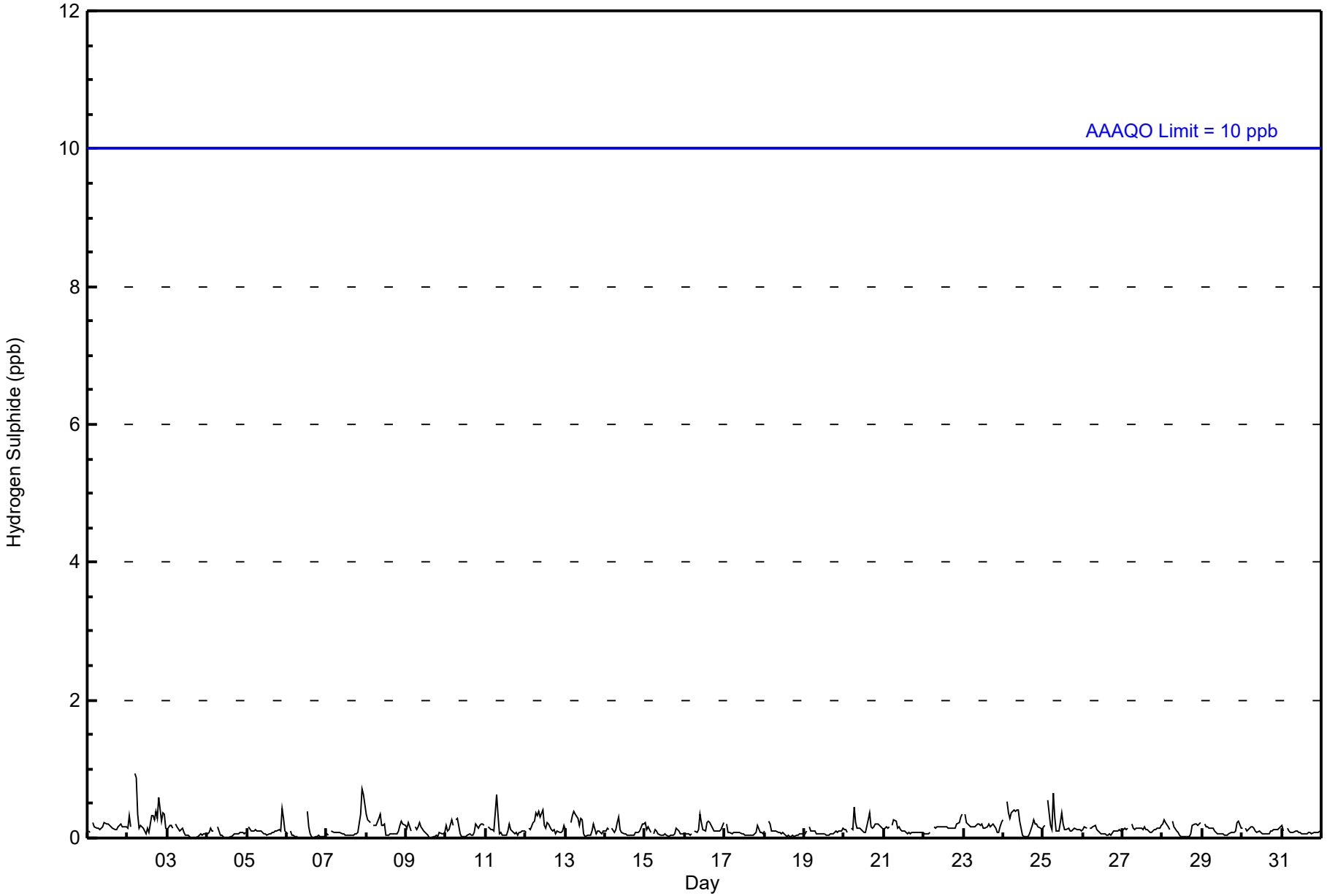
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Surmont 2 - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 708 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Surmont 2 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 23 | 26 | 10 | 8 | 9 | 23 | 44 | 19 | 13 | 15 | 20 | 106 | 127 | 96 | 64 | 52 | 655 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 23 | 26 | 10 | 8 | 9 | 23 | 44 | 19 | 13 | 15 | 20 | 106 | 127 | 96 | 64 | 52 | 655 |

Total Number of Valid Hours: 655

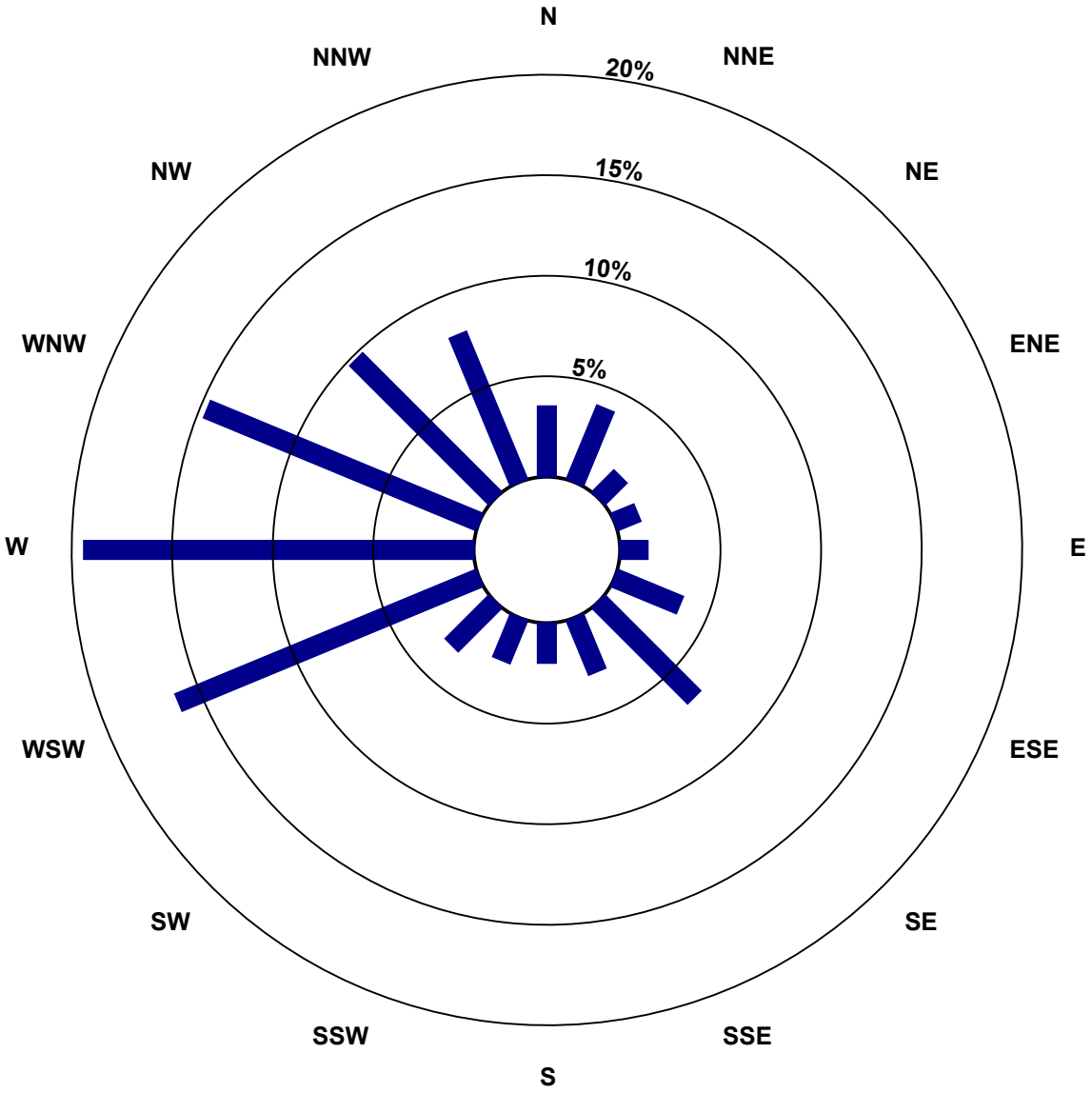
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Surmont 2




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

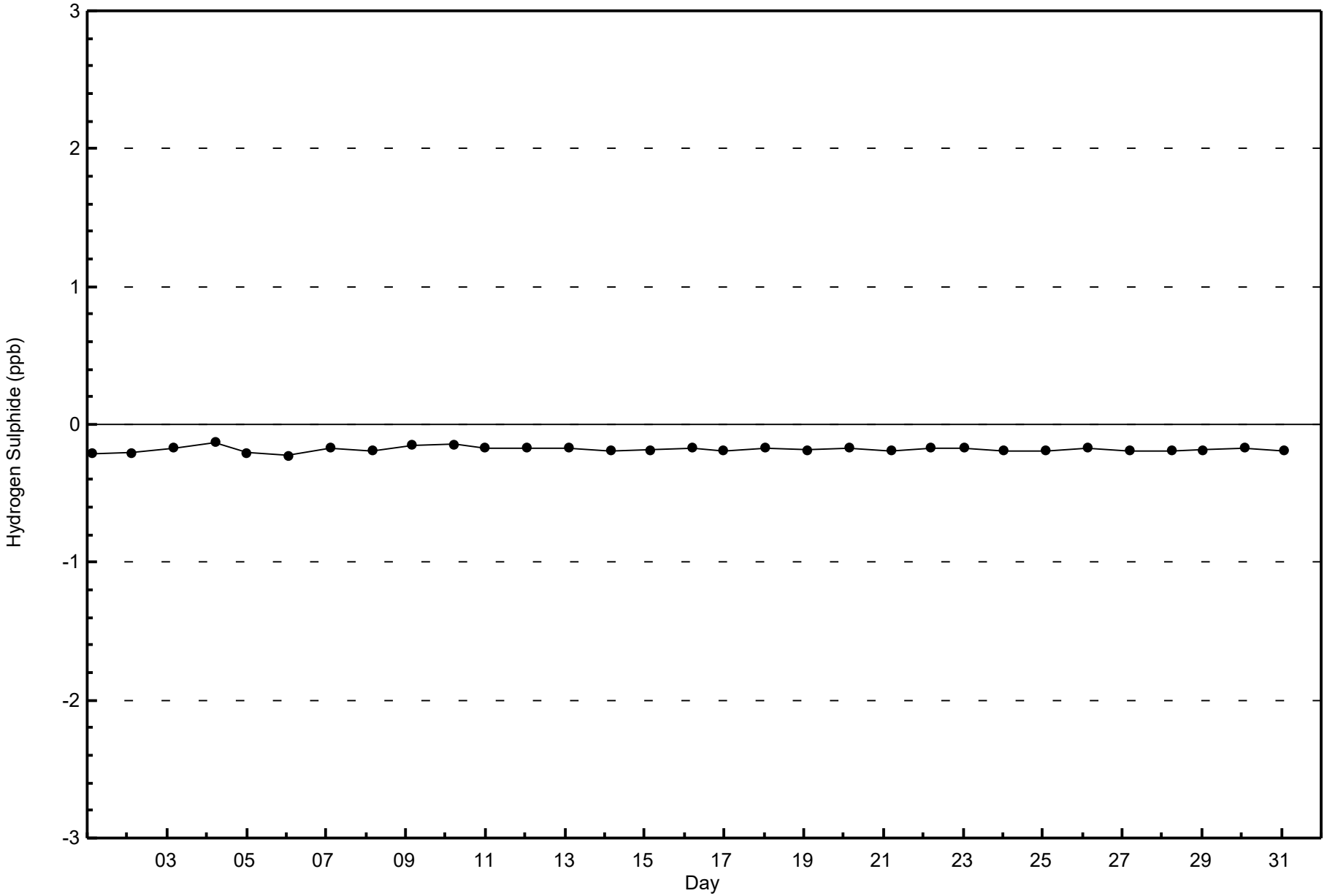
Total Number of Valid Hours: 655

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Surmont 2 - August 2026**

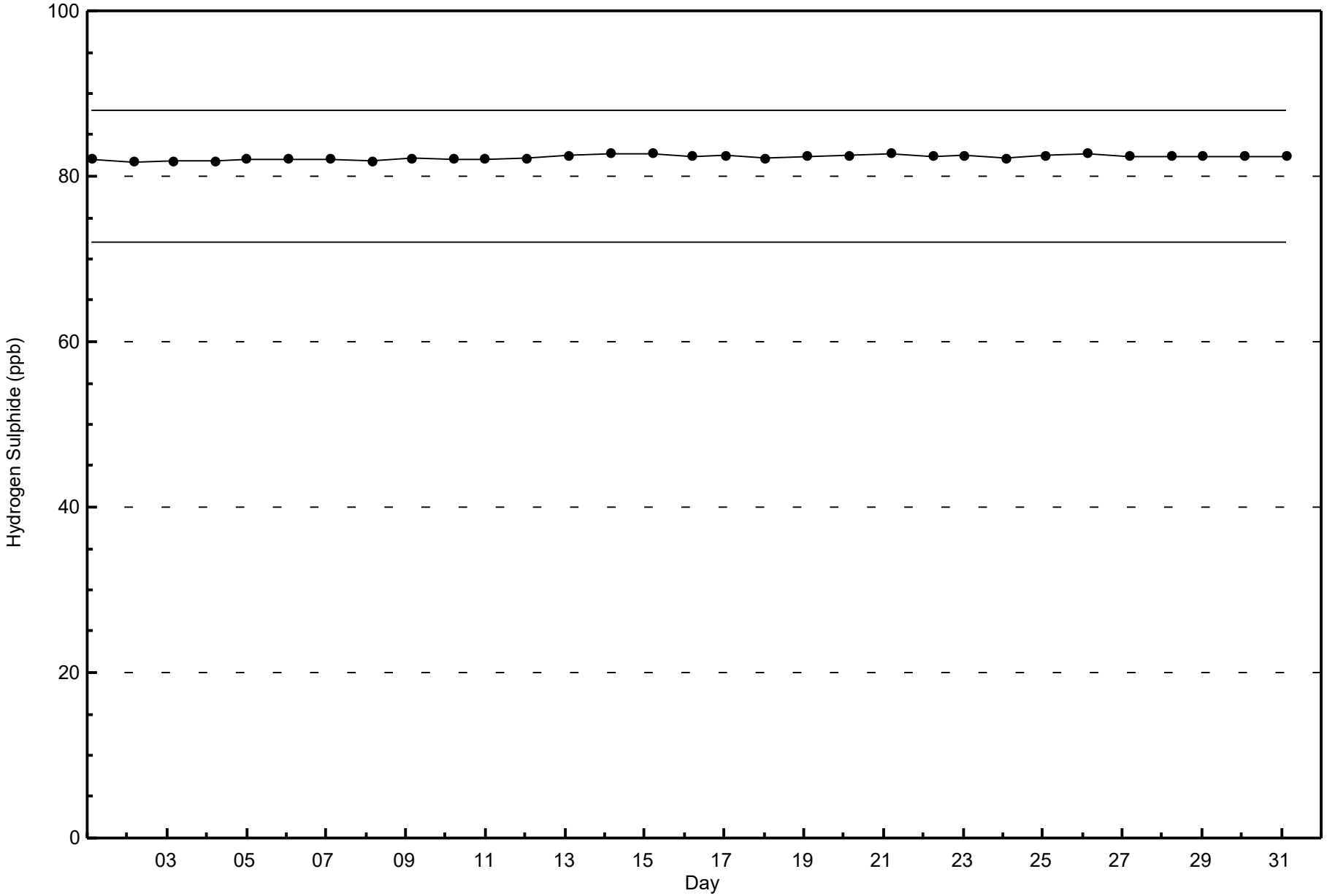


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Surmont 2 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.6 ppm on Aug 23 09:00

Maximum Daily Average: 2.4 ppm on Aug 23

Minimum Value: 2.0 ppm on Aug 2 13:00

Minimum Daily Average: 2.1 ppm on Aug 6

Maximum Diurnal Average: 2.3 ppm at hour 7

Minimum Diurnal Average: 2.2 ppm at hour 14

Monthly Average: 2.25 ppm

Percentiles: $P_1$ = 2.1 $P_{10}$ = 2.2 $Q_1$ = 2.2 Median = 2.3 $Q_3$ = 2.3 $P_{90}$ = 2.4 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 |
| 2-Aug | 2.1 | 2.3 | Z | 2.2 | 2.3 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.3 |
| 3-Aug | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 4-Aug | 2.3 | 2.3 | 2.3 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 5-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 6-Aug | Z | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 |
| 7-Aug | 2.2 | Z | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.2 | 2.4 |
| 8-Aug | 2.3 | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 9-Aug | 2.3 | 2.4 | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 |
| 10-Aug | 2.3 | 2.3 | 2.3 | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.4 |
| 11-Aug | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 |
| 12-Aug | Z | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 |
| 13-Aug | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 |
| 14-Aug | 2.3 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 |
| 15-Aug | 2.4 | 2.3 | 2.4 | Z | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 16-Aug | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 17-Aug | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 18-Aug | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 |
| 19-Aug | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 20-Aug | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 |
| 21-Aug | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.4 |
| 22-Aug | 2.2 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 |
| 23-Aug | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | Z | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.6 |
| 24-Aug | Z | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 |
| 25-Aug | 2.3 | Z | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 |
| 26-Aug | 2.3 | 2.4 | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | C | C | C | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.4 |
| 27-Aug | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 |
| 28-Aug | 2.3 | 2.3 | 2.2 | 2.3 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.2 | 2.4 |
| 29-Aug | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.4 |
| 30-Aug | Z | 2.3 | 2.2 | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 |
| 31-Aug | 2.5 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.5 |
| | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | Diurnal Average | |
| | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | Diurnal Maximum | |

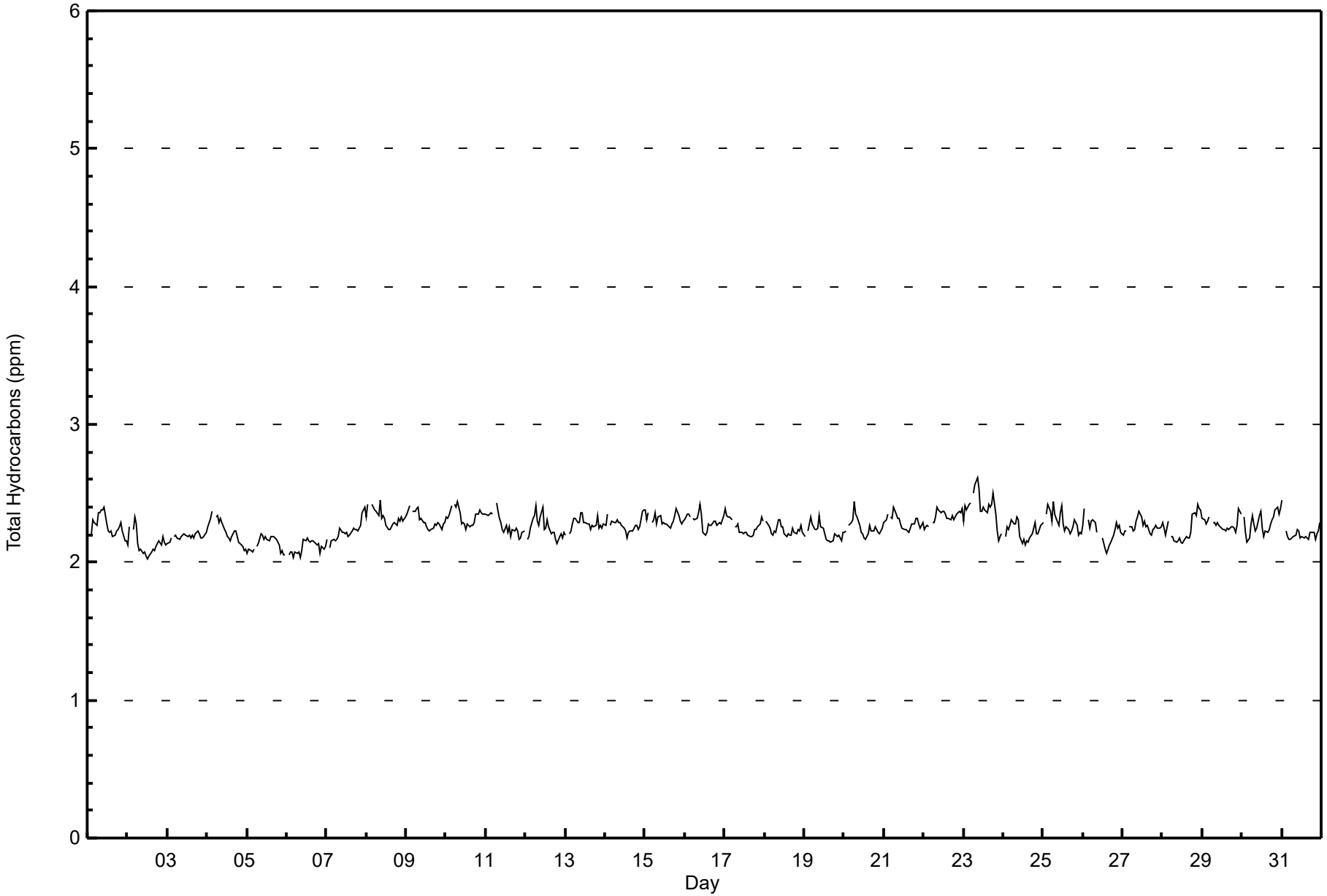
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Surmont 2 - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 5 | 0.70 | 0.70 |
| 2.1 - 3.0 | 705 | 99.30 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Surmont 2 - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 5 |
| 2.1 - 3.0 | 24 | 26 | 10 | 8 | 9 | 24 | 41 | 20 | 14 | 15 | 19 | 106 | 122 | 98 | 65 | 51 | 652 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 26 | 10 | 8 | 9 | 24 | 41 | 20 | 14 | 15 | 19 | 106 | 122 | 100 | 66 | 53 | 657 |

Total Number of Valid Hours: 657

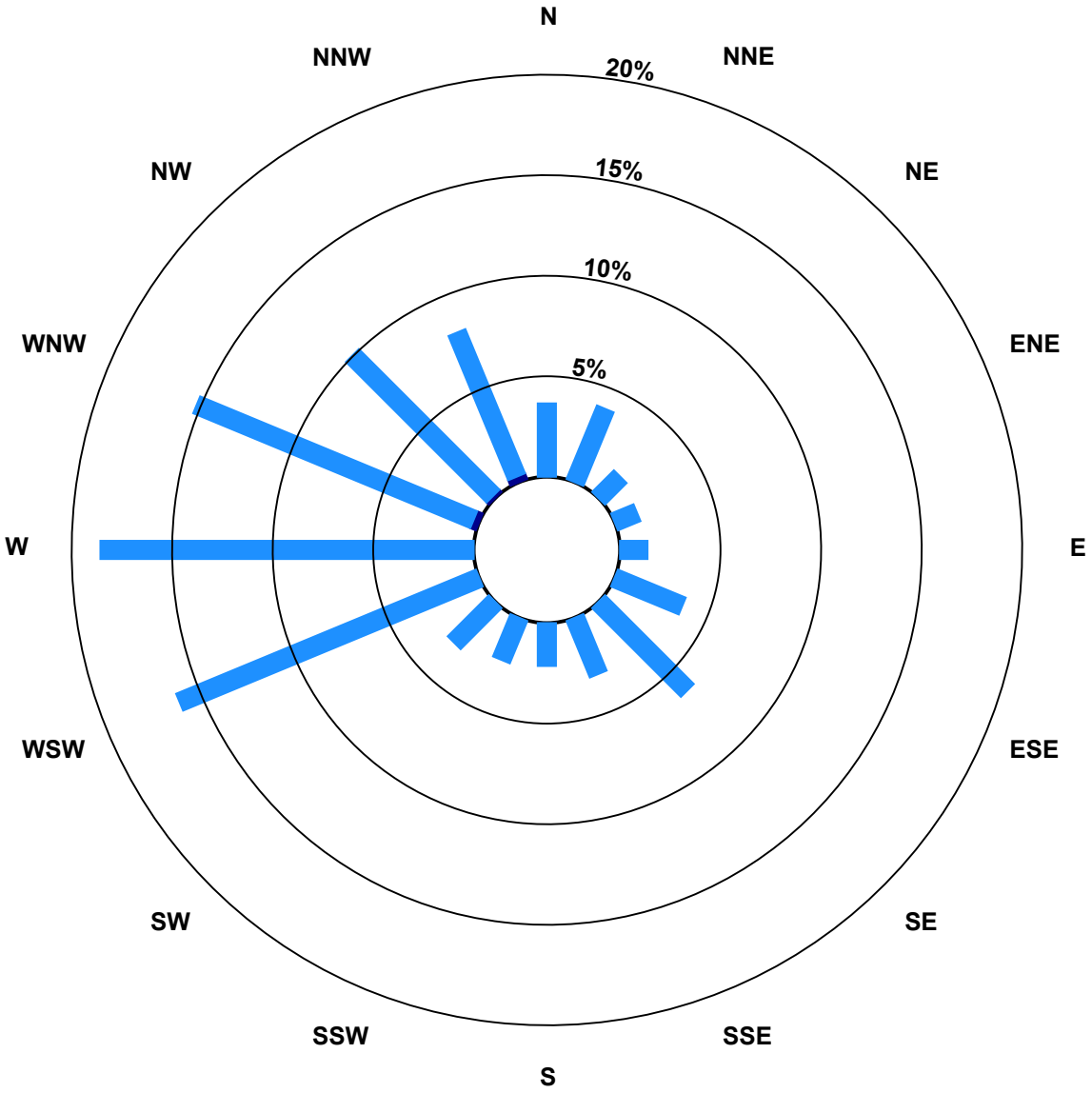
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Surmont 2




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

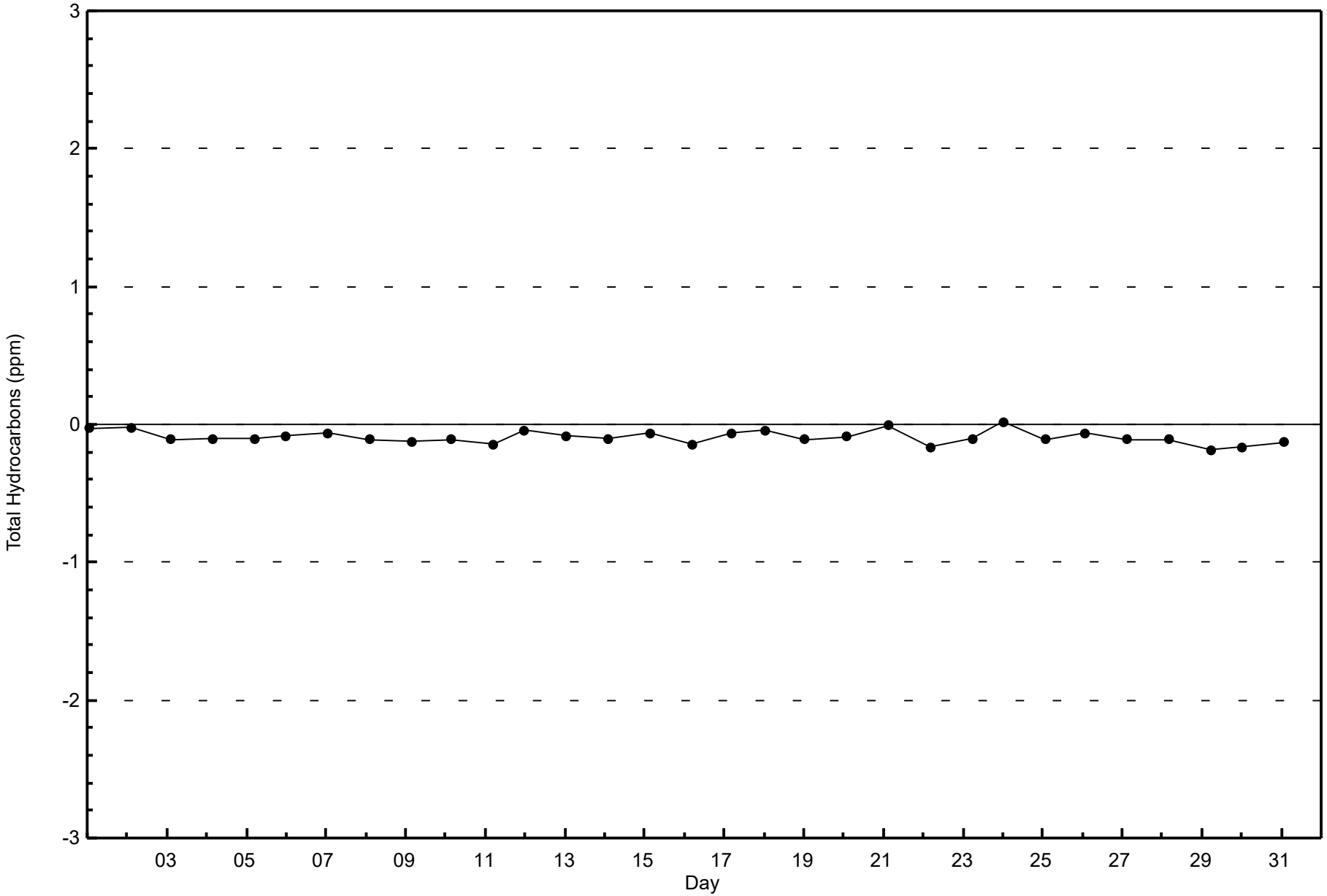
Total Number of Valid Hours: 657

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Surmont 2 - August 2026**

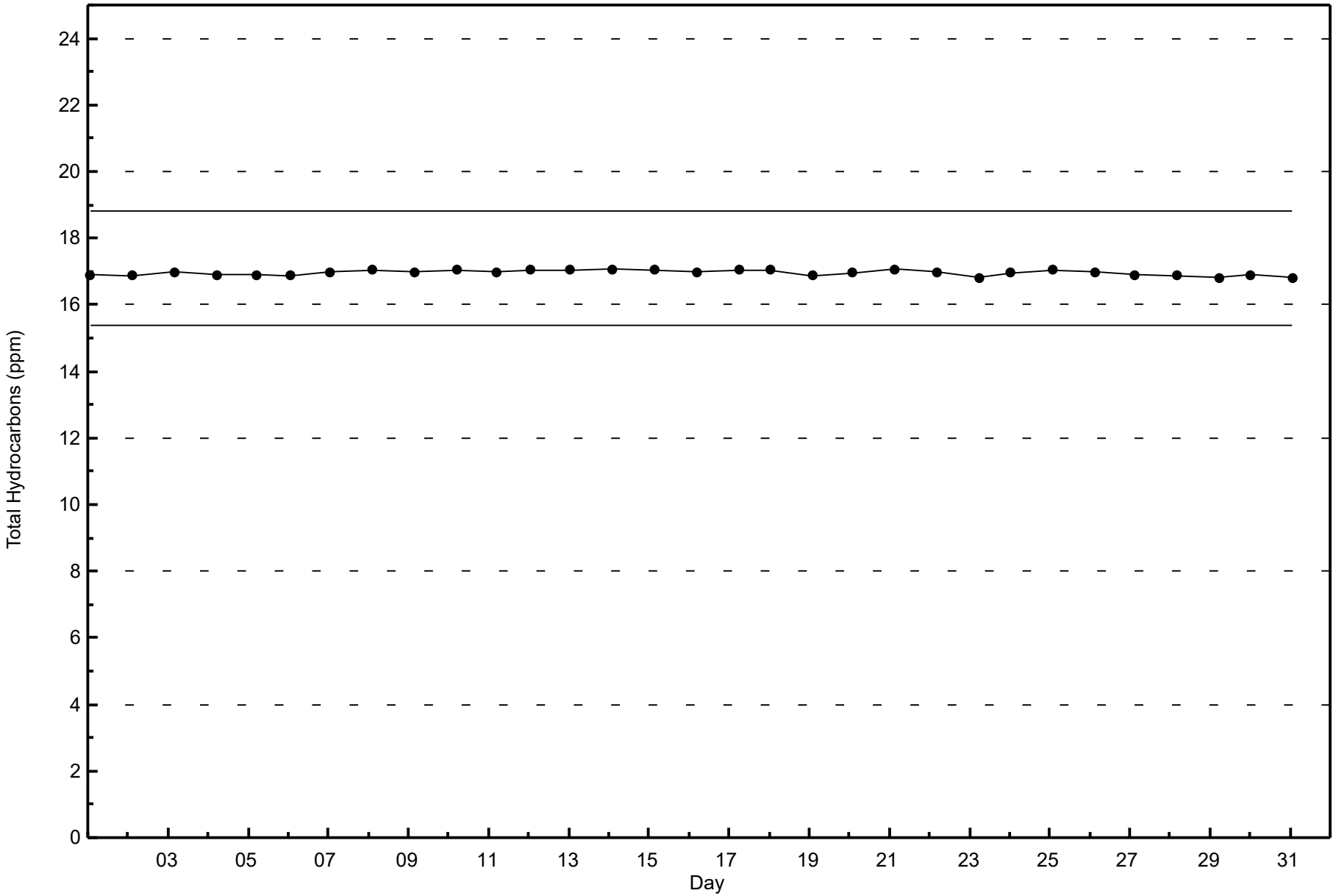


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Surmont 2 - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.8 ppb on Aug 8 09:00 Maximum Daily Average: 0.5 ppb on Aug 8

Minimum Value: 0.0 ppb on Aug 1 04:00 Minimum Daily Average: 0.0 ppb on Aug 17

Maximum Diurnal Average: 0.4 ppb at hour 8 Minimum Diurnal Average: 0.0 ppb at hour 24

Monthly Average: 0.12 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.1 $P_{90}$ = 0.2 $P_{99}$ = 1.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 686 |
| Hours of Missing Data: | 58 |
| Hours of Calibration: | 39 |
| Percent Operational Time: | 97.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 2-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 3-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.5 | 0.6 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 4-Aug | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 5-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 7-Aug | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| 8-Aug | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.7 | 2.3 | 2.8 | 1.2 | 1.0 | 1.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.5 | 2.8 |
| 9-Aug | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.4 | 0.6 | 1.0 | 0.5 | 0.3 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 |
| 10-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.3 | 1.6 | 2.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 2.5 |
| 11-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 1.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.2 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.4 | 1.1 | C | C | C | C | C | M | M | M | M | M | M | M | M | M | M | M | -- | 1.1 |
| 13-Aug | M | M | M | M | M | M | M | M | C | C | C | C | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 0.1 |
| 14-Aug | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 15-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 16-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 17-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 20-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 21-Aug | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.2 | 0.6 | 0.8 | 0.1 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 22-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 23-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.3 | 0.8 | 1.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.4 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.3 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.8 | 1.0 | 1.2 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.2 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | Z | 0.5 | 0.2 | 0.1 | 0.1 | 0.4 | 1.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 |
| 26-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 27-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 28-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 |
| 31-Aug | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.1 | 0.6 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 1.6 | 2.5 | 2.8 | 1.3 | 1.0 | 1.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.6 | 0.1 | Diurnal Maximum | |

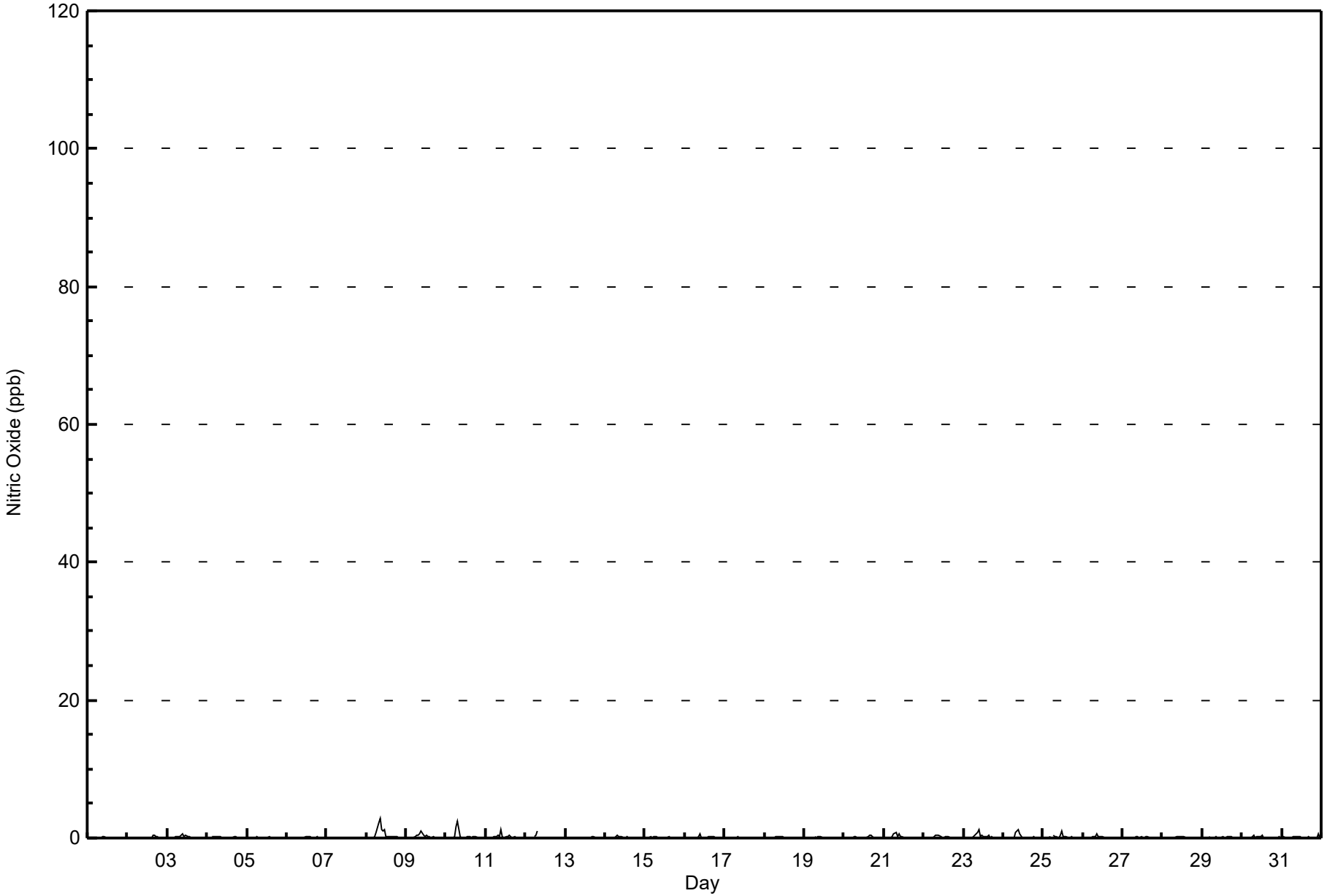
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Surmont 2 - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 686 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 686

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 22 | 24 | 9 | 7 | 8 | 25 | 43 | 21 | 14 | 14 | 19 | 106 | 119 | 95 | 58 | 47 | 631 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 22 | 24 | 9 | 7 | 8 | 25 | 43 | 21 | 14 | 14 | 19 | 106 | 119 | 95 | 58 | 47 | 631 |

Total Number of Valid Hours: 631

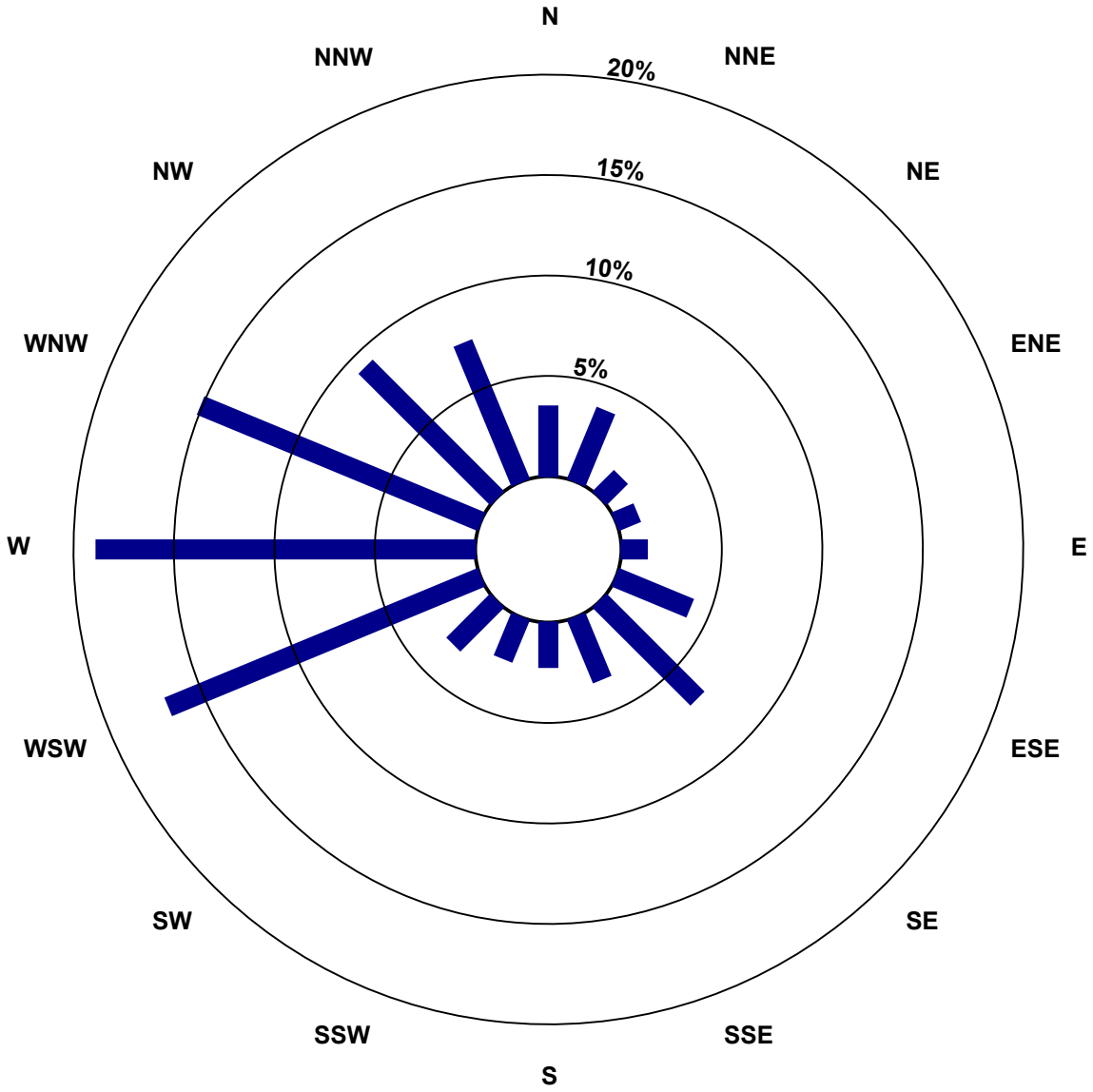
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Surmont 2




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

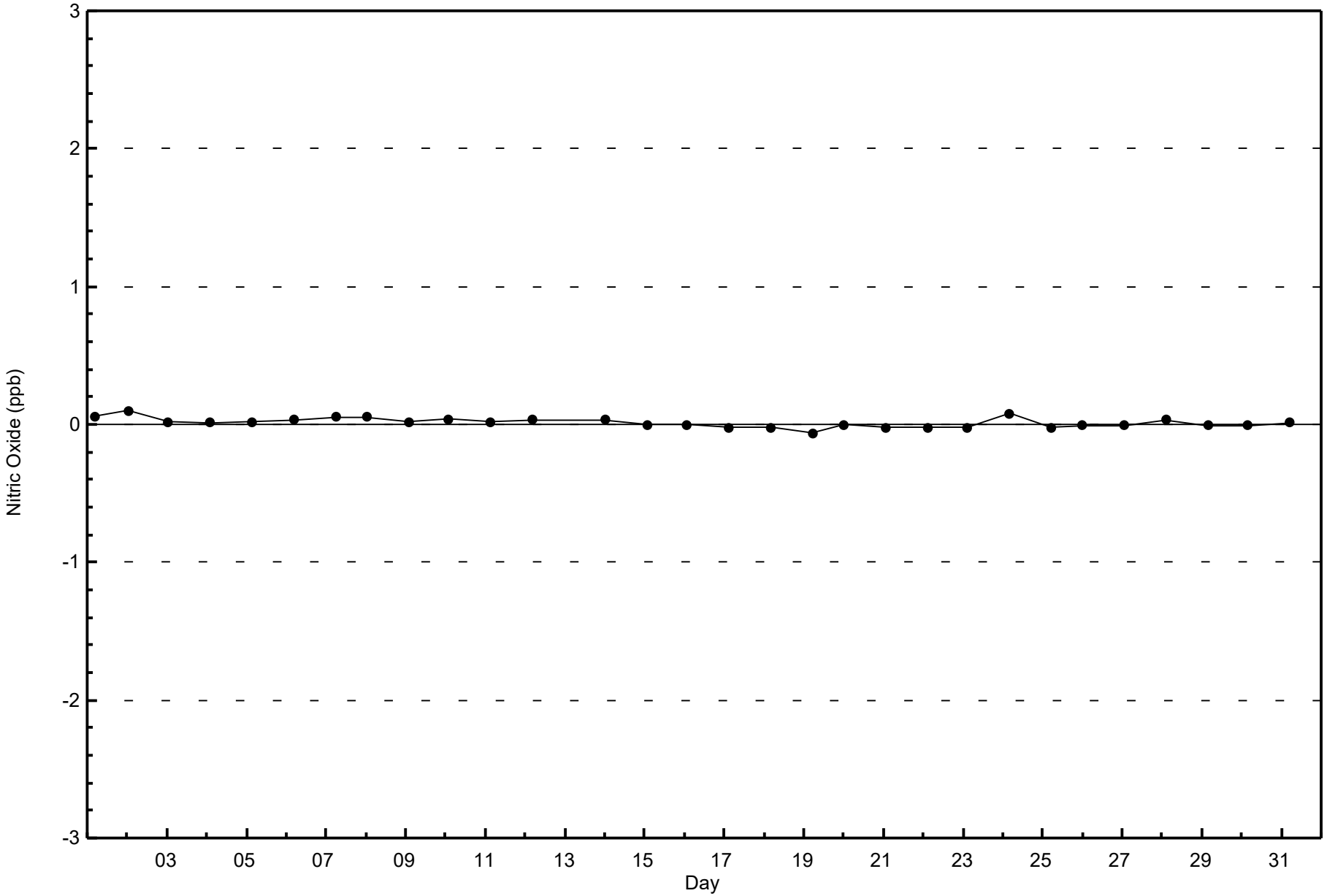
Total Number of Valid Hours: 631

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Surmont 2 - August 2026**

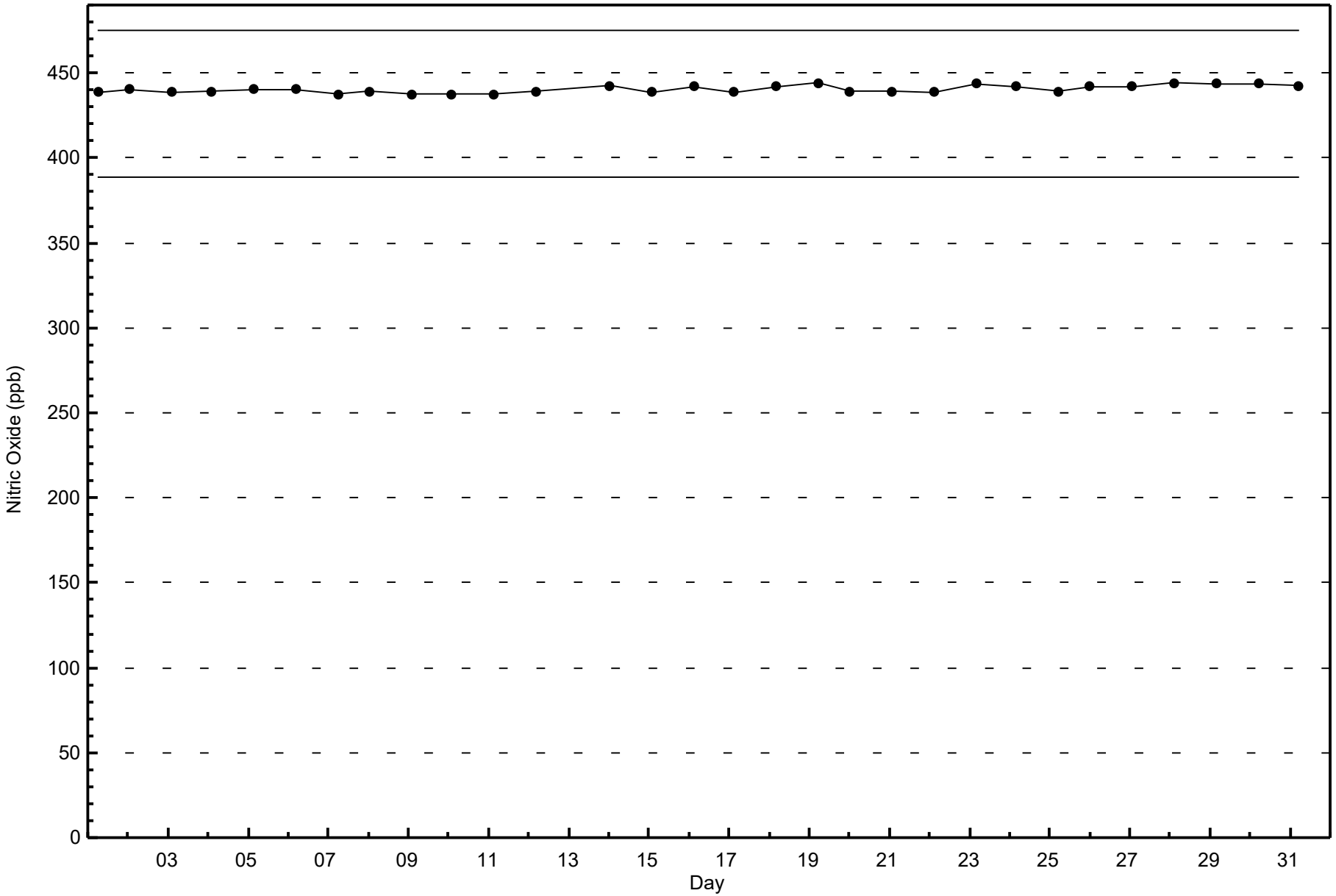


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Surmont 2 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 6.1 ppb on Aug 24 09:00

Maximum Daily Average: 2.6 ppb on Aug 24

Minimum Value: 0.1 ppb on Aug 6 01:00

Minimum Daily Average: 0.2 ppb on Aug 6

Maximum Diurnal Average: 1.3 ppb at hour 22

Minimum Diurnal Average: 0.6 ppb at hour 14

Monthly Average: 0.93 ppb

Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.2 $Q_1$ = 0.4 Median = 0.7 $Q_3$ = 1.1 $P_{90}$ = 1.9 $P_{99}$ = 4.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 686 |
| Hours of Missing Data: | 58 |
| Hours of Calibration: | 39 |
| Percent Operational Time: | 97.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.5 | 0.7 | 1.3 | 1.7 | Z | 0.6 | 0.6 | 0.8 | 1.0 | 1.6 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 1.0 | 1.7 | 3.2 | 0.9 | 3.2 |
| 2-Aug | Z | 2.1 | 1.2 | 1.2 | 4.4 | 3.4 | 1.4 | 1.1 | 1.4 | 1.6 | 0.9 | 0.6 | 0.9 | 0.8 | 0.8 | 1.8 | 1.5 | 1.2 | 1.5 | 2.4 | 1.7 | 2.6 | 1.8 | 1.1 | 1.6 | 4.4 |
| 3-Aug | 1.3 | Z | 1.9 | 1.6 | 1.8 | 2.5 | 1.7 | 1.1 | 1.1 | 1.0 | 0.6 | 0.9 | 0.7 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 0.9 | 2.5 |
| 4-Aug | 0.7 | 0.7 | Z | 0.5 | 0.4 | 0.5 | 0.2 | 0.4 | 0.8 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.5 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.2 | 0.7 | 0.5 | 0.8 |
| 5-Aug | 1.2 | 1.0 | 0.4 | Z | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 1.2 | 1.0 | 1.8 | 2.0 | 0.9 | 0.6 | 2.0 |
| 6-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 |
| 7-Aug | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.4 | 0.6 | 2.9 | 5.9 | 4.1 | 2.8 | 0.9 | 5.9 |
| 8-Aug | Z | 2.1 | 1.2 | 0.8 | 0.6 | 0.4 | 0.9 | 3.3 | 3.8 | 2.2 | 2.1 | 2.6 | 0.8 | 0.8 | 1.0 | 1.2 | 1.1 | 1.2 | 1.4 | 0.9 | 1.5 | 2.6 | 1.7 | 1.3 | 1.5 | 3.8 |
| 9-Aug | 1.1 | Z | 0.8 | 0.9 | 0.6 | 0.7 | 0.7 | 0.7 | 1.8 | 2.2 | 1.4 | 1.0 | 1.8 | 1.5 | 0.6 | 0.4 | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 | 1.6 | 1.5 | 0.8 | 1.0 | 2.2 |
| 10-Aug | 0.9 | 0.6 | Z | 0.6 | 0.4 | 0.3 | 0.5 | 0.8 | 0.4 | 0.3 | 0.5 | 0.5 | 0.5 | 1.0 | 1.2 | 0.8 | 1.5 | 1.1 | 1.8 | 2.1 | 2.3 | 1.6 | 1.3 | 1.0 | 1.0 | 2.3 |
| 11-Aug | 0.7 | 0.6 | 0.6 | Z | 0.3 | 0.5 | 0.4 | 0.4 | 0.9 | 3.1 | 0.7 | 0.4 | 0.7 | 1.3 | 2.3 | 1.0 | 0.9 | 0.9 | 0.7 | 0.9 | 1.3 | 2.1 | 0.9 | 0.6 | 1.0 | 3.1 |
| 12-Aug | 0.5 | 1.1 | 1.3 | 0.8 | Z | 1.1 | 0.8 | 3.0 | C | C | C | C | C | M | M | M | M | M | M | M | M | M | M | M | -- | 3.0 |
| 13-Aug | M | M | M | M | M | M | M | M | C | C | C | C | 0.1 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.2 | 0.3 | 0.6 | 0.5 | 0.3 | 0.2 | -- | 0.6 |
| 14-Aug | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.8 | 0.9 | 0.5 | 0.5 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.5 | 0.9 | 1.1 | 0.7 | 0.5 | 1.1 |
| 15-Aug | 0.9 | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.5 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 1.0 | 1.0 | 0.4 | 0.3 | 0.3 | 0.5 | 1.0 |
| 16-Aug | 0.4 | 0.8 | Z | 0.8 | 0.8 | 0.8 | 0.9 | 0.5 | 0.9 | 2.7 | 1.5 | 0.6 | 0.9 | 1.2 | 1.7 | 1.3 | 1.2 | 1.6 | 1.8 | 1.1 | 1.3 | 1.1 | 0.7 | 0.5 | 1.1 | 2.7 |
| 17-Aug | 0.3 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.9 |
| 18-Aug | 1.3 | 2.6 | 5.4 | 3.9 | Z | 0.8 | 0.5 | 0.8 | 0.9 | 1.1 | 1.1 | 0.8 | 0.5 | 0.3 | 0.5 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.2 | 1.0 | 5.4 |
| 19-Aug | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | Z | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 1.0 | 0.7 | 1.2 | 0.4 | 1.2 |
| 20-Aug | Z | 0.6 | 0.3 | 0.6 | 0.8 | 0.7 | 0.3 | 0.5 | 0.6 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 2.1 | 3.3 | 2.7 | 2.2 | 2.2 | 3.5 | 1.9 | 1.5 | 1.1 | 1.1 | 1.3 | 3.5 |
| 21-Aug | 1.4 | Z | 0.9 | 0.6 | 0.3 | 1.1 | 0.8 | 1.2 | 1.4 | 2.6 | 1.5 | 1.1 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.8 | 2.6 |
| 22-Aug | 0.8 | 0.7 | Z | 1.3 | 1.2 | 1.5 | 1.6 | 1.6 | 1.4 | 1.5 | 1.0 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 1.2 | 1.0 | 1.0 | 0.9 | 2.8 | 2.9 | 2.0 | 1.9 | 1.3 | 2.9 |
| 23-Aug | 1.8 | 1.6 | 1.3 | Z | 0.8 | 0.6 | 0.6 | 0.6 | 1.1 | 1.8 | 1.4 | 2.1 | 1.3 | 1.6 | 1.9 | 4.2 | 2.7 | 3.8 | 2.8 | 0.9 | 0.4 | 0.5 | 1.4 | 2.1 | 1.6 | 4.2 |
| 24-Aug | 2.2 | 2.5 | 4.9 | 4.6 | Z | 5.4 | 5.2 | 6.0 | 6.1 | 5.3 | 2.7 | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.6 | 1.1 | 2.6 | 2.2 | 3.1 | 1.4 | 0.9 | 0.7 | 2.6 | 6.1 |
| 25-Aug | 0.7 | 0.9 | 0.9 | 1.0 | 1.3 | Z | 0.8 | 0.5 | 0.5 | 0.3 | 1.6 | 4.4 | 1.9 | 1.0 | 1.2 | 0.9 | 0.8 | 1.3 | 1.5 | 1.2 | 1.9 | 1.6 | 1.4 | 0.9 | 1.2 | 4.4 |
| 26-Aug | Z | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 1.8 | 1.3 | 0.7 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.5 | 0.8 | 0.8 | 1.0 | 0.6 | 1.8 |
| 27-Aug | 1.5 | Z | 1.4 | 1.4 | 1.3 | 1.1 | 1.0 | 0.9 | 1.2 | 0.9 | 0.7 | 0.6 | 0.9 | 0.8 | 0.7 | 0.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.8 | 1.5 |
| 28-Aug | 0.4 | 0.4 | Z | 1.0 | 0.7 | 1.0 | 2.5 | 2.2 | 1.3 | 0.9 | 0.7 | 0.6 | 0.8 | 0.7 | 0.6 | 0.5 | 0.3 | 0.7 | 1.1 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.9 | 2.5 |
| 29-Aug | 0.5 | 0.6 | 0.6 | Z | 0.9 | 0.7 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.5 | 0.7 | 0.8 | 0.3 | 0.3 | 0.8 | 2.0 | 0.8 | 0.8 | 0.6 | 2.0 |
| 30-Aug | 2.0 | 0.9 | 0.6 | 0.9 | Z | 1.1 | 0.4 | 0.3 | 0.3 | 0.8 | 1.1 | 0.7 | 1.0 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.5 | 1.0 | 1.0 | 1.1 | 1.4 | 1.0 | 0.8 | 2.0 |
| 31-Aug | 0.7 | 1.3 | 1.2 | 0.9 | 0.4 | Z | 0.6 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.6 | 0.5 | 0.8 | 1.7 | 1.0 | 0.9 | 2.1 | 1.1 | 0.8 | 2.1 |
| | 0.9 | 0.9 | 1.1 | 1.0 | 0.8 | 1.0 | 0.9 | 1.0 | 1.1 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 1.1 | 1.3 | 1.1 | 1.0 | Diurnal Average | |
| | 2.2 | 2.6 | 5.4 | 4.6 | 4.4 | 5.4 | 5.2 | 6.0 | 6.1 | 5.3 | 2.7 | 4.4 | 1.9 | 1.6 | 2.3 | 4.2 | 2.7 | 3.8 | 2.8 | 3.5 | 3.1 | 5.9 | 4.1 | 3.2 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

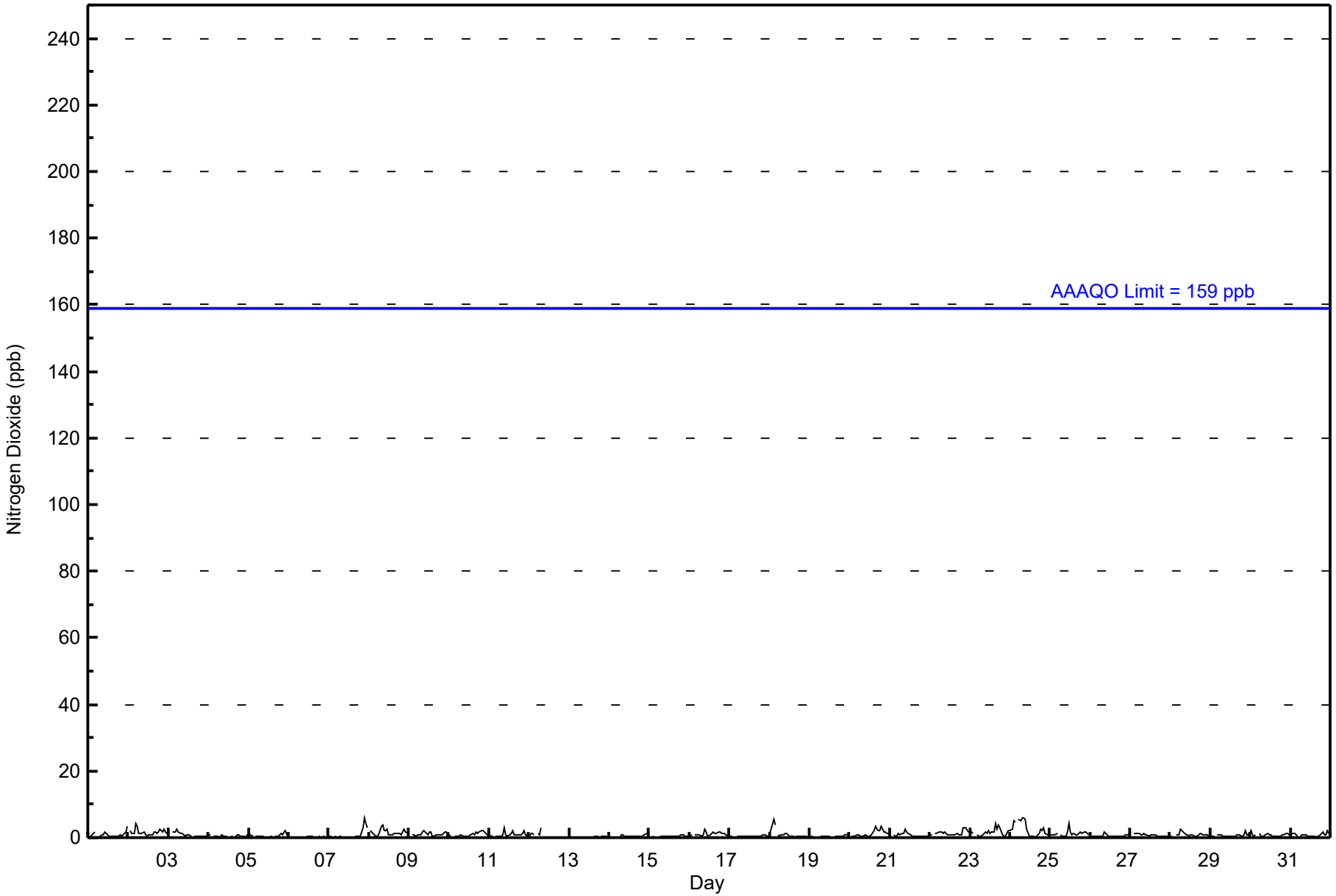
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Surmont 2 - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Surmont 2 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 686 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 686

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Surmont 2 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 22 | 24 | 9 | 7 | 8 | 25 | 43 | 21 | 14 | 14 | 19 | 106 | 119 | 95 | 58 | 47 | 631 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 22 | 24 | 9 | 7 | 8 | 25 | 43 | 21 | 14 | 14 | 19 | 106 | 119 | 95 | 58 | 47 | 631 |

Total Number of Valid Hours: 631

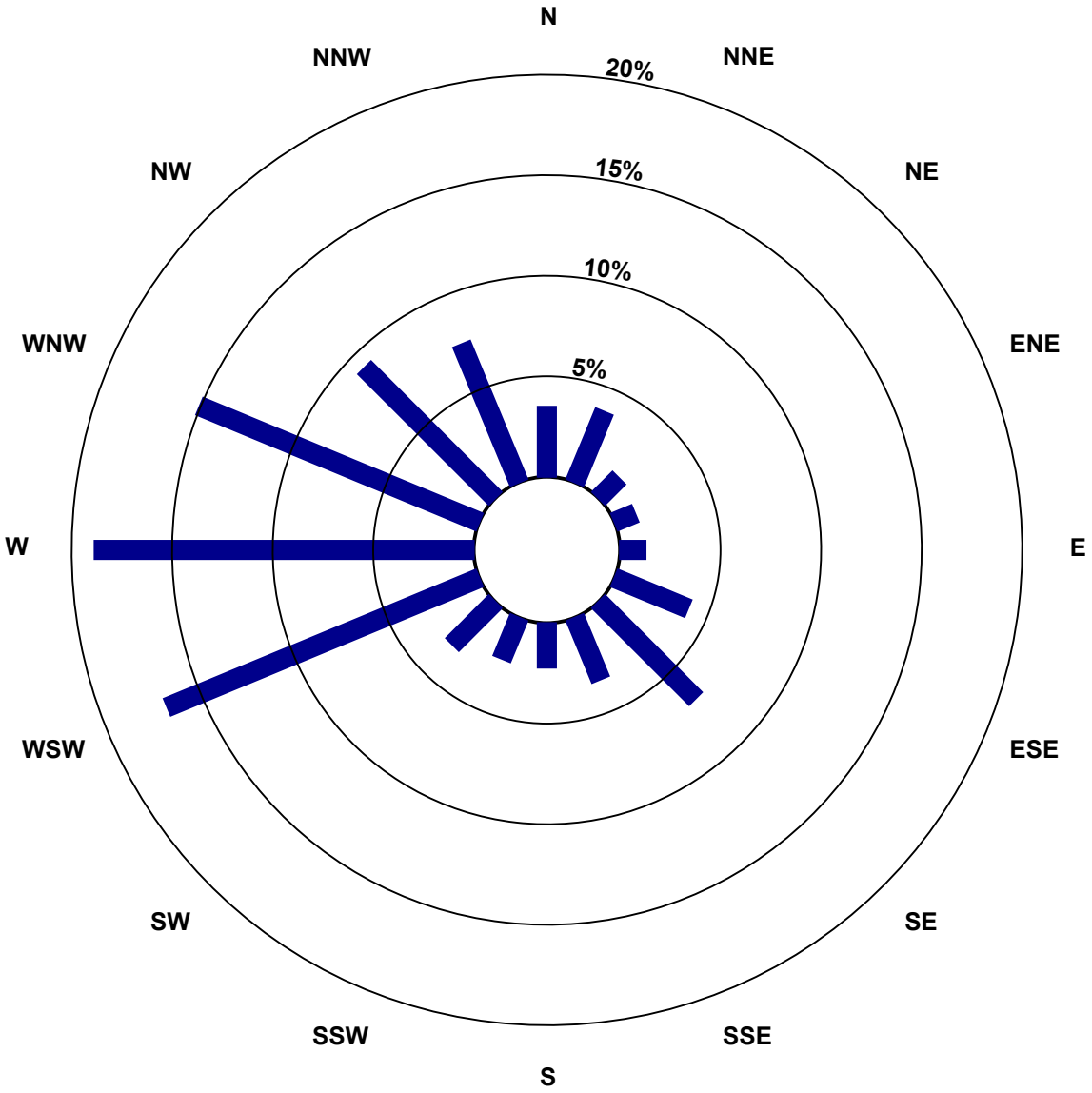
Total Number of Hours: 744

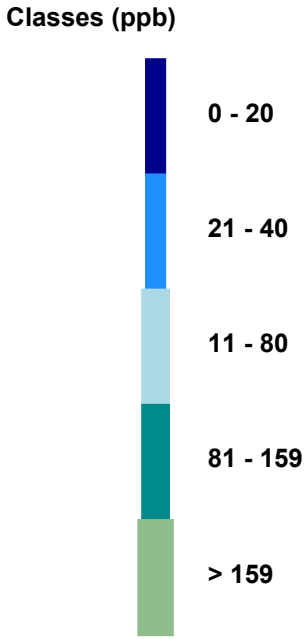
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Surmont 2



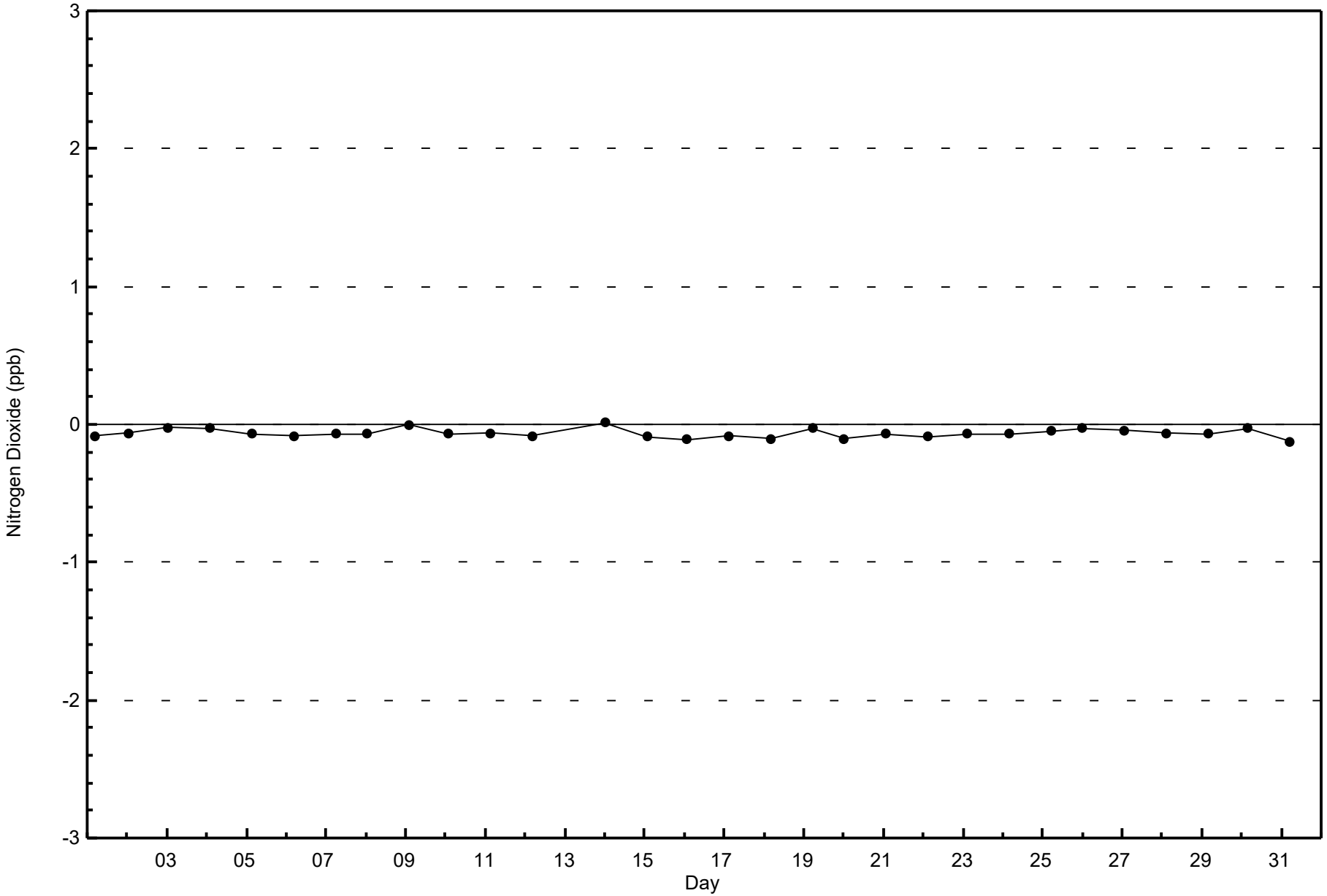

Total Number of Valid Hours: 631

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Surmont 2 - August 2026**

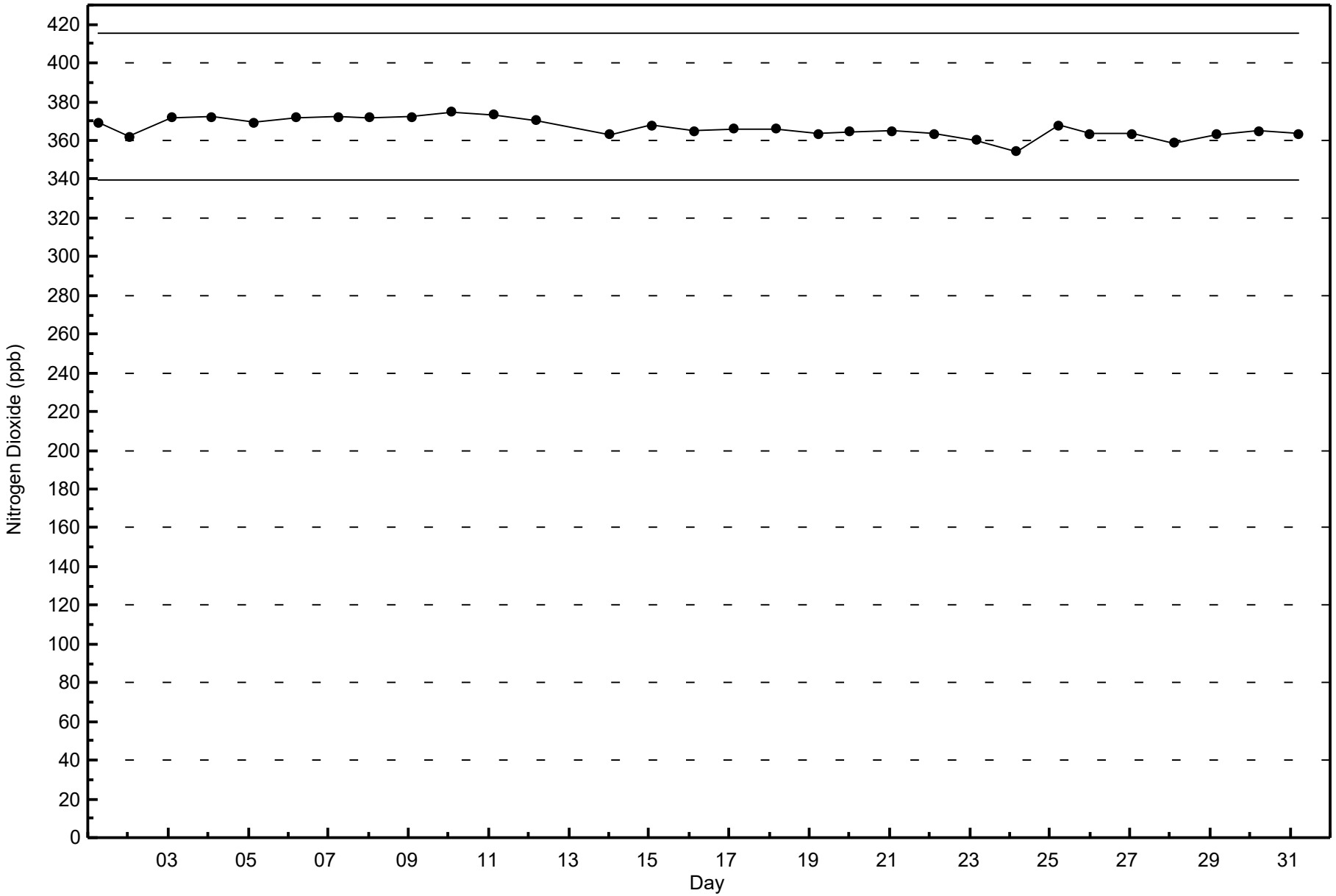


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Surmont 2 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7.1 ppb on Aug 24 09:00 Maximum Daily Average: 2.8 ppb on Aug 24

Minimum Value: 0.1 ppb on Aug 6 03:00 Minimum Daily Average: 0.3 ppb on Aug 6
Maximum Diurnal Average: 1.6 ppb at hour 10 Minimum Diurnal Average: 0.7 ppb at hour 14
Monthly Average: 1.05 ppb Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.3 $Q_1$ = 0.4 Median = 0.8 $Q_3$ = 1.3 $P_{90}$ = 2.1 $P_{99}$ = 5.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 686 |
| Hours of Missing Data: | 58 |
| Hours of Calibration: | 39 |
| Percent Operational Time: | 97.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.5 | 0.7 | 1.3 | 1.7 | Z | 0.6 | 0.6 | 0.9 | 1.1 | 1.8 | 0.9 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 1.0 | 1.7 | 3.2 | 0.9 | 3.2 |
| 2-Aug | Z | 2.1 | 1.2 | 1.2 | 4.4 | 3.4 | 1.4 | 1.1 | 1.4 | 1.6 | 0.9 | 0.6 | 0.9 | 0.8 | 0.9 | 2.2 | 1.8 | 1.4 | 1.6 | 2.5 | 1.7 | 2.6 | 1.8 | 1.1 | 1.7 | 4.4 |
| 3-Aug | 1.3 | Z | 1.9 | 1.6 | 1.8 | 2.6 | 2.0 | 1.3 | 1.6 | 1.6 | 0.9 | 1.2 | 0.9 | 0.5 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 1.0 | 2.6 |
| 4-Aug | 0.7 | 0.8 | Z | 0.6 | 0.5 | 0.7 | 0.5 | 0.6 | 0.9 | 0.7 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.2 | 0.7 | 0.6 | 0.9 |
| 5-Aug | 1.2 | 1.0 | 0.4 | Z | 0.3 | 0.3 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 1.3 | 1.0 | 1.8 | 2.0 | 0.9 | 0.7 | 2.0 |
| 6-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.4 | 0.8 | 0.9 | 0.8 | 0.3 | 0.3 | 0.3 | 0.5 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.9 |
| 7-Aug | 0.3 | 0.4 | 0.2 | 0.2 | 0.3 | Z | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.4 | 0.6 | 2.9 | 5.9 | 4.2 | 2.8 | 0.9 | 5.9 |
| 8-Aug | Z | 2.1 | 1.3 | 0.8 | 0.6 | 0.6 | 1.6 | 5.6 | 6.6 | 3.4 | 3.1 | 3.9 | 1.1 | 1.0 | 1.3 | 1.5 | 1.2 | 1.4 | 1.6 | 1.0 | 1.5 | 2.7 | 1.7 | 1.3 | 2.0 | 6.6 |
| 9-Aug | 1.1 | Z | 0.9 | 1.0 | 0.6 | 0.9 | 1.0 | 1.1 | 2.4 | 3.2 | 1.9 | 1.3 | 2.2 | 1.8 | 0.7 | 0.5 | 0.8 | 0.8 | 0.9 | 1.0 | 0.9 | 1.6 | 1.5 | 0.8 | 1.3 | 3.2 |
| 10-Aug | 0.9 | 0.6 | Z | 0.7 | 0.5 | 0.6 | 2.1 | 3.3 | 0.5 | 0.4 | 0.6 | 0.6 | 0.6 | 1.1 | 1.3 | 0.9 | 1.7 | 1.2 | 1.9 | 2.2 | 2.3 | 1.6 | 1.3 | 1.0 | 1.2 | 3.3 |
| 11-Aug | 0.7 | 0.6 | 0.6 | Z | 0.4 | 0.6 | 0.6 | 0.8 | 1.2 | 4.3 | 0.9 | 0.5 | 0.8 | 1.5 | 2.7 | 1.1 | 1.0 | 1.0 | 0.8 | 1.0 | 1.3 | 2.1 | 0.9 | 0.6 | 1.1 | 4.3 |
| 12-Aug | 0.5 | 1.1 | 1.3 | 0.8 | Z | 1.2 | 1.2 | 4.1 | C | C | C | C | C | M | M | M | M | M | M | M | M | M | M | M | -- | 4.1 |
| 13-Aug | M | M | M | M | M | M | M | M | C | C | C | C | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.7 | 0.2 | 0.3 | 0.6 | 0.5 | 0.3 | 0.2 | -- | 0.7 |
| 14-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 1.2 | 1.2 | 0.6 | 0.6 | 0.4 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.5 | 0.9 | 1.1 | 0.7 | 0.6 | 1.2 |
| 15-Aug | 1.0 | Z | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.6 | 0.6 | 0.7 | 0.4 | 0.4 | 0.5 | 0.5 | 1.0 | 1.0 | 0.4 | 0.3 | 0.3 | 0.5 | 1.0 |
| 16-Aug | 0.4 | 0.8 | Z | 0.8 | 0.8 | 0.8 | 0.9 | 0.5 | 1.1 | 3.2 | 1.6 | 0.6 | 1.0 | 1.3 | 1.9 | 1.5 | 1.3 | 1.7 | 1.9 | 1.1 | 1.3 | 1.1 | 0.7 | 0.5 | 1.2 | 3.2 |
| 17-Aug | 0.3 | 0.3 | 0.2 | Z | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.9 |
| 18-Aug | 1.3 | 2.6 | 5.4 | 3.9 | Z | 0.8 | 0.5 | 1.0 | 1.1 | 1.3 | 1.3 | 0.9 | 0.6 | 0.4 | 0.6 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.2 | 1.1 | 5.4 |
| 19-Aug | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | Z | 0.6 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.6 | 0.4 | 0.5 | 1.0 | 0.7 | 1.2 | 0.4 | 1.2 |
| 20-Aug | Z | 0.6 | 0.3 | 0.6 | 0.8 | 0.8 | 0.5 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 2.3 | 3.8 | 3.0 | 2.3 | 2.3 | 3.6 | 1.9 | 1.5 | 1.1 | 1.1 | 1.4 | 3.8 |
| 21-Aug | 1.4 | Z | 0.9 | 0.6 | 0.4 | 1.3 | 1.4 | 2.0 | 1.5 | 3.2 | 1.7 | 1.2 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 | 0.9 | 3.2 |
| 22-Aug | 0.8 | 0.7 | Z | 1.3 | 1.2 | 1.5 | 1.8 | 1.9 | 1.7 | 1.9 | 1.1 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.3 | 1.1 | 1.1 | 1.0 | 2.9 | 3.0 | 2.1 | 2.0 | 1.5 | 3.0 |
| 23-Aug | 1.8 | 1.6 | 1.3 | Z | 0.8 | 0.6 | 0.7 | 0.9 | 1.9 | 3.1 | 1.7 | 2.5 | 1.5 | 1.7 | 2.0 | 4.6 | 2.8 | 4.0 | 2.9 | 0.9 | 0.4 | 0.5 | 1.4 | 2.1 | 1.8 | 4.6 |
| 24-Aug | 2.2 | 2.5 | 4.9 | 4.6 | Z | 5.4 | 5.2 | 6.8 | 7.1 | 6.5 | 3.3 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.7 | 1.2 | 2.7 | 2.2 | 3.1 | 1.4 | 0.9 | 0.7 | 2.8 | 7.1 |
| 25-Aug | 0.7 | 0.9 | 0.9 | 1.1 | 1.4 | Z | 1.3 | 0.7 | 0.6 | 0.4 | 2.0 | 5.5 | 2.1 | 1.1 | 1.3 | 1.0 | 0.9 | 1.4 | 1.6 | 1.3 | 1.9 | 1.6 | 1.4 | 0.9 | 1.4 | 5.5 |
| 26-Aug | Z | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.9 | 2.3 | 1.6 | 0.8 | 0.5 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.0 | 0.7 | 2.3 |
| 27-Aug | 1.5 | Z | 1.4 | 1.4 | 1.3 | 1.1 | 1.1 | 1.0 | 1.4 | 1.1 | 0.8 | 0.7 | 1.0 | 0.9 | 0.8 | 1.1 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.9 | 1.5 |
| 28-Aug | 0.4 | 0.4 | Z | 1.0 | 0.7 | 1.0 | 2.5 | 2.3 | 1.4 | 1.1 | 0.8 | 0.7 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.8 | 1.2 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 1.0 | 2.5 |
| 29-Aug | 0.5 | 0.6 | 0.6 | Z | 1.0 | 0.7 | 0.8 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | 0.6 | 0.8 | 0.9 | 0.4 | 0.3 | 0.8 | 2.0 | 0.8 | 0.8 | 0.7 | 2.0 |
| 30-Aug | 2.0 | 0.9 | 0.6 | 0.9 | Z | 1.2 | 0.6 | 0.6 | 0.4 | 0.9 | 1.4 | 0.9 | 1.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.6 | 1.1 | 1.0 | 1.2 | 1.6 | 1.1 | 0.9 | 2.0 |
| 31-Aug | 0.7 | 1.5 | 1.2 | 0.9 | 0.4 | Z | 0.6 | 1.0 | 1.0 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.8 | 0.6 | 0.9 | 1.7 | 1.0 | 0.9 | 2.7 | 1.1 | 0.9 | 2.7 |
| | 0.9 | 1.0 | 1.1 | 1.1 | 0.9 | 1.1 | 1.1 | 1.4 | 1.4 | 1.6 | 1.1 | 1.0 | 0.8 | 0.7 | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 | 1.3 | 1.1 | 1.0 | Diurnal Average | |
| | 2.2 | 2.6 | 5.4 | 4.6 | 4.4 | 5.4 | 5.2 | 6.8 | 7.1 | 6.5 | 3.3 | 5.5 | 2.2 | 1.8 | 2.7 | 4.6 | 3.0 | 4.0 | 2.9 | 3.6 | 3.1 | 5.9 | 4.2 | 3.2 | Diurnal Maximum | |

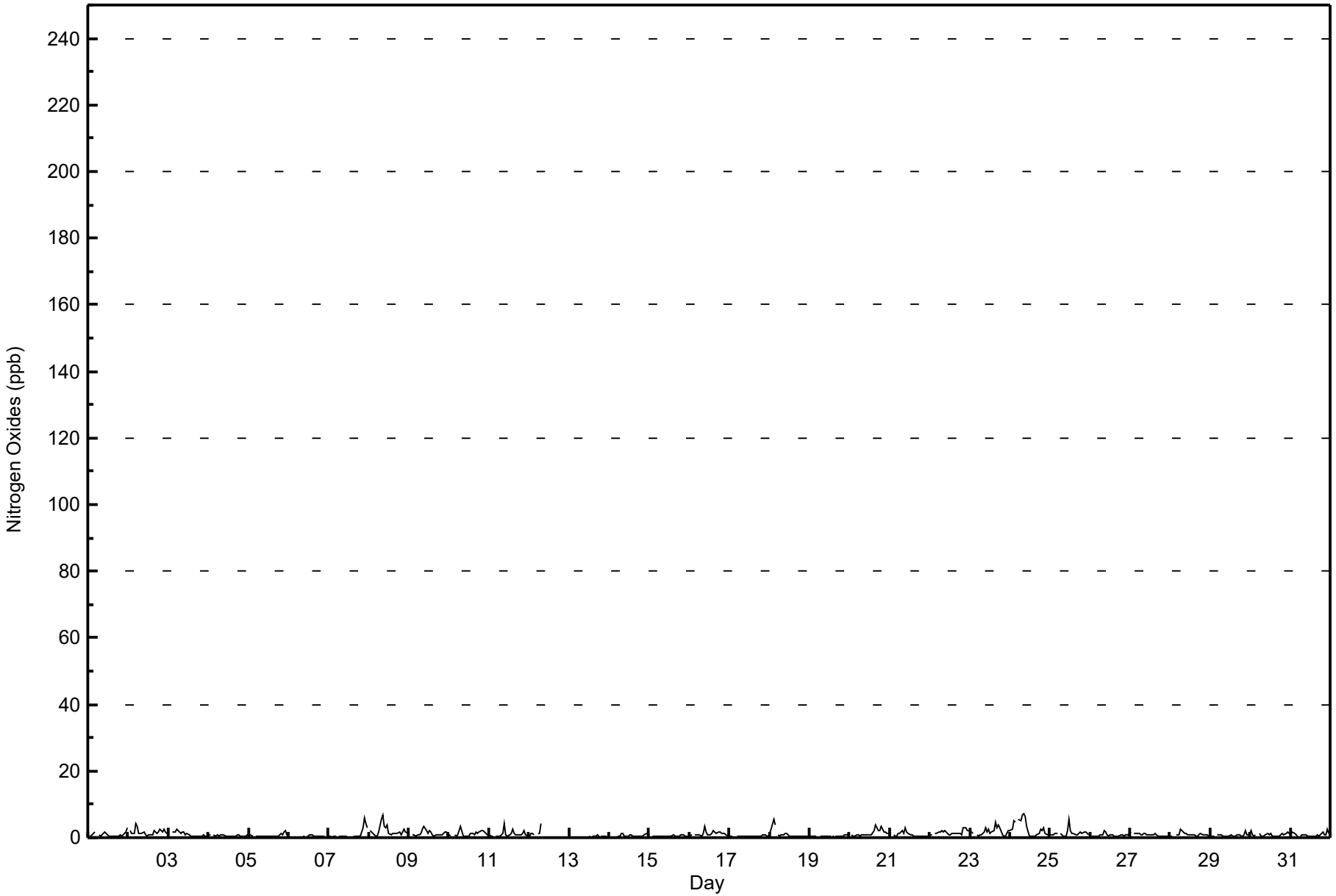
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Surmont 2 - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Surmont 2 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 686 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 686

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Surmont 2 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 22 | 24 | 9 | 7 | 8 | 25 | 43 | 21 | 14 | 14 | 19 | 106 | 119 | 95 | 58 | 47 | 631 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 22 | 24 | 9 | 7 | 8 | 25 | 43 | 21 | 14 | 14 | 19 | 106 | 119 | 95 | 58 | 47 | 631 |

Total Number of Valid Hours: 631

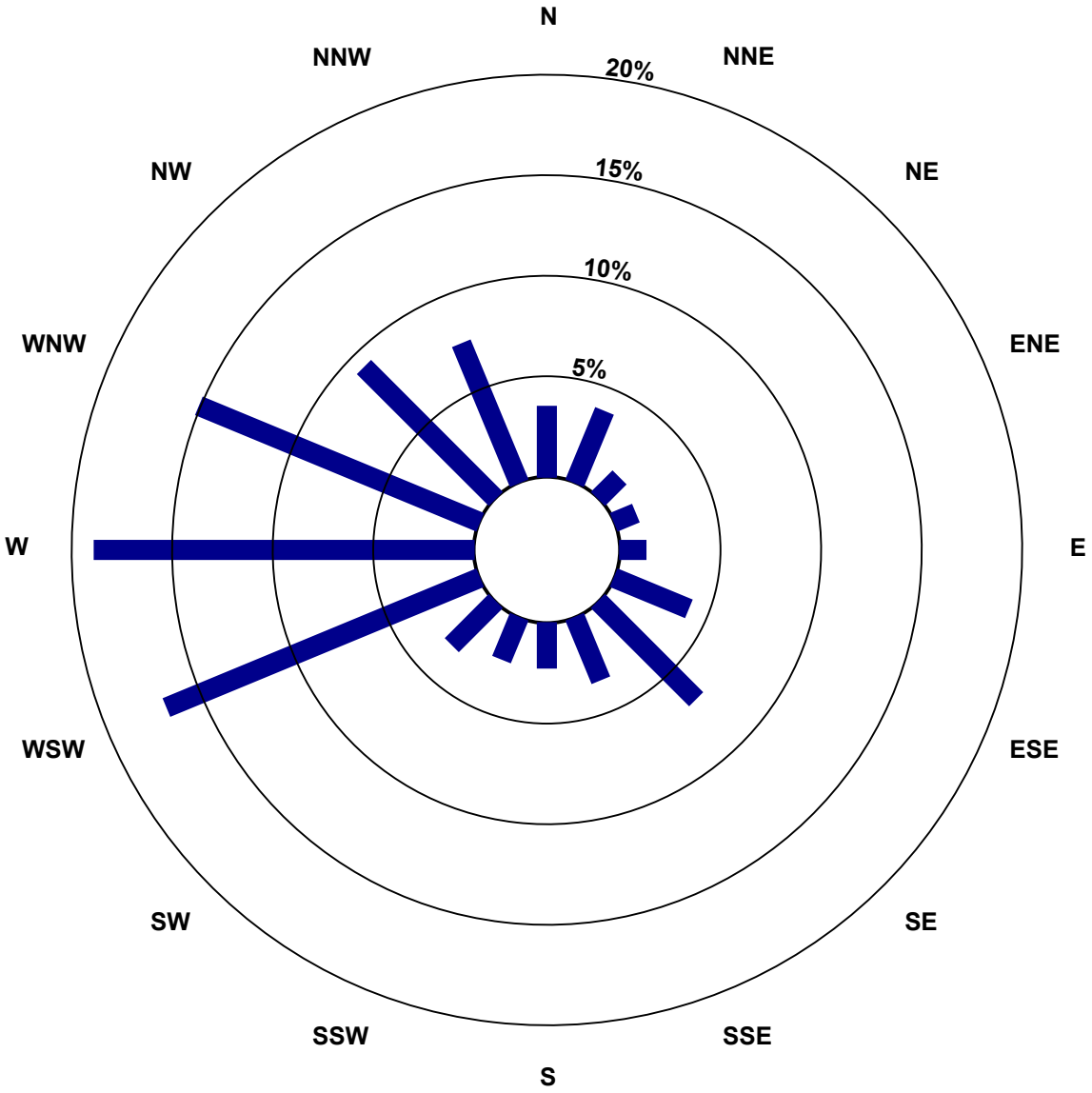
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Surmont 2




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

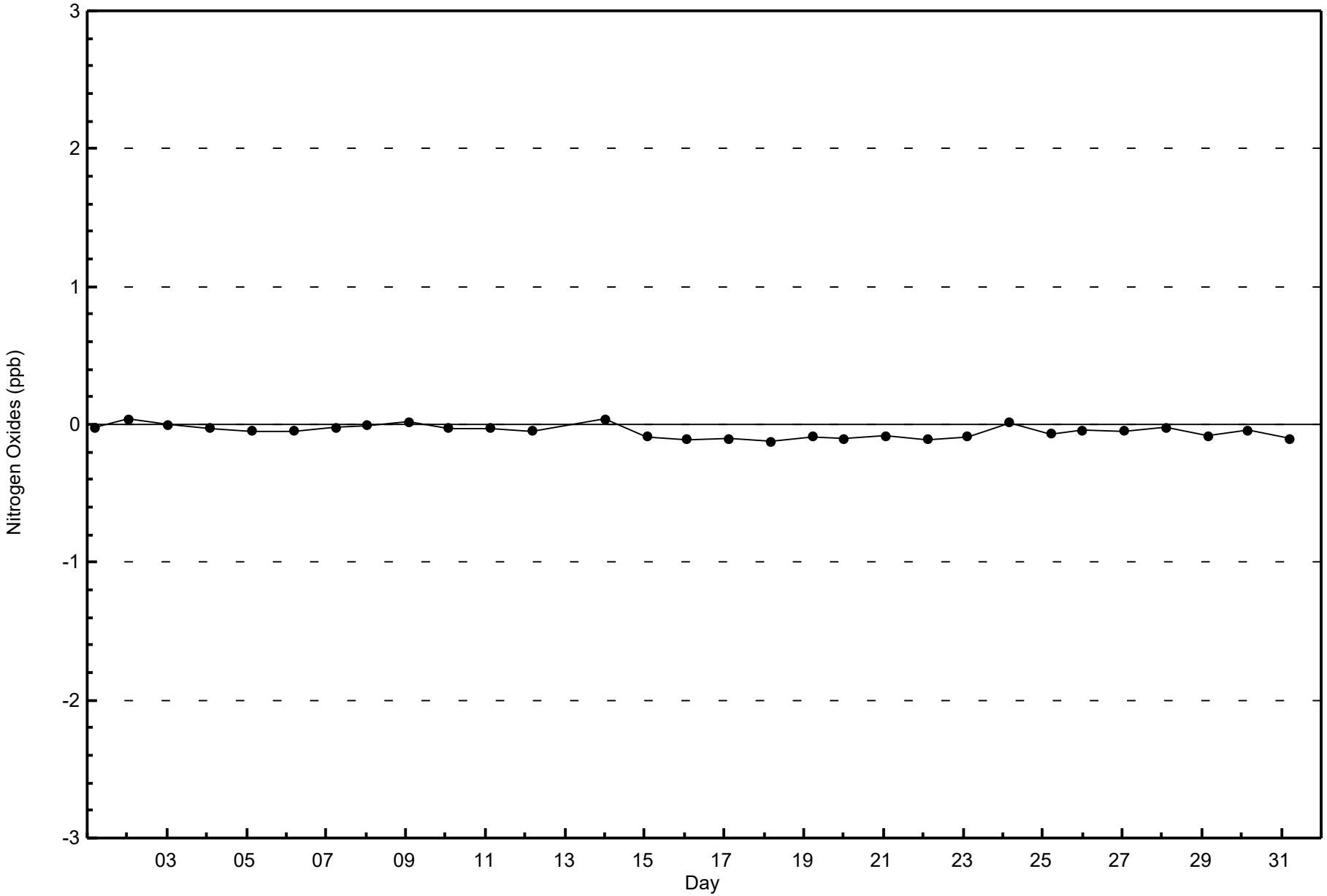
Total Number of Valid Hours: 631

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Surmont 2 - August 2026**

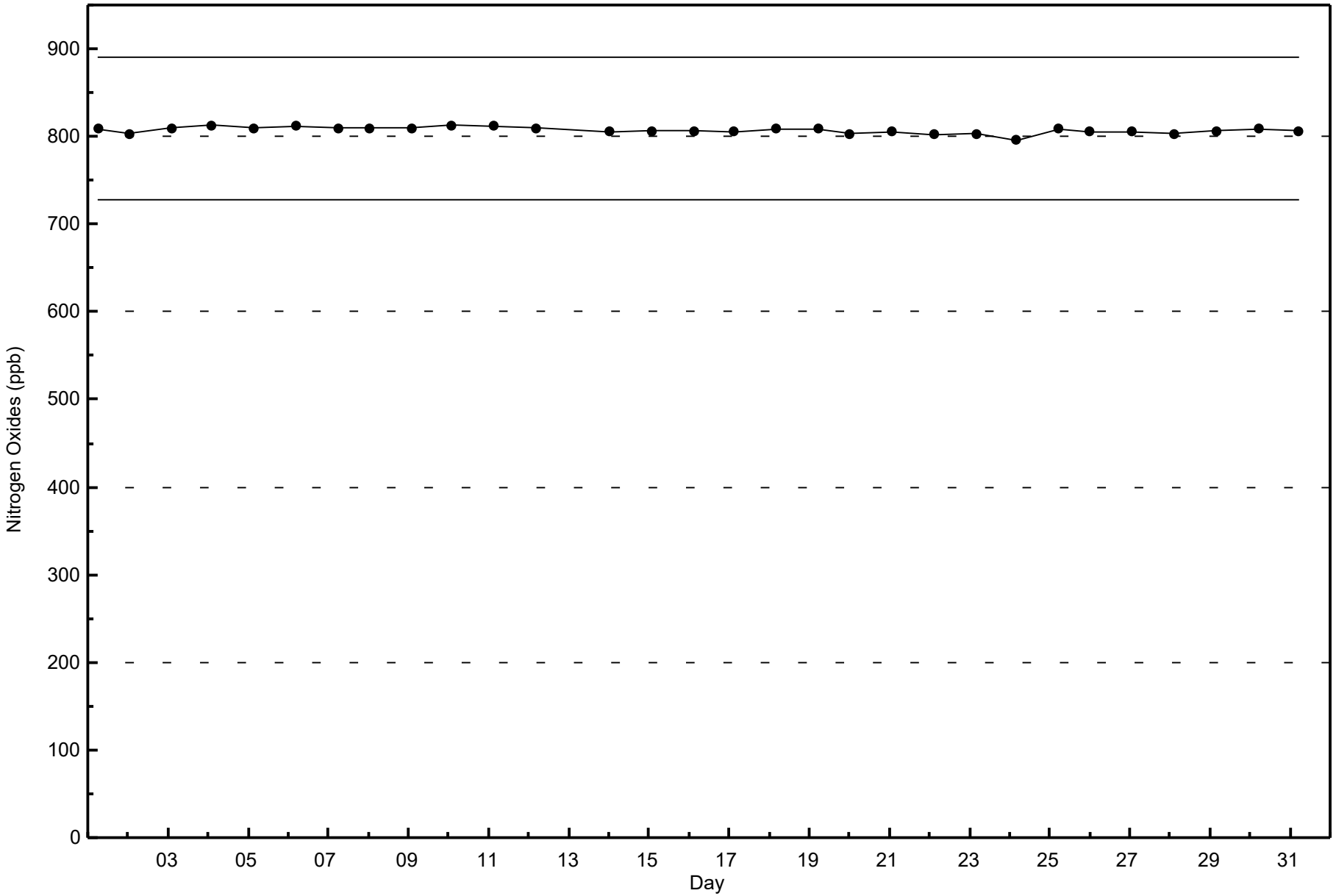


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Surmont 2 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 78.1 $\mu g/m^3$ on Aug 28 22:00

Maximum Daily Average: 27.9 $\mu g/m^3$ on Aug 20

Minimum Value: 0.5 $\mu g/m^3$ on Aug 6 10:00

Minimum Daily Average: 1.8 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 13.0 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 7.7 $\mu g/m^3$ at hour 13

Monthly Average: 9.91 $\mu g/m^3$

Percentiles: $P_1$ = 0.9 $P_{10}$ = 3.0 $Q_1$ = 4.3 Median = 7.1 $Q_3$ = 12.6 $P_{90}$ = 19.8 $P_{99}$ = 44.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 5.8 | 6.6 | 8.3 | 9.9 | 9.9 | 9.3 | 8.9 | 8.9 | 9.8 | 10.1 | 10.7 | 10.6 | 11.1 | 11.9 | 13.3 | 16.9 | 16.7 | 16.7 | 16.7 | 17.0 | 17.1 | 29.9 | 41.0 | 35.5 | 14.7 | 41.0 |
| 2-Aug | 27.7 | 29.6 | 33.6 | 34.0 | 22.8 | 13.4 | 15.5 | 7.3 | 6.0 | 6.7 | 8.9 | 5.5 | 3.9 | 3.5 | 3.8 | 3.9 | 4.3 | 4.7 | 5.4 | 4.6 | 4.2 | 4.5 | 4.0 | 2.9 | 10.9 | 34.0 |
| 3-Aug | 2.7 | 3.2 | 3.3 | 3.2 | 3.2 | 3.4 | 3.2 | 3.2 | 3.0 | 3.3 | 3.5 | 3.1 | 3.9 | 4.5 | 3.9 | 3.2 | 2.9 | 2.7 | 2.3 | 3.1 | 6.8 | 5.1 | 5.9 | 8.3 | 3.8 | 8.3 |
| 4-Aug | 6.9 | 6.2 | 5.6 | 6.0 | 4.8 | 4.4 | 3.7 | 6.0 | 29.3 | 19.3 | 9.4 | 5.6 | 6.3 | 5.3 | 5.3 | 6.2 | 8.4 | 15.9 | 20.2 | 14.3 | 10.4 | 6.5 | 7.3 | 7.6 | 9.2 | 29.3 |
| 5-Aug | 9.0 | 11.1 | 13.8 | 16.2 | 16.9 | 15.7 | 14.2 | 11.8 | 12.9 | 10.5 | 6.2 | 5.8 | 5.8 | 7.5 | 7.7 | 10.7 | 14.4 | 16.9 | 13.9 | 5.9 | 2.0 | 1.9 | 2.0 | 1.8 | 9.8 | 16.9 |
| 6-Aug | 1.1 | 1.2 | 1.0 | 0.9 | 0.8 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 1.7 | 3.0 | 4.0 | 4.7 | 3.1 | 3.2 | 1.7 | 1.7 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 1.8 | 4.7 |
| 7-Aug | 2.2 | 2.4 | 2.4 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.8 | 3.1 | 3.3 | 3.2 | 3.0 | 3.8 | 4.0 | 5.0 | 5.4 | 4.9 | 5.4 | 6.9 | 7.7 | 10.9 | 10.5 | 12.9 | 4.7 | 12.9 |
| 8-Aug | 11.3 | 11.1 | 8.8 | 8.5 | 9.7 | 7.5 | 7.2 | 5.5 | 6.5 | 4.9 | 4.1 | 5.5 | 3.7 | 3.5 | 3.4 | 4.4 | 4.4 | 5.1 | 5.7 | 9.5 | 6.5 | 13.9 | 9.9 | 8.6 | 7.0 | 13.9 |
| 9-Aug | 8.2 | 8.1 | 8.1 | 6.2 | 5.5 | 13.8 | 12.1 | 11.6 | 4.9 | 4.4 | 3.5 | 3.7 | 3.8 | 4.3 | 4.5 | 4.9 | 4.4 | 5.3 | 4.7 | 6.0 | 20.7 | 21.8 | 21.4 | 14.6 | 8.6 | 21.8 |
| 10-Aug | 11.2 | 10.8 | 11.7 | 8.0 | 7.3 | 8.6 | 10.5 | 17.8 | 5.2 | 2.7 | 3.4 | 4.2 | 3.9 | 6.2 | 5.9 | 5.5 | 32.5 | 35.1 | 13.4 | 13.6 | 18.7 | 10.7 | 8.2 | 7.0 | 10.9 | 35.1 |
| 11-Aug | 6.0 | 6.7 | 8.1 | 6.9 | 5.5 | 8.6 | 9.3 | 8.7 | 6.6 | 5.3 | 7.6 | 5.6 | 6.3 | 8.7 | 11.5 | 10.8 | 9.7 | 8.7 | 5.3 | 6.3 | 10.7 | 14.7 | 7.5 | 6.5 | 8.0 | 14.7 |
| 12-Aug | 11.2 | 5.0 | 4.7 | 4.6 | 4.5 | 9.4 | 7.8 | 5.7 | 5.2 | 3.2 | 3.5 | 2.6 | 2.0 | 3.2 | 2.3 | 1.5 | 1.1 | 1.0 | 1.2 | 1.2 | 1.3 | 1.4 | 1.6 | 1.8 | 3.6 | 11.2 |
| 13-Aug | 1.8 | 2.1 | 2.2 | 2.6 | 3.3 | 3.5 | 3.5 | 3.2 | 2.8 | 3.1 | 2.8 | 2.6 | 1.6 | 2.1 | 1.7 | 2.1 | 2.8 | 2.6 | 2.5 | 2.6 | 2.8 | 2.9 | 3.2 | 3.3 | 2.7 | 3.5 |
| 14-Aug | 3.1 | 3.3 | 3.4 | 3.3 | 3.3 | 3.7 | 3.6 | 3.7 | 4.1 | 3.8 | 3.4 | 3.5 | 3.3 | 2.6 | 2.4 | 2.4 | 2.6 | 3.1 | 3.5 | 3.6 | 4.3 | 4.6 | 5.1 | 4.9 | 3.5 | 5.1 |
| 15-Aug | 5.3 | 5.0 | 4.8 | 4.6 | 4.4 | 4.3 | 4.2 | 3.6 | 4.4 | 4.6 | 4.4 | 4.4 | 4.3 | 4.7 | 4.9 | 4.6 | 3.3 | 3.4 | 3.3 | 3.0 | 3.1 | 3.3 | 3.2 | 3.7 | 4.1 | 5.3 |
| 16-Aug | 3.5 | 3.4 | 3.6 | 3.6 | 3.8 | 3.9 | 4.1 | 4.2 | 4.2 | 6.4 | 8.4 | 12.2 | 15.3 | 18.6 | 21.6 | 16.4 | 11.2 | 20.6 | 21.1 | 21.8 | 24.8 | 25.1 | 25.3 | 27.6 | 13.0 | 27.6 |
| 17-Aug | 25.4 | 28.6 | 30.2 | 23.6 | 20.4 | 19.4 | 20.3 | 20.6 | 21.5 | 20.2 | 19.8 | 18.7 | 18.5 | 18.4 | 17.8 | 17.6 | 17.0 | 15.5 | 15.7 | 16.2 | 17.4 | 17.6 | 15.2 | 14.0 | 19.6 | 30.2 |
| 18-Aug | 12.5 | 11.9 | 10.8 | 9.4 | 8.7 | 8.4 | 9.1 | 8.1 | 7.4 | 7.6 | 7.3 | 7.3 | 7.3 | 6.3 | 5.8 | 5.7 | 6.2 | 8.2 | 6.1 | 3.9 | 4.9 | 5.0 | 5.2 | 5.2 | 7.4 | 12.5 |
| 19-Aug | 4.9 | 5.0 | 5.4 | 5.2 | 5.4 | 5.4 | 6.3 | 6.4 | 6.6 | 6.2 | 4.9 | 4.6 | 3.5 | 3.1 | 3.4 | 4.8 | 7.0 | 14.1 | 18.3 | 18.6 | 17.4 | 18.3 | 17.9 | 27.6 | 9.2 | 27.6 |
| 20-Aug | 33.4 | 35.2 | 28.8 | 40.2 | 45.9 | 46.1 | 41.8 | 41.8 | 32.0 | 28.5 | 24.0 | 20.3 | 19.8 | 21.2 | 22.6 | 23.3 | 19.9 | 20.0 | 20.2 | 23.6 | 20.9 | 20.0 | 20.6 | 20.8 | 27.9 | 46.1 |
| 21-Aug | 17.0 | 13.3 | 12.4 | 10.9 | 10.5 | 16.9 | 15.9 | 16.0 | 16.5 | 14.8 | 14.7 | 11.8 | 9.5 | 9.3 | 8.8 | 9.8 | 11.2 | 10.5 | 9.9 | 9.5 | 9.9 | 10.3 | 10.7 | 8.8 | 12.0 | 17.0 |
| 22-Aug | 7.1 | 6.5 | 5.8 | 5.6 | 5.9 | 5.7 | 5.7 | 6.0 | 6.9 | 8.9 | 9.5 | 9.5 | 11.1 | 11.7 | 12.4 | 13.7 | 16.0 | 13.7 | 13.0 | 13.3 | 12.9 | 11.9 | 11.6 | 11.4 | 9.8 | 16.0 |
| 23-Aug | 11.5 | 11.9 | 12.0 | 12.5 | 12.7 | 12.9 | 12.6 | 12.8 | 15.1 | 24.6 | 17.4 | 19.2 | 22.4 | 22.2 | 21.4 | 22.3 | 25.4 | 32.8 | 31.9 | 25.3 | 14.8 | 9.3 | 9.8 | 11.0 | 17.7 | 32.8 |
| 24-Aug | 9.7 | 8.7 | 8.7 | 5.8 | 4.9 | 5.0 | 4.8 | 4.6 | 5.0 | 5.3 | 5.6 | 4.9 | 3.2 | 2.2 | 2.2 | 2.3 | 3.1 | 5.3 | 6.3 | 7.0 | 8.0 | 7.1 | 6.4 | 6.5 | 5.5 | 9.7 |
| 25-Aug | 6.1 | 6.1 | 6.3 | 6.4 | 6.8 | 5.9 | 5.7 | 7.9 | 6.6 | 6.2 | 10.4 | 20.1 | 17.6 | 12.2 | 12.3 | 12.8 | 12.0 | 14.6 | 13.4 | 29.7 | 14.9 | 19.5 | 15.6 | 13.7 | 11.8 | 29.7 |
| 26-Aug | 11.6 | 11.6 | 17.1 | 9.2 | 8.8 | 8.8 | 7.8 | 6.7 | C | 9.1 | 5.8 | 4.1 | 4.6 | 4.3 | 4.1 | 4.3 | 4.3 | 4.3 | 4.4 | 4.6 | 4.9 | 5.2 | 6.3 | 7.8 | 6.9 | 17.1 |
| 27-Aug | 9.4 | 10.7 | 12.3 | 12.3 | 12.6 | 12.4 | 12.5 | 13.2 | 15.9 | 16.6 | 17.5 | 17.2 | 16.0 | 13.3 | 12.0 | 12.3 | 10.3 | 10.0 | 10.7 | 11.6 | 13.7 | 16.8 | 18.4 | 19.3 | 13.6 | 19.3 |
| 28-Aug | 18.9 | 19.8 | 19.3 | 14.3 | 14.0 | 14.4 | 14.2 | 14.8 | 15.3 | 11.3 | 8.2 | 5.0 | 4.5 | 4.5 | 5.4 | 4.9 | 4.7 | 9.4 | 63.7 | 73.6 | 76.9 | 78.1 | 76.1 | 59.0 | 26.3 | 78.1 |
| 29-Aug | 22.5 | 17.1 | 15.7 | 16.8 | 16.1 | 15.4 | 15.4 | 12.5 | 8.6 | 7.5 | 7.7 | 8.6 | 7.9 | 7.6 | 7.1 | 8.3 | 8.5 | 8.2 | 7.6 | 7.6 | 8.2 | 10.0 | 9.7 | 9.9 | 11.0 | 22.5 |
| 30-Aug | 10.7 | 10.0 | 8.9 | 6.5 | 6.2 | 5.8 | 5.5 | 5.2 | 5.2 | 5.2 | 5.7 | 5.6 | 7.6 | 7.4 | 7.4 | 8.1 | 7.8 | 6.8 | 7.9 | 7.5 | 7.6 | 7.8 | 7.8 | 7.7 | 7.2 | 10.7 |
| 31-Aug | 7.4 | 6.8 | 5.3 | 3.7 | 3.8 | 4.0 | 4.3 | 4.2 | 4.1 | 4.1 | 4.2 | 4.0 | 3.9 | 3.8 | 3.6 | 3.1 | 3.5 | 3.0 | 4.7 | 8.7 | 6.2 | 6.3 | 5.8 | 6.1 | 4.8 | 8.7 |
| | 10.5 | 10.3 | 10.4 | 9.8 | 9.4 | 9.7 | 9.5 | 9.2 | 9.2 | 8.6 | 7.9 | 7.8 | 7.7 | 7.8 | 8.0 | 8.2 | 9.2 | 10.5 | 11.6 | 12.3 | 12.3 | 13.0 | 12.8 | 12.2 | Diurnal Average | |
| | 33.4 | 35.2 | 33.6 | 40.2 | 45.9 | 46.1 | 41.8 | 41.8 | 32.0 | 28.5 | 24.0 | 20.3 | 22.4 | 22.2 | 22.6 | 23.3 | 32.5 | 35.1 | 63.7 | 73.6 | 76.9 | 78.1 | 76.1 | 59.0 | Diurnal Maximum | |

C - Calibration

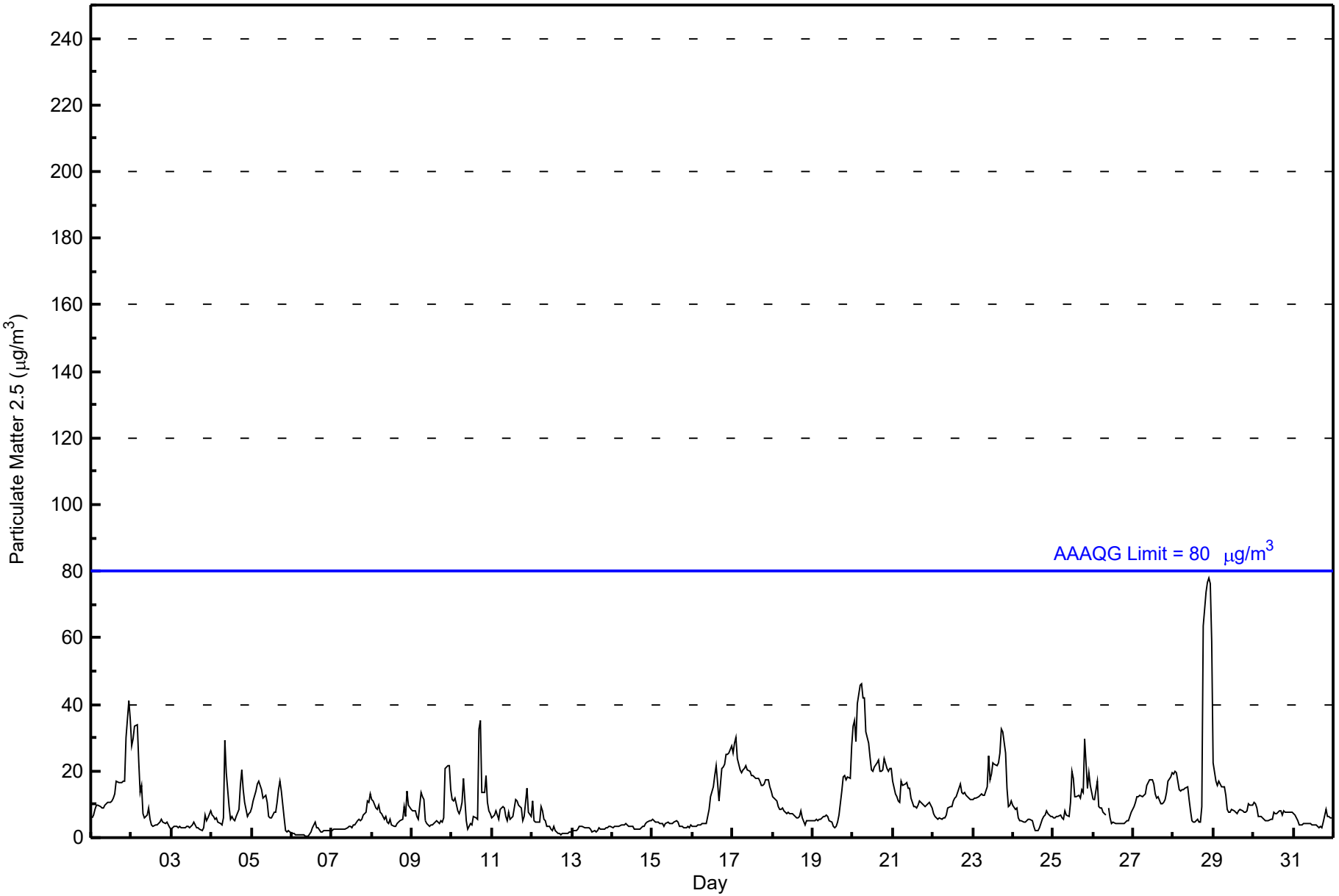
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Surmont 2 - August 2026**



| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 282 | 37.95 | 37.95 |
| 6 - 15 | 326 | 43.88 | 81.83 |
| 16 - 25 | 102 | 13.73 | 95.56 |
| 26 - 80 | 33 | 4.44 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Surmont 2 - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 16 | 15 | 3 | 4 | 4 | 2 | 7 | 4 | 1 | 2 | 2 | 29 | 46 | 63 | 41 | 25 | 264 |
| 6 - 15 | 4 | 7 | 3 | 4 | 4 | 19 | 30 | 13 | 11 | 12 | 11 | 55 | 48 | 34 | 17 | 18 | 290 |
| 16 - 25 | 3 | 3 | 4 | 0 | 0 | 4 | 8 | 2 | 1 | 2 | 5 | 20 | 23 | 8 | 7 | 9 | 99 |
| 26 - 80 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 6 | 13 | 1 | 1 | 1 | 30 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 26 | 10 | 8 | 9 | 25 | 45 | 20 | 14 | 17 | 20 | 110 | 130 | 106 | 66 | 53 | 683 |

Total Number of Valid Hours: 683

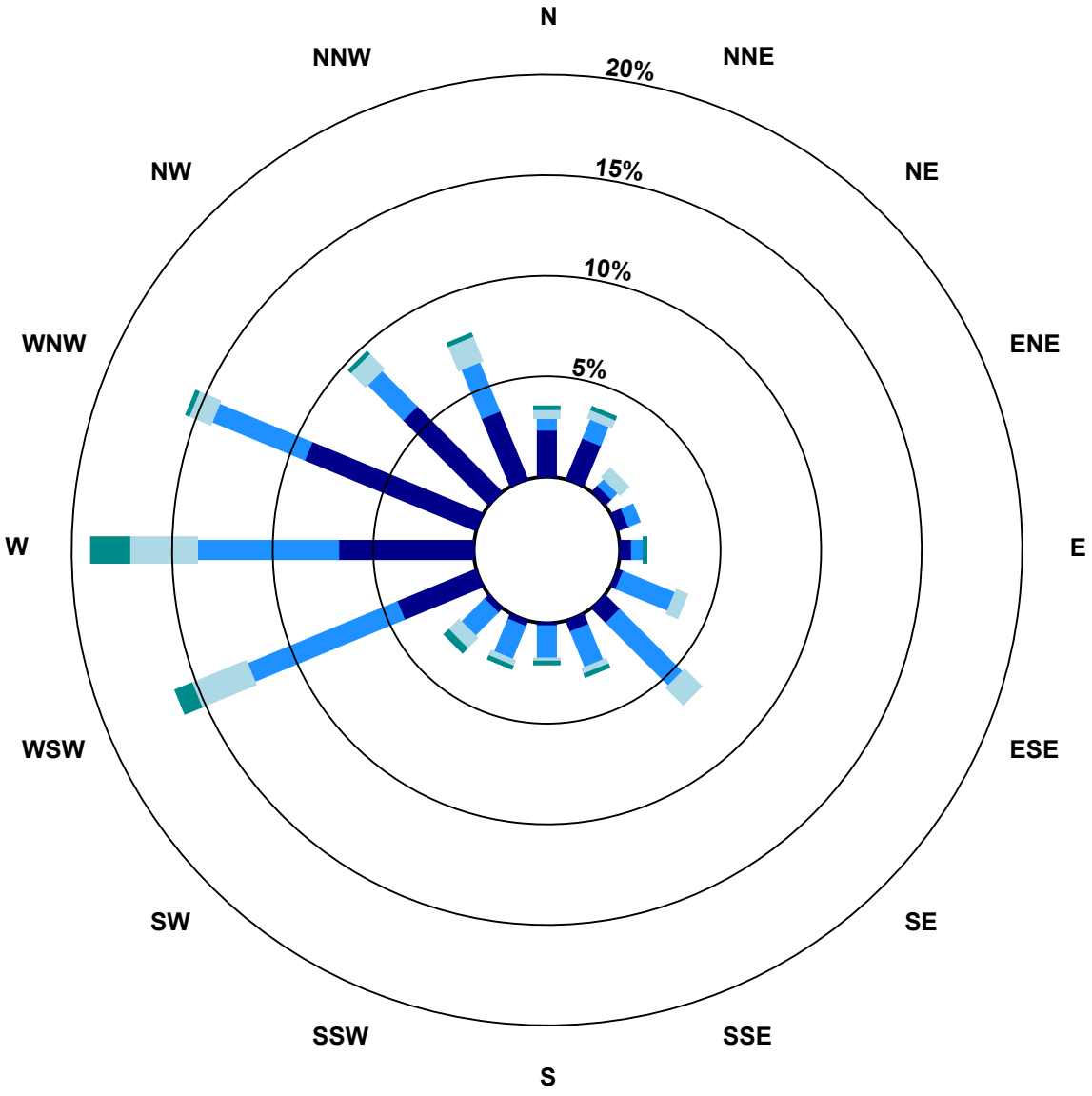
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Surmont 2




Classes ($\mu g/m^3$)

0 - 5

6 - 15

16 - 25

26 - 80

> 81.0

Total Number of Valid Hours: 683

Maximum Value: 28.3 C on Aug 1 17:00

Maximum Daily Average: 20.9 C on Aug 1

Minimum Value: 4.1 C on Aug 4 03:00

Minimum Daily Average: 11.6 C on Aug 12

Maximum Diurnal Average: 21.2 C at hour 16

Minimum Diurnal Average: 10.2 C at hour 5

Monthly Average: 15.41 C

Percentiles: $P_1$ = 4.9 $P_{10}$ = 8.8 $Q_1$ = 11.5 Median = 15.0 $Q_3$ = 19.3 $P_{90}$ = 22.2 $P_{99}$ = 27.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

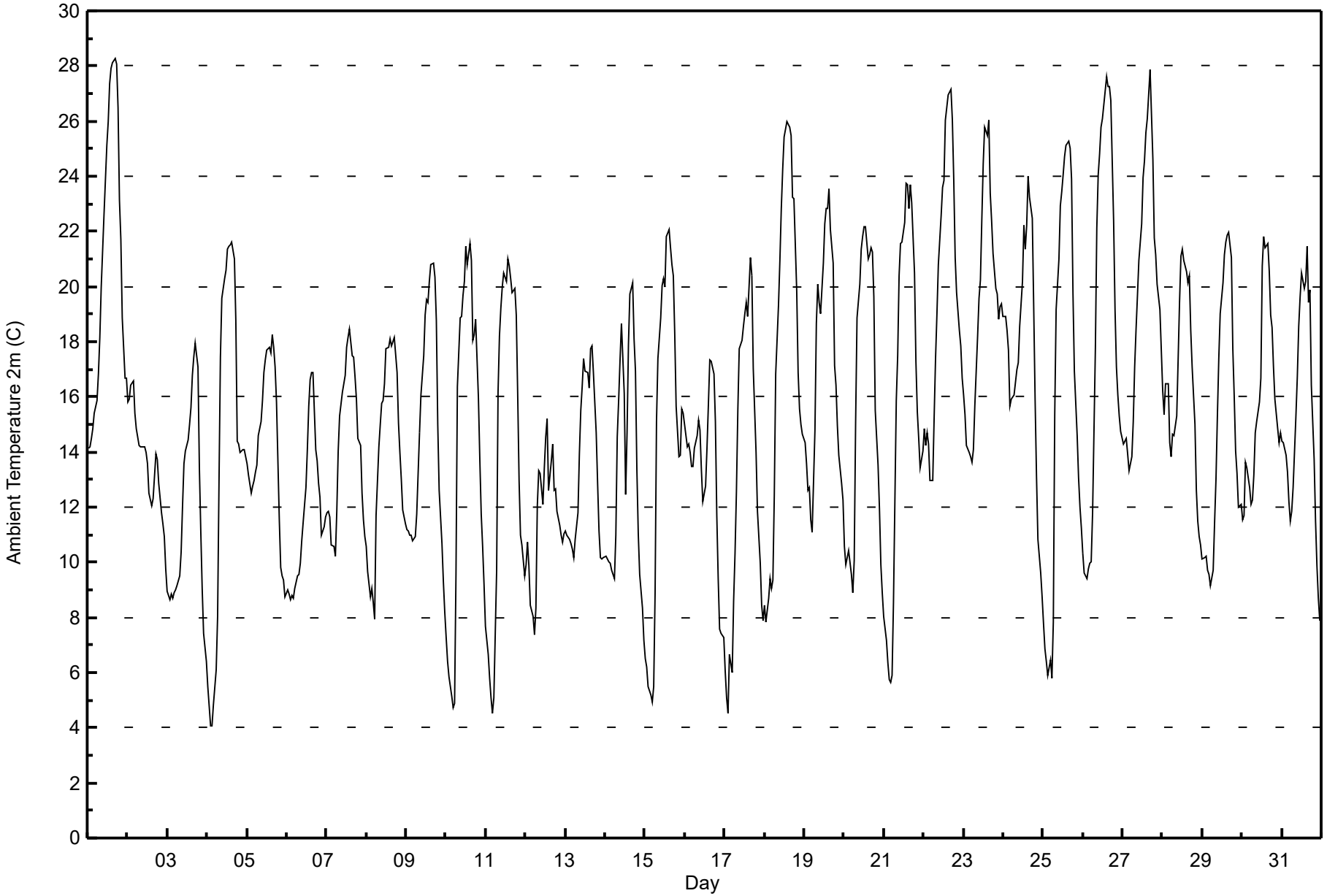
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 14.1 | 14.2 | 14.5 | 14.9 | 15.4 | 15.9 | 16.9 | 18.1 | 20.0 | 21.3 | 22.6 | 25.1 | 26.0 | 27.4 | 27.9 | 28.1 | 28.3 | 28.1 | 26.5 | 23.1 | 21.7 | 18.8 | 16.7 | 16.7 | 20.9 | 28.3 |
| 2-Aug | 15.8 | 15.9 | 16.4 | 16.6 | 15.4 | 14.8 | 14.5 | 14.2 | 14.2 | 14.2 | 14.2 | 14.0 | 13.6 | 12.5 | 12.1 | 12.3 | 13.1 | 13.9 | 13.8 | 12.8 | 11.8 | 11.4 | 10.9 | 9.8 | 13.7 | 16.6 |
| 3-Aug | 9.0 | 8.6 | 8.8 | 8.7 | 8.9 | 9.0 | 9.1 | 9.5 | 10.4 | 12.1 | 13.6 | 14.0 | 14.4 | 15.0 | 15.6 | 16.8 | 17.4 | 17.9 | 17.1 | 13.4 | 11.2 | 9.1 | 7.4 | 6.4 | 11.8 | 17.9 |
| 4-Aug | 5.5 | 4.8 | 4.1 | 4.1 | 4.8 | 6.1 | 8.0 | 12.9 | 17.4 | 19.6 | 20.3 | 20.6 | 21.3 | 21.4 | 21.5 | 21.6 | 21.0 | 18.8 | 14.4 | 14.3 | 14.0 | 14.1 | 14.1 | 13.8 | 14.1 | 21.6 |
| 5-Aug | 13.6 | 13.2 | 12.5 | 12.8 | 13.0 | 13.3 | 13.5 | 14.6 | 15.1 | 15.9 | 16.9 | 17.3 | 17.7 | 17.8 | 17.6 | 18.2 | 17.8 | 17.1 | 15.8 | 11.6 | 9.8 | 9.5 | 9.4 | 8.8 | 14.3 | 18.2 |
| 6-Aug | 9.0 | 8.8 | 8.6 | 8.8 | 8.7 | 9.1 | 9.5 | 9.5 | 10.0 | 10.8 | 11.4 | 12.7 | 14.1 | 15.7 | 16.6 | 16.9 | 16.9 | 14.1 | 13.7 | 12.9 | 12.4 | 11.0 | 11.3 | 11.7 | 11.8 | 16.9 |
| 7-Aug | 11.8 | 11.8 | 11.6 | 10.6 | 10.6 | 10.2 | 11.8 | 14.0 | 15.3 | 16.2 | 16.5 | 16.8 | 17.8 | 18.2 | 18.5 | 17.5 | 17.4 | 16.7 | 15.9 | 14.5 | 14.2 | 12.5 | 11.5 | 10.9 | 14.3 | 18.5 |
| 8-Aug | 10.6 | 9.6 | 8.8 | 9.1 | 8.5 | 7.9 | 11.7 | 14.2 | 15.0 | 15.8 | 15.9 | 16.5 | 17.7 | 17.8 | 18.1 | 17.8 | 18.0 | 18.1 | 16.9 | 15.0 | 14.0 | 13.0 | 11.9 | 11.4 | 13.9 | 18.1 |
| 9-Aug | 11.2 | 11.1 | 11.0 | 11.0 | 10.8 | 10.9 | 11.8 | 13.2 | 14.7 | 16.0 | 17.5 | 18.9 | 19.5 | 19.4 | 20.2 | 20.8 | 20.8 | 20.4 | 18.8 | 15.0 | 12.6 | 10.7 | 9.3 | 8.2 | 14.7 | 20.8 |
| 10-Aug | 7.3 | 6.4 | 5.9 | 5.2 | 4.7 | 4.9 | 9.5 | 16.4 | 18.9 | 18.9 | 19.7 | 20.2 | 21.4 | 20.8 | 21.6 | 20.9 | 18.1 | 18.3 | 18.8 | 16.0 | 13.7 | 11.8 | 10.6 | 9.2 | 14.1 | 21.6 |
| 11-Aug | 7.7 | 6.7 | 5.8 | 5.1 | 4.5 | 5.1 | 9.7 | 16.2 | 18.2 | 19.2 | 20.0 | 20.5 | 20.2 | 21.0 | 20.8 | 20.3 | 19.8 | 19.9 | 19.0 | 16.1 | 13.0 | 11.0 | 10.6 | 9.5 | 14.2 | 21.0 |
| 12-Aug | 9.9 | 10.7 | 9.9 | 8.4 | 8.1 | 7.4 | 8.4 | 12.1 | 13.3 | 13.2 | 12.1 | 13.4 | 14.5 | 15.2 | 12.6 | 13.7 | 14.3 | 12.6 | 12.7 | 11.9 | 11.4 | 11.0 | 10.7 | 11.0 | 11.6 | 15.2 |
| 13-Aug | 11.1 | 11.0 | 10.9 | 10.7 | 10.5 | 10.2 | 10.8 | 11.8 | 13.9 | 15.5 | 16.4 | 17.4 | 16.9 | 16.9 | 16.3 | 17.7 | 17.9 | 16.9 | 14.7 | 12.9 | 11.1 | 10.2 | 10.1 | 10.2 | 13.4 | 17.9 |
| 14-Aug | 10.2 | 10.1 | 10.0 | 10.0 | 9.7 | 9.4 | 11.0 | 14.5 | 15.9 | 17.4 | 18.6 | 16.1 | 12.5 | 14.7 | 17.9 | 19.8 | 20.1 | 18.1 | 16.9 | 13.4 | 11.1 | 9.5 | 8.3 | 7.2 | 13.4 | 20.1 |
| 15-Aug | 6.5 | 6.2 | 5.5 | 5.2 | 5.0 | 5.5 | 8.9 | 15.1 | 17.4 | 18.9 | 20.1 | 20.3 | 20.0 | 21.8 | 22.1 | 21.4 | 20.8 | 20.4 | 18.3 | 15.7 | 13.8 | 13.9 | 15.6 | 15.4 | 14.7 | 22.1 |
| 16-Aug | 15.0 | 14.2 | 14.3 | 14.0 | 13.5 | 13.5 | 14.2 | 14.6 | 15.2 | 14.8 | 13.4 | 12.2 | 12.7 | 14.1 | 15.7 | 17.3 | 17.3 | 16.8 | 15.1 | 11.7 | 9.4 | 7.6 | 7.4 | 7.3 | 13.4 | 17.3 |
| 17-Aug | 6.0 | 5.1 | 4.5 | 6.6 | 6.0 | 8.6 | 10.3 | 12.5 | 15.5 | 17.8 | 18.1 | 18.5 | 19.0 | 19.4 | 18.9 | 21.0 | 20.4 | 17.1 | 15.5 | 14.0 | 11.8 | 10.0 | 8.4 | 7.9 | 13.0 | 21.0 |
| 18-Aug | 8.4 | 7.8 | 8.7 | 9.4 | 9.1 | 9.4 | 12.4 | 16.8 | 19.3 | 21.0 | 22.8 | 24.2 | 25.4 | 26.0 | 25.9 | 25.8 | 25.5 | 23.2 | 23.2 | 19.8 | 16.9 | 15.6 | 15.0 | 14.7 | 17.8 | 26.0 |
| 19-Aug | 14.3 | 13.6 | 12.6 | 12.7 | 11.6 | 11.1 | 14.8 | 18.7 | 20.1 | 19.4 | 19.0 | 20.9 | 22.3 | 22.9 | 22.8 | 23.5 | 22.1 | 20.8 | 17.2 | 16.4 | 15.0 | 13.9 | 12.9 | 12.2 | 17.1 | 23.5 |
| 20-Aug | 10.6 | 9.9 | 10.2 | 10.4 | 9.5 | 8.9 | 10.1 | 15.1 | 18.9 | 20.1 | 21.4 | 21.8 | 22.2 | 22.2 | 21.0 | 21.1 | 21.4 | 21.2 | 19.6 | 15.5 | 13.5 | 11.9 | 9.9 | 8.9 | 15.6 | 22.2 |
| 21-Aug | 8.1 | 7.2 | 6.4 | 5.7 | 5.7 | 5.9 | 8.6 | 15.9 | 17.5 | 20.4 | 21.6 | 21.6 | 22.3 | 23.7 | 23.7 | 22.8 | 23.7 | 23.1 | 20.5 | 17.3 | 15.5 | 14.5 | 13.4 | 14.0 | 15.8 | 23.7 |
| 22-Aug | 14.9 | 14.2 | 14.7 | 14.3 | 13.0 | 13.0 | 15.2 | 17.4 | 19.0 | 20.8 | 22.6 | 23.6 | 23.8 | 26.0 | 26.5 | 27.0 | 27.2 | 26.0 | 23.9 | 21.1 | 19.8 | 18.4 | 17.8 | 16.7 | 19.9 | 27.2 |
| 23-Aug | 16.1 | 15.3 | 14.2 | 14.0 | 13.8 | 13.6 | 14.1 | 15.6 | 18.2 | 19.6 | 20.2 | 22.4 | 24.5 | 25.8 | 25.5 | 26.0 | 23.4 | 22.4 | 21.2 | 19.9 | 19.7 | 18.8 | 19.3 | 19.4 | 19.3 | 26.0 |
| 24-Aug | 18.9 | 18.9 | 18.4 | 17.7 | 15.7 | 15.9 | 16.1 | 16.5 | 17.0 | 17.3 | 18.5 | 20.2 | 22.2 | 21.3 | 22.2 | 24.0 | 23.3 | 22.5 | 19.3 | 15.9 | 13.1 | 10.8 | 9.6 | 8.8 | 17.7 | 24.0 |
| 25-Aug | 7.8 | 6.9 | 6.4 | 5.9 | 6.5 | 5.8 | 7.8 | 15.3 | 19.2 | 21.0 | 22.9 | 23.5 | 24.1 | 24.7 | 25.1 | 25.3 | 25.0 | 23.9 | 19.8 | 16.9 | 14.6 | 13.1 | 12.0 | 11.2 | 16.0 | 25.3 |
| 26-Aug | 10.3 | 9.6 | 9.4 | 9.8 | 9.9 | 10.0 | 11.8 | 17.8 | 22.1 | 24.1 | 24.8 | 25.8 | 26.1 | 27.1 | 27.6 | 27.3 | 27.3 | 26.7 | 22.4 | 19.2 | 17.1 | 16.1 | 15.3 | 14.7 | 18.8 | 27.6 |
| 27-Aug | 14.3 | 14.4 | 14.5 | 13.9 | 13.3 | 13.8 | 15.1 | 17.1 | 18.4 | 19.7 | 21.0 | 22.3 | 23.9 | 24.5 | 25.6 | 26.1 | 27.9 | 26.2 | 24.6 | 21.7 | 21.2 | 20.1 | 19.1 | 17.7 | 19.9 | 27.9 |
| 28-Aug | 16.2 | 15.4 | 16.5 | 16.5 | 14.3 | 13.9 | 14.6 | 14.6 | 15.3 | 17.3 | 19.4 | 21.1 | 21.3 | 20.9 | 20.5 | 20.1 | 20.4 | 18.4 | 17.1 | 15.0 | 12.6 | 11.5 | 10.9 | 10.6 | 16.4 | 21.3 |
| 29-Aug | 10.1 | 10.2 | 10.2 | 9.7 | 9.5 | 9.1 | 9.7 | 11.5 | 13.0 | 15.3 | 17.4 | 19.0 | 20.1 | 21.1 | 21.6 | 21.9 | 22.0 | 21.0 | 17.7 | 16.0 | 14.0 | 13.2 | 12.0 | 12.1 | 14.9 | 22.0 |
| 30-Aug | 11.6 | 11.7 | 13.6 | 13.4 | 12.7 | 12.1 | 12.2 | 13.2 | 14.7 | 15.1 | 15.8 | 16.7 | 20.7 | 21.8 | 21.4 | 21.6 | 20.6 | 19.0 | 18.5 | 17.1 | 15.9 | 14.8 | 14.4 | 14.7 | 16.0 | 21.8 |
| 31-Aug | 14.4 | 14.3 | 13.9 | 13.3 | 12.2 | 11.5 | 11.8 | 12.7 | 15.3 | 16.7 | 18.6 | 19.6 | 20.5 | 19.9 | 20.2 | 21.4 | 19.4 | 19.9 | 16.4 | 13.8 | 11.5 | 9.9 | 8.7 | 7.9 | 15.2 | 21.4 |
| | 11.3 | 10.9 | 10.7 | 10.6 | 10.2 | 10.2 | 11.7 | 14.6 | 16.4 | 17.6 | 18.5 | 19.3 | 20.0 | 20.6 | 20.8 | 21.2 | 20.9 | 20.0 | 18.2 | 15.8 | 14.1 | 12.8 | 12.1 | 11.6 | Diurnal Average | |
| | 18.9 | 18.9 | 18.4 | 17.7 | 15.7 | 15.9 | 16.9 | 18.7 | 22.1 | 24.1 | 24.8 | 25.8 | 26.1 | 27.4 | 27.9 | 28.1 | 28.3 | 28.1 | 26.5 | 23.1 | 21.7 | 20.1 | 19.3 | 19.4 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Surmont 2 - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 126 | 16.94 | 16.94 |
| 10 - 20 | 459 | 61.69 | 78.63 |
| > 20 | 159 | 21.37 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 99.6 % on Aug 4 05:00

Maximum Daily Average: 90.0 % on Aug 2

Minimum Value: 31.0 % on Aug 24 16:00

Minimum Daily Average: 63.3 % on Aug 24

Maximum Diurnal Average: 93.4 % at hour 5

Minimum Diurnal Average: 50.7 % at hour 16

Monthly Average: 75.10 %

Percentiles: $P_1$ = 37.1 $P_{10}$ = 47.4 $Q_1$ = 57.5 Median = 79.4 $Q_3$ = 93.0 $P_{90}$ = 97.3 $P_{99}$ = 99.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

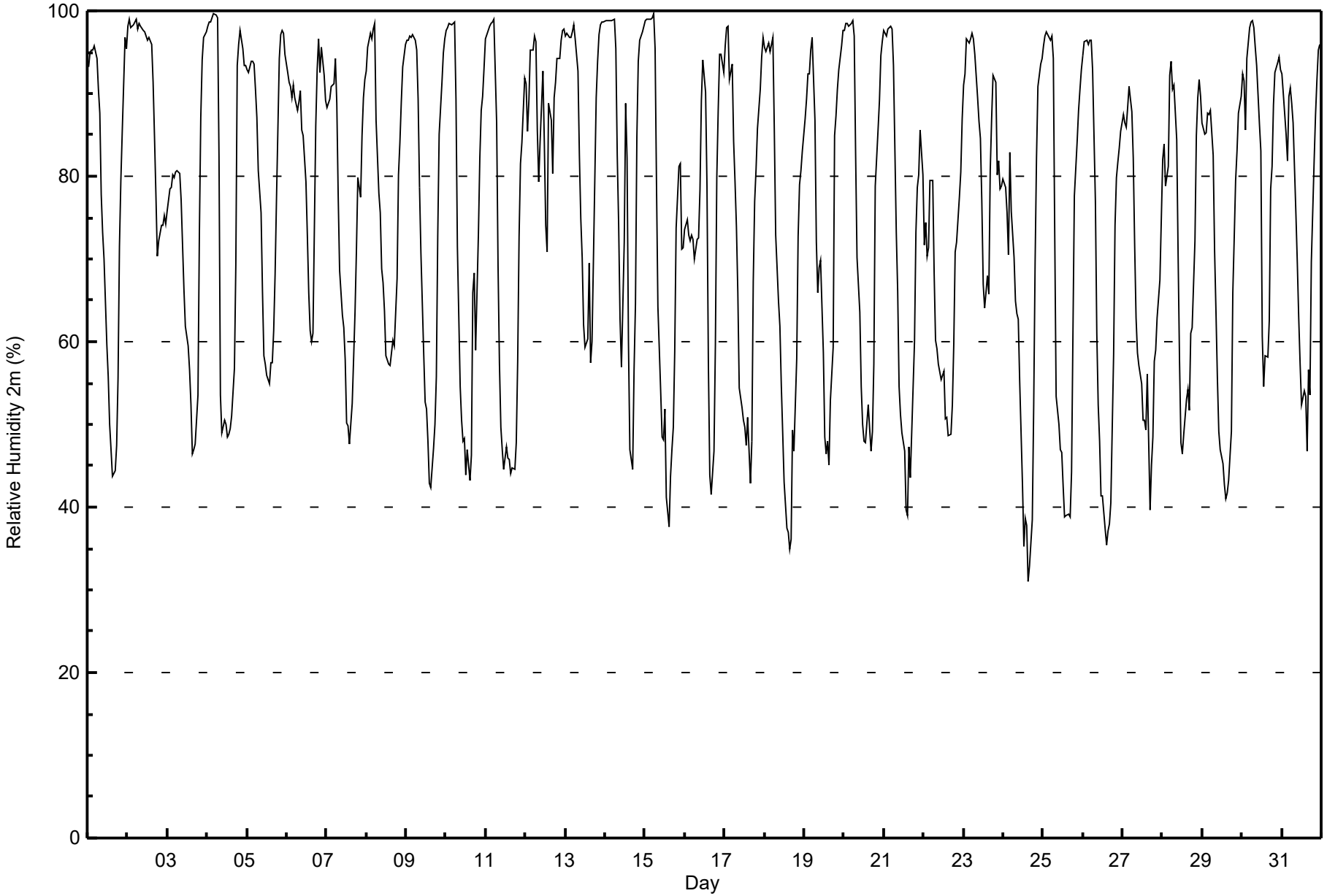
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 93.2 | 95.0 | 95.3 | 95.3 | 95.7 | 94.2 | 90.6 | 87.7 | 77.8 | 73.3 | 70.0 | 59.7 | 55.8 | 49.9 | 46.9 | 43.7 | 44.4 | 47.4 | 55.7 | 71.5 | 79.4 | 85.5 | 96.8 | 95.5 | 75.0 | 96.8 |
| 2-Aug | 98.1 | 99.1 | 98.0 | 98.2 | 98.7 | 99.0 | 97.8 | 98.4 | 98.2 | 97.7 | 97.5 | 97.0 | 96.5 | 96.8 | 95.9 | 91.3 | 84.7 | 77.8 | 70.3 | 72.2 | 74.1 | 74.0 | 75.3 | 74.2 | 90.0 | 99.1 |
| 3-Aug | 75.8 | 78.5 | 78.6 | 80.2 | 79.8 | 80.4 | 80.7 | 80.3 | 77.2 | 71.7 | 66.3 | 61.8 | 59.4 | 56.6 | 52.4 | 46.4 | 46.9 | 47.7 | 53.5 | 73.0 | 87.2 | 94.0 | 96.8 | 97.5 | 71.8 | 97.5 |
| 4-Aug | 98.2 | 98.7 | 98.7 | 99.2 | 99.6 | 99.6 | 99.2 | 82.4 | 53.5 | 49.0 | 50.5 | 49.9 | 48.5 | 48.9 | 49.6 | 51.1 | 56.7 | 69.3 | 93.4 | 96.0 | 97.7 | 95.4 | 93.4 | 93.3 | 78.0 | 99.6 |
| 5-Aug | 92.8 | 92.5 | 93.9 | 93.9 | 93.5 | 90.6 | 87.0 | 80.6 | 75.6 | 66.1 | 58.3 | 57.3 | 55.9 | 55.0 | 57.4 | 57.5 | 61.4 | 68.2 | 77.3 | 94.2 | 97.2 | 97.6 | 97.3 | 94.8 | 79.0 | 97.6 |
| 6-Aug | 92.5 | 91.3 | 90.9 | 89.5 | 91.1 | 89.4 | 88.0 | 89.0 | 90.4 | 85.7 | 85.0 | 79.4 | 72.9 | 66.0 | 61.3 | 60.0 | 61.1 | 86.1 | 92.9 | 96.6 | 92.6 | 95.5 | 92.1 | 89.2 | 84.5 | 96.6 |
| 7-Aug | 88.4 | 88.8 | 89.4 | 90.9 | 91.1 | 94.2 | 88.8 | 77.6 | 68.6 | 63.2 | 61.7 | 57.8 | 50.1 | 49.8 | 47.7 | 52.5 | 58.0 | 63.6 | 71.1 | 79.8 | 77.5 | 84.9 | 89.5 | 91.7 | 74.0 | 94.2 |
| 8-Aug | 92.7 | 95.7 | 97.2 | 96.7 | 97.7 | 98.4 | 86.7 | 78.0 | 75.5 | 68.8 | 67.2 | 63.8 | 58.3 | 57.4 | 57.1 | 58.7 | 60.1 | 59.6 | 67.7 | 80.1 | 84.0 | 89.0 | 93.2 | 95.9 | 78.3 | 98.4 |
| 9-Aug | 96.5 | 96.5 | 96.9 | 96.8 | 97.1 | 96.4 | 95.2 | 89.3 | 78.6 | 70.6 | 58.5 | 52.7 | 51.8 | 48.0 | 42.8 | 42.4 | 47.1 | 50.0 | 55.8 | 72.9 | 85.1 | 91.3 | 94.9 | 96.6 | 75.2 | 97.1 |
| 10-Aug | 97.6 | 98.0 | 98.5 | 98.2 | 98.6 | 98.7 | 89.3 | 71.6 | 54.5 | 50.5 | 48.0 | 48.3 | 44.0 | 46.9 | 43.2 | 46.3 | 65.9 | 68.3 | 58.9 | 73.1 | 82.3 | 87.9 | 89.7 | 93.0 | 73.0 | 98.7 |
| 11-Aug | 96.7 | 97.7 | 98.1 | 98.4 | 98.6 | 99.1 | 86.4 | 69.1 | 57.3 | 49.6 | 46.9 | 44.6 | 47.4 | 46.0 | 45.8 | 44.0 | 44.8 | 44.6 | 47.8 | 57.6 | 72.7 | 81.5 | 84.1 | 91.9 | 68.8 | 99.1 |
| 12-Aug | 91.1 | 85.5 | 89.1 | 95.3 | 95.3 | 96.9 | 96.3 | 85.6 | 79.2 | 84.2 | 92.6 | 84.1 | 74.0 | 70.8 | 88.9 | 86.8 | 80.4 | 89.6 | 91.3 | 94.2 | 94.3 | 96.4 | 97.6 | 97.8 | 89.1 | 97.8 |
| 13-Aug | 97.0 | 97.3 | 96.9 | 96.8 | 97.5 | 98.2 | 96.7 | 92.7 | 82.6 | 74.8 | 70.2 | 62.1 | 59.3 | 60.3 | 69.5 | 57.4 | 59.9 | 69.7 | 89.5 | 93.8 | 97.0 | 98.4 | 98.6 | 98.7 | 84.0 | 98.7 |
| 14-Aug | 98.8 | 98.8 | 98.9 | 98.9 | 98.9 | 98.9 | 95.5 | 82.6 | 74.2 | 62.7 | 57.0 | 72.0 | 88.8 | 82.2 | 59.9 | 46.9 | 44.5 | 56.5 | 64.6 | 84.8 | 94.0 | 96.5 | 97.4 | 98.1 | 81.3 | 98.9 |
| 15-Aug | 98.7 | 99.1 | 99.0 | 99.0 | 99.2 | 99.6 | 95.4 | 79.0 | 64.2 | 53.9 | 48.5 | 48.1 | 51.8 | 41.2 | 37.6 | 43.7 | 47.0 | 49.6 | 58.8 | 73.7 | 81.2 | 81.5 | 71.2 | 71.3 | 70.5 | 99.6 |
| 16-Aug | 73.5 | 74.7 | 72.8 | 72.2 | 72.9 | 72.4 | 70.1 | 72.3 | 72.5 | 78.3 | 89.2 | 94.0 | 90.2 | 78.9 | 57.3 | 43.9 | 41.5 | 46.8 | 59.7 | 79.9 | 88.0 | 94.7 | 94.7 | 92.6 | 74.3 | 94.7 |
| 17-Aug | 95.8 | 98.0 | 98.1 | 91.7 | 93.6 | 84.3 | 79.4 | 73.9 | 65.9 | 54.4 | 52.0 | 50.5 | 49.7 | 47.5 | 50.9 | 42.9 | 48.0 | 67.2 | 77.0 | 80.8 | 85.8 | 90.5 | 94.4 | 96.8 | 73.7 | 98.1 |
| 18-Aug | 95.5 | 95.1 | 96.2 | 95.1 | 95.9 | 96.9 | 85.7 | 72.8 | 64.8 | 61.8 | 54.7 | 49.0 | 43.1 | 37.4 | 36.9 | 34.9 | 36.2 | 49.4 | 46.8 | 58.0 | 72.8 | 79.0 | 80.8 | 83.0 | 67.6 | 96.9 |
| 19-Aug | 86.9 | 89.2 | 92.3 | 92.4 | 95.3 | 96.7 | 86.8 | 72.1 | 66.0 | 69.1 | 69.9 | 58.6 | 48.5 | 46.4 | 48.0 | 45.2 | 52.8 | 59.3 | 84.8 | 87.3 | 90.4 | 92.9 | 95.8 | 97.6 | 76.0 | 97.6 |
| 20-Aug | 97.7 | 98.5 | 98.5 | 98.2 | 98.4 | 98.8 | 96.9 | 82.8 | 70.1 | 63.5 | 54.6 | 50.0 | 48.0 | 47.8 | 52.3 | 49.5 | 46.8 | 49.2 | 57.2 | 78.7 | 85.7 | 89.2 | 94.5 | 96.3 | 75.1 | 98.8 |
| 21-Aug | 97.6 | 96.9 | 97.7 | 98.0 | 98.2 | 97.8 | 93.3 | 73.3 | 66.1 | 54.6 | 51.3 | 49.0 | 46.7 | 39.7 | 39.1 | 47.4 | 43.5 | 49.0 | 59.9 | 73.3 | 78.6 | 80.2 | 85.5 | 80.1 | 70.7 | 98.2 |
| 22-Aug | 71.7 | 74.4 | 70.3 | 71.4 | 79.5 | 79.5 | 68.2 | 60.1 | 59.1 | 57.3 | 55.4 | 55.9 | 56.5 | 50.6 | 50.8 | 48.6 | 48.7 | 52.4 | 59.6 | 70.8 | 72.0 | 77.4 | 80.6 | 86.9 | 64.9 | 86.9 |
| 23-Aug | 91.0 | 92.4 | 96.5 | 96.1 | 96.7 | 97.3 | 96.6 | 94.7 | 89.5 | 86.6 | 84.6 | 77.0 | 66.9 | 64.0 | 68.0 | 65.8 | 80.7 | 87.0 | 92.1 | 91.4 | 80.1 | 81.9 | 78.5 | 78.8 | 84.8 | 97.3 |
| 24-Aug | 79.7 | 78.6 | 75.7 | 70.5 | 82.9 | 75.8 | 70.1 | 65.0 | 63.4 | 62.7 | 55.2 | 42.8 | 35.2 | 38.6 | 37.8 | 31.0 | 33.0 | 38.4 | 52.3 | 69.5 | 82.1 | 90.8 | 93.6 | 94.2 | 63.3 | 94.2 |
| 25-Aug | 95.7 | 96.9 | 97.5 | 97.1 | 96.4 | 97.0 | 94.2 | 73.1 | 53.5 | 50.0 | 47.0 | 46.6 | 42.5 | 38.8 | 39.0 | 39.1 | 38.9 | 44.3 | 61.2 | 77.6 | 84.2 | 87.9 | 90.5 | 93.0 | 70.1 | 97.5 |
| 26-Aug | 94.6 | 96.3 | 96.5 | 95.9 | 96.5 | 96.4 | 92.9 | 77.0 | 61.0 | 52.4 | 47.9 | 41.3 | 41.3 | 37.2 | 35.4 | 37.0 | 37.9 | 40.6 | 58.4 | 74.1 | 79.8 | 81.7 | 83.4 | 85.4 | 68.4 | 96.5 |
| 27-Aug | 87.4 | 86.5 | 85.9 | 88.4 | 90.8 | 87.7 | 82.2 | 71.7 | 62.9 | 58.6 | 57.0 | 54.9 | 50.4 | 50.5 | 49.2 | 56.1 | 39.7 | 45.1 | 48.4 | 57.7 | 58.9 | 62.9 | 67.4 | 74.7 | 65.6 | 90.8 |
| 28-Aug | 82.0 | 83.9 | 78.8 | 81.2 | 92.3 | 93.9 | 90.6 | 91.0 | 84.4 | 70.3 | 57.6 | 47.7 | 46.5 | 48.8 | 53.1 | 54.2 | 51.7 | 61.0 | 61.7 | 72.1 | 84.9 | 89.6 | 91.7 | 89.7 | 73.3 | 93.9 |
| 29-Aug | 86.5 | 85.1 | 85.2 | 87.6 | 87.4 | 87.9 | 82.6 | 71.0 | 63.5 | 55.5 | 49.1 | 47.0 | 45.2 | 42.8 | 41.0 | 41.7 | 43.2 | 49.2 | 65.9 | 72.6 | 79.6 | 83.1 | 87.6 | 89.6 | 67.9 | 89.6 |
| 30-Aug | 92.4 | 91.5 | 85.6 | 94.3 | 97.9 | 98.6 | 98.8 | 98.1 | 95.7 | 93.4 | 86.3 | 83.1 | 60.8 | 54.6 | 58.4 | 58.1 | 62.5 | 78.5 | 81.2 | 88.7 | 92.6 | 93.8 | 94.5 | 92.9 | 84.7 | 98.8 |
| 31-Aug | 92.4 | 90.0 | 85.0 | 81.8 | 89.6 | 90.8 | 88.8 | 86.5 | 75.4 | 69.5 | 62.9 | 57.4 | 52.3 | 54.0 | 53.4 | 46.8 | 56.6 | 53.6 | 69.6 | 81.9 | 87.5 | 91.8 | 95.2 | 95.9 | 75.4 | 95.9 |
| | 91.2 | 91.6 | 91.4 | 91.6 | 93.4 | 93.1 | 88.7 | 80.0 | 71.7 | 66.4 | 63.0 | 59.5 | 56.1 | 53.3 | 52.5 | 50.7 | 52.4 | 58.7 | 67.2 | 78.3 | 83.8 | 87.6 | 89.6 | 90.5 | Diurnal Average | |
| | 98.8 | 99.1 | 99.0 | 99.2 | 99.6 | 99.6 | 99.2 | 98.4 | 98.2 | 97.7 | 97.5 | 97.0 | 96.5 | 96.8 | 95.9 | 91.3 | 84.7 | 89.6 | 93.4 | 96.6 | 97.7 | 98.4 | 98.6 | 98.7 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Surmont 2 - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 22 | 2.96 | 2.96 |
| 40 - 60 | 195 | 26.21 | 29.17 |
| 60 - 80 | 164 | 22.04 | 51.21 |
| 80 - 100 | 363 | 48.79 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Surmont 2 - August 2026

Maximum Speed: 13 km/h on Aug 1 15:00

Maximum Daily Speed Average: 8.0 km/h on Aug 6

Minimum Speed Value: 0 km/h on Aug 1 02:00

Minimum Daily Speed Average: 0.8 km/h on Aug 30

Maximum Diurnal Speed Average: 3.2 km/h at hour 12

Minimum Diurnal Speed Average: 2.0 km/h at hour 18

Monthly Average Velocity: 2.4 km/h 289.2 deg

Percentiles: $P_1 = 0$ $P_{10} = 1$ $Q_1 = 2$ Median = 4 $Q_3 = 7$ $P_{90} = 9$ $P_{99} = 12$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 684 |
| Hours of Missing Data: | 60 |
| Percent Operational Time: | 91.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSW1 | SSE0 | NNW0 | NNW0 | UO | SSW1 | S2 | ESE2 | ESE5 | ESE6 | ESE8 | SE9 | ESE12 | ESE13 | ESE13 | SE12 | SE11 | SE7 | S4 | W2 | SW1 | W6 | SSE4 | WSW5 | SE4.2 | ESE13 |
| 2-Aug | SSW4 | W3 | W3 | N2 | NNW5 | NW6 | WNW8 | NW8 | NW7 | NNW8 | NNW9 | NNW10 | NNW12 | NW12 | NW12 | NW12 | NW11 | NNW10 | NNW10 | NW8 | WNW7 | NW7 | NW8 | WNW8 | NW7.5 | NW12 |
| 3-Aug | WNW7 | WNW7 | WNW8 | W7 | WNW7 | WNW7 | W7 | WNW7 | WNW8 | NW7 | NW9 | NNW9 | NW9 | NNW9 | NW8 | NNW8 | NNW5 | NNE4 | N3 | W3 | WSW3 | WSW2 | UO | WSW1 | NW5.7 | NW9 |
| 4-Aug | WSW1 | WSW1 | WSW1 | WSW1 | UO | WSW1 | ESE1 | W2 | W8 | WSW8 | W10 | WNW11 | W11 | W11 | WSW10 | WSW9 | W8 | W9 | W4 | W3 | NW1 | W6 | WNW7 | WNW7 | W5.5 | WNW11 |
| 5-Aug | WNW6 | WNW6 | W5 | W6 | W7 | WNW8 | WNW8 | WNW9 | WNW11 | NW12 | WNW11 | WNW10 | NW9 | WNW10 | WNW9 | WNW10 | WNW8 | WNW5 | WNW5 | NNW8 | NW7 | WNW6 | NW6 | WNW8 | WNW7.7 | NW12 |
| 6-Aug | WNW11 | WNW11 | WNW10 | WNW12 | WNW13 | WNW11 | WNW11 | WNW11 | WNW10 | WNW10 | WNW9 | NW10 | NW10 | NW9 | NW8 | NW8 | WNW8 | WNW4 | W3 | W2 | W3 | W3 | W5 | W5 | WNW8.0 | WNW13 |
| 7-Aug | W6 | W5 | WNW5 | W6 | W4 | W3 | WNW3 | WNW7 | WNW8 | NW7 | WNW9 | WNW7 | WNW9 | WNW9 | WNW8 | WNW7 | NNE4 | N4 | NNW2 | WNW3 | N2 | W3 | WSW4 | WSW2 | WNW4.8 | WNW9 |
| 8-Aug | W3 | WSW3 | W2 | UO | UO | WNW1 | NW2 | N6 | NNE7 | N6 | NNW7 | NNW6 | N6 | NNE6 | N5 | WNW3 | N3 | NNW3 | NW3 | W2 | WSW3 | W3 | UO | UO | NNW3.1 | NNE7 |
| 9-Aug | UO | UO | UO | WNW1 | NW0 | W1 | W0 | ENE1 | NNW2 | NW2 | W3 | N4 | NNE3 | NW4 | WNW3 | N4 | NNE6 | NNE4 | NNE3 | WSW3 | WSW3 | WSW2 | W1 | WSW1 | NNW1.6 | NNE6 |
| 10-Aug | WSW1 | UO | WSW1 | WSW1 | WSW1 | UO | UO | NE1 | SE3 | S3 | SSW2 | ENE2 | ENE3 | NNW3 | NW3 | N3 | W3 | W3 | NW3 | W4 | WSW3 | UO | UO | WNW1 | WNW0.8 | W4 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | ENE1 | NNW4 | NNW6 | NNW6 | NNW8 | NNW7 | N8 | N9 | N8 | NNW7 | NNW6 | N5 | WNW4 | W3 | WSW2 | WSW2 | UO | ---- | N9 |
| 12-Aug | W2 | W4 | W2 | WSW1 | W1 | WSW1 | WNW1 | NW3 | NNW6 | N6 | NNW5 | NW7 | NW7 | NNW7 | NNW6 | NW6 | NNW6 | NNW4 | NW5 | NW4 | NW4 | WNW3 | WNW2 | W4 | NW3.6 | NNW7 |
| 13-Aug | WNW4 | WNW3 | WNW3 | WNW3 | WNW3 | WNW3 | WNW3 | NW4 | NNE5 | NNE6 | N6 | NE7 | E10 | NNE7 | NNE6 | NNW5 | NNW5 | ENE4 | WSW3 | W2 | W1 | WNW0 | UO | UO | N2.4 | E10 |
| 14-Aug | UO | UO | UO | UO | UO | UO | ESE1 | ENE1 | NE2 | NW0 | E4 | WSW3 | WSW6 | WNW5 | W3 | NNE2 | N2 | N4 | NNE4 | W3 | WSW2 | WSW2 | WSW1 | UO | ---- | WSW6 |
| 15-Aug | UO | WSW1 | UO | UO | UO | UO | UO | WSW0 | WNW5 | W6 | NW4 | N2 | SSE3 | NE2 | W7 | W4 | W5 | W6 | WSW3 | SW2 | W1 | WNW3 | W6 | W5 | W3.0 | W7 |
| 16-Aug | W5 | W6 | WSW8 | WSW10 | WSW10 | WSW9 | W8 | W8 | NW7 | NNW7 | NW6 | NNW7 | NW6 | WNW6 | NNW7 | NNW9 | NNW9 | NW7 | WNW4 | WSW4 | WSW3 | UO | W3 | WSW3 | WNW5.3 | WSW10 |
| 17-Aug | ESE1 | S0 | SW1 | W5 | WSW3 | W6 | WNW6 | W6 | W6 | NW6 | W9 | NW6 | NW6 | NW5 | WNW4 | N4 | WSW3 | WSW2 | WSW4 | WSW3 | SW3 | WSW2 | WSW1 | SSW1 | WNW3.4 | W9 |
| 18-Aug | SSW1 | ESE2 | ENE1 | ESE2 | ENE2 | SSE2 | ESE3 | SE4 | SSE5 | S5 | WSW7 | WSW6 | W4 | W7 | WSW6 | WSW7 | W7 | W5 | W7 | W5 | WSW5 | W2 | WSW4 | WSW2 | WSW2.5 | WSW7 |
| 19-Aug | NNW1 | WNW2 | SSE1 | E0 | SE1 | E1 | NW2 | WNW3 | W5 | WNW5 | WNW6 | WNW8 | NW8 | W9 | WNW8 | NW8 | WNW6 | W8 | W4 | W3 | W3 | WSW1 | UO | W2 | WNW3.9 | W9 |
| 20-Aug | NW1 | W1 | SW1 | UO | UO | W1 | UO | E2 | NNW3 | NNE4 | WNW4 | N6 | NNW7 | NNW10 | NNW10 | NNW9 | NNW9 | N6 | NNW4 | W3 | W3 | WSW4 | SW2 | WSW1 | NNW3.4 | NNW10 |
| 21-Aug | UO | UO | UO | UO | WSW1 | WSW1 | WSW1 | SSW1 | SW3 | SE4 | S1 | NE1 | ESE4 | SE7 | SE7 | SE5 | SSE6 | S4 | S2 | SW2 | WSW3 | WSW2 | SW1 | SSW3 | SSE1.9 | SE7 |
| 22-Aug | SSE3 | SE5 | SE6 | SE5 | ESE5 | SE5 | SSE5 | S6 | SSE5 | S5 | SE7 | SE7 | SE7 | SE7 | SE8 | SE8 | SE6 | SE7 | SE5 | S4 | SSW4 | S3 | SW3 | SSW2 | SSE4.8 | SE8 |
| 23-Aug | SSW2 | S1 | WSW2 | SSW0 | WSW1 | UO | SW1 | E0 | ESE1 | SSW1 | WNW1 | NE1 | NW3 | NNE4 | NE5 | NE4 | NW2 | W1 | WSW2 | W3 | W5 | WNW3 | WNW4 | WNW5 | WNW1.1 | WNW5 |
| 24-Aug | WNW5 | WNW6 | WNW6 | WNW6 | W6 | WNW6 | NW5 | NW5 | NW6 | WNW5 | NW6 | WNW9 | NW11 | NW8 | NW8 | NNW11 | NNW9 | N5 | W4 | W3 | UO | UO | UO | UO | NW6.2 | NNW11 |
| 25-Aug | W1 | UO | UO | WSW1 | WSW2 | W0 | UO | WNW1 | NNE4 | NNE5 | NNE6 | NE7 | NNE7 | NE7 | NE7 | NNE7 | NNE6 | NNE4 | W3 | WSW4 | WSW3 | WSW2 | WSW2 | W1 | NNE2.2 | NE7 |
| 26-Aug | W1 | WSW2 | WSW1 | WSW2 | WSW1 | WSW1 | WSW0 | E1 | SSE2 | SE6 | SE8 | SE9 | SSE9 | SE8 | SSE8 | SE7 | SE6 | SE5 | SW3 | WSW3 | WSW4 | SW2 | WNW0 | ESE2 | SSE2.8 | SE9 |
| 27-Aug | SSE1 | SE3 | SE3 | SE3 | SSE3 | SE4 | SE5 | SE6 | SE8 | SE9 | SE9 | SSE6 | ESE8 | ESE7 | ESE5 | NNW2 | SE8 | SE6 | SE7 | SE5 | SE7 | ESE8 | ESE7 | SE2 | SE5.2 | SE9 |
| 28-Aug | WSW2 | SSE3 | SW3 | W4 | SSW1 | S2 | SW3 | WSW5 | WSW9 | W10 | WSW9 | WSW10 | WSW12 | WSW11 | WSW11 | WSW11 | WSW10 | WSW10 | W7 | WSW4 | WNW1 | W1 | WSW2 | W4 | WSW5.8 | WSW12 |
| 29-Aug | W5 | W6 | W6 | W5 | W6 | W4 | W6 | W8 | W10 | W10 | W10 | W10 | W9 | WSW10 | WSW11 | WSW7 | WSW5 | SSW3 | SW3 | SW3 | WSW3 | W2 | SW1 | W1 | WSW5.8 | WSW11 |
| 30-Aug | W2 | SSW2 | SSE3 | SSE1 | UO | UO | UO | UO | NNE0 | NNE1 | NW2 | E1 | E5 | ESE6 | ESE5 | ESE5 | SSE2 | WSW1 | W2 | W2 | W0 | WSW2 | WSW3 | WSW3 | SE0.8 | ESE6 |
| 31-Aug | SW2 | WSW3 | W2 | W5 | WSW1 | W4 | WNW3 | WNW4 | WNW6 | WNW6 | NW7 | NW7 | NW6 | WNW5 | W4 | WNW5 | W4 | WNW4 | W3 | W3 | SW2 | SW1 | UO | WSW1 | WNW3.5 | NW7 |
| | W2.4 | W2.3 | W2.3 | W2.6 | W2.7 | W2.6 | W2.5 | WNW2.4 | WNW2.7 | NW2.6 | WNW3.1 | NW3.2 | NW2.8 | NW3.1 | NW2.8 | NW3.1 | NW2.4 | NW2.0 | WNW2.1 | W2.6 | W2.3 | W2.2 | W2.2 | W2.4 | Diurnal Average | |
| | WNW11 | WNW11 | WNW10 | WNW12 | WNW13 | WNW11 | WNW11 | WNW11 | WNW11 | NW12 | WNW11 | WNW11 | WSW12 | ESE13 | ESE13 | NW12 | SE11 | NNW10 | NNW10 | NW8 | SE7 | ESE8 | NW8 | WNW8 | Diurnal Maximum | |

UO - Unstable Operation

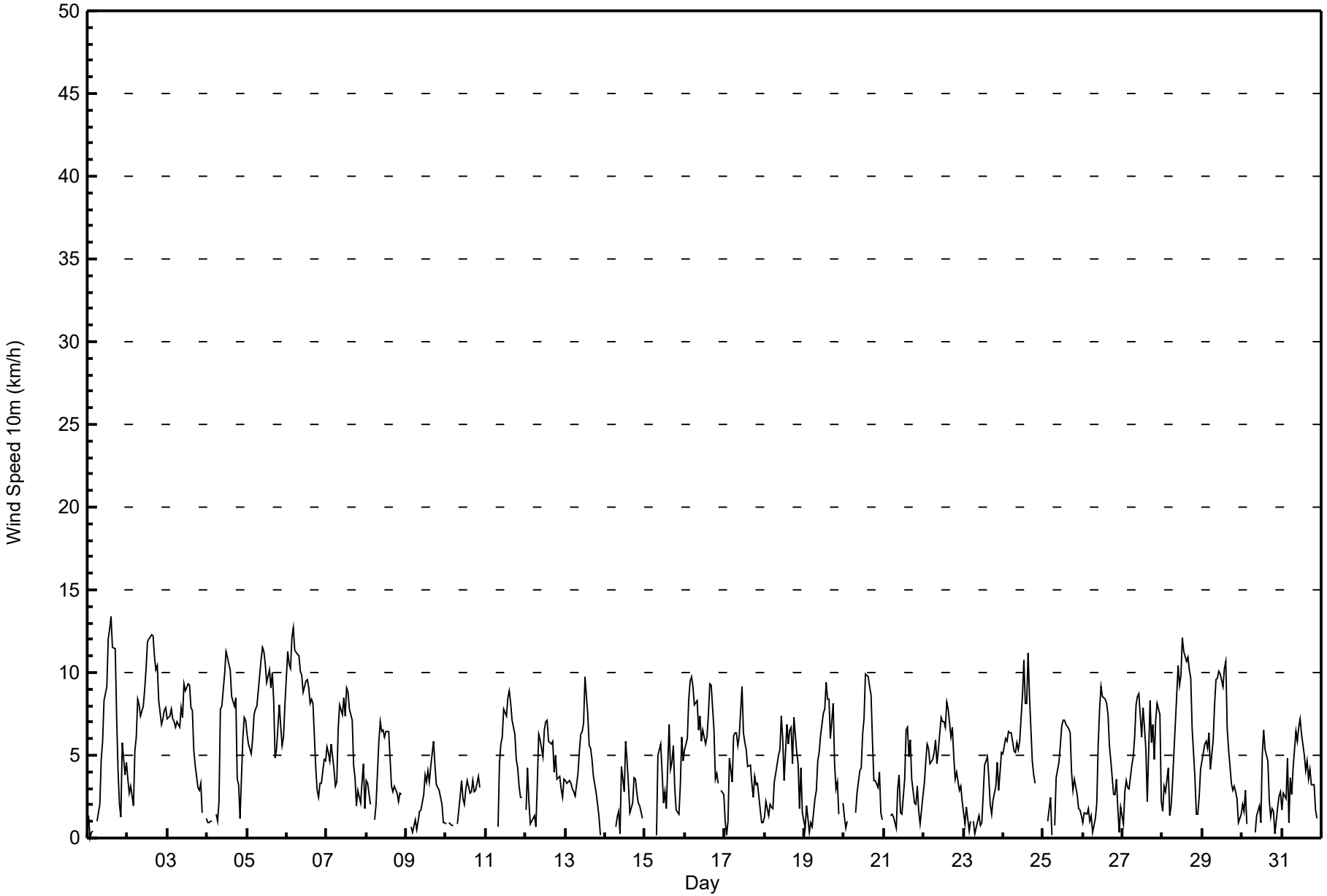
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Surmont 2 - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 410 | 59.94 | 59.94 |
| 6 - 11 | 262 | 38.30 | 98.25 |
| 12 - 19 | 12 | 1.75 | 100.00 |
| 20 - 28 | 0 | 0.00 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 684

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Surmont 2 - August 2026**

| **Wind Speed** | **Wind Direction** | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ranges (km/h)** | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 15 | 16 | 6 | 8 | 8 | 15 | 17 | 16 | 13 | 17 | 20 | 86 | 87 | 46 | 23 | 17 | 410 |
| 6 - 11 | 9 | 10 | 4 | 0 | 1 | 7 | 27 | 5 | 1 | 0 | 0 | 23 | 43 | 58 | 39 | 35 | 262 |
| 12 - 19 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 4 | 1 | 12 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 24 | 26 | 10 | 8 | 9 | 25 | 45 | 21 | 14 | 17 | 20 | 110 | 130 | 106 | 66 | 53 | 684 |

Total Number of Valid Hours: 684

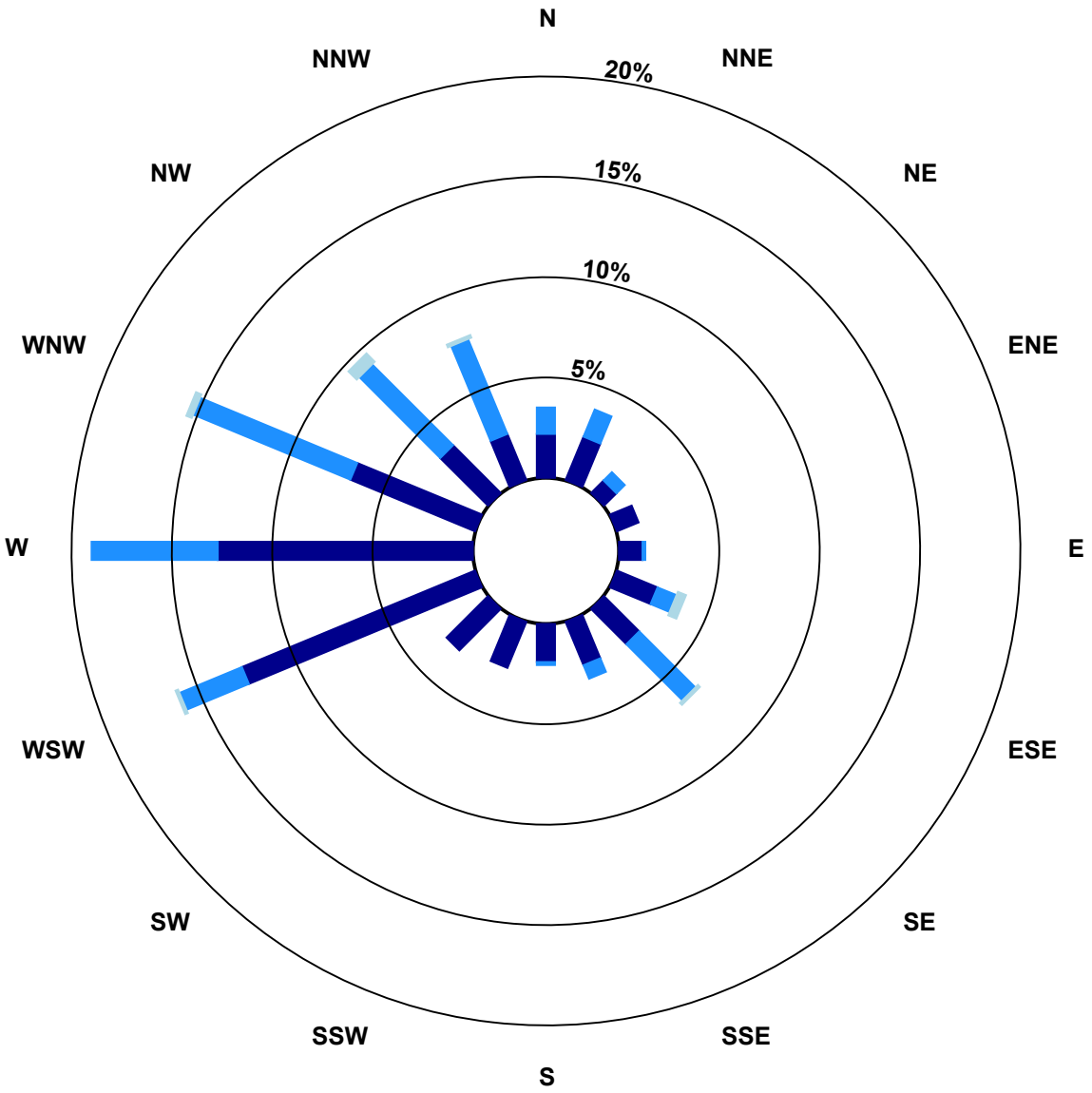
Total Number of Hours: 744

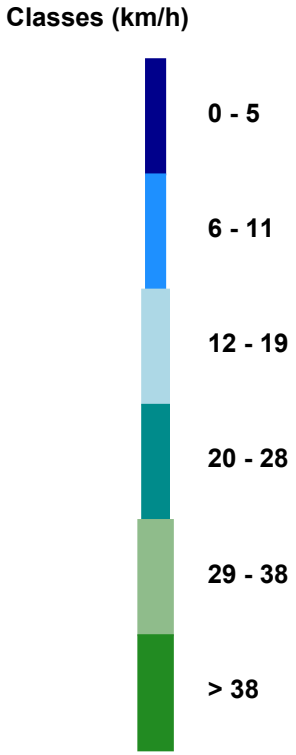
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Surmont 2**




**Total Number of Valid Hours: 684**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6 km/h on Aug 4 18:00

Minimum Value: 0 km/h on Aug 31 19:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 684 |
| Hours of Missing Data: | 60 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 91.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | UO | 1 | 2 | 1 | 2 | 2 | 3 | 5 | 5 | 4 | 5 | 5 | 5 | 3 | 2 | 1 | 2 | 5 | 3 | 3 | 5 |
| 2-Aug | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 3 | 3 | 3 | 3 | 5 |
| 3-Aug | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | UO | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | UO | 1 | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 6 | 2 | 1 | 1 | 3 | 3 | 3 | 6 |
| 5-Aug | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 5 |
| 6-Aug | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 5 |
| 7-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 8-Aug | 1 | 1 | 2 | UO | UO | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | UO | UO | 3 |
| 9-Aug | UO | UO | UO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | UO | 1 | 1 | 1 | UO | UO | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | UO | UO | 1 | 2 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | UO | 4 |
| 12-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 3 |
| 13-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 3 | 5 | 3 | 2 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | UO | UO | 5 |
| 14-Aug | UO | UO | UO | UO | UO | UO | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 1 | 1 | 2 | 1 | UO | 3 |
| 15-Aug | UO | 1 | UO | UO | UO | UO | UO | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 |
| 16-Aug | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 3 | 2 | 1 | 1 | UO | 2 | 3 | 4 |
| 17-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 4 |
| 18-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 1 | 2 | 3 |
| 19-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 2 | 3 | 2 | 1 | 1 | 1 | UO | 1 | 4 |
| 20-Aug | 1 | 1 | 1 | UO | UO | 1 | UO | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 4 |
| 21-Aug | UO | UO | UO | UO | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 22-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 |
| 23-Aug | 1 | 1 | 2 | 1 | 1 | UO | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| 24-Aug | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 4 | 4 | 5 | 4 | 2 | 1 | 1 | UO | UO | UO | UO | 5 |
| 25-Aug | 1 | UO | UO | 1 | 1 | 1 | UO | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 27-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 3 |
| 28-Aug | 1 | 2 | 3 | 4 | 4 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 3 | 3 | 1 | 1 | 1 | 3 | 5 |
| 29-Aug | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 30-Aug | 1 | 1 | 2 | 1 | UO | UO | UO | UO | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 3 |
| 31-Aug | 1 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 1 | 1 | 0 | 1 | 2 | 1 | UO | 1 | 3 |
| | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 4 | 3 | 5 | 4 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Surmont 2 - August 2026

Direction of Maximum Speed: 119 deg on Aug 1 15:00
Direction of Maximum Daily Speed Average: 290.9 deg on Aug 6

Direction of Minimum Speed: 155 deg on Aug 1 02:00

Direction of Minimum Daily Speed Average: 0.8 deg on Aug 30

Monthly Average Direction: 289.2 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 684 |
| Hours of Missing Data: | 60 |
| Percent Operational Time: | 91.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 204 | 155 | 348 | 340 | UO | 193 | 180 | 110 | 108 | 121 | 110 | 127 | 119 | 118 | 119 | 134 | 128 | 144 | 180 | 263 | 232 | 262 | 149 | 254 | 133.8 |
| 2-Aug | 209 | 270 | 279 | 350 | 339 | 308 | 290 | 306 | 324 | 332 | 347 | 343 | 331 | 325 | 315 | 315 | 318 | 329 | 338 | 316 | 303 | 304 | 311 | 303 | 318.6 |
| 3-Aug | 291 | 292 | 287 | 279 | 285 | 293 | 281 | 285 | 297 | 326 | 325 | 344 | 317 | 333 | 318 | 330 | 347 | 14 | 356 | 276 | 258 | 257 | UO | 240 | 308.5 |
| 4-Aug | 246 | 245 | 258 | 254 | UO | 253 | 108 | 264 | 264 | 258 | 268 | 282 | 279 | 268 | 251 | 258 | 267 | 271 | 272 | 275 | 306 | 277 | 288 | 295 | 270.2 |
| 5-Aug | 284 | 288 | 279 | 277 | 280 | 282 | 283 | 290 | 293 | 311 | 301 | 296 | 309 | 294 | 290 | 284 | 283 | 285 | 300 | 343 | 322 | 289 | 308 | 291 | 294.9 |
| 6-Aug | 291 | 290 | 293 | 285 | 285 | 288 | 284 | 285 | 287 | 292 | 300 | 309 | 306 | 307 | 305 | 315 | 289 | 301 | 266 | 260 | 267 | 262 | 261 | 275 | 290.9 |
| 7-Aug | 269 | 275 | 282 | 265 | 265 | 278 | 293 | 290 | 300 | 309 | 284 | 291 | 291 | 293 | 301 | 292 | 20 | 1 | 338 | 283 | 355 | 262 | 246 | 256 | 291.0 |
| 8-Aug | 266 | 254 | 260 | UO | UO | 284 | 306 | 349 | 12 | 8 | 344 | 345 | 354 | 15 | 4 | 290 | 358 | 338 | 309 | 266 | 256 | 261 | UO | UO | 335.1 |
| 9-Aug | UO | UO | UO | 294 | 312 | 267 | 270 | 59 | 348 | 309 | 271 | 357 | 31 | 307 | 290 | 353 | 27 | 16 | 14 | 258 | 256 | 256 | 263 | 252 | 330.8 |
| 10-Aug | 255 | UO | 252 | 242 | 243 | UO | UO | 35 | 126 | 185 | 193 | 72 | 64 | 341 | 322 | 7 | 271 | 271 | 307 | 269 | 254 | UO | UO | 283 | 282.7 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | 68 | 341 | 340 | 339 | 344 | 342 | 356 | 353 | 4 | 334 | 346 | 6 | 286 | 273 | 257 | 257 | UO | -- |
| 12-Aug | 279 | 279 | 265 | 249 | 277 | 256 | 301 | 325 | 347 | 353 | 334 | 323 | 308 | 344 | 334 | 311 | 341 | 329 | 310 | 309 | 309 | 303 | 292 | 280 | 318.2 |
| 13-Aug | 291 | 284 | 288 | 282 | 287 | 291 | 303 | 317 | 18 | 27 | 9 | 38 | 101 | 24 | 19 | 348 | 333 | 59 | 240 | 267 | 263 | 283 | UO | UO | 354.7 |
| 14-Aug | UO | UO | UO | UO | UO | UO | 118 | 78 | 43 | 308 | 85 | 240 | 251 | 300 | 261 | 20 | 6 | 354 | 27 | 265 | 255 | 247 | 237 | UO | -- |
| 15-Aug | UO | 249 | UO | UO | UO | UO | UO | 246 | 283 | 262 | 304 | 351 | 167 | 37 | 276 | 259 | 263 | 261 | 254 | 214 | 270 | 294 | 262 | 275 | 269.9 |
| 16-Aug | 260 | 259 | 251 | 248 | 249 | 249 | 273 | 280 | 323 | 338 | 325 | 339 | 307 | 301 | 340 | 337 | 338 | 325 | 297 | 254 | 249 | UO | 260 | 250 | 291.3 |
| 17-Aug | 123 | 170 | 219 | 268 | 256 | 278 | 294 | 275 | 280 | 309 | 281 | 304 | 307 | 326 | 292 | 8 | 253 | 251 | 251 | 242 | 234 | 237 | 252 | 201 | 282.2 |
| 18-Aug | 192 | 105 | 64 | 106 | 61 | 147 | 122 | 132 | 149 | 171 | 241 | 250 | 274 | 262 | 251 | 250 | 261 | 274 | 274 | 261 | 251 | 262 | 247 | 244 | 238.4 |
| 19-Aug | 340 | 282 | 154 | 90 | 137 | 100 | 304 | 284 | 273 | 286 | 290 | 285 | 305 | 281 | 286 | 304 | 286 | 278 | 262 | 279 | 261 | 242 | UO | 276 | 284.2 |
| 20-Aug | 311 | 270 | 231 | UO | UO | 278 | UO | 97 | 348 | 16 | 285 | 357 | 339 | 346 | 347 | 342 | 342 | 352 | 341 | 263 | 263 | 254 | 229 | 247 | 332.6 |
| 21-Aug | UO | UO | UO | UO | 246 | 250 | 239 | 194 | 222 | 137 | 181 | 42 | 105 | 124 | 144 | 127 | 150 | 191 | 191 | 226 | 249 | 240 | 217 | 199 | 166.1 |
| 22-Aug | 164 | 130 | 133 | 133 | 121 | 137 | 149 | 172 | 150 | 185 | 146 | 129 | 141 | 141 | 131 | 139 | 137 | 129 | 134 | 169 | 208 | 190 | 218 | 212 | 147.5 |
| 23-Aug | 200 | 186 | 238 | 198 | 246 | UO | 228 | 94 | 109 | 196 | 297 | 34 | 321 | 19 | 34 | 36 | 324 | 266 | 246 | 278 | 277 | 294 | 292 | 297 | 303.3 |
| 24-Aug | 299 | 301 | 300 | 295 | 279 | 287 | 311 | 322 | 304 | 292 | 310 | 301 | 319 | 311 | 325 | 330 | 327 | 355 | 281 | 259 | UO | UO | UO | UO | 308.2 |
| 25-Aug | 273 | UO | UO | 241 | 242 | 279 | UO | 290 | 28 | 12 | 24 | 39 | 31 | 40 | 44 | 31 | 24 | 22 | 267 | 255 | 255 | 245 | 252 | 260 | 14.7 |
| 26-Aug | 267 | 251 | 253 | 238 | 252 | 242 | 256 | 96 | 149 | 132 | 137 | 131 | 147 | 146 | 153 | 136 | 142 | 142 | 226 | 249 | 250 | 227 | 286 | 105 | 155.2 |
| 27-Aug | 160 | 129 | 136 | 132 | 160 | 131 | 127 | 124 | 124 | 130 | 128 | 156 | 120 | 116 | 102 | 339 | 129 | 134 | 133 | 143 | 124 | 116 | 115 | 131 | 127.0 |
| 28-Aug | 239 | 161 | 236 | 261 | 195 | 174 | 216 | 258 | 258 | 266 | 258 | 255 | 252 | 253 | 255 | 258 | 251 | 254 | 267 | 257 | 286 | 267 | 254 | 261 | 253.2 |
| 29-Aug | 267 | 268 | 267 | 264 | 277 | 274 | 264 | 265 | 260 | 261 | 264 | 263 | 264 | 249 | 255 | 256 | 246 | 202 | 226 | 226 | 243 | 275 | 229 | 264 | 258.7 |
| 30-Aug | 264 | 203 | 157 | 158 | UO | UO | UO | UO | 15 | 28 | 317 | 92 | 95 | 109 | 103 | 108 | 152 | 242 | 264 | 267 | 260 | 256 | 247 | 255 | 143.3 |
| 31-Aug | 231 | 239 | 279 | 265 | 242 | 261 | 300 | 292 | 291 | 302 | 310 | 318 | 309 | 296 | 275 | 296 | 272 | 282 | 262 | 263 | 232 | 234 | UO | 247 | 285.1 |
| | 268.0 | 267.7 | 265.3 | 265.8 | 270.3 | 269.8 | 275.4 | 287.0 | 299.1 | 304.0 | 299.9 | 316.2 | 313.1 | 317.0 | 307.4 | 315.2 | 306.9 | 305.1 | 285.3 | 268.2 | 263.6 | 263.7 | 262.4 | 270.5 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

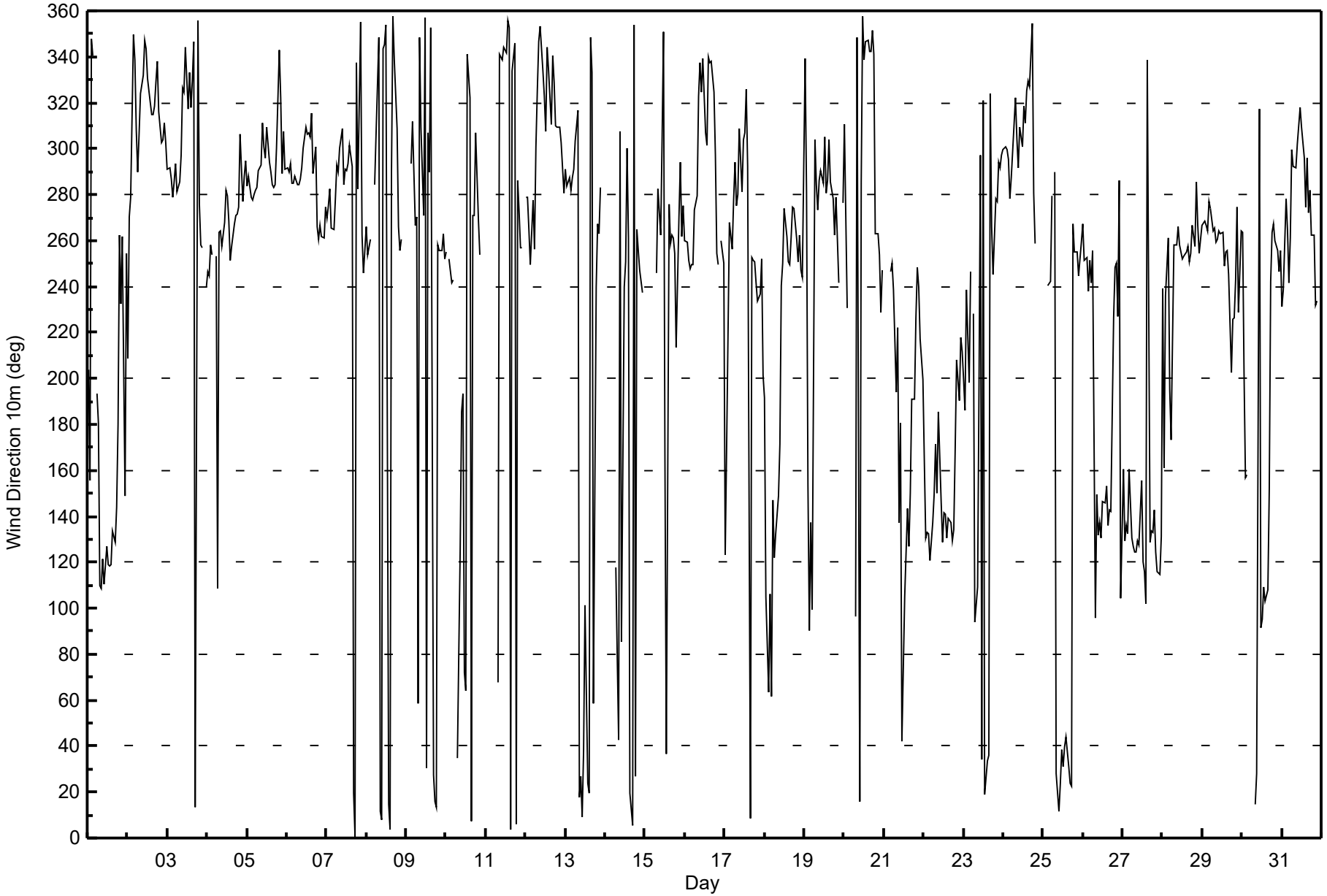
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Surmont 2 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Surmont 2 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 106 deg on Aug 21 11:00

Minimum Value: 10 deg on Aug 18 21:00

Percentiles: $P_1$ = 14 $P_{10}$ = 28 $Q_1$ = 40 Median = 51 $Q_3$ = 61 $P_{90}$ = 74 $P_{99}$ = 94

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 684 |
| Hours of Missing Data: | 60 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 91.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 23 | 89 | 86 | 91 | UO | 66 | 74 | 42 | 26 | 40 | 26 | 45 | 33 | 28 | 34 | 42 | 41 | 49 | 59 | 51 | 30 | 66 | 76 | 61 | 91 |
| 2-Aug | 49 | 80 | 76 | 81 | 64 | 49 | 43 | 57 | 63 | 60 | 56 | 54 | 57 | 60 | 59 | 57 | 55 | 61 | 61 | 59 | 48 | 62 | 57 | 52 | 81 |
| 3-Aug | 57 | 52 | 47 | 39 | 44 | 46 | 36 | 39 | 41 | 62 | 57 | 56 | 55 | 57 | 64 | 58 | 67 | 59 | 64 | 42 | 20 | 36 | UO | 78 | 78 |
| 4-Aug | 51 | 49 | 41 | 41 | UO | 36 | 48 | 92 | 39 | 39 | 35 | 37 | 41 | 37 | 41 | 37 | 36 | 31 | 57 | 56 | 85 | 33 | 44 | 47 | 92 |
| 5-Aug | 43 | 45 | 38 | 33 | 38 | 40 | 39 | 41 | 45 | 49 | 52 | 51 | 53 | 45 | 46 | 40 | 35 | 31 | 54 | 56 | 63 | 50 | 58 | 48 | 63 |
| 6-Aug | 43 | 47 | 46 | 43 | 38 | 40 | 41 | 37 | 38 | 46 | 51 | 55 | 54 | 53 | 56 | 57 | 48 | 45 | 38 | 21 | 28 | 21 | 22 | 34 | 57 |
| 7-Aug | 28 | 34 | 37 | 26 | 31 | 41 | 44 | 41 | 47 | 54 | 44 | 47 | 46 | 49 | 53 | 42 | 52 | 60 | 62 | 21 | 70 | 43 | 13 | 80 | 80 |
| 8-Aug | 19 | 16 | 38 | UO | UO | 70 | 53 | 61 | 42 | 67 | 59 | 60 | 61 | 53 | 62 | 67 | 67 | 61 | 53 | 20 | 32 | 18 | UO | UO | 70 |
| 9-Aug | UO | UO | UO | 67 | 72 | 78 | 82 | 40 | 75 | 81 | 67 | 68 | 71 | 61 | 76 | 73 | 53 | 52 | 55 | 39 | 22 | 22 | 38 | 55 | 82 |
| 10-Aug | 70 | UO | 51 | 39 | 47 | UO | UO | 61 | 65 | 66 | 83 | 94 | 88 | 68 | 86 | 78 | 18 | 25 | 52 | 19 | 13 | UO | UO | 40 | 94 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | 43 | 69 | 53 | 63 | 61 | 56 | 60 | 57 | 61 | 64 | 64 | 63 | 40 | 21 | 19 | 15 | UO | 69 |
| 12-Aug | 31 | 28 | 48 | 63 | 60 | 65 | 78 | 71 | 51 | 58 | 63 | 54 | 56 | 57 | 52 | 50 | 59 | 56 | 56 | 70 | 56 | 51 | 55 | 36 | 78 |
| 13-Aug | 38 | 37 | 42 | 37 | 31 | 39 | 55 | 52 | 45 | 51 | 51 | 52 | 34 | 55 | 58 | 54 | 59 | 75 | 40 | 32 | 34 | 67 | UO | UO | 75 |
| 14-Aug | UO | UO | UO | UO | UO | UO | 46 | 48 | 70 | 104 | 54 | 75 | 37 | 53 | 69 | 93 | 80 | 54 | 66 | 19 | 51 | 56 | 70 | UO | 104 |
| 15-Aug | UO | 35 | UO | UO | UO | UO | UO | 99 | 45 | 49 | 63 | 87 | 63 | 88 | 41 | 50 | 44 | 38 | 42 | 57 | 75 | 68 | 37 | 32 | 99 |
| 16-Aug | 25 | 26 | 23 | 19 | 23 | 24 | 38 | 33 | 59 | 59 | 60 | 55 | 51 | 49 | 56 | 55 | 57 | 51 | 45 | 13 | 20 | UO | 70 | 62 | 70 |
| 17-Aug | 66 | 78 | 70 | 28 | 40 | 34 | 33 | 36 | 43 | 55 | 37 | 50 | 60 | 60 | 62 | 66 | 53 | 19 | 13 | 26 | 43 | 61 | 27 | 57 | 78 |
| 18-Aug | 84 | 65 | 90 | 77 | 42 | 58 | 27 | 40 | 57 | 60 | 46 | 55 | 87 | 53 | 65 | 38 | 39 | 28 | 31 | 22 | 10 | 24 | 14 | 67 | 90 |
| 19-Aug | 94 | 61 | 61 | 92 | 48 | 94 | 75 | 60 | 35 | 38 | 40 | 39 | 54 | 40 | 45 | 56 | 42 | 32 | 23 | 32 | 18 | 44 | UO | 17 | 94 |
| 20-Aug | 47 | 63 | 56 | UO | UO | 44 | UO | 31 | 71 | 52 | 67 | 62 | 65 | 56 | 55 | 52 | 57 | 63 | 63 | 20 | 16 | 20 | 70 | 52 | 71 |
| 21-Aug | UO | UO | UO | UO | 49 | 52 | 56 | 74 | 41 | 62 | 106 | 86 | 64 | 49 | 53 | 44 | 50 | 57 | 74 | 44 | 18 | 23 | 75 | 74 | 106 |
| 22-Aug | 75 | 44 | 45 | 43 | 28 | 42 | 60 | 58 | 68 | 70 | 46 | 46 | 46 | 48 | 40 | 45 | 47 | 41 | 51 | 63 | 63 | 64 | 71 | 58 | 75 |
| 23-Aug | 80 | 83 | 49 | 85 | 60 | UO | 54 | 81 | 58 | 67 | 86 | 73 | 70 | 61 | 47 | 47 | 47 | 33 | 24 | 37 | 34 | 44 | 49 | 50 | 86 |
| 24-Aug | 61 | 57 | 52 | 48 | 38 | 49 | 70 | 67 | 56 | 46 | 56 | 45 | 56 | 53 | 64 | 59 | 53 | 57 | 37 | 14 | UO | UO | UO | UO | 70 |
| 25-Aug | 78 | UO | UO | 57 | 25 | 92 | UO | 74 | 31 | 50 | 49 | 48 | 50 | 53 | 52 | 51 | 50 | 52 | 47 | 12 | 16 | 14 | 52 | 12 | 92 |
| 26-Aug | 41 | 17 | 35 | 22 | 24 | 18 | 59 | 52 | 76 | 40 | 49 | 47 | 54 | 52 | 50 | 42 | 60 | 52 | 53 | 36 | 22 | 43 | 97 | 65 | 97 |
| 27-Aug | 80 | 51 | 39 | 35 | 54 | 46 | 45 | 42 | 41 | 40 | 41 | 61 | 40 | 31 | 60 | 74 | 42 | 44 | 44 | 51 | 42 | 31 | 33 | 89 | 89 |
| 28-Aug | 55 | 69 | 78 | 87 | 88 | 75 | 70 | 61 | 45 | 42 | 43 | 42 | 37 | 42 | 41 | 36 | 46 | 34 | 46 | 56 | 48 | 82 | 40 | 34 | 88 |
| 29-Aug | 42 | 43 | 48 | 43 | 47 | 75 | 53 | 43 | 36 | 40 | 42 | 44 | 44 | 56 | 42 | 48 | 60 | 73 | 53 | 45 | 31 | 17 | 83 | 60 | 83 |
| 30-Aug | 32 | 77 | 63 | 103 | UO | UO | UO | UO | 81 | 53 | 72 | 86 | 55 | 46 | 42 | 48 | 57 | 61 | 49 | 38 | 82 | 67 | 60 | 63 | 103 |
| 31-Aug | 70 | 43 | 61 | 25 | 39 | 47 | 60 | 38 | 50 | 53 | 54 | 56 | 68 | 54 | 53 | 64 | 28 | 26 | 16 | 29 | 51 | 62 | UO | 34 | 70 |
| | 94 | 89 | 90 | 103 | 88 | 94 | 82 | 99 | 81 | 104 | 106 | 94 | 88 | 88 | 86 | 93 | 80 | 75 | 74 | 70 | 85 | 82 | 97 | 89 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS30
## ELLS RIVER
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
AUGUST 2026

MONTHLY SUMMARY for
AMD SECTION III.B.1(c)

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 30-Min Value | 30-Min Exceedances | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 701 | 35 | 43 | 98.92 | - | - | 13.9 | 0 | 2.4 | 0 |
| TRS (ppb) Average | 699 | 36 | 45 | 98.79 | 12.2 | 16 | 12.1 | 0 | 1.6 | 0 |
| THC (ppm) Average | 701 | 35 | 43 | 98.92 | - | - | 3.7 | - | 2.4 | - |
| NMHC (ppm) Average | 701 | 35 | 43 | 98.92 | - | - | 0.247 | - | 0.018 | - |
| CH4 (ppm) Average | 701 | 35 | 43 | 98.92 | - | - | 3.5 | - | 2.4 | - |
| NO2 (ppb) Average | 700 | 36 | 44 | 98.92 | - | - | 23.4 | 0 | 6.8 | - |
| NO (ppb) Average | 700 | 36 | 44 | 98.92 | - | - | 46.1 | - | 8.4 | - |
| NOX (ppb) Average | 700 | 36 | 44 | 98.92 | - | - | 60 | - | 14.3 | - |
| PM2.5 (ug/m3) Average | 651 | 3 | 93 | 87.9 | - | - | 64.6 | 0 | 29.2 | 1 |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | - | - | 29.5 | - | 21.1 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | - | - | 96.9 | - | 87 | - |
| Wind Speed 10 m (km/h) Average | 736 | 0 | 8 | 98.92 | - | - | 34 | - | 24 | - |
| Wind Direction 10 m (deg) Average | 736 | 0 | 8 | 98.92 | - | - | - | - | - | - |
| Global Solar Radiation (W/m2) Average | 744 | 0 | 0 | 100 | - | - | 917 | - | 278 | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 701 | 0.36 | 1.1 | - | 0 | 0 | 0 | 0 | 0.2 | 0.7 | 13.9 |
| TRS (ppb) Average | 699 | 0.4 | 0.9 | - | 0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.7 | 12.1 |
| THC (ppm) Average | 701 | 2.13 | 0.2 | - | 1.9 | 2 | 2 | 2.1 | 2.2 | 2.4 | 3.7 |
| NMHC(ppm) Average | 701 | 0.002 | 0.015 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.247 |
| CH4(ppm) Average | 701 | 2.12 | 0.2 | - | 1.9 | 2 | 2 | 2.1 | 2.2 | 2.4 | 3.5 |
| NO2 (ppb) Average | 700 | 3.41 | 3.9 | - | 0 | 0 | 0.5 | 2.2 | 4.8 | 8.3 | 23.4 |
| NO (ppb) Average | 700 | 2.06 | 5.5 | - | 0 | 0 | 0.1 | 0.4 | 1.2 | 4.6 | 46.1 |
| NOX (ppb) Average | 700 | 5.47 | 8.2 | - | 0 | 0.2 | 0.7 | 2.7 | 6.4 | 13.5 | 60 |
| PM2.5 (ug/m3) Average | 651 | 10.95 | 9.9 | - | 0.3 | 2.6 | 4 | 6.8 | 15.3 | 23.3 | 64.6 |
| Temperature 2 m (C) Average | 744 | 16.88 | 4.8 | - | 5.2 | 10.7 | 13.1 | 16.6 | 20.5 | 23.6 | 29.5 |
| Relative Humidity (%) Average | 744 | 69.13 | 18 | - | 26.2 | 44.2 | 53.2 | 71.2 | 85.5 | 91.3 | 96.9 |
| Wind Speed 10 m (km/h) Average | 736 | 9.2 | 6 | - | 0 | 3 | 5 | 8 | 12 | 16 | 34 |
| Wind Direction 10 m (deg) Average | 736 | 264 | - | - | - | - | - | - | - | - | - |
| Global Solar Radiation (W/m2) Average | 744 | 207.84 | 254.6 | - | 0 | 0 | 0 | 65.2 | 398.3 | 641.7 | 917 |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| ALL GASEOUS ANALYZERS | 12 Aug 2026 09:00 | 12 Aug 2026 09:00 | 1 | Maintenance - sample manifold cleaned |
| ALL GASEOUS ANALYZERS | 27 Aug 2026 10:00 | 27 Aug 2026 10:00 | 1 | Maintenance - replaced part of sample manifold |
| AIR QUALITY ANALYZERS | 25 Aug 2026 16:00 | 25 Aug 2026 21:00 | 6 | Station power failure |
| PM2.5 | 01 Aug 2026 01:00 | 01 Sep 2026 00:00 | 84 | Intermittent unstable operation |
| TRS | 24 Aug 2026 09:00 | 24 Aug 2026 09:00 | 1 | Maintenance - verify daily QA response |
| Wind Speed, Wind Direction | 01 Aug 2026 01:00 | 25 Aug 2026 01:00 | 8 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Ells River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 13.9 ppb on Aug 27 14:00 Maximum Daily Average: 2.4 ppb on Aug 27

Minimum Value: 0.0 ppb on Aug 1 01:00 Minimum Daily Average: 0.0 ppb on Aug 29
Maximum Diurnal Average: 0.9 ppb at hour 14 Minimum Diurnal Average: 0.0 ppb at hour 5
Monthly Average: 0.36 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.2 $P_{90}$ = 0.7 $P_{99}$ = 6.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.6 | 3.8 | 3.2 | 1.6 | 0.9 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.6 | 0.2 | 0.1 | 0.1 | 0.6 | 3.8 |
| 2-Aug | 0.1 | 0.2 | Z | 0.1 | 0.1 | 0.3 | 0.3 | 0.0 | 0.5 | 0.3 | 0.6 | 0.9 | 2.4 | 1.6 | 1.2 | 0.5 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.4 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 0.5 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 6-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 1.1 | 0.6 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 1.1 |
| 7-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | C | C | C | C | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 8-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.0 | 0.1 | 0.1 | 0.5 | 0.3 | 1.0 | 1.0 | 1.3 | 0.4 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 1.3 |
| 9-Aug | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 1.3 | 0.6 | 1.7 | 1.7 | 2.8 | 2.3 | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 2.8 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 |
| 15-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.9 | 0.3 | 0.0 | 0.1 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.0 | 1.2 | 2.8 | 0.7 | 1.7 | 0.5 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 2.8 |
| 18-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 19-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 20-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.3 | 0.5 | 0.8 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.8 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 1.5 | 1.7 | 0.5 | 0.6 | 1.3 | 1.2 | 0.3 | 0.4 | 1.7 |
| 22-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.7 | 0.7 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 2.4 | 1.8 | 5.7 | 6.5 | 6.8 | 1.7 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 1.4 | 6.8 |
| 23-Aug | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.6 |
| 24-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 |
| 25-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | PF | PF | PF | PF | PF | PF | 0.0 | 0.0 | 0.0 | -- | 0.3 |
| 26-Aug | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.3 | 0.9 | 4.6 | 7.2 | 6.0 | 0.8 | 5.6 | 0.5 | 5.2 | 7.1 | 2.9 | 0.8 | 0.5 | 1.6 | 1.2 | 0.4 | 2.0 | 7.2 |
| 27-Aug | 0.2 | 0.3 | 0.3 | 0.0 | Z | 0.0 | 0.1 | 2.5 | 2.4 | M | 6.9 | 1.5 | 4.5 | 13.9 | 6.6 | 7.8 | 1.8 | 0.8 | 0.8 | 0.3 | 0.2 | 0.4 | 0.5 | 0.6 | 2.4 | 13.9 |
| 28-Aug | 1.2 | 1.3 | 0.5 | 1.2 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.3 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.5 | 0.7 | 0.7 | 1.8 | 1.5 | 1.1 | 1.4 | 0.4 | 0.1 | 0.0 | 0.1 | 0.4 | 1.8 |
| 31-Aug | 0.1 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 2.2 | 7.6 | 2.9 | 1.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.7 | 7.6 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.8 | 0.6 | 0.7 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.4 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | Diurnal Average | |
| | 1.2 | 1.3 | 0.5 | 1.2 | 0.2 | 0.3 | 0.7 | 2.5 | 2.4 | 2.2 | 7.6 | 7.2 | 6.0 | 13.9 | 6.6 | 7.8 | 6.5 | 7.1 | 2.9 | 1.4 | 0.6 | 1.6 | 1.2 | 0.6 | Diurnal Maximum | |

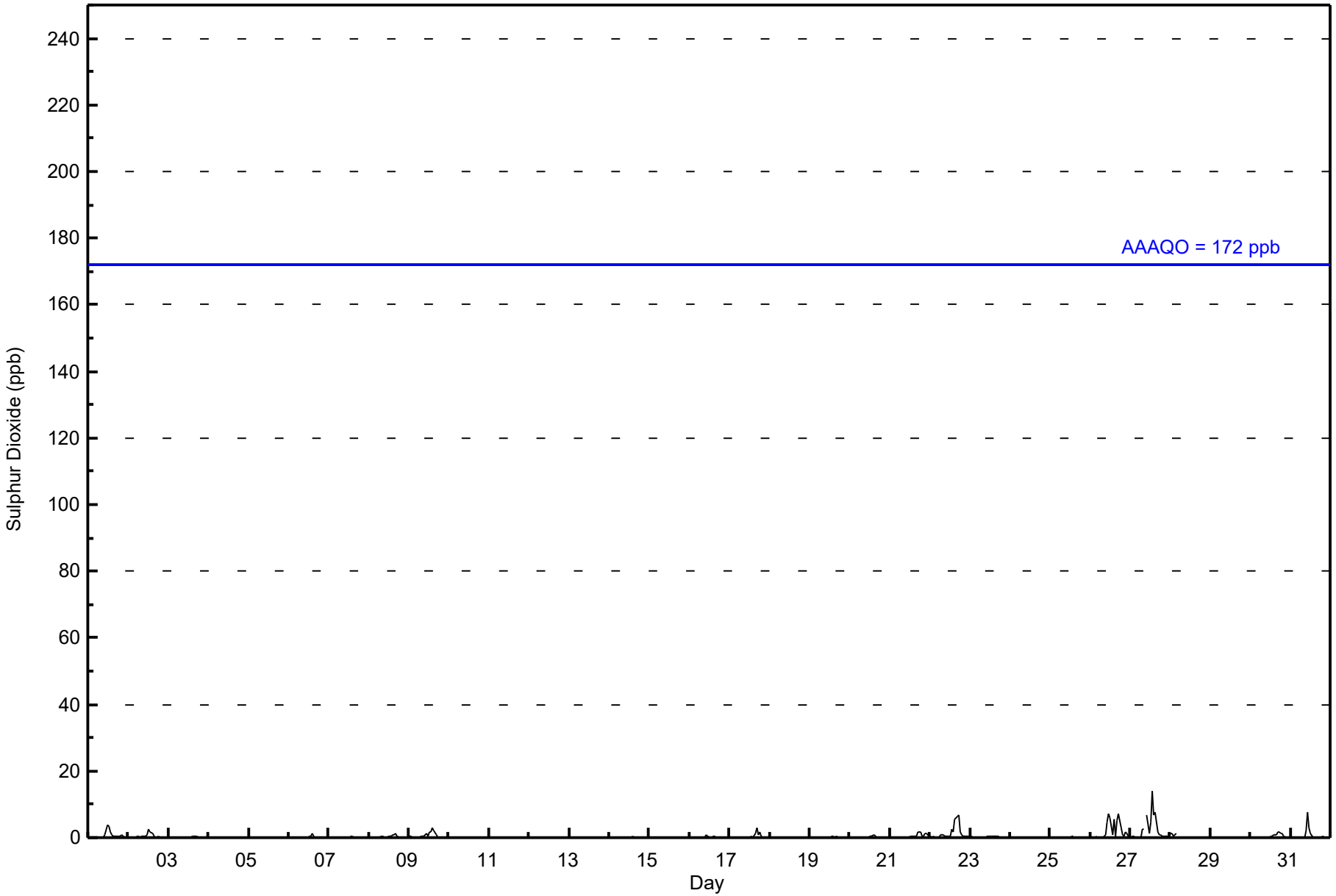
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Ells River - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Ells River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 700 | 99.86 | 99.86 |
| 11 - 20 | 1 | 0.14 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Ells River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 99 | 39 | 7 | 3 | 4 | 7 | 19 | 71 | 71 | 54 | 51 | 53 | 60 | 47 | 47 | 60 | 692 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 99 | 39 | 7 | 3 | 4 | 7 | 19 | 72 | 71 | 54 | 51 | 53 | 60 | 47 | 47 | 60 | 693 |

Total Number of Valid Hours: 693

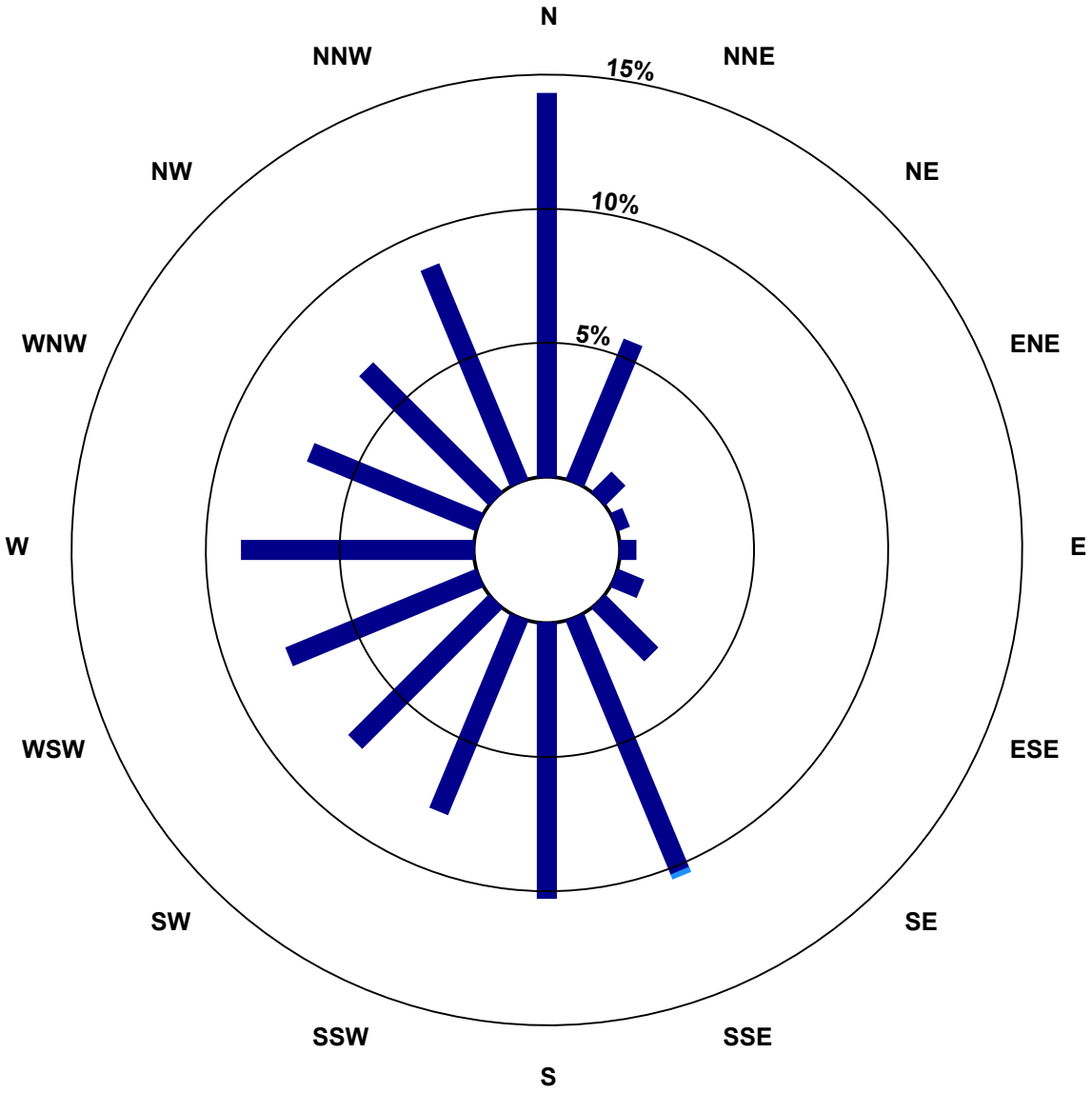
Total Number of Hours: 744

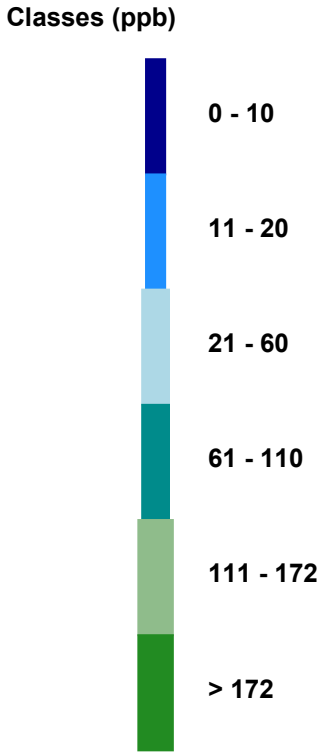
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Ells River



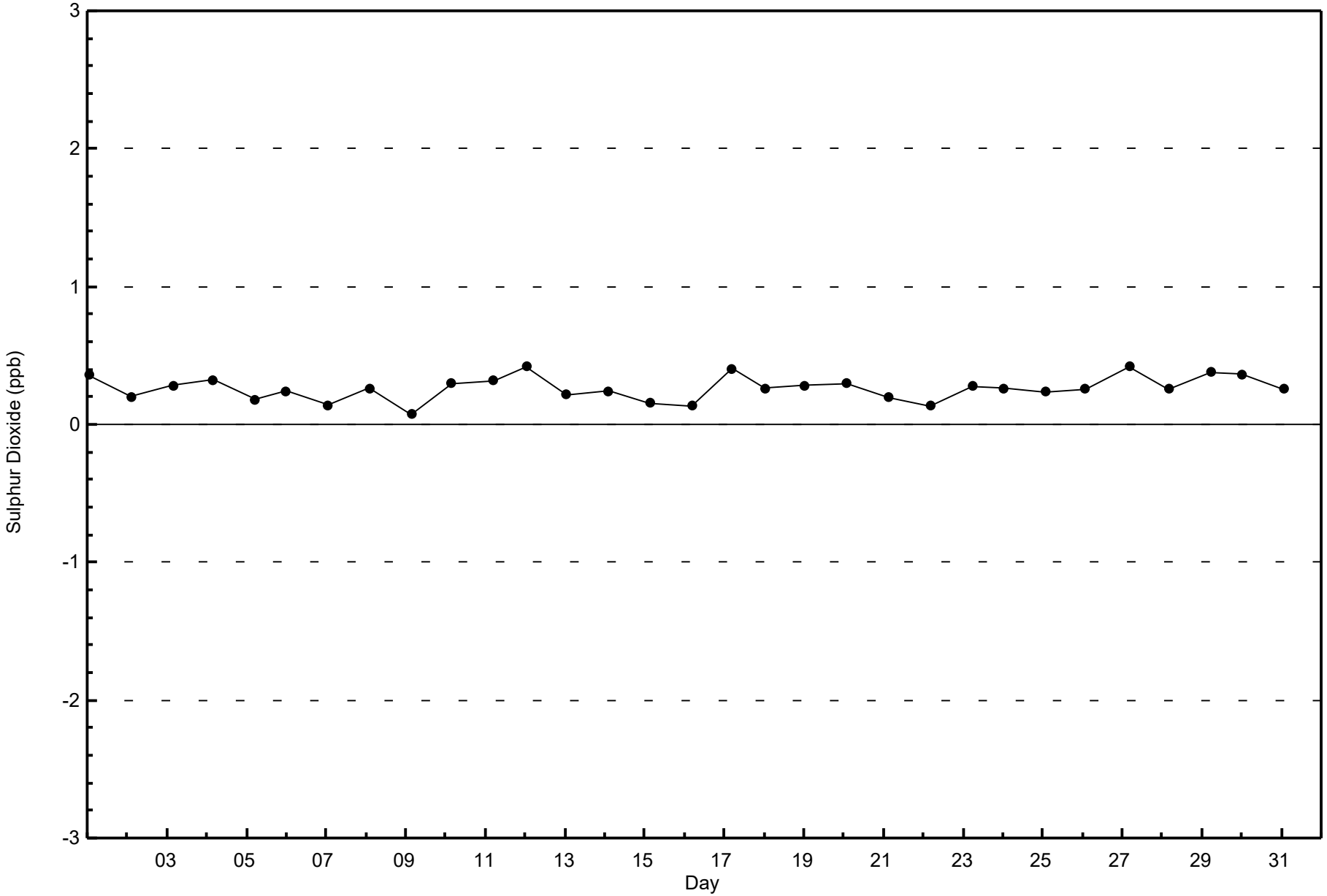

Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Ells River - August 2026**

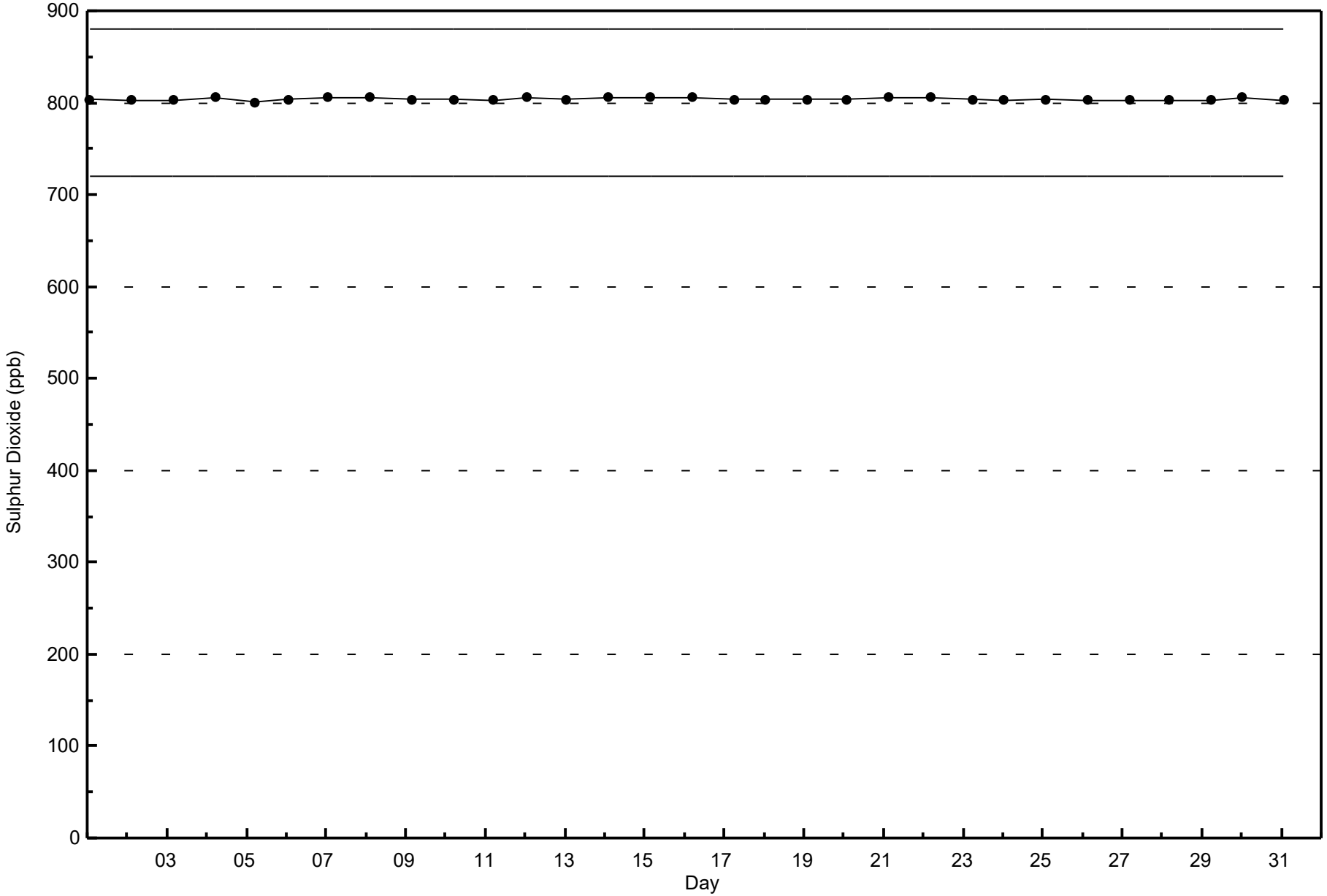


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Ells River - August 2026**



## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Ells River - August 2026

Number of Exceedences (AAAQG): 30-Min: 16

Maximum Value: 12.2 ppb on Aug 21 23:00 Maximum Daily Average: 1.6 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 8 18:00 Minimum Daily Average: 0.1 ppb on Aug 5

Maximum Diurnal Average: 0.9 ppb at hour 23 Minimum Diurnal Average: 0.2 ppb at hour 17

Monthly Average: 0.40 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.3 $P_{90}$ = 0.7 $P_{99}$ = 5.4

| | |
|---|---|
| Periods in Service: | 1488 |
| Periods of Valid Data: | 1397 |
| Periods of Invalid Data: | 91 |
| Periods of Calibration: | 72 |
| Percent Operational Time: | 98.7 |

Period Ending At (MST)

| Day | 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | 0.4 | 0.4 | Z | 0.5 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 1.3 | 1.2 | 1.1 | 0.9 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 1.3 |
| | 0.5 | 0.5 | SP | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.7 | 1.3 | 1.0 | 0.9 | 0.9 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | | |
| 2-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| | 0.1 | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 3-Aug | 0.1 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 | 0.7 | 0.2 | 0.9 |
| | 0.2 | 0.3 | 0.2 | 0.4 | SP | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.6 | 0.9 | 0.8 | | |
| 4-Aug | 1.4 | 0.3 | 0.4 | 0.5 | 0.7 | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 1.4 |
| | 0.6 | 0.4 | 0.4 | 1.1 | 0.6 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | | |
| 5-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 6-Aug | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 |
| | 0.1 | SP | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | | |
| 7-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| | 0.2 | 0.2 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | | |
| 8-Aug | 0.2 | 0.2 | 0.5 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.5 |
| | 0.2 | 0.2 | 0.3 | SP | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | | |
| 9-Aug | 0.2 | 0.7 | 0.6 | 0.6 | Z | 0.4 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.7 |
| | 0.2 | 0.3 | 0.5 | 0.5 | SP | 0.5 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | | |
| 10-Aug | 0.3 | 0.3 | 0.4 | 0.9 | 0.4 | Z | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.2 | 0.3 | 0.9 |
| | 0.3 | 0.3 | 0.6 | 0.5 | 0.9 | SP | 0.5 | 0.4 | 0.9 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | | |
| 11-Aug | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.8 | 0.5 | 0.3 | 0.3 | C | C | C | C | C | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.8 |
| | SP | 0.2 | 0.3 | 0.4 | 0.3 | 0.8 | 0.4 | 0.3 | 0.3 | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | | |
| 12-Aug | 0.3 | Z | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | M | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| | 0.4 | SP | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | M | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | |
| 13-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| | 0.1 | 0.1 | SP | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | | |
| 14-Aug | 0.3 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| | 0.3 | 0.2 | 0.2 | SP | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | | |
| 15-Aug | 0.3 | 0.2 | 0.2 | 0.4 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.5 |
| | 0.2 | 0.2 | 0.3 | 0.5 | SP | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | | |

## Wood Buffalo Environmental Association

## Summary of 30-Minute Averages

## Total Reduced Sulphur (TRS) - ppb

## Ells River - August 2026

| Day | 00:30 01:00 | 01:30 02:00 | 02:30 03:00 | 03:30 04:00 | 04:30 05:00 | 05:30 06:00 | 06:30 07:00 | 07:30 08:00 | 08:30 09:00 | 09:30 10:00 | 10:30 11:00 | 11:30 12:00 | 12:30 13:00 | 13:30 14:00 | 14:30 15:00 | 15:30 16:00 | 16:30 17:00 | 17:30 18:00 | 18:30 19:00 | 19:30 20:00 | 20:30 21:00 | 21:30 22:00 | 22:30 23:00 | 23:30 24:00 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16-Aug | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 | 0.4 | 0.2 | 0.7 |
| | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | SP | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.7 | | |
| 17-Aug | Z | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.4 | 0.9 | 0.4 | 0.1 | 0.1 | 0.2 | 0.3 | 0.9 |
| | SP | 0.3 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 | 0.2 | 0.2 | 0.8 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | | |
| 18-Aug | 0.2 | Z | 0.6 | 0.5 | 0.8 | 1.2 | 5.4 | 0.9 | 0.9 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 5.4 |
| | 0.2 | SP | 0.4 | 0.5 | 0.8 | 2.2 | 5.2 | 0.8 | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | | |
| 19-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | 0.4 |
| | 0.2 | 0.1 | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | | |
| 20-Aug | 0.3 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.8 | 0.3 | 0.8 |
| | 0.2 | 0.2 | 0.2 | SP | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | | |
| 21-Aug | 0.6 | 0.5 | 0.4 | 0.3 | Z | 0.3 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.7 | 0.1 | 0.1 | 0.2 | 12.0 | 8.6 | 1.1 | 12.2 |
| | 0.6 | 0.4 | 0.3 | 0.3 | SP | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.8 | 0.6 | 0.1 | 0.1 | 2.3 | 12.2 | 4.2 | | |
| 22-Aug | 2.4 | 2.3 | 1.2 | 0.6 | 0.6 | Z | 5.8 | 7.9 | 5.8 | 2.4 | 0.3 | 0.3 | 0.2 | 0.6 | 0.5 | 0.9 | 0.4 | 0.5 | 0.2 | 0.6 | 1.0 | 2.3 | 0.3 | 0.3 | 1.6 | 11.8 |
| | 2.6 | 1.6 | 1.1 | 0.5 | 0.7 | SP | 11.8 | 3.9 | 5.4 | 0.6 | 0.2 | 0.3 | 0.2 | 0.5 | 0.9 | 0.8 | 0.4 | 0.3 | 0.2 | 0.9 | 1.5 | 1.0 | 0.3 | 0.3 | | |
| 23-Aug | Z | 1.4 | 1.9 | 1.4 | 0.7 | 0.6 | 2.7 | 1.4 | 0.5 | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.6 | 2.7 |
| | SP | 1.9 | 2.0 | 0.9 | 0.5 | 2.5 | 2.3 | 1.7 | 0.5 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | | |
| 24-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | M | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.4 | 0.2 | 0.5 |
| | 0.1 | SP | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | M | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.0 | 0.5 | | |
| 25-Aug | 0.5 | 0.1 | Z | 0.8 | 0.6 | 0.6 | 2.0 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | PF | PF | PF | PF | PF | PF | PF | 0.2 | 0.3 | -- | 2.0 |
| | 0.6 | 0.1 | SP | 0.6 | 1.0 | 0.9 | 1.1 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | PF | PF | PF | PF | PF | PF | 0.3 | 0.3 | 0.3 | | |
| 26-Aug | 0.4 | 0.4 | 0.6 | Z | 0.3 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 3.5 | 0.9 | 0.6 | 0.1 | 0.4 | 0.0 | 0.4 | 0.4 | 1.6 | 0.2 | 0.7 | 0.2 | 9.3 | 11.3 | 1.4 | 11.3 |
| | 0.4 | 0.4 | 0.6 | SP | 0.6 | 0.3 | 0.4 | 0.4 | 0.4 | 1.1 | 1.6 | 0.6 | 0.9 | 0.0 | 0.3 | 0.0 | 0.4 | 0.2 | 2.4 | 0.5 | 0.9 | 2.9 | 9.6 | 7.2 | | |
| 27-Aug | 3.1 | 0.6 | 2.2 | 1.2 | 1.5 | Z | 1.0 | 1.6 | 6.1 | M | 1.5 | 0.7 | 0.6 | 1.0 | 0.8 | 0.6 | 0.7 | 0.9 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.7 | 1.2 | 6.1 |
| | 0.7 | 0.9 | 0.9 | 0.8 | 0.7 | SP | 1.0 | 5.4 | 4.4 | M | 1.7 | 0.4 | 1.0 | 1.1 | 0.4 | 0.8 | 0.8 | 0.8 | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 1.8 | | |
| 28-Aug | 2.7 | 3.2 | 2.5 | 1.9 | 0.9 | Z | 0.2 | 1.0 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 3.2 |
| | 2.5 | 2.7 | 2.2 | 1.9 | 0.2 | SP | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | | |
| 29-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.3 |
| | SP | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | | |
| 30-Aug | 0.3 | Z | 0.6 | 0.4 | 0.2 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.2 | 0.2 | 0.2 | 0.6 |
| | 0.2 | SP | 0.6 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | | |
| 31-Aug | 0.2 | 0.4 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 2.3 | 0.6 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.5 | 0.3 | 2.3 |
| | 0.3 | 0.4 | SP | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 1.0 | 0.5 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.6 | | |
| | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.9 | 0.6 | 0.6 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.9 | 0.8 | Diurnal Average | |
| | 3.1 | 3.2 | 2.5 | 1.9 | 1.5 | 2.5 | 11.8 | 7.9 | 6.1 | 2.4 | 3.5 | 1.2 | 1.1 | 1.1 | 0.9 | 0.9 | 0.8 | 0.9 | 2.4 | 0.9 | 1.5 | 2.9 | 12.2 | 11.3 | Diurnal Maximum | |

Z - zerospan  C - Calibration  M - Maintenance  PF - Power Failure  SP - Span

Alberta Ambient Air Quality Guideline (AAAQG): 30-Min: 5 ppb

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Reduced Sulphur (TRS) - ppb

## Ells River - August 2026

Maximum Value: 12.1 ppb on Aug 21 23:00

Maximum Daily Average: 1.6 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 8 19:00

Minimum Daily Average: 0.1 ppb on Aug 5

Maximum Diurnal Average: 0.9 ppb at hour 23

Minimum Diurnal Average: 0.2 ppb at hour 17

Monthly Average: 0.40 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.3 $P_{90}$ = 0.7 $P_{99}$ = 5.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 699 |
| Hours of Missing Data: | 45 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.5 | 0.4 | Z | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 | 1.3 | 1.1 | 1.0 | 0.9 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.4 | 1.3 |
| 2-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 3-Aug | 0.1 | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.5 | 0.8 | 0.7 | 0.2 | 0.8 |
| 4-Aug | 1.0 | 0.3 | 0.4 | 0.8 | 0.7 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 1.0 |
| 5-Aug | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 7-Aug | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| 8-Aug | 0.2 | 0.2 | 0.4 | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 9-Aug | 0.2 | 0.5 | 0.5 | 0.6 | Z | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.6 |
| 10-Aug | 0.3 | 0.3 | 0.5 | 0.7 | 0.6 | Z | 0.5 | 0.4 | 0.8 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.8 |
| 11-Aug | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.8 | 0.5 | 0.3 | 0.3 | C | C | C | C | C | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.8 |
| 12-Aug | 0.3 | Z | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | M | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 13-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 |
| 14-Aug | 0.3 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| 15-Aug | 0.3 | 0.2 | 0.2 | 0.4 | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 |
| 16-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.6 | 0.5 | 0.2 | 0.6 |
| 17-Aug | Z | 0.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.6 | 0.8 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.8 |
| 18-Aug | 0.2 | Z | 0.5 | 0.5 | 0.8 | 1.7 | 5.3 | 0.8 | 0.8 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 5.3 |
| 19-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 |
| 20-Aug | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.7 | 0.3 | 0.7 |
| 21-Aug | 0.6 | 0.4 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 1.2 | 0.1 | 0.1 | 1.2 | 12.1 | 6.4 | 1.1 | 12.1 |
| 22-Aug | 2.5 | 2.0 | 1.1 | 0.6 | 0.7 | Z | 8.8 | 5.9 | 5.6 | 1.5 | 0.2 | 0.3 | 0.2 | 0.6 | 0.7 | 0.9 | 0.4 | 0.4 | 0.2 | 0.8 | 1.2 | 1.7 | 0.3 | 0.3 | 1.6 | 8.8 |
| 23-Aug | Z | 1.6 | 2.0 | 1.2 | 0.6 | 1.6 | 2.5 | 1.5 | 0.5 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.6 | 2.5 |
| 24-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | M | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.1 | 0.5 | 0.2 | 0.5 |
| 25-Aug | 0.6 | 0.1 | Z | 0.7 | 0.8 | 0.8 | 1.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | PF | PF | PF | PF | PF | PF | 0.3 | 0.3 | 0.3 | -- | 1.5 |
| 26-Aug | 0.4 | 0.4 | 0.6 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 2.5 | 0.7 | 0.7 | 0.1 | 0.3 | 0.0 | 0.4 | 0.3 | 2.0 | 0.4 | 0.8 | 1.6 | 9.4 | 9.2 | 1.4 | 9.4 |
| 27-Aug | 1.9 | 0.8 | 1.6 | 1.0 | 1.1 | Z | 1.0 | 3.5 | 5.3 | M | 1.6 | 0.6 | 0.8 | 1.0 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 1.2 | 1.2 | 5.3 |
| 28-Aug | 2.6 | 3.0 | 2.4 | 1.9 | 0.6 | Z | 0.3 | 0.7 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 3.0 |
| 29-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.3 |
| 30-Aug | 0.2 | Z | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.6 |
| 31-Aug | 0.3 | 0.4 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 1.7 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.6 | 0.3 | 1.7 |
| | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.9 | 0.6 | 0.6 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.9 | 0.8 | Diurnal Average | |
| | 2.6 | 3.0 | 2.4 | 1.9 | 1.1 | 1.7 | 8.8 | 5.9 | 5.6 | 1.5 | 2.5 | 1.1 | 1.0 | 1.0 | 0.7 | 0.9 | 0.8 | 0.9 | 2.0 | 0.8 | 1.2 | 1.7 | 12.1 | 9.2 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance PF - Power Failure

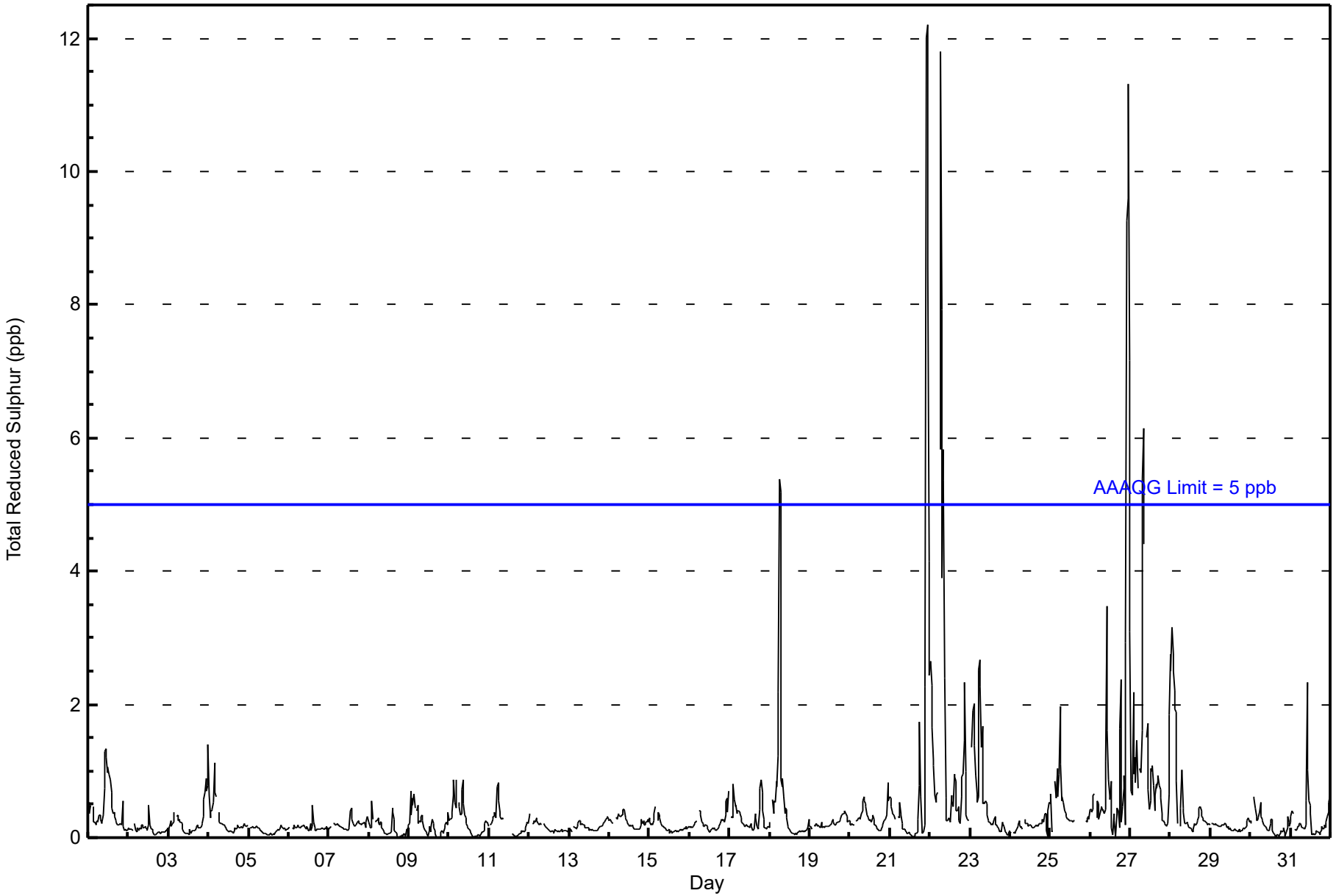
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Reduced Sulphur (TRS) - ppb**

**Ells River - August 2026**



# Total Reduced Sulphur (TRS) - ppb
## Ells River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 685 | 98.00 | 98.00 |
| 3 - 4 | 5 | 0.72 | 98.71 |
| 5 - 7 | 5 | 0.72 | 99.43 |
| 8 - 11 | 3 | 0.43 | 99.86 |
| > 11 | 1 | 0.14 | 100.00 |

Total Number of Valid Hours: 699

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Reduced Sulphur (TRS) - ppb**

**Ells River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 96 | 36 | 7 | 3 | 4 | 7 | 17 | 63 | 69 | 56 | 53 | 50 | 61 | 46 | 48 | 61 | 677 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 5 - 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 96 | 37 | 7 | 3 | 4 | 7 | 18 | 74 | 69 | 57 | 53 | 50 | 61 | 46 | 48 | 61 | 691 |

Total Number of Valid Hours: 691

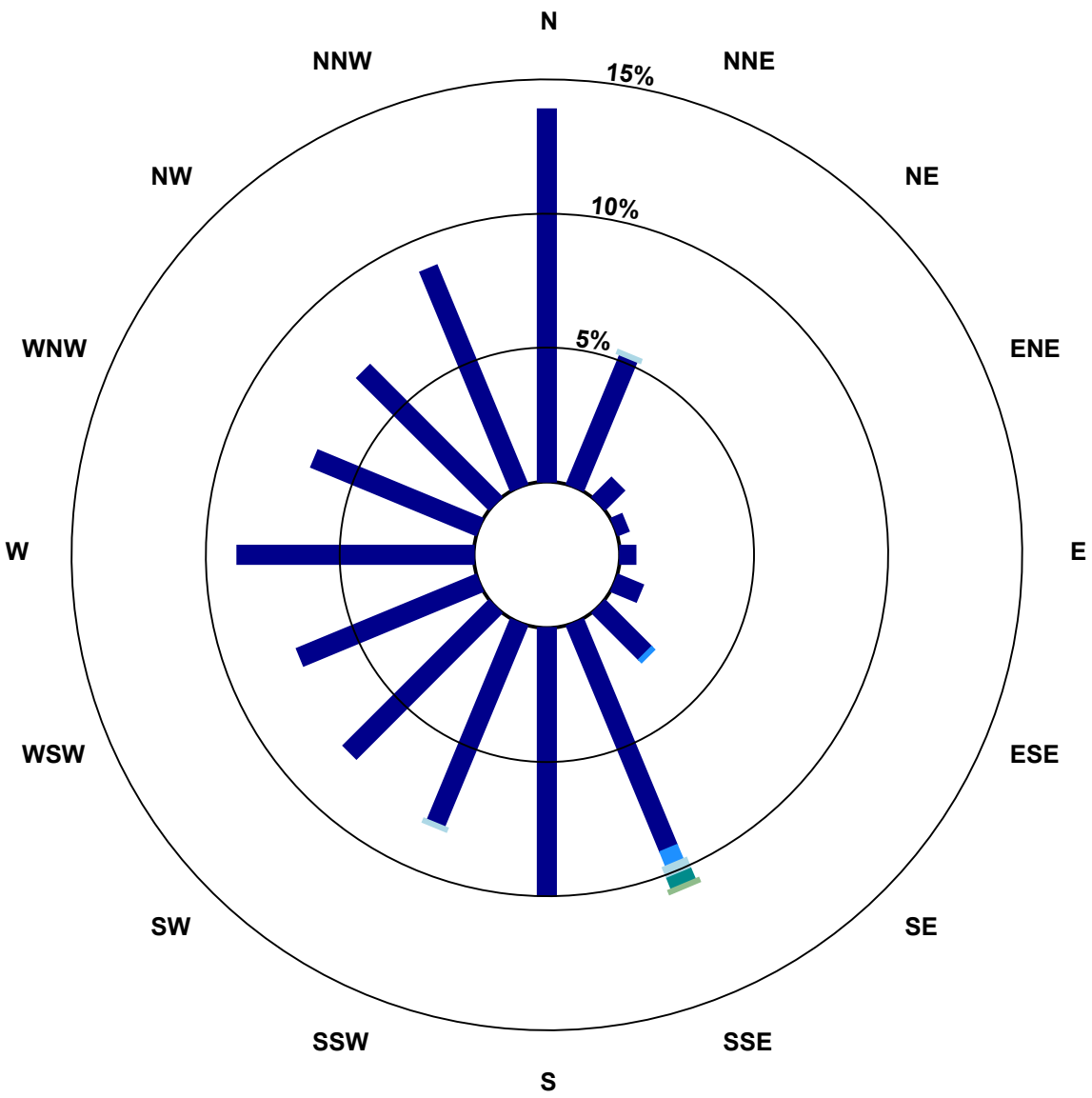
Total Number of Hours: 744

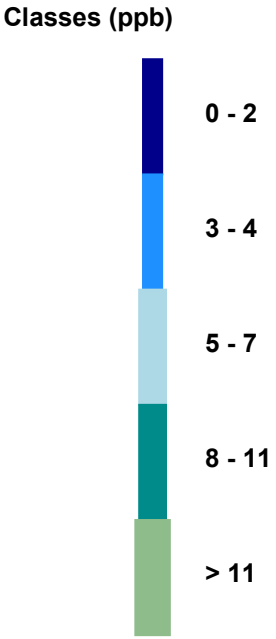
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Reduced Sulphur (TRS) - ppb**

**Ells River**



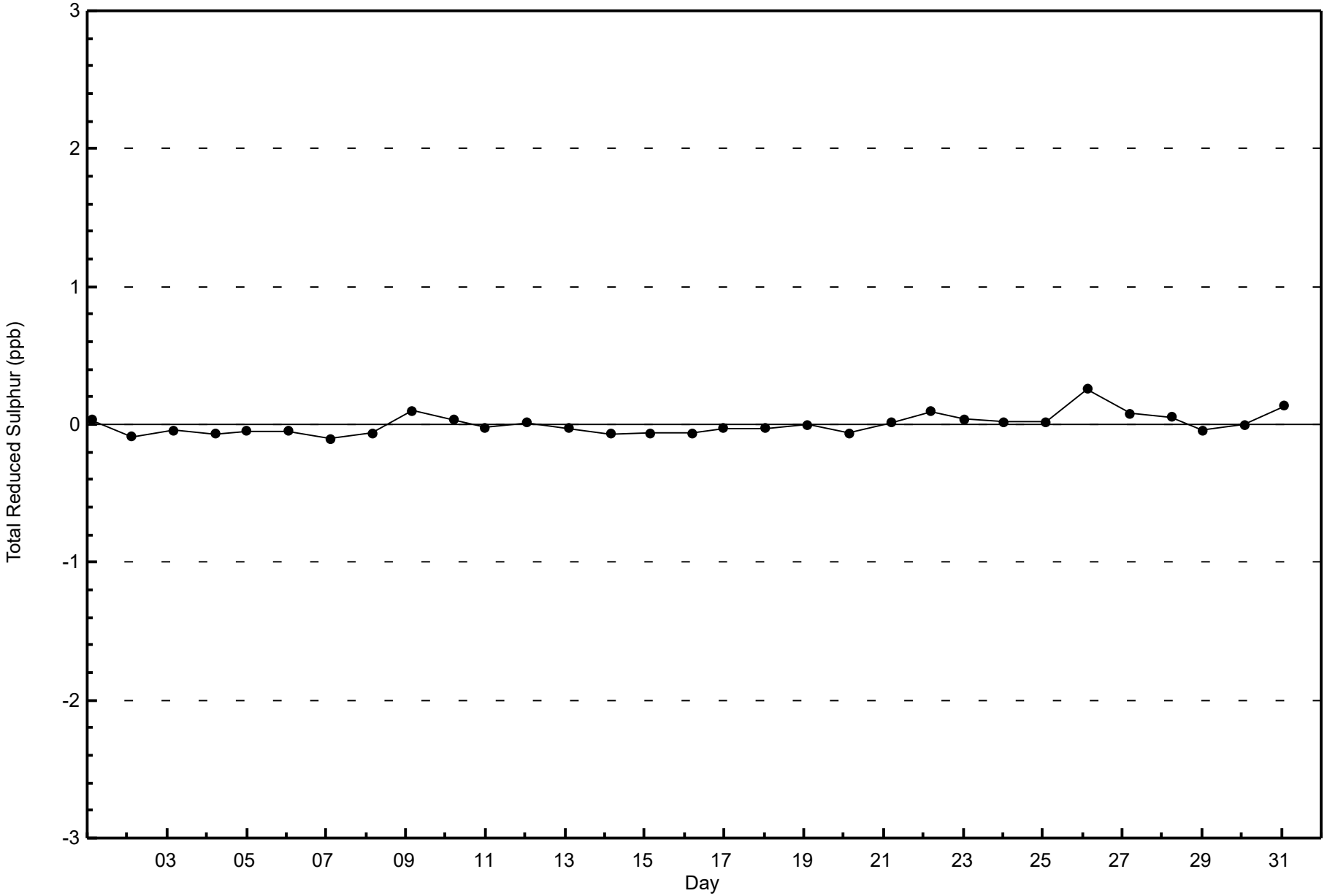

**Total Number of Valid Hours: 691**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Ells River - August 2026**

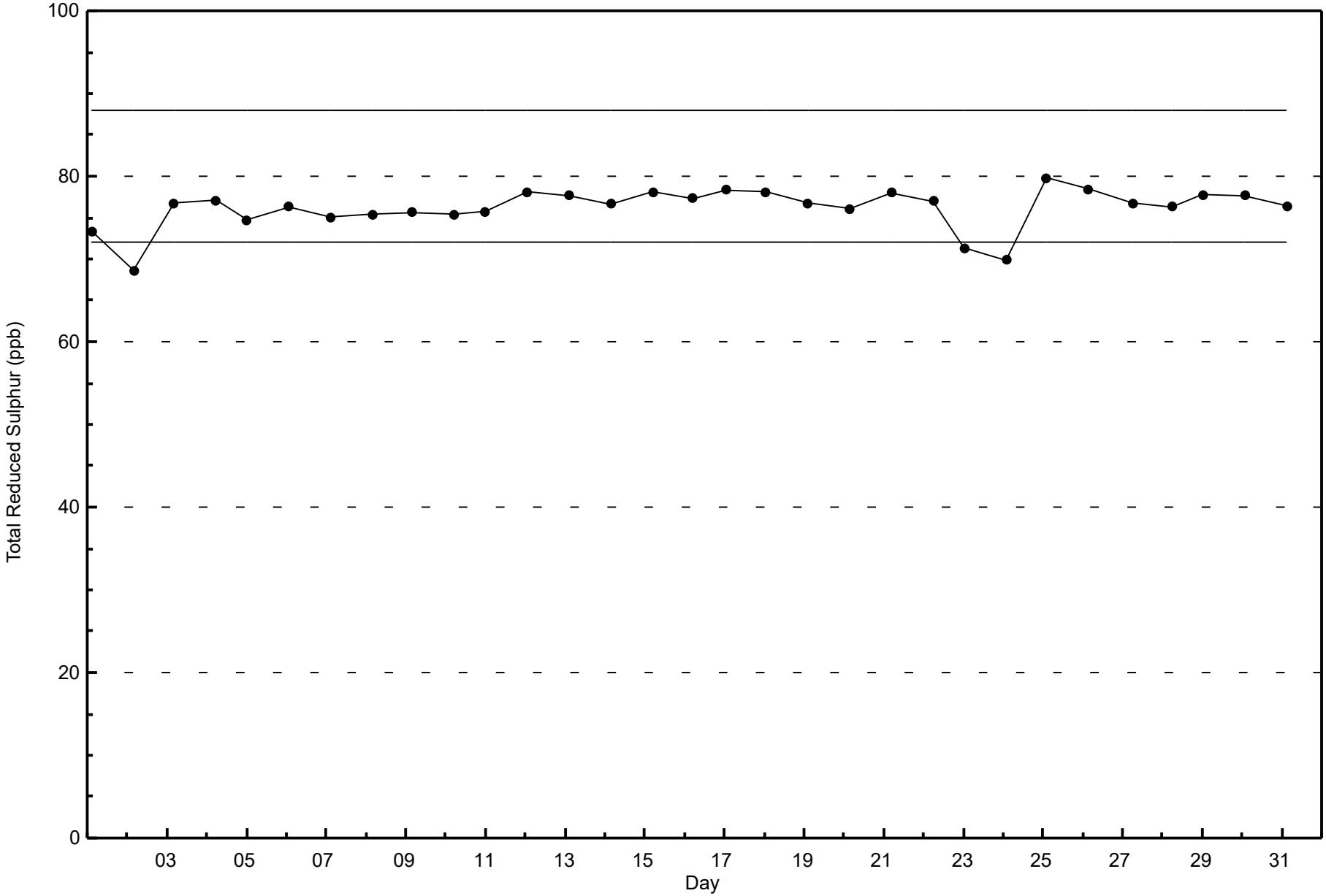


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Reduced Sulphur (TRS) - ppb**

**Ells River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Ells River - August 2026

Maximum Value: 3.7 ppm on Aug 20 09:00

Maximum Daily Average: 2.4 ppm on Aug 1

Minimum Value: 1.9 ppm on Aug 31 14:00

Minimum Daily Average: 2.0 ppm on Aug 29

Maximum Diurnal Average: 2.3 ppm at hour 8

Minimum Diurnal Average: 2.0 ppm at hour 18

Monthly Average: 2.13 ppm

Percentiles: $P_1$ = 1.9 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.4 $P_{99}$ = 2.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.5 | Z | 2.9 | 2.5 | 2.5 | 2.4 | 2.4 | 2.6 | 2.6 | 2.9 | 2.6 | 2.4 | 2.8 | 2.7 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.9 |
| 2-Aug | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.2 |
| 3-Aug | 2.1 | 2.1 | 2.2 | Z | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 4-Aug | 2.2 | 2.2 | 2.3 | 2.3 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.1 | 2.0 | 2.1 | 2.3 |
| 5-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.5 | 2.4 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 |
| 6-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.2 |
| 7-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | C | C | C | C | 2.0 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.0 | 2.2 |
| 8-Aug | 2.1 | 2.0 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.8 | 2.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.8 |
| 9-Aug | 3.0 | 2.8 | 2.7 | Z | 2.6 | 2.6 | 2.4 | 3.1 | 2.9 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 3.1 |
| 10-Aug | 2.3 | 2.3 | 2.5 | 2.5 | Z | 2.4 | 2.4 | 2.5 | 2.9 | 2.6 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.1 | 2.2 | 2.9 |
| 11-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.0 | 2.2 |
| 12-Aug | Z | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.2 |
| 13-Aug | 2.0 | Z | 2.1 | 2.1 | 2.0 | 2.1 | 2.3 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.4 | 2.2 | 2.1 | 2.4 |
| 14-Aug | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.3 | 2.5 | 2.4 | 2.5 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.0 | 2.1 | 2.2 | 2.2 | 2.5 |
| 15-Aug | 2.1 | 2.3 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 |
| 16-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 17-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.2 | 2.2 | 2.1 | 2.2 |
| 18-Aug | Z | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.5 |
| 19-Aug | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.1 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 |
| 20-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 3.1 | 3.7 | 3.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 3.7 |
| 21-Aug | 2.2 | 2.1 | 2.1 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.2 | 2.1 | 2.5 |
| 22-Aug | 2.3 | 2.3 | 2.3 | 2.2 | Z | 2.4 | 2.8 | 2.6 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 2.1 | 2.2 | 2.2 | 2.8 |
| 23-Aug | 2.2 | 2.5 | 2.5 | 2.5 | 2.5 | Z | 2.5 | 2.4 | 2.6 | 2.5 | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.5 | 2.1 | 2.0 | 2.0 | 2.0 | 2.3 | 2.6 |
| 24-Aug | Z | 2.2 | 2.3 | 2.5 | 2.2 | 2.0 | 2.1 | 2.2 | 2.1 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 | 2.0 | 2.2 | 2.1 | 2.2 | 2.1 | 2.5 |
| 25-Aug | 2.2 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 2.7 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | PF | PF | PF | PF | PF | PF | 2.2 | 2.3 | 2.3 | -- | 2.7 |
| 26-Aug | 2.7 | 2.7 | Z | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 | 2.3 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.1 | 2.3 | 3.1 |
| 27-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.4 | 2.4 | 2.4 | 2.4 | M | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 |
| 28-Aug | 2.1 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 29-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.1 | 2.3 | 2.3 | 2.0 | 2.3 |
| 30-Aug | Z | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 31-Aug | 2.5 | Z | 2.4 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.0 | 2.0 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.4 | 2.1 | 2.5 |
| | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | Diurnal Average |
| | 3.0 | 2.8 | 2.9 | 3.1 | 2.9 | 2.8 | 2.8 | 3.1 | 3.7 | 3.0 | 2.6 | 2.4 | 2.8 | 2.7 | 2.4 | 2.3 | 2.2 | 2.5 | 2.4 | 2.5 | 2.2 | 2.4 | 2.5 | 2.4 | Diurnal Maximum | |

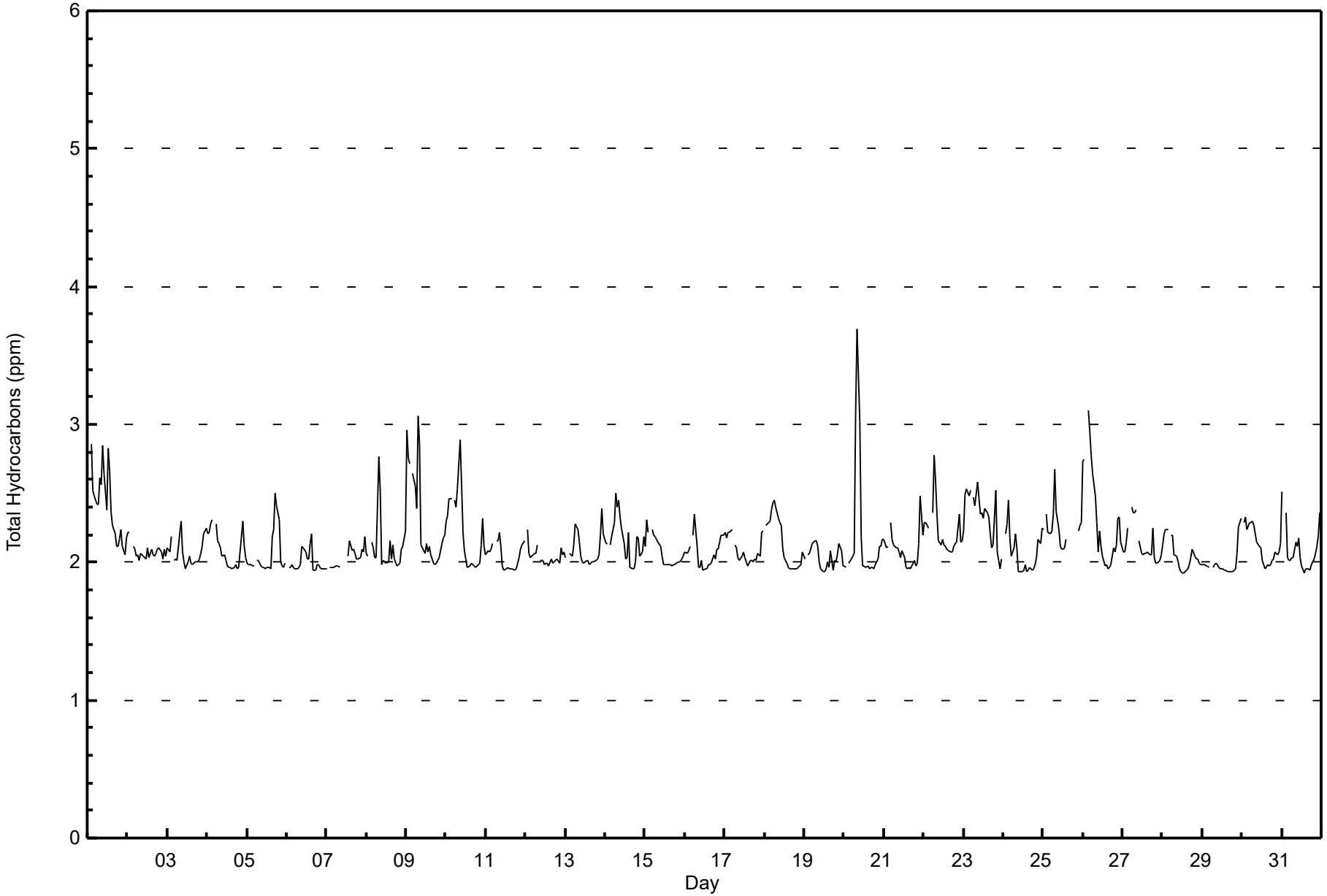
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Ells River - August 2026**



# Total Hydrocarbons (THC) - ppm
## Ells River - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 319 | 45.51 | 45.51 |
| 2.1 - 3.0 | 378 | 53.92 | 99.43 |
| 3.1 - 10.0 | 4 | 0.57 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Ells River - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 62 | 27 | 5 | 1 | 2 | 5 | 11 | 17 | 10 | 30 | 36 | 18 | 29 | 27 | 19 | 20 | 319 |
| 2.1 - 3.0 | 37 | 12 | 2 | 2 | 2 | 2 | 7 | 55 | 61 | 24 | 15 | 34 | 30 | 20 | 27 | 40 | 370 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 4 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 99 | 39 | 7 | 3 | 4 | 7 | 19 | 72 | 71 | 54 | 51 | 53 | 60 | 47 | 47 | 60 | 693 |

Total Number of Valid Hours: 693

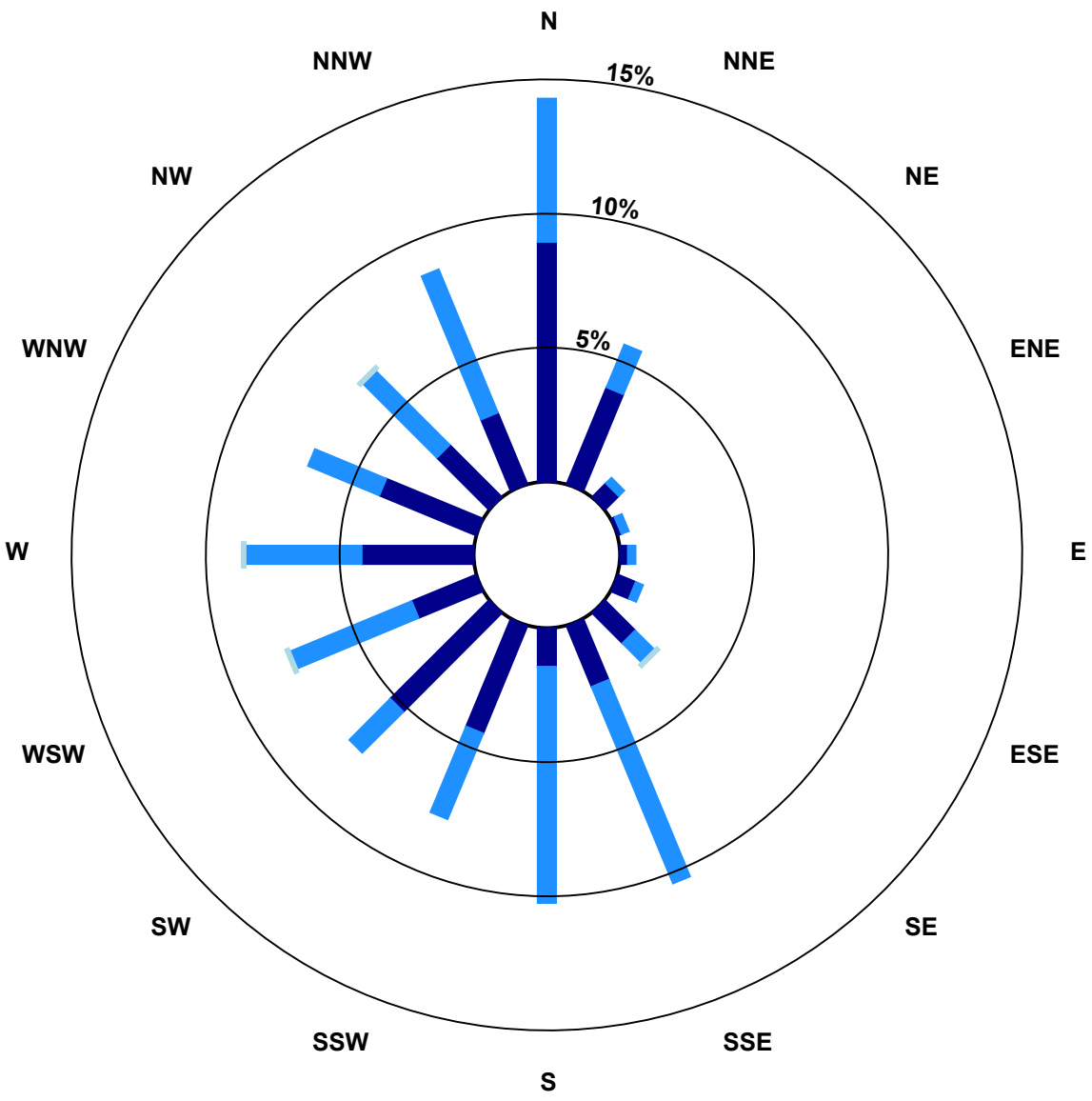
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Ells River




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

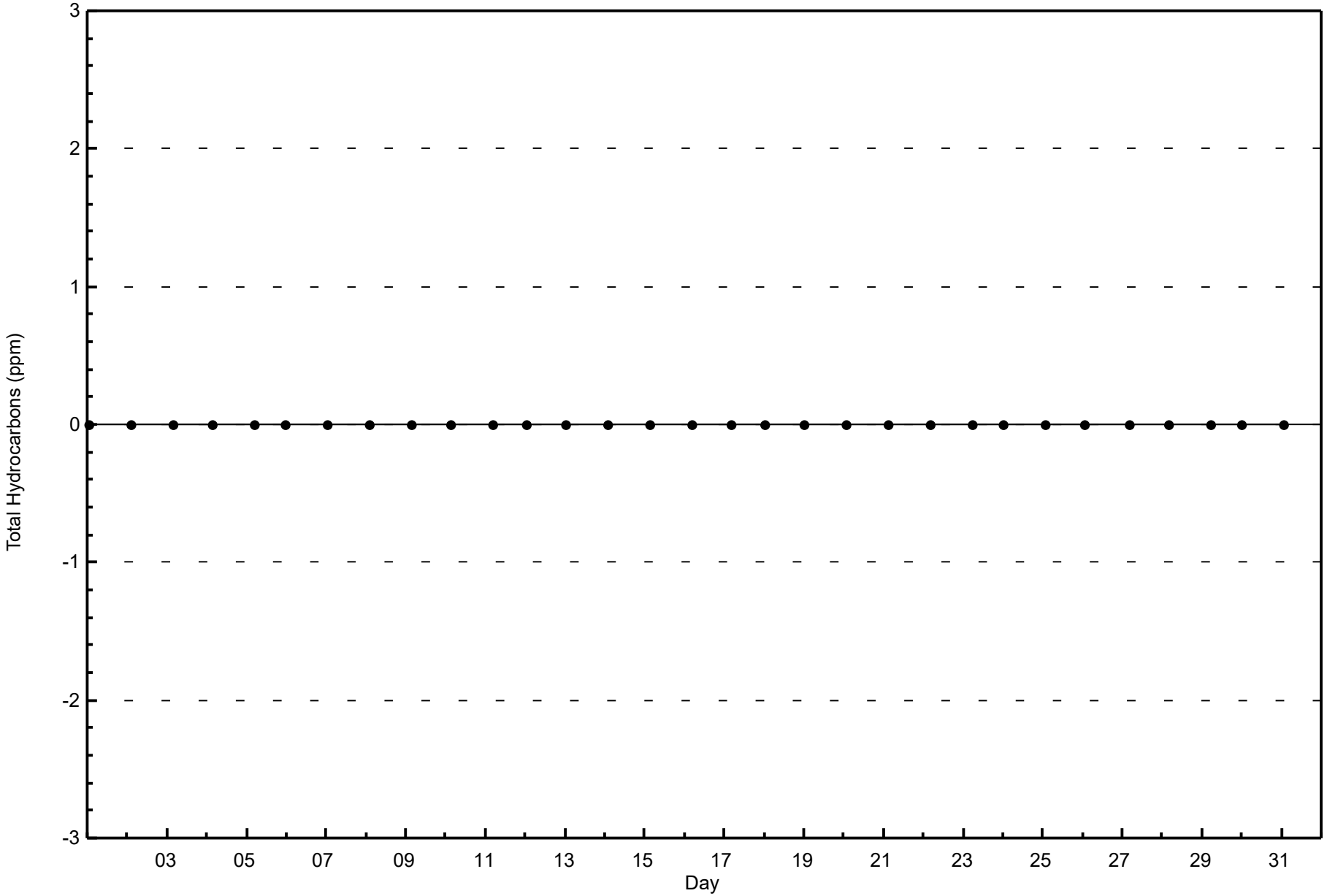
Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Ells River - August 2026**

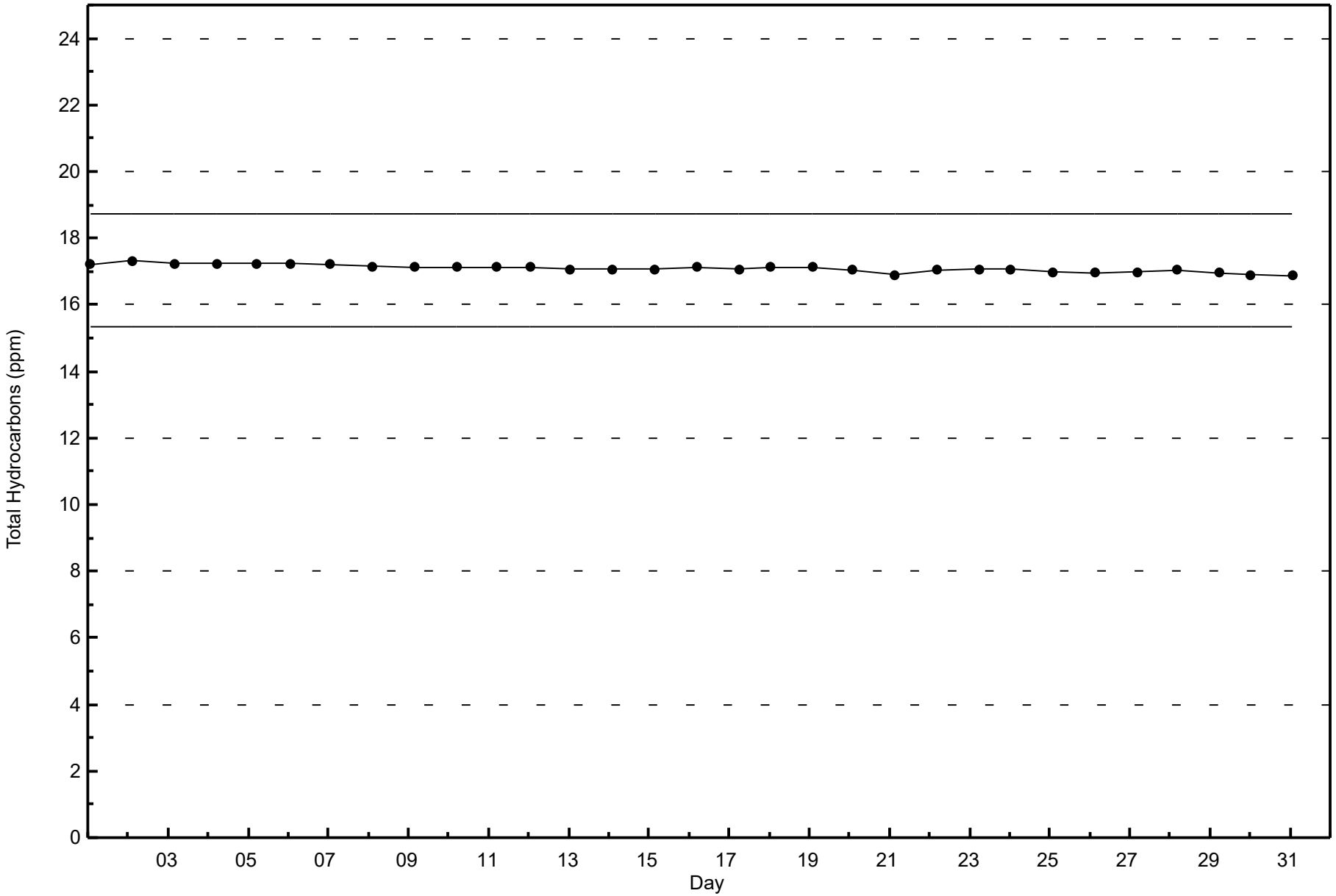


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Ells River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Non Methane Hydrocarbons (NMHC) - ppm

## Ells River - August 2026

Maximum Value: 0.247 ppm on Aug 20 10:00

Maximum Daily Average: 0.018 ppm on Aug 20

Minimum Value: 0.000 ppm on Aug 1 04:00

Minimum Daily Average: 0.000 ppm on Aug 2

Maximum Diurnal Average: 0.013 ppm at hour 9

Minimum Diurnal Average: 0.000 ppm at hour 4

Monthly Average: 0.002 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.005 | Z | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.004 | 0.011 | 0.027 | 0.140 | 0.016 | 0.055 | 0.025 | 0.007 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.013 | 0.140 |
| 2-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.081 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.081 |
| 10-Aug | 0.000 | 0.000 | 0.002 | 0.000 | Z | 0.000 | 0.000 | 0.002 | 0.147 | 0.020 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.147 |
| 11-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | M | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 18-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.150 | 0.247 | 0.016 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.002 | 0.018 | 0.247 |
| 21-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.022 | 0.000 | 0.001 | 0.022 |
| 22-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.001 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.022 | 0.014 | 0.017 | 0.012 | 0.000 | 0.000 | 0.003 | 0.022 |
| 23-Aug | 0.000 | 0.004 | 0.002 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.014 | 0.020 | 0.022 | 0.048 | 0.057 | 0.063 | 0.053 | 0.015 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.013 | 0.063 |
| 24-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 25-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.064 | PF | PF | PF | PF | PF | PF | 0.000 | 0.000 | 0.000 | -- | 0.064 |
| 26-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 |
| 27-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | M | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 28-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.014 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.014 |
| 29-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Aug | 0.000 | Z | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.017 | 0.010 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.017 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.013 | 0.010 | 0.001 | 0.001 | 0.005 | 0.002 | 0.005 | 0.003 | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 | 0.000 | 0.001 | 0.000 | Diurnal Average | |
| | 0.005 | 0.004 | 0.002 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.150 | 0.247 | 0.016 | 0.027 | 0.140 | 0.022 | 0.064 | 0.057 | 0.063 | 0.053 | 0.022 | 0.014 | 0.017 | 0.012 | 0.022 | 0.002 | Diurnal Maximum | |

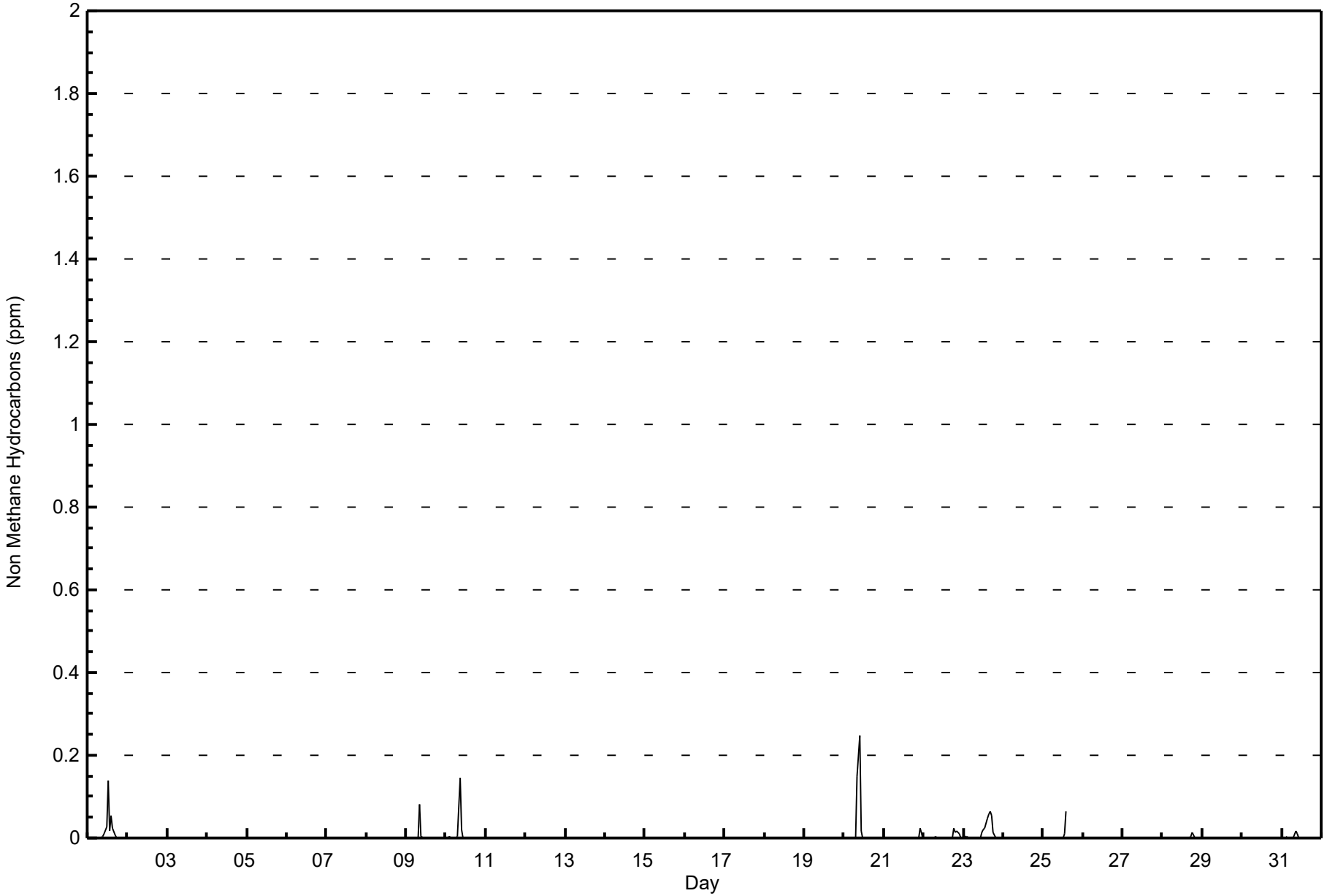
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Ells River - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Ells River - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 670 | 95.58 | 95.58 |
| 0.006 - 0.05 | 23 | 3.28 | 98.86 |
| 0.06 - 0.1 | 6 | 0.86 | 99.71 |
| > 0.1 | 2 | 0.29 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Ells River - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 91 | 38 | 6 | 2 | 3 | 7 | 18 | 67 | 67 | 53 | 50 | 50 | 59 | 47 | 46 | 58 | 662 |
| 0.006 - 0.05 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 23 |
| 0.06 - 0.1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 6 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| **Totals** | 99 | 39 | 7 | 3 | 4 | 7 | 19 | 72 | 71 | 54 | 51 | 53 | 60 | 47 | 47 | 60 | 693 |

Total Number of Valid Hours: 693

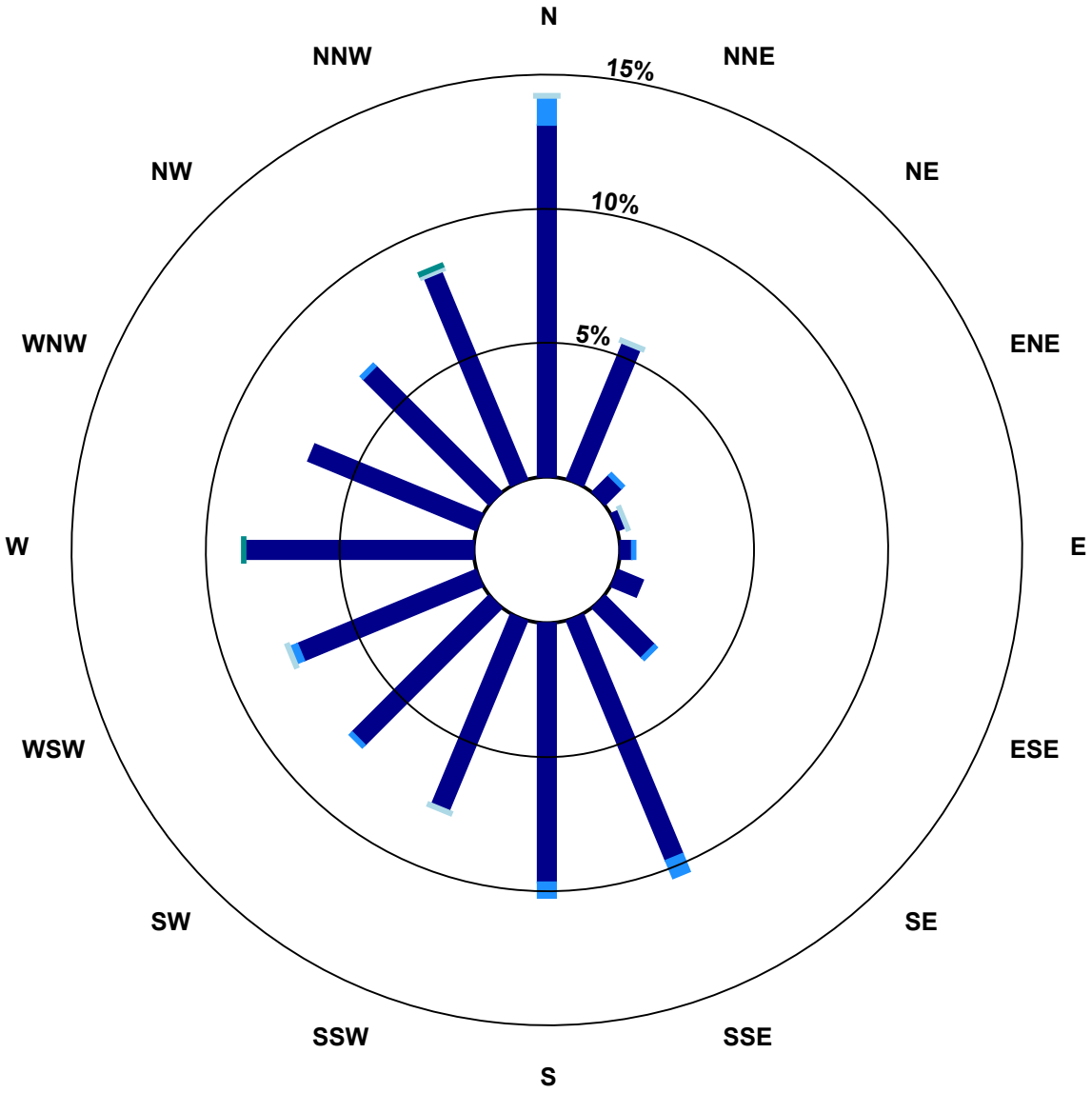
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Ells River




Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

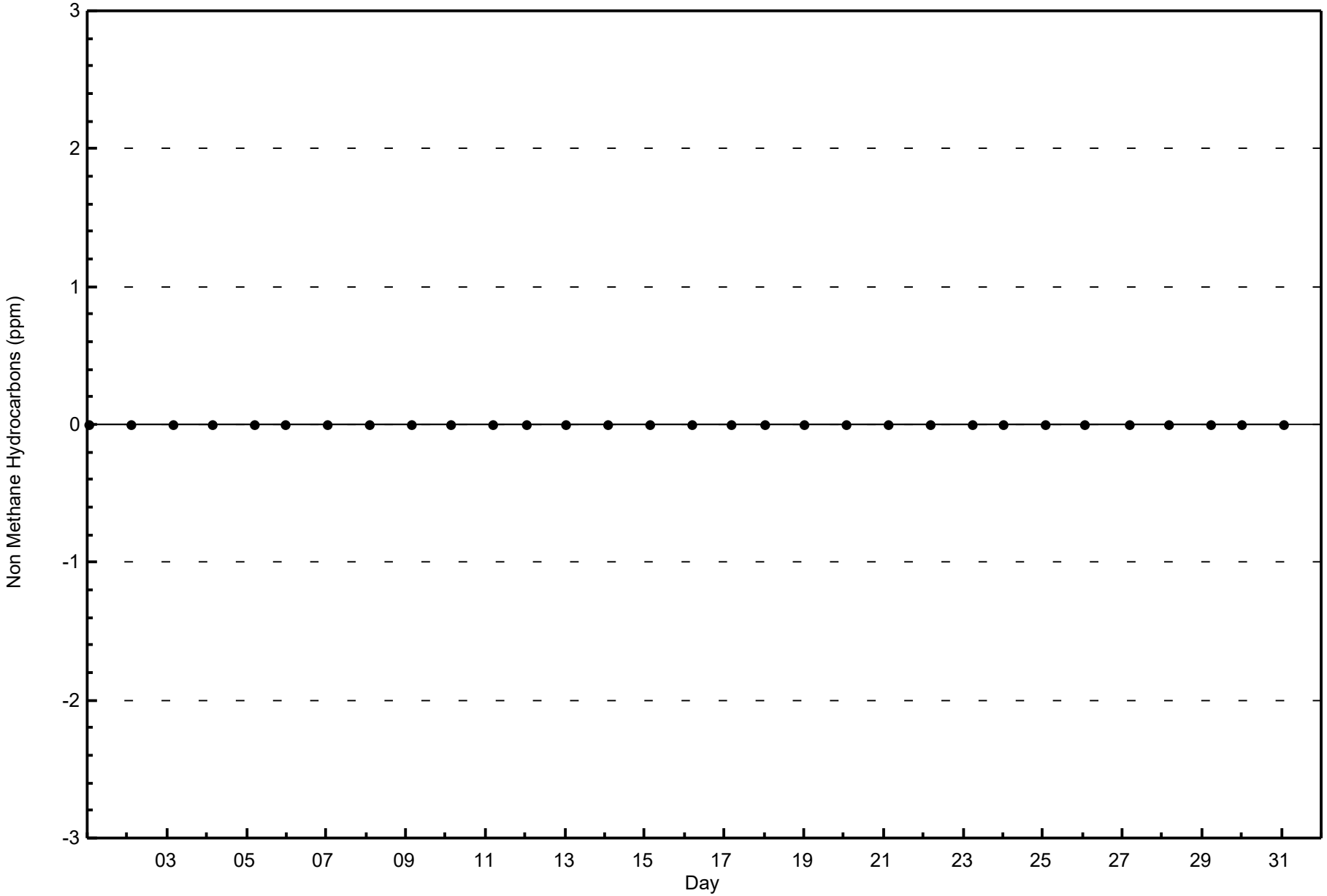
Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Ells River - August 2026**

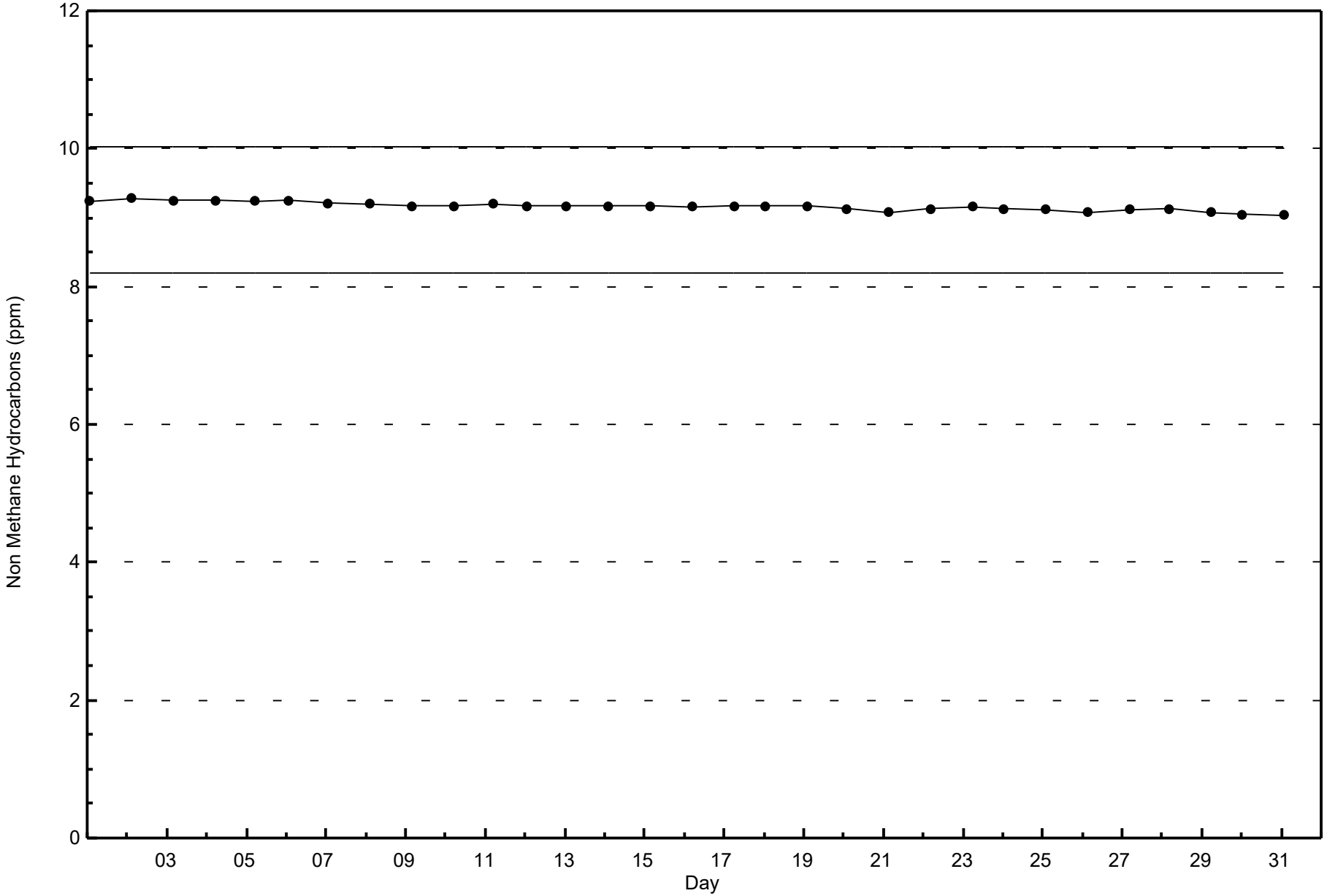


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Ells River - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Methane ($CH_4$) - ppm

## Ells River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.5 ppm on Aug 20 09:00
Maximum Daily Average: 2.4 ppm on Aug 1

Minimum Value: 1.9 ppm on Aug 31 14:00
Minimum Daily Average: 2.0 ppm on Aug 29
Maximum Diurnal Average: 2.3 ppm at hour 8
Minimum Diurnal Average: 2.0 ppm at hour 18
Monthly Average: 2.12 ppm
Percentiles: $P_1$ = 1.9 $P_{10}$ = 2.0 $Q_1$ = 2.0 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.4 $P_{99}$ = 2.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 701 |
| Hours of Missing Data: | 43 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.5 | Z | 2.9 | 2.5 | 2.5 | 2.4 | 2.4 | 2.6 | 2.6 | 2.8 | 2.6 | 2.4 | 2.7 | 2.7 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.9 |
| 2-Aug | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.2 |
| 3-Aug | 2.1 | 2.1 | 2.2 | Z | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 4-Aug | 2.2 | 2.2 | 2.3 | 2.3 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.1 | 2.0 | 2.1 | 2.3 |
| 5-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.5 | 2.4 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 |
| 6-Aug | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.2 |
| 7-Aug | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | C | C | C | C | 2.0 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.0 | 2.2 |
| 8-Aug | 2.1 | 2.0 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.8 | 2.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.8 |
| 9-Aug | 3.0 | 2.8 | 2.7 | Z | 2.6 | 2.6 | 2.4 | 3.1 | 2.8 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 3.1 |
| 10-Aug | 2.3 | 2.3 | 2.5 | 2.5 | Z | 2.4 | 2.4 | 2.5 | 2.7 | 2.5 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.1 | 2.2 | 2.7 |
| 11-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.0 | 2.2 |
| 12-Aug | Z | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.2 |
| 13-Aug | 2.0 | Z | 2.1 | 2.1 | 2.0 | 2.1 | 2.3 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.4 | 2.2 | 2.1 | 2.4 |
| 14-Aug | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.3 | 2.5 | 2.4 | 2.5 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.0 | 2.1 | 2.2 | 2.2 | 2.5 |
| 15-Aug | 2.1 | 2.3 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 |
| 16-Aug | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.2 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 |
| 17-Aug | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.2 | 2.2 | 2.1 | 2.2 |
| 18-Aug | Z | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.5 |
| 19-Aug | 2.0 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.1 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 |
| 20-Aug | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.1 | 3.1 | 3.5 | 2.8 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 3.5 |
| 21-Aug | 2.2 | 2.1 | 2.1 | Z | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.5 | 2.2 | 2.1 | 2.5 |
| 22-Aug | 2.3 | 2.3 | 2.3 | 2.2 | Z | 2.4 | 2.8 | 2.6 | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 | 2.2 | 2.2 | 2.8 |
| 23-Aug | 2.2 | 2.5 | 2.5 | 2.5 | 2.5 | Z | 2.5 | 2.4 | 2.6 | 2.5 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.1 | 2.0 | 2.1 | 2.5 | 2.1 | 2.0 | 2.0 | 2.0 | 2.3 | 2.6 |
| 24-Aug | Z | 2.2 | 2.3 | 2.5 | 2.2 | 2.0 | 2.1 | 2.2 | 2.1 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 2.0 | 2.0 | 2.2 | 2.1 | 2.2 | 2.1 | 2.5 |
| 25-Aug | 2.2 | Z | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 2.7 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | PF | PF | PF | PF | PF | PF | 2.2 | 2.3 | 2.3 | -- | 2.7 |
| 26-Aug | 2.7 | 2.7 | Z | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 | 2.3 | 2.1 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.1 | 2.3 | 3.1 |
| 27-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.4 | 2.4 | 2.4 | 2.4 | M | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 |
| 28-Aug | 2.1 | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 |
| 29-Aug | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.1 | 2.3 | 2.3 | 2.0 | 2.3 |
| 30-Aug | Z | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 31-Aug | 2.5 | Z | 2.4 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.0 | 2.0 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.4 | 2.1 | 2.5 |
| | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | Diurnal Average | |
| | 3.0 | 2.8 | 2.9 | 3.1 | 2.9 | 2.8 | 2.8 | 3.1 | 3.5 | 2.8 | 2.6 | 2.4 | 2.7 | 2.7 | 2.3 | 2.3 | 2.2 | 2.5 | 2.4 | 2.5 | 2.2 | 2.3 | 2.5 | 2.4 | Diurnal Maximum | |

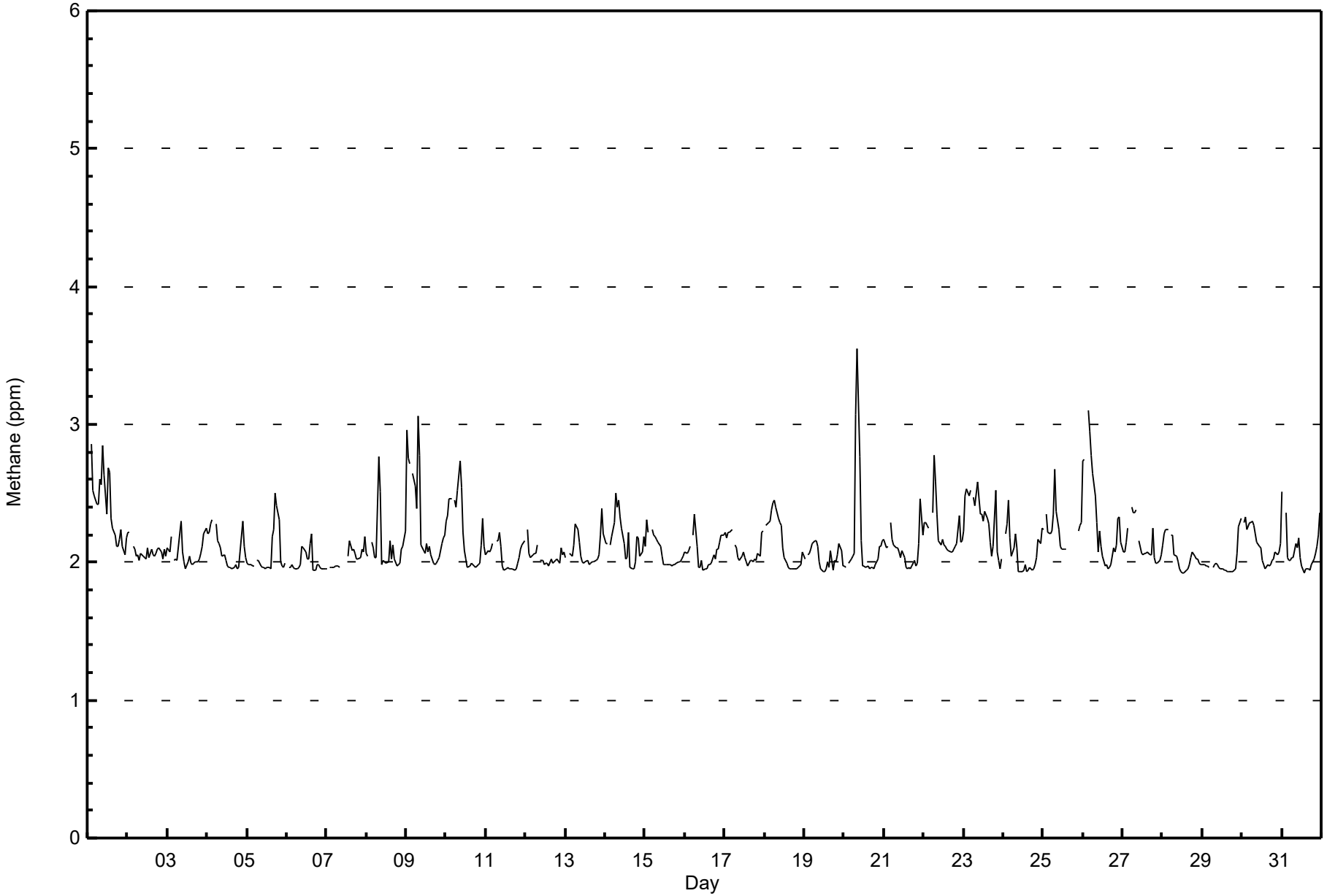
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Ells River - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 320 | 45.65 | 45.65 |
| 2.1 - 3.0 | 377 | 53.78 | 99.43 |
| 3.1 - 10.0 | 4 | 0.57 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 701

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Ells River - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 62 | 27 | 5 | 1 | 2 | 5 | 11 | 17 | 10 | 30 | 36 | 19 | 29 | 27 | 19 | 20 | 320 |
| 2.1 - 3.0 | 37 | 12 | 2 | 2 | 2 | 2 | 7 | 55 | 61 | 24 | 15 | 33 | 30 | 20 | 27 | 40 | 369 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 4 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 99 | 39 | 7 | 3 | 4 | 7 | 19 | 72 | 71 | 54 | 51 | 53 | 60 | 47 | 47 | 60 | 693 |

Total Number of Valid Hours: 693

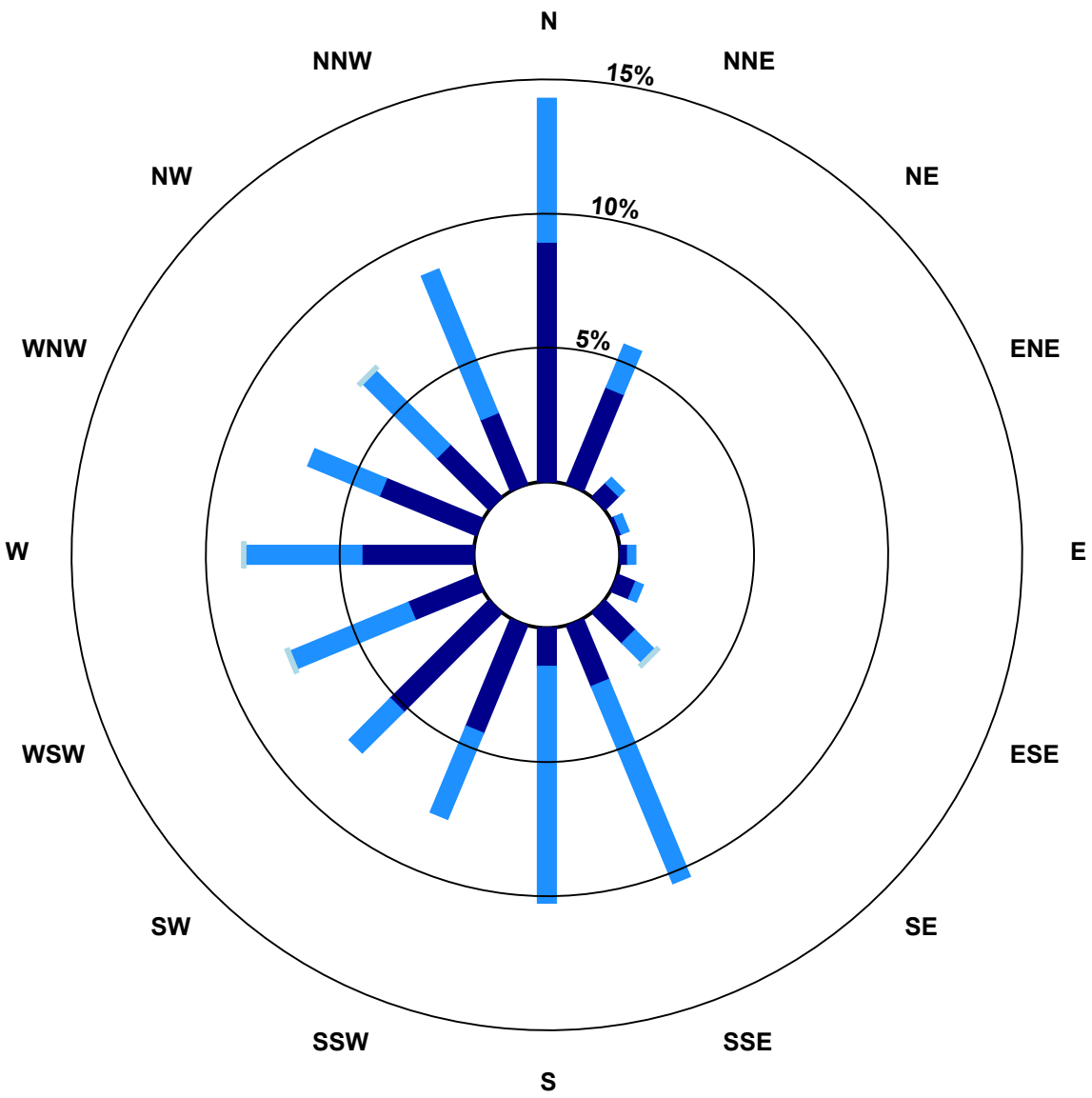
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Ells River




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

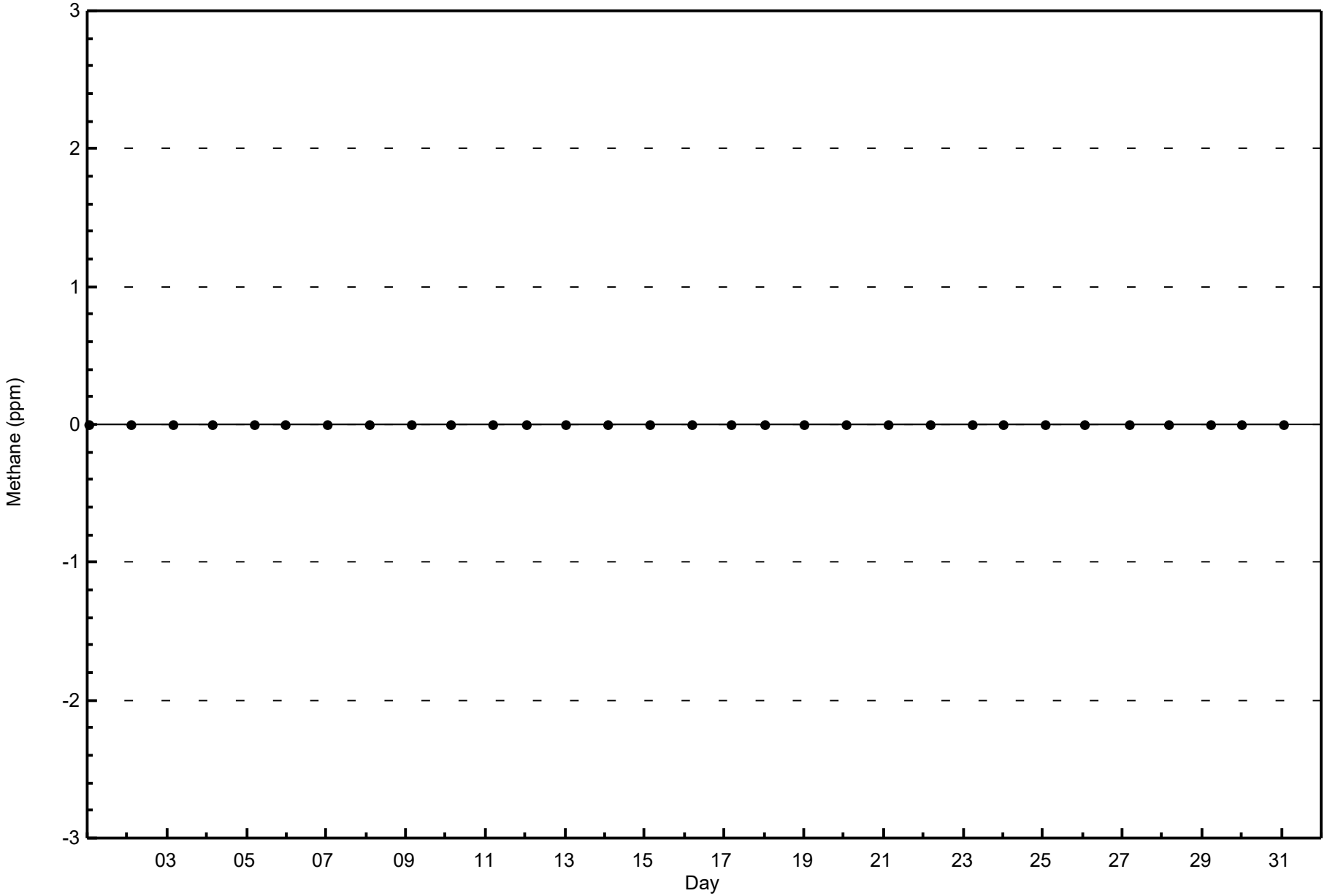
Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Ells River - August 2026**

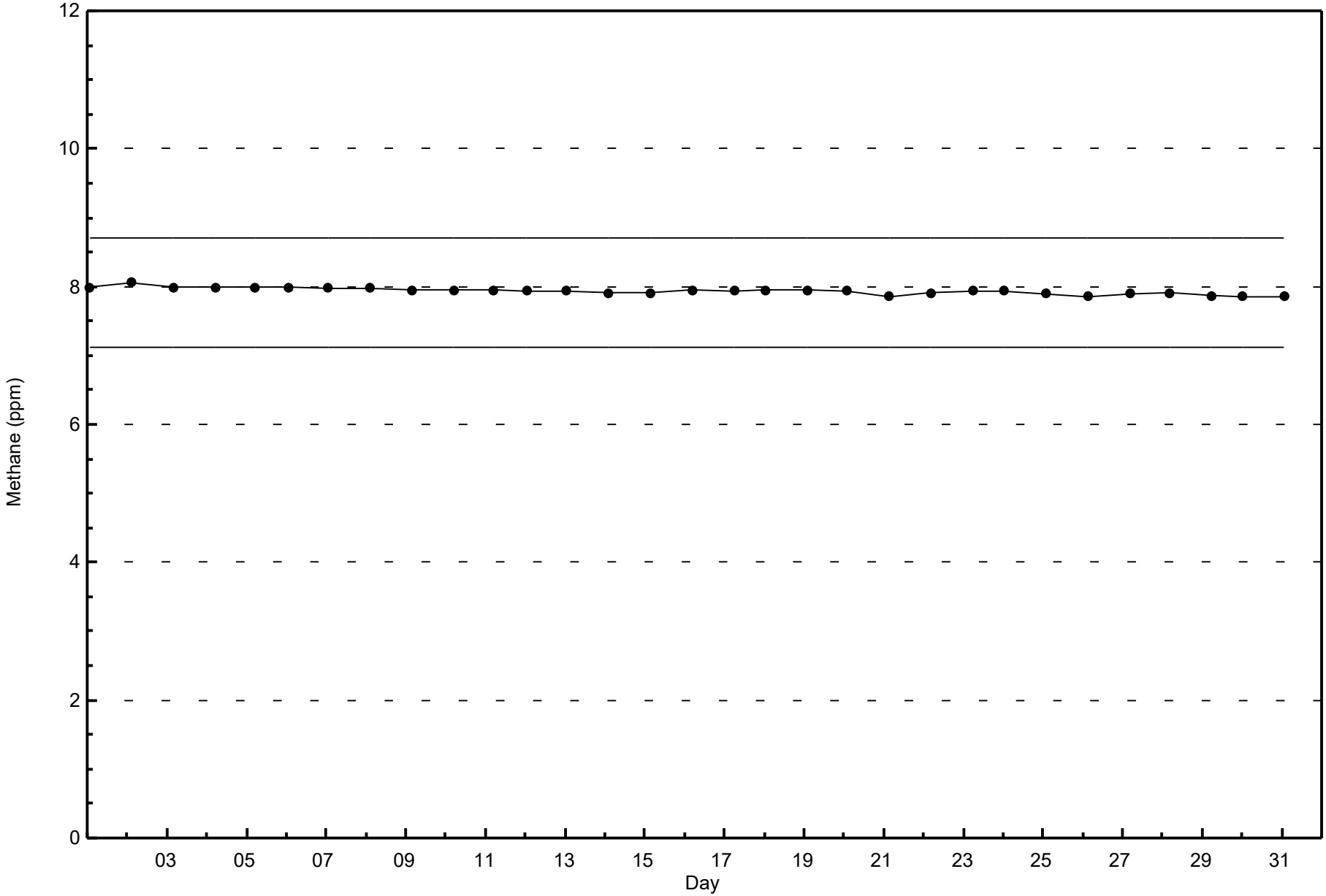


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Ells River - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Ells River - August 2026

Maximum Value: 46.1 ppb on Aug 20 09:00

Maximum Daily Average: 8.4 ppb on Aug 26

Minimum Value: 0.0 ppb on Aug 1 22:00

Minimum Daily Average: 0.0 ppb on Aug 17

Maximum Diurnal Average: 8.0 ppb at hour 9

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 2.06 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.4 $Q_3$ = 1.2 $P_{90}$ = 4.6 $P_{99}$ = 32.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.3 | 6.5 | 8.7 | 3.3 | 0.9 | Z | 5.9 | 21.6 | 13.2 | 32.6 | 8.0 | 5.4 | 32.0 | 21.6 | 7.0 | 4.2 | 2.2 | 0.6 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7 | 32.6 |
| 2-Aug | Z | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 1.2 | 0.8 | 1.8 | 1.1 | 0.7 | 0.6 | 0.8 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 1.8 |
| 3-Aug | 0.3 | Z | 1.3 | 0.7 | 0.1 | 0.0 | 0.3 | 7.8 | 7.5 | 1.3 | 0.5 | 0.2 | 0.8 | 1.4 | 1.1 | 1.3 | 1.0 | 1.6 | 1.9 | 1.4 | 1.0 | 0.4 | 0.0 | 0.0 | 1.4 | 7.8 |
| 4-Aug | 0.3 | 0.2 | Z | 1.7 | 0.7 | 0.8 | 0.1 | 0.4 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.3 | 0.3 | 0.1 | 0.2 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 | 1.7 |
| 5-Aug | 0.1 | 0.0 | 0.2 | Z | 0.4 | 0.1 | 0.6 | 1.1 | 0.2 | 0.5 | 0.4 | 0.0 | 0.2 | 0.3 | 0.1 | 1.0 | 0.9 | 2.2 | 1.2 | 0.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 2.2 |
| 6-Aug | 0.1 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.6 | 2.6 | 1.9 | 1.4 | 0.8 | 0.4 | 3.1 | 2.8 | 0.1 | 0.0 | 0.3 | 0.2 | 0.0 | 0.2 | 0.1 | 0.1 | 0.7 | 3.1 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.7 | 2.9 | 1.5 | 5.2 | 2.9 | 1.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.8 | 5.2 |
| 8-Aug | Z | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 23.7 | 8.6 | 1.1 | 3.1 | 1.6 | 1.7 | 0.5 | 3.9 | 1.1 | 1.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 5.6 | 2.4 | 23.7 |
| 9-Aug | 22.5 | Z | 14.8 | 13.6 | 8.4 | 4.8 | 2.0 | 27.5 | 42.3 | 4.6 | 2.4 | 1.7 | 2.8 | 1.6 | 2.1 | 1.6 | 0.8 | 0.1 | 0.5 | 0.1 | 0.2 | 0.0 | 0.2 | 1.1 | 6.8 | 42.3 |
| 10-Aug | 1.8 | 2.1 | Z | 2.7 | 2.1 | 1.9 | 3.2 | 8.5 | 44.0 | C | C | C | C | C | 0.6 | 1.1 | 0.5 | 0.3 | 0.2 | 0.0 | 0.0 | 1.8 | 3.6 | 0.2 | 4.1 | 44.0 |
| 11-Aug | 0.2 | 0.3 | 0.1 | Z | 0.3 | 0.1 | 0.5 | 0.9 | 3.0 | 1.8 | 0.6 | 0.1 | 0.2 | 0.1 | 0.2 | 0.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.4 | 2.5 | 0.5 | 3.0 |
| 12-Aug | 8.4 | 1.6 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 1.1 | M | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 1.0 | 0.4 | 0.7 | 0.4 | 0.2 | 0.0 | 1.5 | 0.0 | 0.0 | 0.7 | 8.4 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 14.9 | 14.4 | 12.3 | 4.5 | 1.8 | 0.9 | 1.6 | 2.6 | 1.3 | 0.6 | 0.6 | 0.6 | 0.3 | 0.0 | 0.0 | 0.4 | 3.9 | 0.4 | 2.7 | 14.9 |
| 14-Aug | Z | 0.2 | 0.1 | 0.4 | 0.6 | 2.3 | 12.5 | 22.3 | 22.6 | 12.9 | 10.2 | 6.5 | 2.6 | 2.5 | 4.6 | 0.5 | 0.1 | 0.3 | 0.8 | 1.9 | 0.6 | 0.4 | 0.4 | 0.4 | 4.6 | 22.6 |
| 15-Aug | 0.4 | Z | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.6 | 0.1 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.6 | 0.3 | 0.4 | 0.6 |
| 16-Aug | 0.2 | 0.1 | Z | 0.6 | 0.5 | 1.5 | 5.4 | 2.7 | 0.2 | 0.2 | 0.9 | 0.3 | 0.4 | 0.3 | 0.6 | 0.7 | 0.3 | 1.6 | 0.9 | 0.5 | 0.1 | 0.3 | 0.0 | 0.2 | 0.8 | 5.4 |
| 17-Aug | 0.0 | 0.0 | 0.0 | Z | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 1.0 | 1.2 | 4.6 | 6.6 | 6.0 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 6.6 |
| 19-Aug | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.3 | 0.9 | 0.5 | 2.1 | 0.2 | 1.5 | 0.7 | 0.3 | 0.3 | 0.2 | 0.0 | 0.3 | 2.1 |
| 20-Aug | Z | 0.2 | 0.4 | 0.3 | 0.0 | 0.0 | 0.4 | 26.3 | 46.1 | 25.4 | 14.7 | 0.6 | 1.2 | 0.8 | 0.6 | 0.6 | 0.8 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 5.2 | 46.1 |
| 21-Aug | 0.0 | Z | 0.0 | 0.0 | 0.5 | 0.0 | 0.2 | 0.6 | 0.9 | 2.3 | 1.8 | 3.9 | 1.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 3.9 |
| 22-Aug | 0.2 | 5.7 | Z | 15.6 | 3.5 | 2.2 | 1.0 | 1.2 | 2.0 | 1.1 | 1.2 | 1.0 | 0.7 | 0.2 | 0.2 | 0.4 | 0.4 | 0.6 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.1 | 1.7 | 15.6 |
| 23-Aug | 0.3 | 0.3 | 0.3 | Z | 0.5 | 0.5 | 1.3 | 1.2 | 1.4 | 1.7 | 2.8 | 2.2 | 1.3 | 2.3 | 0.6 | 0.3 | 0.0 | 0.0 | 0.2 | 0.7 | 0.1 | 0.1 | 0.1 | 0.2 | 0.8 | 2.8 |
| 24-Aug | 0.5 | 1.1 | 2.4 | 5.4 | Z | 0.6 | 0.9 | 7.3 | 1.8 | 0.0 | 0.0 | 0.0 | 0.4 | 0.3 | 0.2 | 0.4 | 1.0 | 0.7 | 0.5 | 0.4 | 0.2 | 0.2 | 0.3 | 0.6 | 1.1 | 7.3 |
| 25-Aug | 1.0 | 0.2 | 0.1 | 0.1 | 0.1 | Z | 1.2 | 14.6 | 11.1 | 15.5 | 5.4 | 3.5 | 2.2 | 2.1 | 1.1 | PF | PF | PF | PF | PF | PF | 0.0 | 2.0 | 5.7 | -- | 15.5 |
| 26-Aug | Z | 22.7 | 35.1 | 41.1 | 34.7 | 19.8 | 12.5 | 15.9 | 6.9 | 0.8 | 1.5 | 1.4 | 0.5 | 0.0 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.4 | 41.1 |
| 27-Aug | 0.0 | 0.0 | Z | 0.2 | 0.3 | 1.3 | 1.0 | 1.7 | 2.0 | M | 2.6 | 0.5 | 0.6 | 1.3 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.6 | 0.2 | 0.5 | 0.8 | 2.6 |
| 28-Aug | 0.4 | 0.8 | Z | 0.7 | 0.5 | 0.6 | 0.8 | 0.8 | 1.1 | 1.2 | 0.4 | 0.5 | 0.3 | 0.5 | 0.5 | 0.6 | 0.3 | 0.4 | 0.5 | 0.5 | 0.3 | 0.2 | 0.3 | 0.6 | 0.6 | 1.2 |
| 29-Aug | 0.3 | 0.5 | 0.4 | Z | 0.4 | 0.3 | 0.2 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 11.5 | 11.3 | 1.2 | 11.5 |
| 30-Aug | 5.5 | 5.3 | 3.5 | 1.1 | Z | 0.1 | 0.5 | 4.1 | 2.4 | 3.1 | 3.1 | 3.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.8 | 4.1 | 1.7 | 5.5 |
| 31-Aug | 18.6 | 20.0 | 8.4 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 3.2 | 4.5 | 7.0 | 2.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 2.4 | 2.9 | 20.0 |
| | 2.4 | 2.5 | 3.1 | 3.4 | 2.1 | 1.5 | 2.2 | 6.8 | 8.0 | 4.3 | 2.6 | 1.3 | 1.8 | 1.4 | 1.1 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.1 | 0.3 | 0.9 | 1.2 | Diurnal Average | |
| | 22.5 | 22.7 | 35.1 | 41.1 | 34.7 | 19.8 | 14.9 | 27.5 | 46.1 | 32.6 | 14.7 | 6.5 | 32.0 | 21.6 | 7.0 | 4.2 | 5.2 | 2.9 | 1.9 | 1.9 | 1.0 | 1.8 | 11.5 | 11.3 | Diurnal Maximum | |

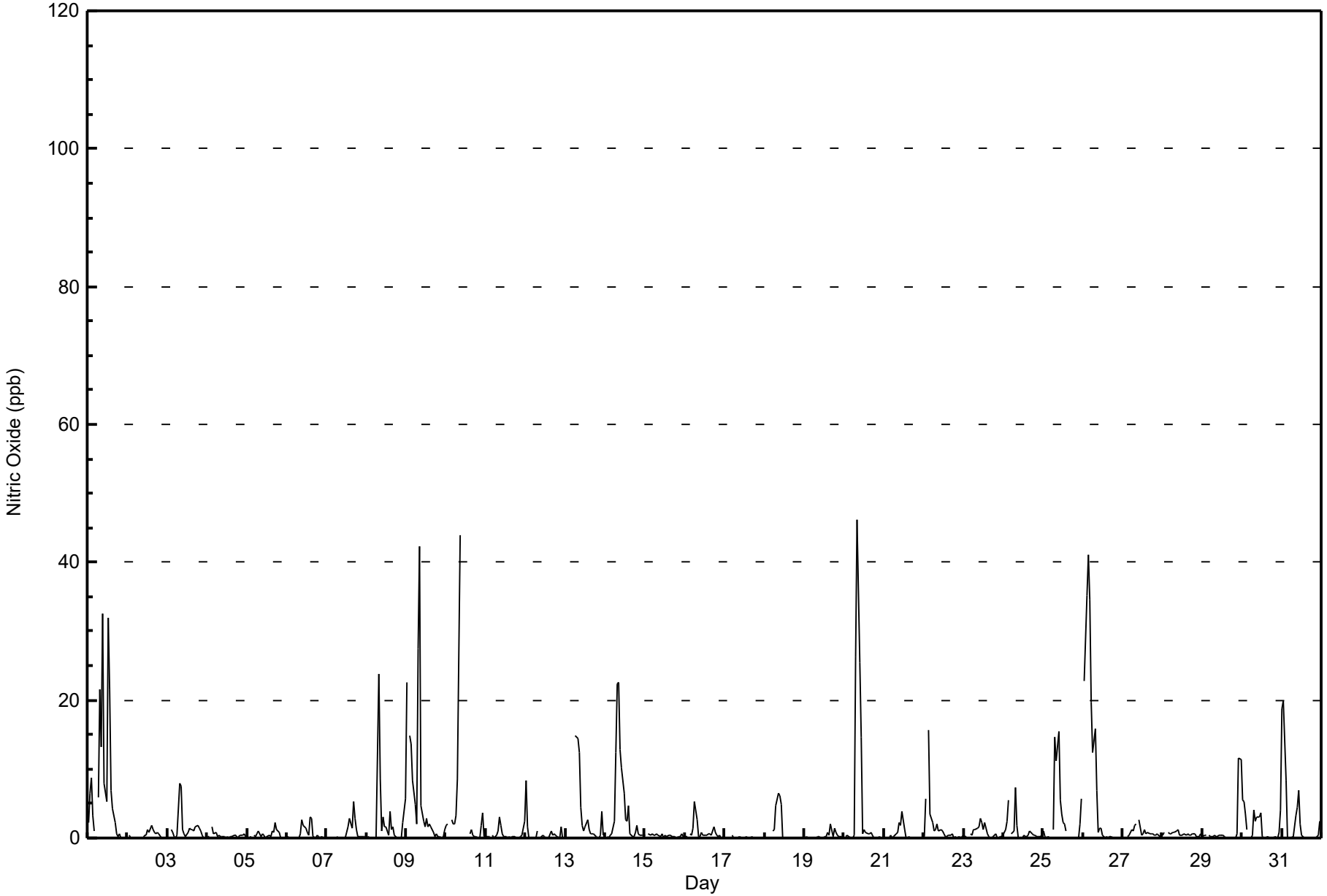
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Ells River - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 682 | 97.43 | 97.43 |
| 21 - 40 | 14 | 2.00 | 99.43 |
| 11 - 80 | 4 | 0.57 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Ells River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 94 | 37 | 7 | 3 | 4 | 7 | 18 | 72 | 67 | 58 | 51 | 51 | 57 | 49 | 45 | 55 | 675 |
| 21 - 40 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 4 | 14 |
| 11 - 80 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 4 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 96 | 38 | 7 | 3 | 4 | 7 | 19 | 73 | 68 | 58 | 51 | 53 | 59 | 50 | 47 | 60 | 693 |

Total Number of Valid Hours: 693

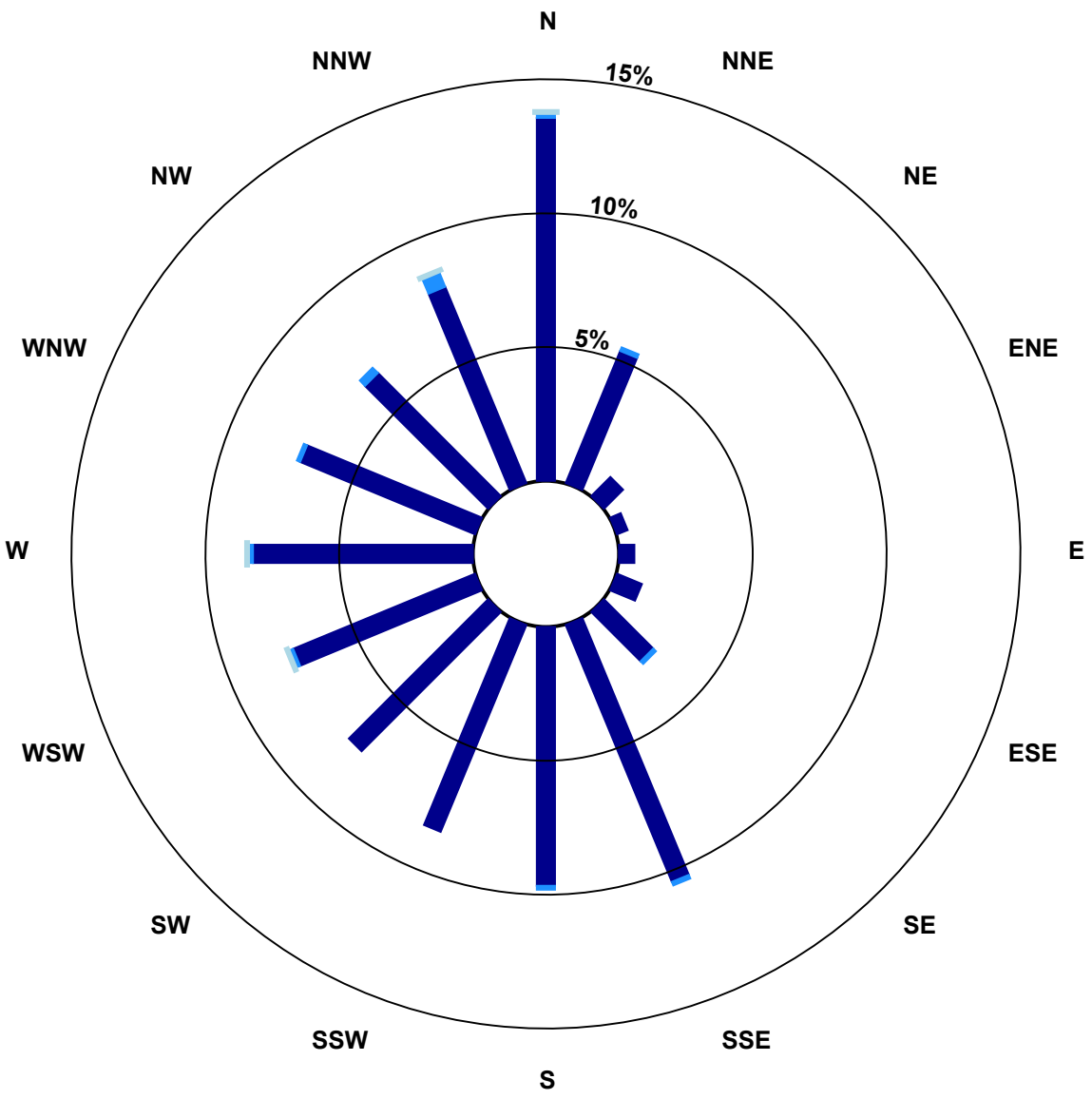
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Ells River




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

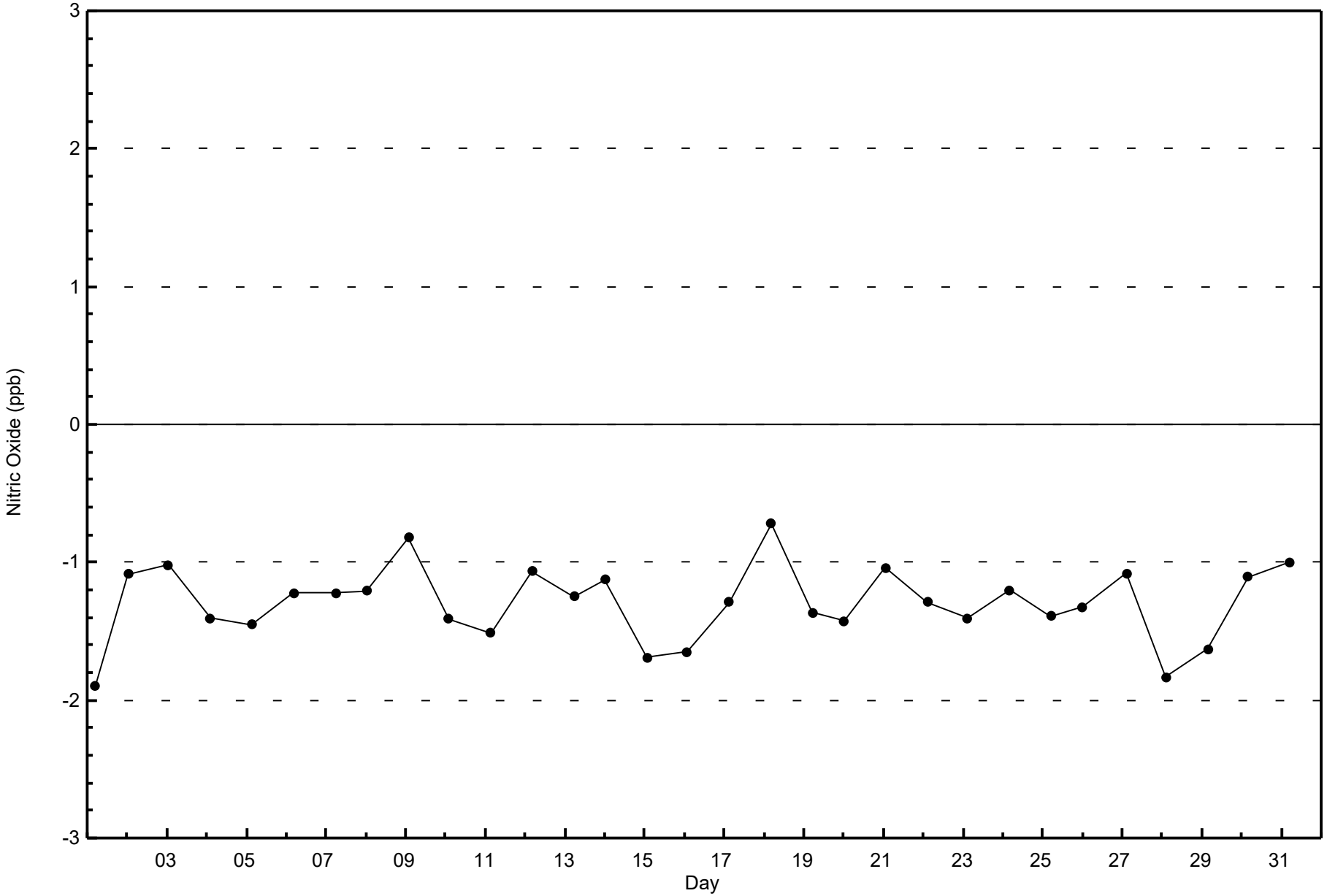
Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Ells River - August 2026**

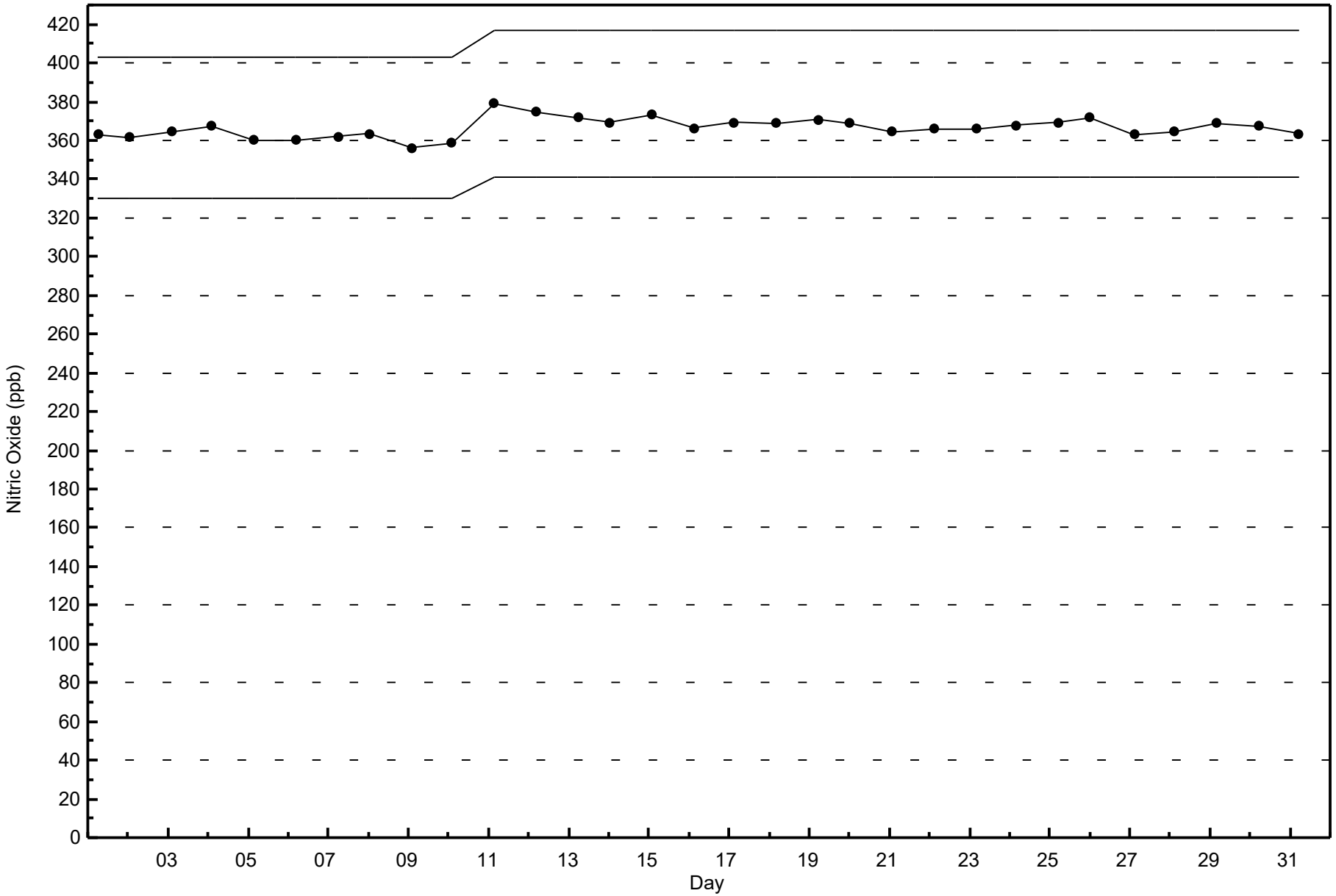


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Ells River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Ells River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 23.4 ppb on Aug 1 13:00 Maximum Daily Average: 6.8 ppb on Aug 14

Minimum Value: 0.0 ppb on Aug 4 08:00 Minimum Daily Average: 0.1 ppb on Aug 15
Maximum Diurnal Average: 5.1 ppb at hour 9 Minimum Diurnal Average: 2.0 ppb at hour 5
Monthly Average: 3.41 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.5 Median = 2.2 $Q_3$ = 4.8 $P_{90}$ = 8.3 $P_{99}$ = 17.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | 2.5 | 2.7 | 2.9 | 1.4 | Z | 2.7 | 6.5 | 5.4 | 7.3 | 7.2 | 9.2 | 23.4 | 22.4 | 12.1 | 8.2 | 5.8 | 2.7 | 1.8 | 3.4 | 8.3 | 5.2 | 2.7 | 5.7 | 6.6 | 23.4 |
| 2-Aug | Z | 7.9 | 2.3 | 0.3 | 2.8 | 1.5 | 1.1 | 0.3 | 3.0 | 1.4 | 2.2 | 2.2 | 6.9 | 3.8 | 4.6 | 2.9 | 2.4 | 2.1 | 4.4 | 5.3 | 6.6 | 1.7 | 8.0 | 4.6 | 3.4 | 8.0 |
| 3-Aug | 10.9 | Z | 16.1 | 12.6 | 6.3 | 0.6 | 2.0 | 9.5 | 6.8 | 2.9 | 2.0 | 1.0 | 1.6 | 2.7 | 2.5 | 2.8 | 2.5 | 3.8 | 6.0 | 7.9 | 4.8 | 2.7 | 1.3 | 0.7 | 4.8 | 16.1 |
| 4-Aug | 2.1 | 3.4 | Z | 4.7 | 2.5 | 1.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 4.9 | 14.7 | 5.8 | 3.9 | 1.9 | 14.7 |
| 5-Aug | 0.1 | 0.1 | 0.0 | Z | 0.4 | 0.1 | 0.9 | 2.1 | 0.6 | 0.6 | 0.6 | 0.1 | 0.5 | 0.2 | 0.6 | 8.5 | 10.2 | 16.0 | 12.2 | 10.6 | 0.8 | 0.0 | 0.1 | 0.8 | 2.9 | 16.0 |
| 6-Aug | 0.5 | 0.2 | 0.2 | 0.6 | Z | 0.5 | 0.3 | 0.5 | 1.0 | 3.8 | 3.4 | 2.9 | 2.1 | 2.6 | 6.2 | 6.3 | 0.5 | 0.1 | 3.2 | 3.4 | 1.0 | 0.0 | 0.2 | 0.0 | 1.7 | 6.3 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 2.9 | 5.4 | 7.3 | 6.0 | 10.4 | 9.1 | 6.4 | 4.8 | 4.3 | 2.8 | 3.0 | 3.5 | 2.9 | 10.4 |
| 8-Aug | Z | 1.1 | 0.5 | 0.3 | 0.0 | 0.2 | 0.1 | 8.4 | 6.3 | 1.5 | 4.4 | 3.3 | 2.6 | 1.7 | 8.2 | 3.2 | 4.5 | 2.6 | 1.1 | 1.4 | 2.3 | 6.7 | 12.3 | 11.1 | 3.6 | 12.3 |
| 9-Aug | 11.4 | Z | 6.7 | 4.7 | 4.3 | 3.5 | 2.8 | 7.8 | 16.5 | 6.1 | 5.4 | 4.3 | 6.2 | 4.9 | 7.6 | 7.4 | 3.8 | 2.0 | 3.6 | 1.6 | 1.9 | 2.1 | 1.8 | 5.0 | 5.3 | 16.5 |
| 10-Aug | 4.6 | 3.8 | Z | 3.7 | 2.3 | 1.2 | 1.6 | 3.8 | 13.9 | C | C | C | C | C | 0.7 | 2.0 | 2.1 | 1.6 | 1.2 | 1.0 | 1.2 | 3.2 | 8.3 | 0.8 | 3.2 | 13.9 |
| 11-Aug | 0.3 | 0.1 | 0.0 | Z | 0.3 | 0.1 | 0.3 | 1.5 | 4.5 | 3.4 | 1.5 | 0.6 | 0.7 | 0.8 | 0.6 | 0.5 | 0.7 | 0.4 | 0.8 | 4.2 | 8.3 | 11.5 | 11.7 | 14.4 | 2.9 | 14.4 |
| 12-Aug | 12.5 | 4.9 | 1.3 | 0.5 | Z | 0.8 | 0.5 | 3.6 | M | 1.3 | 1.3 | 0.5 | 0.8 | 1.0 | 0.3 | 2.7 | 1.8 | 2.6 | 2.4 | 3.6 | 0.7 | 7.0 | 2.7 | 2.2 | 2.5 | 12.5 |
| 13-Aug | 1.3 | 0.0 | 1.6 | 1.9 | 3.3 | Z | 13.7 | 12.6 | 9.8 | 5.1 | 2.9 | 1.9 | 2.8 | 4.5 | 2.4 | 1.9 | 1.7 | 2.8 | 2.4 | 2.4 | 1.0 | 5.6 | 9.0 | 2.9 | 4.1 | 13.7 |
| 14-Aug | Z | 1.1 | 0.4 | 1.7 | 2.9 | 4.8 | 10.2 | 19.4 | 18.7 | 16.0 | 12.1 | 8.8 | 5.0 | 5.6 | 10.6 | 0.8 | 0.1 | 0.2 | 4.5 | 16.6 | 14.4 | 2.3 | 0.7 | 0.5 | 6.8 | 19.4 |
| 15-Aug | 0.5 | Z | 0.8 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 |
| 16-Aug | 0.0 | 0.1 | Z | 0.5 | 2.2 | 4.7 | 8.7 | 3.3 | 0.6 | 0.5 | 2.8 | 0.6 | 0.7 | 0.7 | 2.1 | 2.2 | 2.8 | 6.9 | 5.1 | 5.5 | 4.7 | 4.0 | 2.5 | 2.4 | 2.8 | 8.7 |
| 17-Aug | 1.5 | 1.7 | 0.9 | Z | 0.8 | 0.2 | 0.1 | 0.0 | 0.2 | 0.3 | 0.1 | 0.2 | 0.4 | 1.4 | 1.0 | 2.4 | 3.3 | 1.5 | 1.6 | 1.1 | 1.7 | 9.7 | 12.4 | 9.9 | 2.3 | 12.4 |
| 18-Aug | 8.5 | 7.6 | 6.2 | 5.1 | Z | 5.4 | 4.5 | 6.2 | 8.2 | 6.9 | 6.8 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 8.5 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.5 | 1.1 | 3.2 | 1.7 | 4.8 | 1.3 | 7.3 | 7.8 | 6.7 | 4.6 | 2.8 | 2.4 | 1.9 | 7.8 |
| 20-Aug | Z | 0.8 | 0.6 | 0.3 | 0.4 | 0.2 | 0.8 | 6.5 | 13.9 | 16.9 | 10.7 | 1.8 | 2.6 | 2.7 | 2.5 | 2.1 | 2.8 | 2.6 | 2.4 | 2.0 | 1.6 | 3.5 | 1.7 | 3.4 | 3.6 | 16.9 |
| 21-Aug | 3.5 | Z | 1.2 | 0.6 | 1.0 | 1.0 | 0.7 | 1.1 | 1.2 | 3.1 | 3.6 | 6.9 | 3.4 | 0.4 | 0.5 | 0.7 | 0.3 | 0.9 | 1.3 | 0.8 | 1.1 | 4.3 | 3.9 | 3.3 | 1.9 | 6.9 |
| 22-Aug | 5.4 | 5.5 | Z | 11.7 | 8.6 | 6.4 | 4.2 | 4.3 | 4.1 | 2.3 | 2.8 | 3.2 | 1.8 | 2.1 | 1.3 | 2.7 | 3.9 | 4.4 | 2.2 | 3.3 | 3.5 | 5.5 | 5.5 | 4.6 | 4.3 | 11.7 |
| 23-Aug | 7.5 | 3.7 | 4.2 | Z | 6.8 | 5.1 | 3.4 | 2.0 | 2.7 | 3.3 | 5.0 | 3.8 | 4.2 | 7.5 | 4.9 | 2.7 | 0.6 | 0.0 | 2.8 | 10.5 | 4.3 | 0.3 | 0.2 | 5.8 | 4.0 | 10.5 |
| 24-Aug | 11.9 | 16.0 | 18.7 | 20.3 | Z | 9.7 | 5.1 | 12.2 | 5.0 | 0.2 | 0.0 | 0.6 | 1.8 | 1.5 | 1.1 | 1.2 | 2.8 | 2.9 | 3.2 | 3.3 | 3.2 | 4.8 | 3.3 | 3.0 | 5.7 | 20.3 |
| 25-Aug | 4.9 | 2.7 | 1.5 | 0.8 | 0.3 | Z | 0.9 | 7.2 | 9.1 | 13.1 | 7.6 | 6.7 | 6.3 | 6.9 | 6.6 | PF | PF | PF | PF | PF | PF | 6.7 | 6.6 | 6.6 | -- | 13.1 |
| 26-Aug | Z | 6.4 | 3.0 | 1.9 | 2.2 | 3.6 | 4.6 | 8.4 | 6.6 | 2.5 | 5.3 | 5.3 | 3.7 | 0.6 | 2.4 | 0.2 | 1.9 | 3.1 | 1.1 | 2.8 | 3.7 | 5.5 | 3.5 | 2.3 | 3.5 | 8.4 |
| 27-Aug | 1.6 | 0.8 | Z | 1.3 | 1.7 | 3.0 | 3.5 | 5.3 | 5.6 | M | 8.1 | 2.4 | 3.3 | 5.6 | 3.5 | 4.3 | 4.6 | 3.3 | 4.4 | 1.0 | 0.4 | 0.6 | 0.5 | 2.8 | 3.1 | 8.1 |
| 28-Aug | 4.0 | 4.2 | Z | 4.7 | 1.9 | 0.1 | 2.0 | 1.4 | 3.2 | 1.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 1.1 | 4.7 |
| 29-Aug | 0.0 | 0.1 | 0.0 | Z | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 8.1 | 18.0 | 17.1 | 1.9 | 18.0 |
| 30-Aug | 12.6 | 10.0 | 7.6 | 5.0 | Z | 1.7 | 1.0 | 3.5 | 2.3 | 3.4 | 5.0 | 6.6 | 1.9 | 1.1 | 1.4 | 1.7 | 1.7 | 1.5 | 2.4 | 1.9 | 7.7 | 13.7 | 15.1 | 17.1 | 5.5 | 17.1 |
| 31-Aug | 14.9 | 10.7 | 6.7 | 0.9 | 0.0 | Z | 0.9 | 1.0 | 3.5 | 5.8 | 9.4 | 4.9 | 2.0 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 1.2 | 1.7 | 1.2 | 4.3 | 2.2 | 2.6 | 3.2 | 14.9 |
| | 4.7 | 3.5 | 3.3 | 3.4 | 2.0 | 2.3 | 2.5 | 4.5 | 5.1 | 3.8 | 3.7 | 2.6 | 2.9 | 2.9 | 3.1 | 2.5 | 2.6 | 2.5 | 2.9 | 3.6 | 3.4 | 4.6 | 4.7 | 4.5 | Diurnal Average | |
| | 14.9 | 16.0 | 18.7 | 20.3 | 8.6 | 9.7 | 13.7 | 19.4 | 18.7 | 16.9 | 12.1 | 9.2 | 23.4 | 22.4 | 12.1 | 8.5 | 10.4 | 16.0 | 12.2 | 16.6 | 14.4 | 14.7 | 18.0 | 17.1 | Diurnal Maximum | |

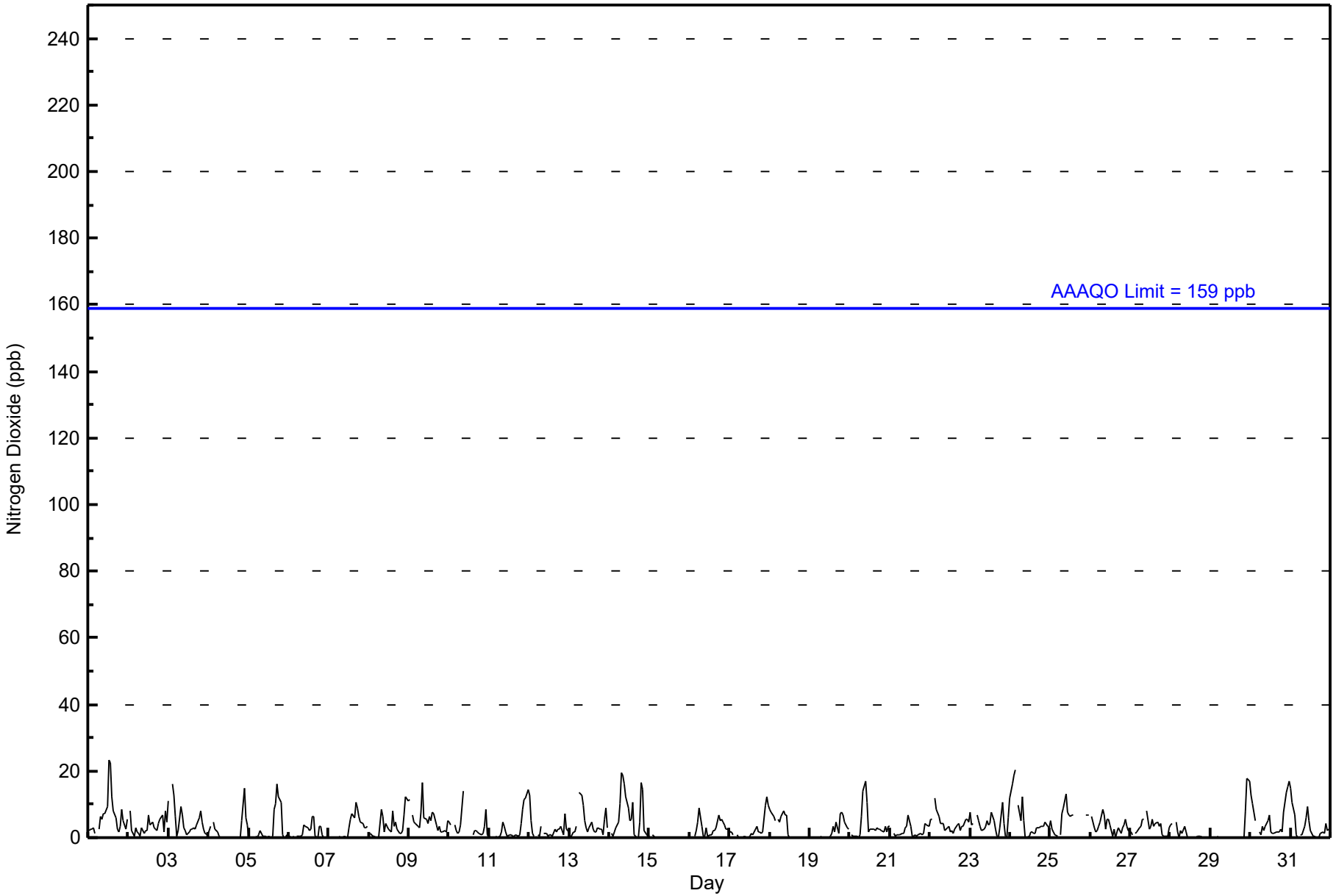
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Ells River - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Ells River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 698 | 99.71 | 99.71 |
| 21 - 40 | 2 | 0.29 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Ells River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 95 | 37 | 7 | 3 | 4 | 7 | 19 | 73 | 68 | 58 | 51 | 53 | 59 | 50 | 47 | 60 | 691 |
| 21 - 40 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 96 | 38 | 7 | 3 | 4 | 7 | 19 | 73 | 68 | 58 | 51 | 53 | 59 | 50 | 47 | 60 | 693 |

Total Number of Valid Hours: 693

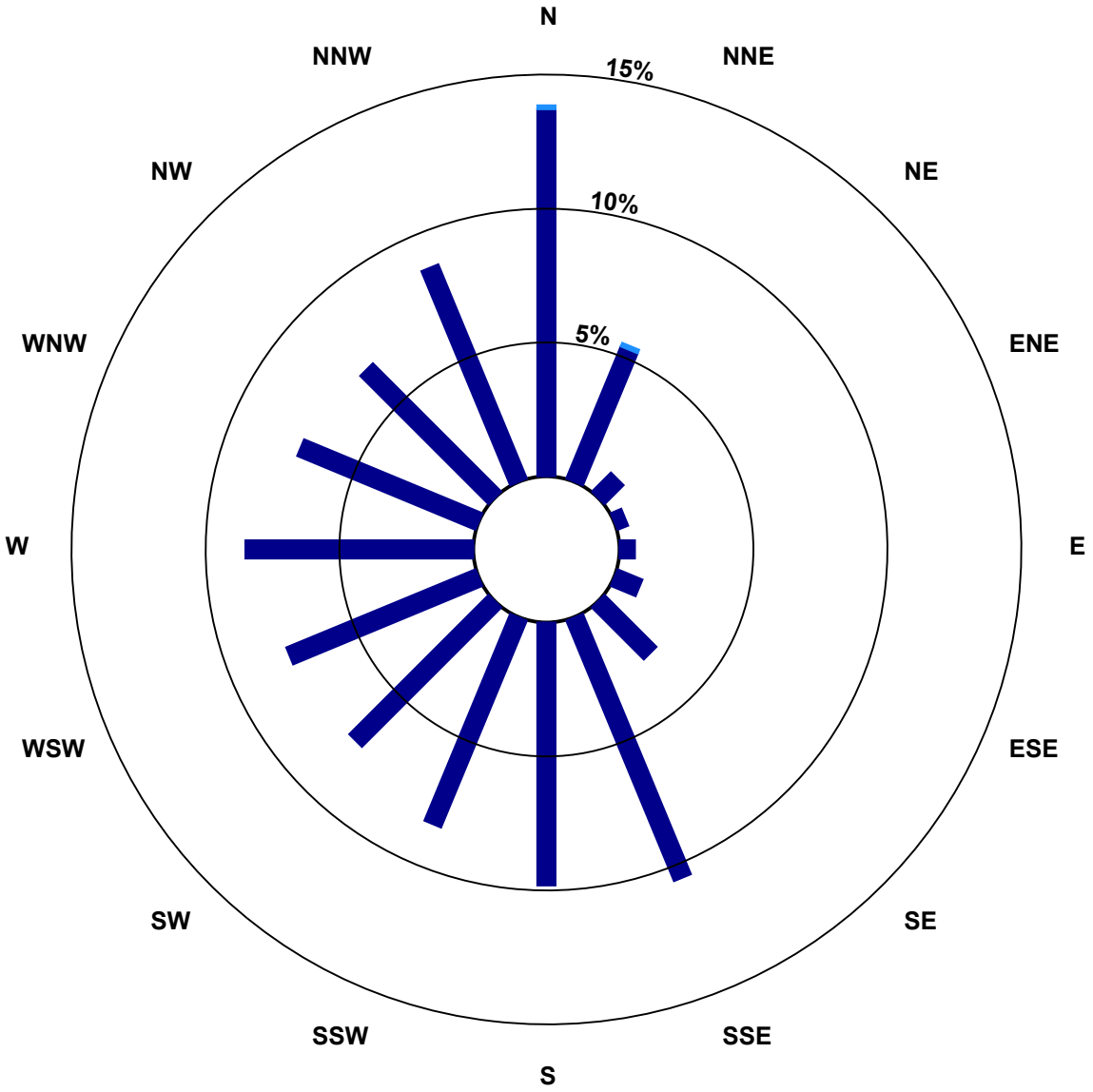
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Ells River




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

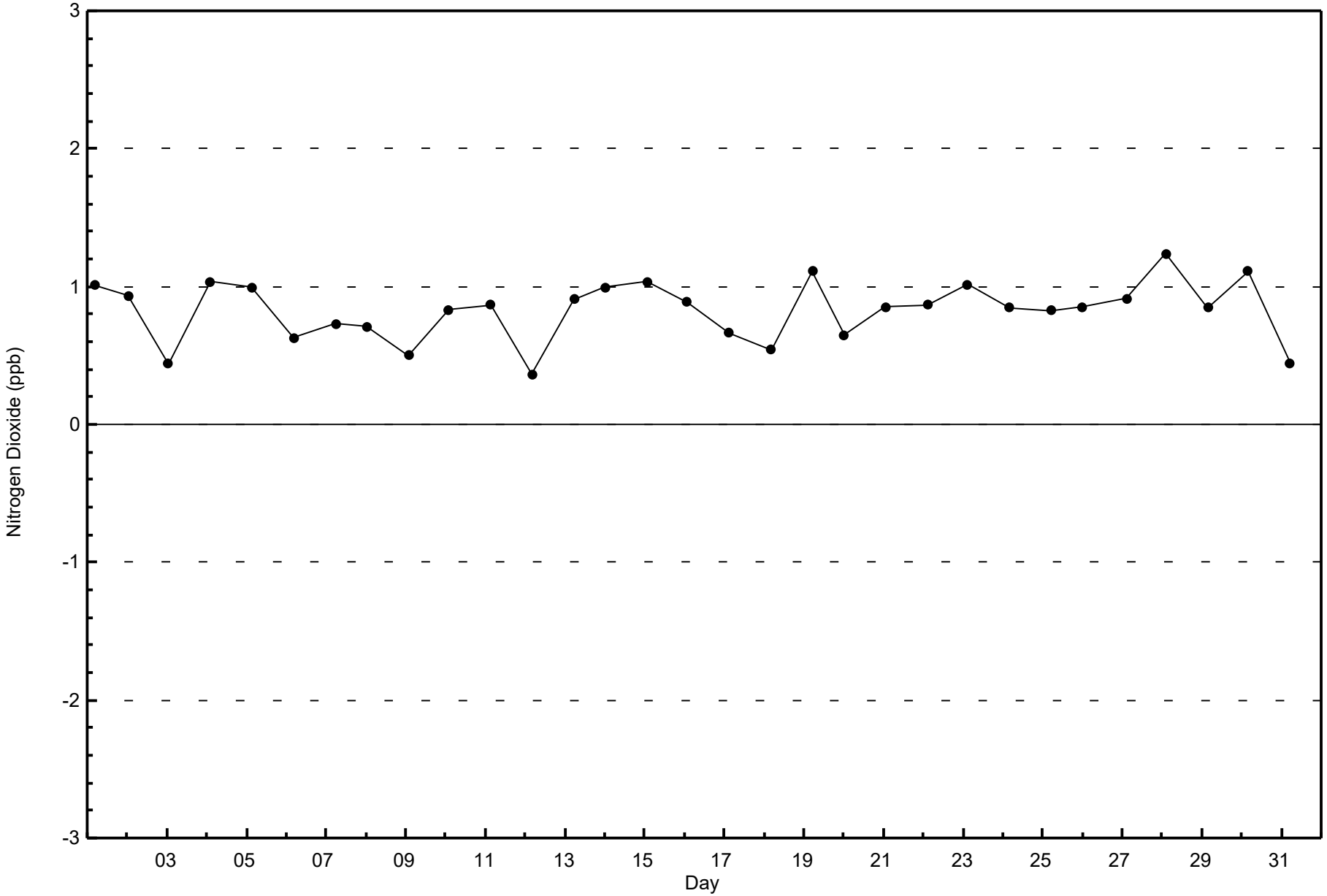
Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Ells River - August 2026**

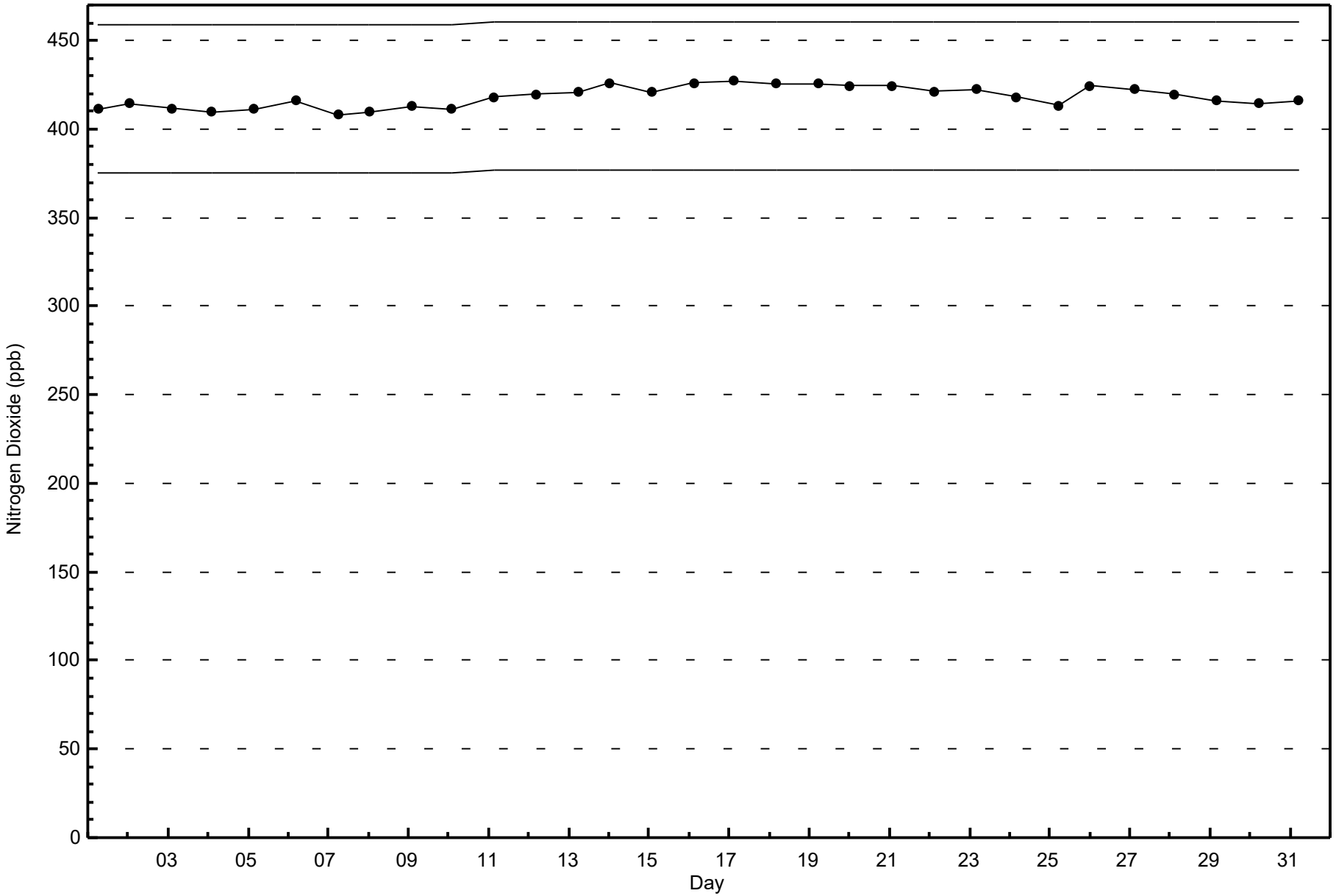


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Ells River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Ells River - August 2026

Maximum Value: 60.0 ppb on Aug 20 09:00

Maximum Daily Average: 14.3 ppb on Aug 1

Minimum Value: 0.0 ppb on Aug 4 14:00

Minimum Daily Average: 0.4 ppb on Aug 15

Maximum Diurnal Average: 13.1 ppb at hour 9

Minimum Diurnal Average: 3.0 ppb at hour 18

Monthly Average: 5.47 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.7 Median = 2.7 $Q_3$ = 6.4 $P_{90}$ = 13.5 $P_{99}$ = 41.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 700 |
| Hours of Missing Data: | 44 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 4.4 | 9.0 | 11.4 | 6.2 | 2.3 | Z | 8.6 | 28.1 | 18.6 | 39.9 | 15.2 | 14.6 | 55.4 | 44.0 | 19.1 | 12.4 | 8.0 | 3.3 | 2.0 | 3.9 | 8.3 | 5.2 | 2.7 | 5.7 | 14.3 | 55.4 |
| 2-Aug | Z | 8.2 | 2.3 | 0.3 | 2.8 | 1.5 | 1.1 | 0.3 | 3.0 | 1.4 | 2.7 | 2.6 | 8.1 | 4.6 | 6.4 | 4.0 | 3.1 | 2.7 | 5.2 | 6.0 | 6.7 | 1.7 | 8.0 | 4.6 | 3.8 | 8.2 |
| 3-Aug | 11.2 | Z | 17.4 | 13.3 | 6.4 | 0.6 | 2.3 | 17.3 | 14.3 | 4.2 | 2.5 | 1.2 | 2.4 | 4.1 | 3.6 | 4.1 | 3.5 | 5.4 | 7.9 | 9.3 | 5.8 | 3.1 | 1.3 | 0.7 | 6.2 | 17.4 |
| 4-Aug | 2.4 | 3.6 | Z | 6.4 | 3.2 | 2.6 | 0.5 | 0.4 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.5 | 0.4 | 0.1 | 0.2 | 5.3 | 15.2 | 6.3 | 4.2 | 2.3 | 15.2 |
| 5-Aug | 0.2 | 0.1 | 0.2 | Z | 0.8 | 0.2 | 1.5 | 3.2 | 0.8 | 1.1 | 1.0 | 0.1 | 0.7 | 0.5 | 0.7 | 9.5 | 11.1 | 18.2 | 13.4 | 11.5 | 0.9 | 0.0 | 0.1 | 0.8 | 3.3 | 18.2 |
| 6-Aug | 0.6 | 0.2 | 0.2 | 0.7 | Z | 0.6 | 0.4 | 0.5 | 1.6 | 6.4 | 5.3 | 4.3 | 2.9 | 3.0 | 9.3 | 9.1 | 0.6 | 0.1 | 3.5 | 3.6 | 1.0 | 0.2 | 0.3 | 0.1 | 2.4 | 9.3 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.6 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 3.8 | 7.1 | 10.2 | 7.5 | 15.6 | 12.0 | 7.7 | 5.1 | 4.5 | 2.9 | 3.2 | 3.8 | 3.7 | 15.6 |
| 8-Aug | Z | 1.3 | 0.5 | 0.3 | 0.0 | 0.3 | 0.1 | 32.1 | 14.9 | 2.6 | 7.5 | 4.9 | 4.3 | 2.2 | 12.1 | 4.3 | 6.1 | 3.1 | 1.1 | 1.4 | 2.3 | 6.7 | 14.5 | 16.7 | 6.1 | 32.1 |
| 9-Aug | 33.9 | Z | 21.5 | 18.3 | 12.7 | 8.3 | 4.8 | 35.3 | 58.8 | 10.7 | 7.8 | 6.0 | 9.0 | 6.5 | 9.7 | 9.0 | 4.6 | 2.1 | 4.1 | 1.7 | 2.1 | 2.1 | 2.0 | 6.1 | 12.0 | 58.8 |
| 10-Aug | 6.4 | 5.9 | Z | 6.4 | 4.4 | 3.1 | 4.8 | 12.3 | 57.9 | C | C | C | C | C | 1.3 | 3.1 | 2.6 | 1.9 | 1.4 | 1.0 | 1.2 | 5.0 | 11.9 | 1.0 | 7.3 | 57.9 |
| 11-Aug | 0.5 | 0.4 | 0.1 | Z | 0.6 | 0.2 | 0.8 | 2.4 | 7.5 | 5.2 | 2.1 | 0.7 | 0.9 | 0.9 | 0.8 | 0.5 | 0.9 | 0.5 | 0.9 | 4.2 | 8.3 | 11.7 | 12.1 | 16.9 | 3.4 | 16.9 |
| 12-Aug | 20.9 | 6.5 | 1.3 | 0.5 | Z | 0.9 | 0.5 | 4.7 | M | 1.4 | 1.7 | 0.6 | 0.8 | 1.0 | 0.3 | 3.7 | 2.2 | 3.3 | 2.8 | 3.8 | 0.7 | 8.5 | 2.7 | 2.2 | 3.2 | 20.9 |
| 13-Aug | 1.3 | 0.0 | 1.6 | 1.9 | 3.3 | Z | 28.6 | 27.0 | 22.1 | 9.6 | 4.7 | 2.8 | 4.4 | 7.1 | 3.7 | 2.5 | 2.3 | 3.4 | 2.7 | 2.4 | 1.0 | 6.0 | 12.9 | 3.3 | 6.7 | 28.6 |
| 14-Aug | Z | 1.3 | 0.5 | 2.1 | 3.5 | 7.1 | 22.7 | 41.7 | 41.3 | 28.9 | 22.3 | 15.3 | 7.6 | 8.1 | 15.2 | 1.3 | 0.2 | 0.5 | 5.3 | 18.5 | 15.0 | 2.7 | 1.1 | 0.9 | 11.4 | 41.7 |
| 15-Aug | 0.9 | Z | 1.4 | 0.6 | 0.7 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.6 | 0.1 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.6 | 0.3 | 0.4 | 1.4 |
| 16-Aug | 0.2 | 0.2 | Z | 1.1 | 2.7 | 6.2 | 14.1 | 6.0 | 0.8 | 0.7 | 3.7 | 0.9 | 1.1 | 1.0 | 2.7 | 2.9 | 3.1 | 8.5 | 6.0 | 6.0 | 4.8 | 4.3 | 2.5 | 2.6 | 3.6 | 14.1 |
| 17-Aug | 1.5 | 1.7 | 0.9 | Z | 1.3 | 0.2 | 0.1 | 0.0 | 0.2 | 0.4 | 0.1 | 0.2 | 0.4 | 1.6 | 1.0 | 2.5 | 3.4 | 1.5 | 1.6 | 1.1 | 1.7 | 9.7 | 12.4 | 9.9 | 2.3 | 12.4 |
| 18-Aug | 8.5 | 7.6 | 6.2 | 5.1 | Z | 6.4 | 5.7 | 10.8 | 14.8 | 12.9 | 11.7 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 14.8 |
| 19-Aug | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.4 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.7 | 1.4 | 4.1 | 2.2 | 6.9 | 1.5 | 8.8 | 8.5 | 7.0 | 4.9 | 3.0 | 2.4 | 2.3 | 8.8 |
| 20-Aug | Z | 1.0 | 1.0 | 0.6 | 0.4 | 0.2 | 1.2 | 32.8 | 60.0 | 42.3 | 25.4 | 2.4 | 3.8 | 3.5 | 3.1 | 2.7 | 3.6 | 3.1 | 2.4 | 2.0 | 1.6 | 3.6 | 1.7 | 3.4 | 8.8 | 60.0 |
| 21-Aug | 3.5 | Z | 1.2 | 0.6 | 1.5 | 1.0 | 0.9 | 1.7 | 2.1 | 5.4 | 5.4 | 10.8 | 4.6 | 0.4 | 0.6 | 0.9 | 0.3 | 0.9 | 1.3 | 0.8 | 1.1 | 4.3 | 3.9 | 3.4 | 2.5 | 10.8 |
| 22-Aug | 5.6 | 11.2 | Z | 27.3 | 12.1 | 8.6 | 5.2 | 5.5 | 6.1 | 3.4 | 4.0 | 4.2 | 2.5 | 2.3 | 1.5 | 3.1 | 4.3 | 5.0 | 2.2 | 3.6 | 3.5 | 5.8 | 5.5 | 4.7 | 6.0 | 27.3 |
| 23-Aug | 7.8 | 4.0 | 4.5 | Z | 7.3 | 5.6 | 4.7 | 3.2 | 4.1 | 5.0 | 7.8 | 6.0 | 5.5 | 9.8 | 5.5 | 3.0 | 0.6 | 0.0 | 3.0 | 11.2 | 4.4 | 0.4 | 0.3 | 6.0 | 4.8 | 11.2 |
| 24-Aug | 12.4 | 17.1 | 21.1 | 25.7 | Z | 10.3 | 6.0 | 19.5 | 6.8 | 0.2 | 0.0 | 0.6 | 2.2 | 1.8 | 1.3 | 1.6 | 3.8 | 3.6 | 3.7 | 3.7 | 3.4 | 5.0 | 3.6 | 3.6 | 6.8 | 25.7 |
| 25-Aug | 5.9 | 2.9 | 1.6 | 0.9 | 0.4 | Z | 2.1 | 21.8 | 20.2 | 28.6 | 13.0 | 10.2 | 8.5 | 9.0 | 7.7 | PF | PF | PF | PF | PF | PF | 6.7 | 8.6 | 12.3 | -- | 28.6 |
| 26-Aug | Z | 29.1 | 38.1 | 43.0 | 36.9 | 23.4 | 17.1 | 24.3 | 13.5 | 3.3 | 6.8 | 6.7 | 4.2 | 0.6 | 2.6 | 0.2 | 2.0 | 3.3 | 1.1 | 2.8 | 3.7 | 5.5 | 3.5 | 2.3 | 11.9 | 43.0 |
| 27-Aug | 1.6 | 0.8 | Z | 1.5 | 2.0 | 4.3 | 4.5 | 7.0 | 7.6 | M | 10.7 | 2.9 | 3.9 | 6.9 | 4.2 | 5.0 | 5.2 | 3.9 | 5.0 | 1.5 | 0.8 | 1.2 | 0.7 | 3.3 | 3.8 | 10.7 |
| 28-Aug | 4.4 | 5.0 | Z | 5.4 | 2.4 | 0.7 | 2.8 | 2.2 | 4.3 | 3.0 | 0.5 | 0.5 | 0.3 | 0.5 | 0.6 | 0.8 | 0.6 | 0.8 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.6 | 1.7 | 5.4 |
| 29-Aug | 0.3 | 0.6 | 0.4 | Z | 0.9 | 0.4 | 0.3 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 8.6 | 29.5 | 28.4 | 3.1 | 29.5 |
| 30-Aug | 18.1 | 15.3 | 11.1 | 6.1 | Z | 1.8 | 1.5 | 7.6 | 4.7 | 6.5 | 8.1 | 10.4 | 2.1 | 1.2 | 1.5 | 1.8 | 1.7 | 1.5 | 2.4 | 1.9 | 7.9 | 13.7 | 15.9 | 21.2 | 7.1 | 21.2 |
| 31-Aug | 33.5 | 30.7 | 15.1 | 0.9 | 0.0 | Z | 1.0 | 1.0 | 6.7 | 10.3 | 16.4 | 7.0 | 2.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 1.2 | 1.7 | 1.2 | 4.5 | 2.6 | 5.0 | 6.2 | 33.5 |
| | 7.1 | 6.1 | 6.4 | 6.7 | 4.2 | 3.8 | 4.7 | 11.3 | 13.1 | 8.1 | 6.3 | 3.9 | 4.8 | 4.3 | 4.2 | 3.3 | 3.2 | 3.0 | 3.3 | 3.9 | 3.5 | 4.8 | 5.6 | 5.7 | Diurnal Average | |
| | 33.9 | 30.7 | 38.1 | 43.0 | 36.9 | 23.4 | 28.6 | 41.7 | 60.0 | 42.3 | 25.4 | 15.3 | 55.4 | 44.0 | 19.1 | 12.4 | 15.6 | 18.2 | 13.4 | 18.5 | 15.0 | 15.2 | 29.5 | 28.4 | Diurnal Maximum | |

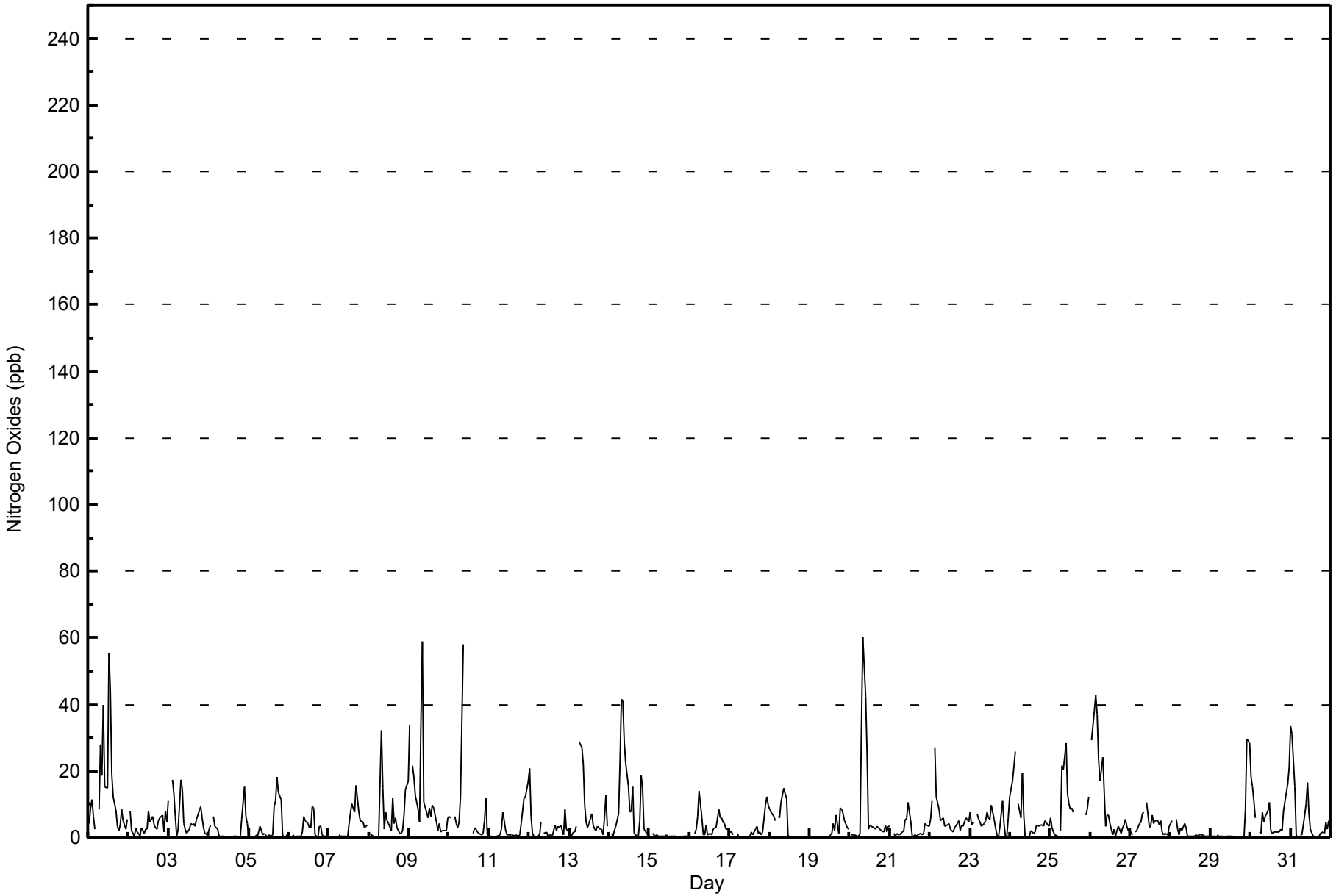
Z - zerospan C - Calibration M - Maintenance PF - Power Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Ells River - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Ells River - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 661 | 94.43 | 94.43 |
| 21 - 40 | 30 | 4.29 | 98.71 |
| 11 - 80 | 9 | 1.29 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 700

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Ells River - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 88 | 37 | 7 | 3 | 4 | 7 | 18 | 71 | 63 | 57 | 51 | 51 | 56 | 47 | 40 | 54 | 654 |
| 21 - 40 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 1 | 0 | 1 | 2 | 3 | 7 | 2 | 30 |
| 11 - 80 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 | 9 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 96 | 38 | 7 | 3 | 4 | 7 | 19 | 73 | 68 | 58 | 51 | 53 | 59 | 50 | 47 | 60 | 693 |

Total Number of Valid Hours: 693

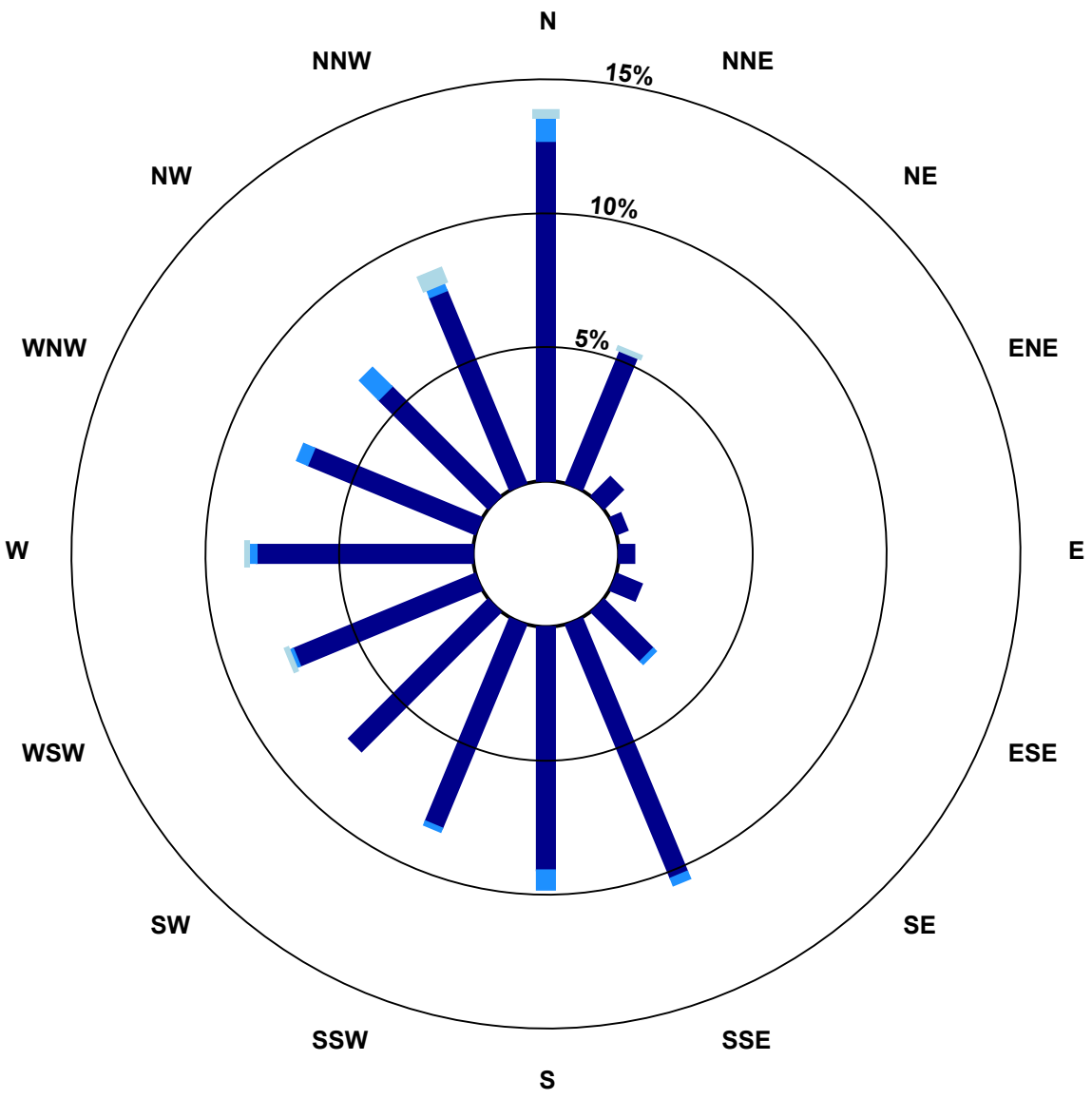
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Ells River




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

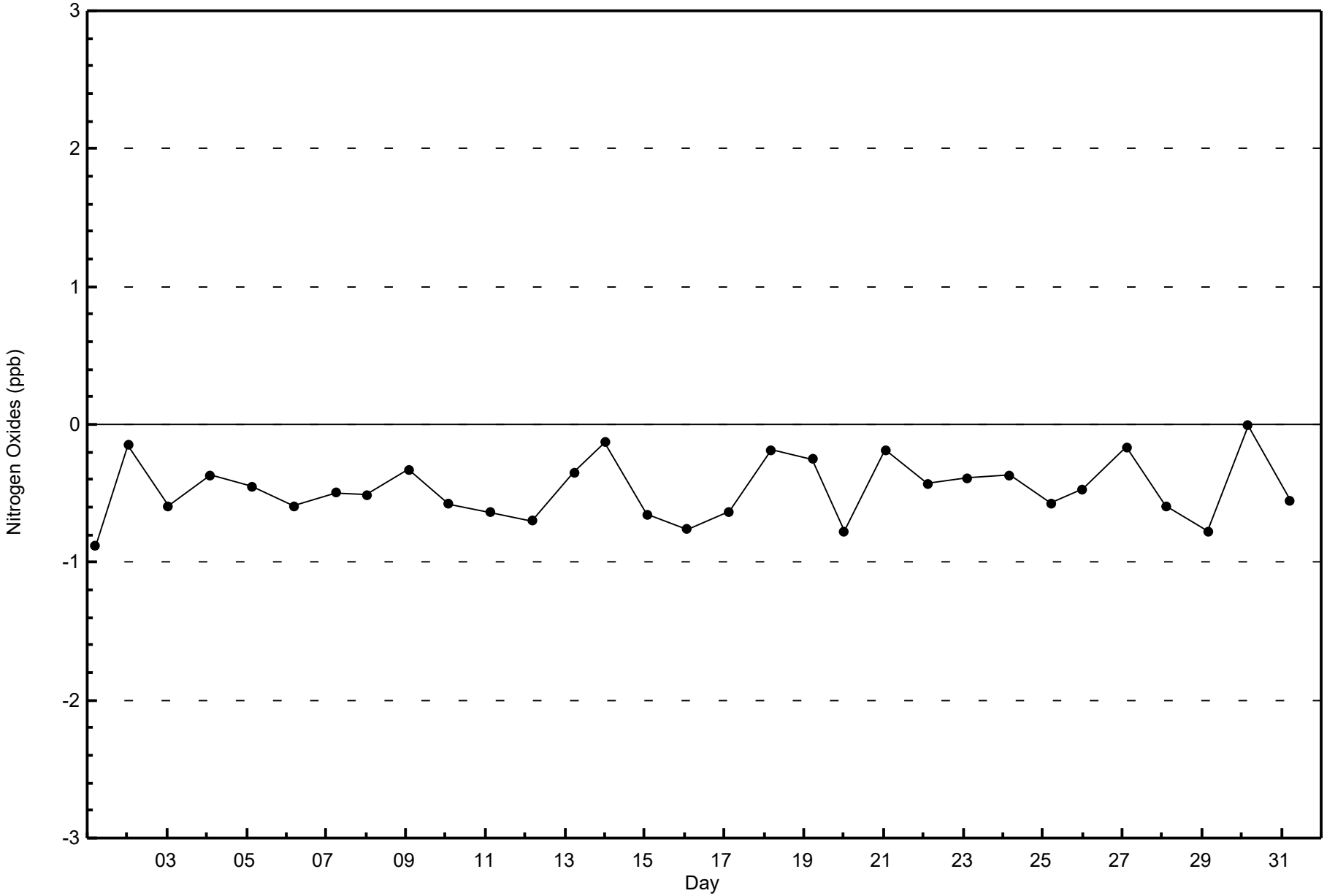
Total Number of Valid Hours: 693

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Ells River - August 2026**

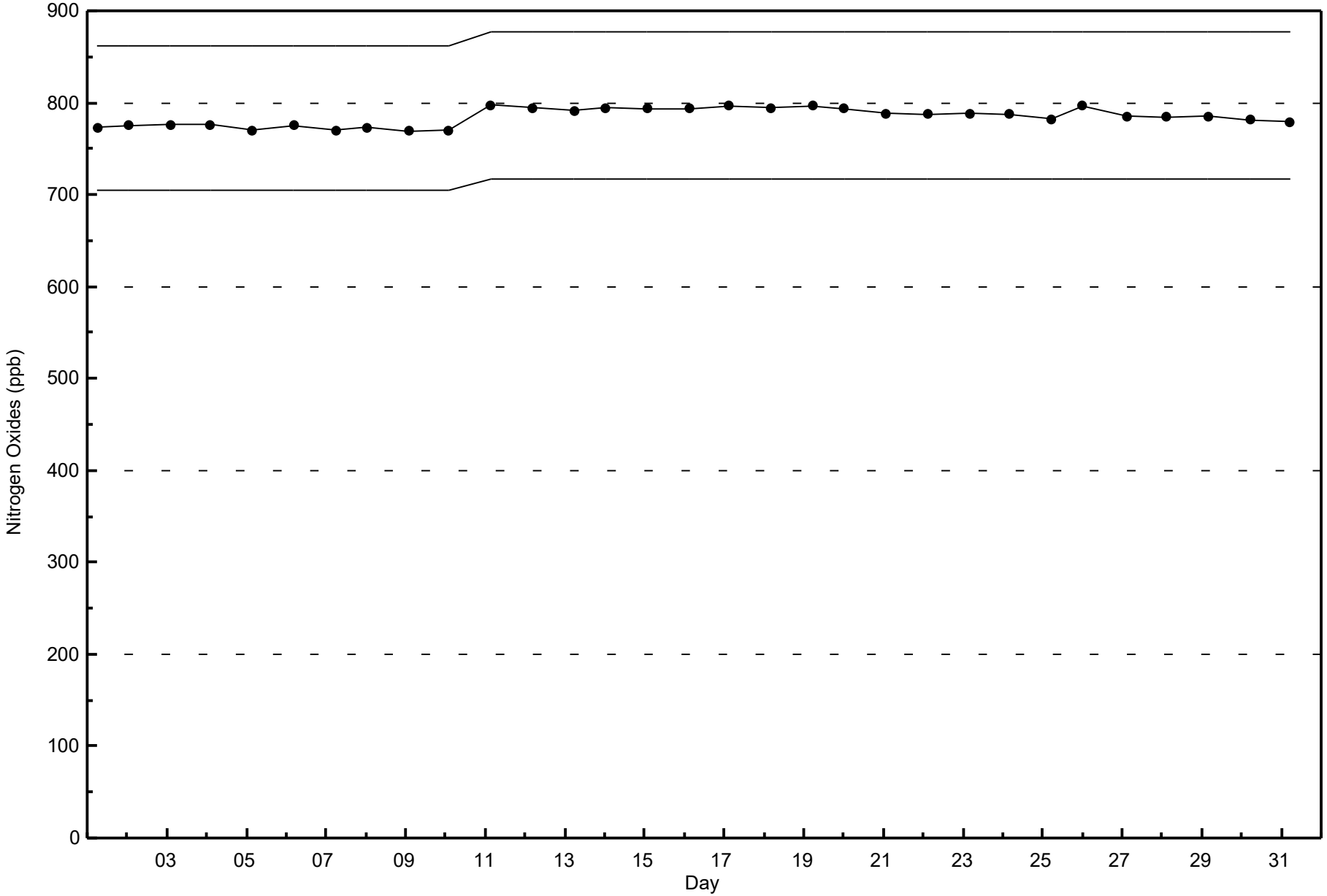


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Ells River - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Ells River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 1

Maximum Value: 64.6 $\mu g/m^3$ on Aug 19 21:00

Maximum Daily Average: 29.2 $\mu g/m^3$ on Aug 25

Minimum Value: 0.3 $\mu g/m^3$ on Aug 6 09:00

Minimum Daily Average: 1.5 $\mu g/m^3$ on Aug 6

Maximum Diurnal Average: 13.3 $\mu g/m^3$ at hour 23

Minimum Diurnal Average: 9.3 $\mu g/m^3$ at hour 7

Monthly Average: 10.95 $\mu g/m^3$

Percentiles: $P_1$ = 0.6 $P_{10}$ = 2.6 $Q_1$ = 4.0 Median = 6.8 $Q_3$ = 15.3 $P_{90}$ = 23.3 $P_{99}$ = 44.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 651 |
| Hours of Missing Data: | 93 |
| Hours of Calibration: | 3 |
| Percent Operational Time: | 87.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 24.2 | 23.6 | 21.0 | 20.4 | 19.3 | 21.7 | 20.8 | 19.6 | 18.9 | 18.3 | 17.1 | 14.0 | 12.2 | -- | 24.2 |
| 2-Aug | 13.4 | 14.5 | 14.7 | 14.5 | 13.5 | 12.3 | 10.5 | 8.0 | 6.7 | 6.5 | 5.1 | 3.5 | 3.5 | 3.6 | 4.5 | 4.7 | 5.2 | 4.9 | 5.5 | 4.6 | 4.4 | 2.3 | 3.3 | 2.6 | 7.2 | 14.7 |
| 3-Aug | 3.3 | 2.9 | 3.4 | 3.0 | 2.7 | 1.8 | 2.2 | 2.9 | 3.0 | 3.7 | 5.3 | 3.7 | 3.8 | 4.4 | 4.3 | 5.5 | 5.9 | 8.4 | 10.3 | 7.8 | 6.4 | 6.8 | 6.0 | 6.2 | 4.7 | 10.3 |
| 4-Aug | 8.1 | 8.5 | 7.9 | 7.6 | 6.6 | 6.0 | 5.1 | 6.6 | 10.2 | 13.0 | 11.7 | 8.4 | 6.7 | 5.9 | 5.1 | 6.2 | 6.8 | 6.9 | 5.0 | 5.6 | 7.0 | 9.1 | 11.1 | 11.9 | 7.8 | 13.0 |
| 5-Aug | 16.0 | 16.2 | 14.2 | 12.5 | 12.2 | 11.5 | 8.3 | 6.7 | 5.3 | 5.3 | 5.1 | 4.0 | 3.8 | 3.4 | 3.1 | 5.7 | 5.1 | 3.7 | 2.6 | 2.7 | 2.6 | 2.6 | 1.6 | 0.9 | 6.5 | 16.2 |
| 6-Aug | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.3 | 0.6 | 0.9 | 1.8 | 2.0 | 2.7 | 2.6 | 2.4 | 1.7 | 1.9 | 2.5 | 2.8 | 2.3 | 2.0 | 2.3 | 2.4 | 1.5 | 2.8 |
| 7-Aug | 2.4 | 2.5 | 2.5 | 2.6 | 2.6 | 2.7 | 2.8 | 3.0 | 3.2 | 4.0 | C | C | C | 6.9 | 8.3 | 8.1 | 7.8 | 6.8 | 5.4 | 2.9 | 3.2 | 3.4 | 3.8 | 4.1 | 4.2 | 8.3 |
| 8-Aug | 3.8 | 3.6 | 4.1 | 3.9 | 3.9 | 3.5 | 3.0 | 3.7 | 2.7 | 1.6 | 2.4 | 2.6 | 2.7 | 2.2 | 3.5 | 2.5 | 2.1 | 2.6 | 3.3 | 3.3 | 3.6 | 5.6 | 6.3 | 6.7 | 3.5 | 6.7 |
| 9-Aug | 7.3 | 6.5 | 6.0 | 5.3 | 4.9 | 4.5 | 4.4 | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | -- | 7.3 |
| 10-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 7.5 | 6.9 | 6.4 | 4.0 | 4.0 | 5.4 | 4.9 | 5.4 | 4.5 | 4.0 | 4.1 | 6.2 | UO | UO | -- | 7.5 |
| 11-Aug | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 4.8 | 4.3 | 3.9 | 3.6 | 4.3 | 4.8 | 5.3 | 6.5 | 5.9 | 6.0 | -- | 6.5 |
| 12-Aug | 7.2 | 4.0 | 3.0 | 2.9 | 2.9 | 2.6 | 2.4 | 2.5 | 2.3 | 1.3 | 1.0 | 0.9 | 1.1 | 1.2 | 1.3 | 2.1 | 2.4 | 2.7 | 2.5 | 2.6 | 2.7 | 2.8 | 2.7 | 2.7 | 2.5 | 7.2 |
| 13-Aug | 2.7 | 2.8 | 2.8 | 2.9 | 3.1 | 3.2 | 3.3 | 3.3 | 3.3 | 3.2 | 3.3 | 3.5 | 3.9 | 4.6 | 4.1 | 3.9 | 4.0 | 4.1 | 4.6 | 4.5 | 3.8 | 4.8 | 6.4 | 4.6 | 3.8 | 6.4 |
| 14-Aug | 4.2 | 4.4 | 4.4 | 4.6 | 4.7 | 4.8 | 5.2 | 5.9 | 6.4 | 6.5 | 6.6 | 7.5 | 8.0 | 8.8 | 11.5 | 4.8 | 3.7 | 3.7 | 5.3 | 10.0 | 10.7 | 6.8 | 6.3 | 6.8 | 6.3 | 11.5 |
| 15-Aug | 6.8 | 7.5 | 6.7 | 5.6 | 5.5 | 5.5 | 5.5 | 5.3 | 5.1 | 5.0 | 4.7 | 3.8 | 3.9 | 4.4 | 4.5 | 4.0 | 3.8 | 3.6 | 3.3 | 3.4 | 3.5 | 3.7 | 3.9 | 4.0 | 4.7 | 7.5 |
| 16-Aug | 4.3 | 4.2 | 4.2 | 4.2 | 4.5 | 4.7 | 5.0 | 13.0 | 19.9 | 21.7 | 21.2 | 19.8 | 14.7 | 22.5 | 34.3 | 55.9 | 50.5 | 37.2 | 39.2 | 37.5 | 37.4 | 37.0 | 35.4 | 35.1 | 23.5 | 55.9 |
| 17-Aug | 35.9 | 35.7 | 34.0 | 34.7 | 31.0 | 25.9 | 21.3 | 19.8 | 20.4 | 21.4 | 20.7 | 20.0 | 20.5 | 21.9 | 22.4 | 28.3 | 28.9 | 23.3 | 23.1 | 21.5 | 21.3 | 27.2 | 24.4 | 21.9 | 25.2 | 35.9 |
| 18-Aug | 22.4 | 19.9 | 19.1 | 18.7 | 17.7 | 17.8 | 17.2 | 16.1 | 13.6 | 13.8 | 16.0 | 8.9 | 6.4 | 6.0 | 5.4 | 3.8 | 3.7 | 3.8 | 3.9 | 4.0 | 4.3 | 4.5 | 5.1 | 5.2 | 10.7 | 22.4 |
| 19-Aug | 5.4 | 5.5 | 5.6 | 5.7 | 5.8 | 6.1 | 6.5 | 6.5 | 5.8 | 5.1 | 4.4 | 3.4 | 3.5 | 3.7 | 4.5 | 7.5 | 20.2 | 28.8 | 33.3 | 52.6 | 64.6 | 64.2 | 52.8 | 19.2 | 17.5 | 64.6 |
| 20-Aug | 17.5 | 17.8 | 17.3 | UO | UO | UO | UO | UO | 17.3 | 18.8 | 20.0 | 13.9 | 16.1 | 18.5 | 18.4 | 14.8 | 10.6 | 8.9 | 8.2 | 7.1 | 7.2 | 11.9 | 10.4 | 11.9 | 14.0 | 20.0 |
| 21-Aug | 12.3 | 11.4 | 11.1 | 11.5 | 11.5 | 11.8 | 11.0 | 12.5 | 11.4 | 9.5 | 8.6 | 8.4 | 11.1 | 8.2 | 9.2 | 11.1 | 10.5 | 12.0 | 13.5 | 12.0 | 11.5 | 15.2 | 15.7 | 14.5 | 11.5 | 15.7 |
| 22-Aug | 14.7 | 15.0 | 15.7 | 14.3 | 14.4 | 15.5 | 16.3 | 17.7 | 17.5 | 15.3 | 14.8 | 16.6 | 15.5 | 16.1 | 14.9 | 14.6 | 16.1 | 19.0 | 15.3 | 17.5 | 18.7 | 21.5 | 18.3 | 16.2 | 16.3 | 21.5 |
| 23-Aug | 16.2 | 16.9 | UO | UO | UO | UO | UO | UO | UO | 21.0 | 24.1 | 20.6 | 22.3 | 26.6 | 28.9 | 27.1 | 24.1 | 18.9 | 12.2 | 9.5 | 9.1 | 8.8 | UO | UO | -- | 28.9 |
| 24-Aug | UO | UO | UO | UO | UO | UO | UO | UO | 3.4 | 2.2 | 1.9 | 2.3 | 3.1 | 3.4 | 3.3 | 3.4 | 5.1 | 7.1 | 10.5 | 10.4 | 10.2 | 12.3 | 10.4 | 10.7 | -- | 12.3 |
| 25-Aug | 13.8 | 12.1 | 12.8 | 17.0 | 23.1 | 19.9 | 20.0 | 38.4 | 42.4 | 36.3 | 27.8 | 33.4 | 36.2 | 40.1 | 45.5 | PF | PF | PF | PF | PF | PF | 36.4 | 35.7 | 34.7 | 29.2 | 45.5 |
| 26-Aug | 35.5 | 35.5 | 33.6 | 32.3 | 31.8 | 32.0 | 34.3 | 31.3 | 25.7 | 18.3 | 20.1 | 23.2 | 15.8 | 7.7 | 9.1 | 7.3 | 7.7 | 10.7 | 10.3 | 8.2 | 9.9 | 12.5 | 10.6 | 9.1 | 19.7 | 35.5 |
| 27-Aug | 7.5 | 7.3 | 7.9 | 7.9 | 9.3 | 10.0 | 14.7 | 18.6 | 21.8 | 32.4 | 21.3 | 17.7 | 22.5 | 26.0 | 25.6 | 25.9 | 22.9 | 20.1 | 21.3 | 18.3 | 18.4 | 19.3 | 20.4 | 23.3 | 18.3 | 32.4 |
| 28-Aug | 24.8 | 25.1 | 23.8 | 26.3 | 19.1 | 14.3 | 13.5 | 14.0 | 14.8 | 17.4 | 14.9 | 8.8 | 5.1 | 4.2 | 5.7 | 6.3 | 12.9 | 25.3 | 27.3 | 9.0 | 5.3 | 4.6 | 2.2 | 1.7 | 13.6 | 27.3 |
| 29-Aug | 1.7 | 1.9 | 2.2 | 2.6 | 3.0 | 3.8 | 4.3 | 6.5 | 6.8 | 7.3 | 8.1 | 6.6 | 6.1 | 5.9 | 6.0 | 5.6 | 5.2 | 6.7 | 7.0 | 7.0 | 7.8 | 18.8 | 36.4 | 20.0 | 7.8 | 36.4 |
| 30-Aug | 15.4 | 14.2 | 12.5 | 11.6 | 10.3 | 9.8 | 9.5 | 10.8 | 11.4 | 11.6 | 10.4 | 11.3 | 12.4 | 11.5 | 9.9 | 11.7 | 12.1 | 11.9 | 13.0 | 13.8 | 13.5 | 5.9 | 6.8 | 6.2 | 11.1 | 15.4 |
| 31-Aug | 10.3 | 9.4 | 6.8 | 5.1 | 4.6 | 4.6 | 4.5 | 4.3 | 5.0 | 5.7 | 6.2 | 6.0 | 5.6 | 3.7 | 3.5 | 2.6 | UO | UO | UO | UO | UO | UO | UO | UO | -- | 10.3 |
| | 11.6 | 11.3 | 10.7 | 10.3 | 10.0 | 9.4 | 9.3 | 10.7 | 11.0 | 11.4 | 10.9 | 10.4 | 10.2 | 10.3 | 10.9 | 10.5 | 11.0 | 11.2 | 11.3 | 10.9 | 11.3 | 13.1 | 13.3 | 11.1 | Diurnal Average | |
| | 35.9 | 35.7 | 34.0 | 34.7 | 31.8 | 32.0 | 34.3 | 38.4 | 42.4 | 36.3 | 27.8 | 33.4 | 36.2 | 40.1 | 45.5 | 55.9 | 50.5 | 37.2 | 39.2 | 52.6 | 64.6 | 64.2 | 52.8 | 35.1 | Diurnal Maximum | |

C - Calibration UO - Unstable Operation PF - Power Failure

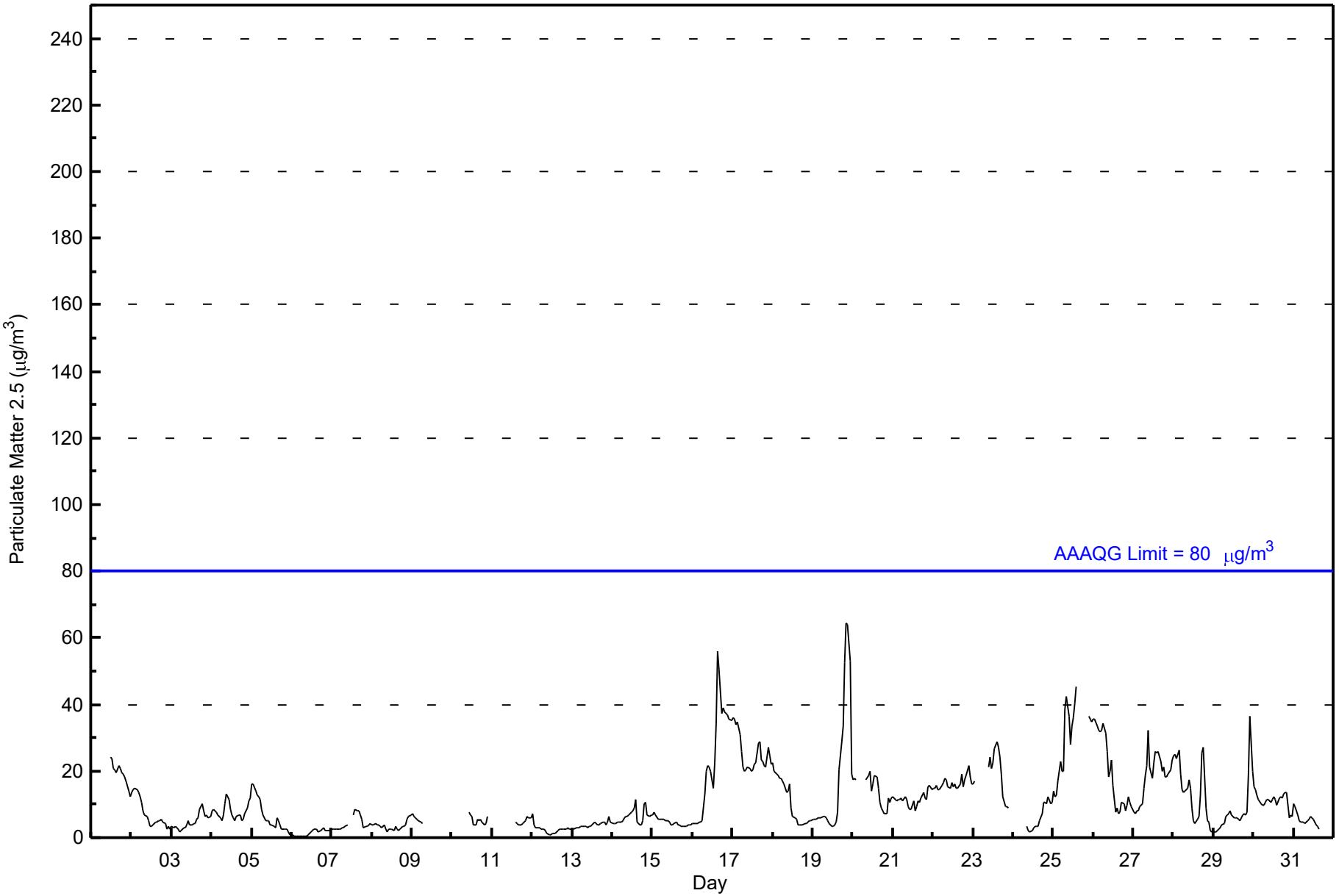
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Ells River - August 2026**



# Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

## Ells River - August 2026

| Concentration Ranges ($\mu g/m^3$) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 259 | 39.78 | 39.78 |
| 6 - 15 | 233 | 35.79 | 75.58 |
| 16 - 25 | 104 | 15.98 | 91.55 |
| 26 - 80 | 55 | 8.45 | 100.00 |
| > 81.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 651

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$**

**Ells River - August 2026**

| Concentration Ranges ($\mu g/m^3$) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 47 | 13 | 3 | 0 | 0 | 0 | 0 | 1 | 9 | 21 | 18 | 19 | 41 | 25 | 29 | 33 | 259 |
| 6 - 15 | 18 | 15 | 3 | 1 | 1 | 2 | 10 | 32 | 36 | 24 | 25 | 14 | 10 | 11 | 13 | 16 | 231 |
| 16 - 25 | 15 | 2 | 1 | 0 | 1 | 4 | 7 | 31 | 12 | 4 | 5 | 8 | 5 | 1 | 0 | 6 | 102 |
| 26 - 80 | 5 | 4 | 0 | 1 | 2 | 0 | 2 | 6 | 8 | 6 | 2 | 4 | 1 | 6 | 2 | 4 | 53 |
| > 81.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 85 | 34 | 7 | 2 | 4 | 6 | 19 | 70 | 65 | 55 | 50 | 45 | 57 | 43 | 44 | 59 | 645 |

Total Number of Valid Hours: 645

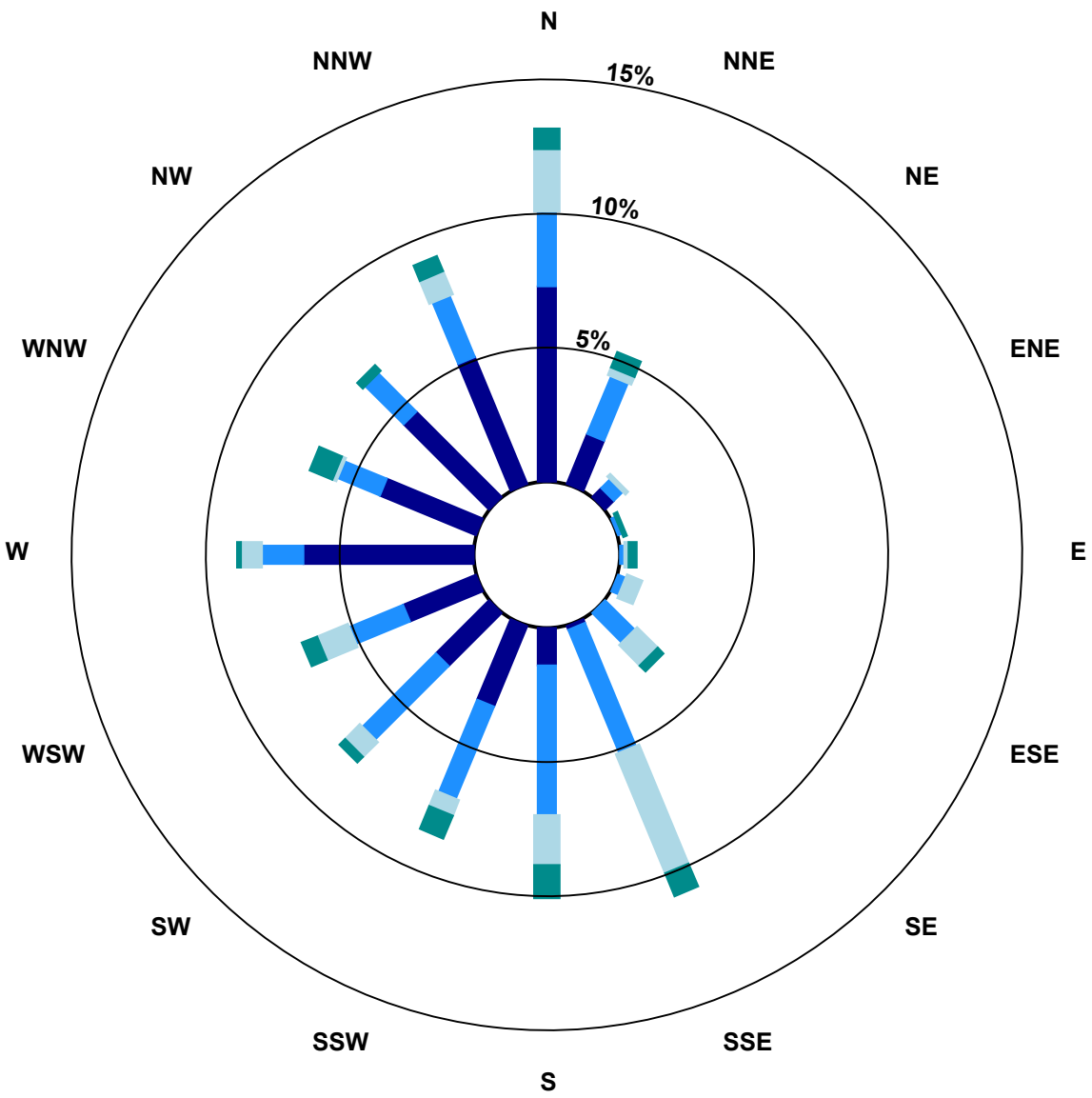
Total Number of Hours: 744

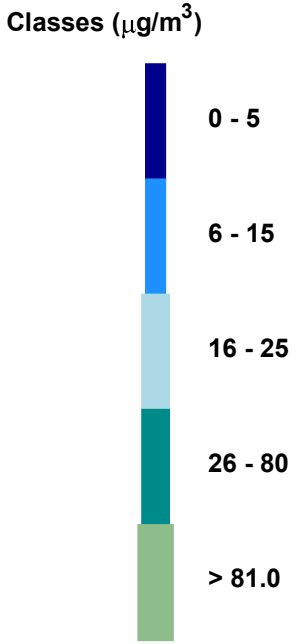
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Ells River




Total Number of Valid Hours: 645

Maximum Value: 29.5 C on Aug 26 17:00

Maximum Daily Average: 21.1 C on Aug 27

Minimum Value: 5.2 C on Aug 17 05:00

Minimum Daily Average: 13.6 C on Aug 12

Maximum Diurnal Average: 22.1 C at hour 16

Minimum Diurnal Average: 11.5 C at hour 6

Monthly Average: 16.88 C

Percentiles: $P_1$ = 7.5 $P_{10}$ = 10.7 $Q_1$ = 13.1 Median = 16.6 $Q_3$ = 20.5 $P_{90}$ = 23.6 $P_{99}$ = 27.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

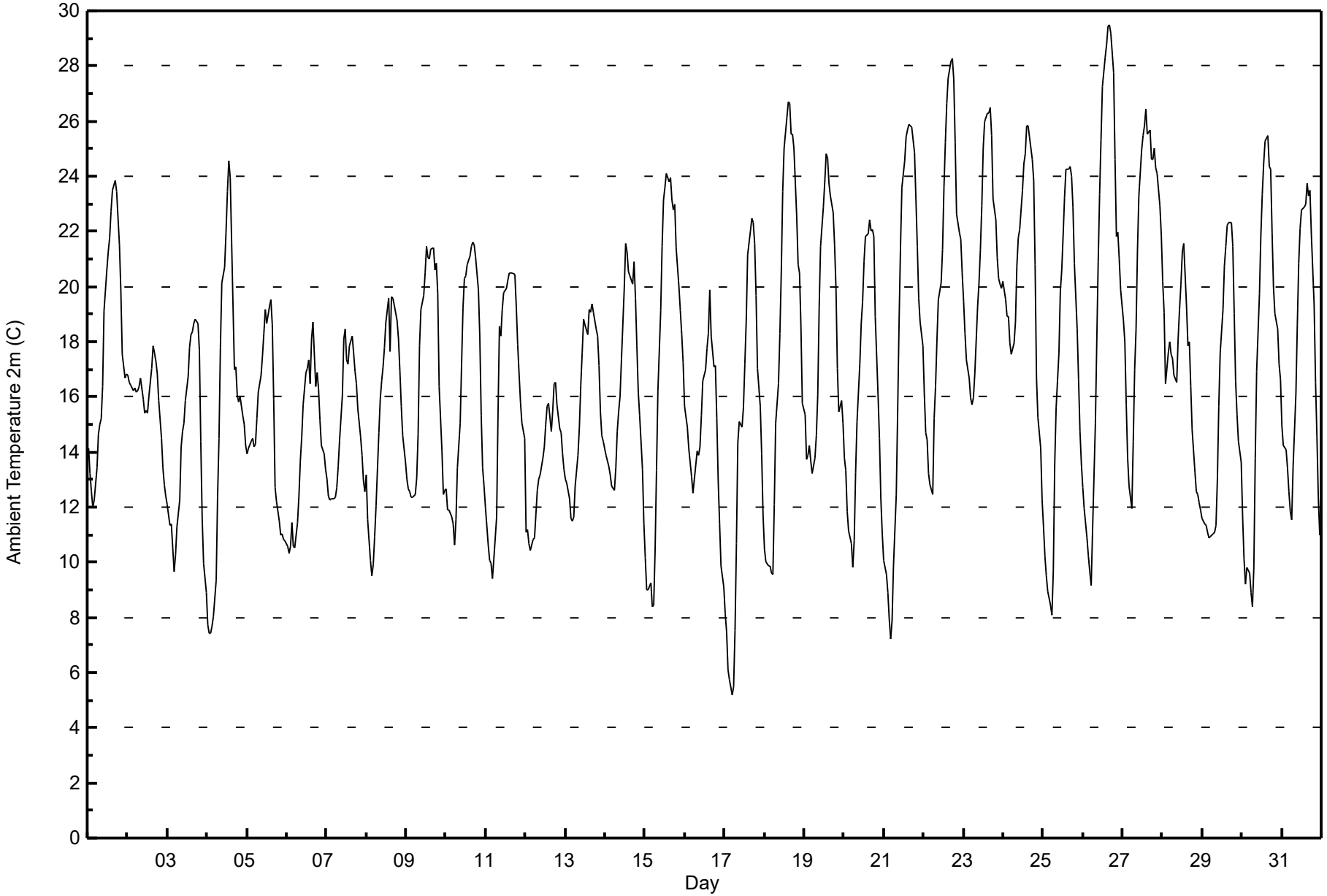
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 14.1 | 13.2 | 12.5 | 12.0 | 12.3 | 13.4 | 14.6 | 15.0 | 15.2 | 16.3 | 19.1 | 20.6 | 21.3 | 21.8 | 22.8 | 23.5 | 23.9 | 23.5 | 22.5 | 21.5 | 19.8 | 17.5 | 16.7 | 16.8 | 17.9 | 23.9 |
| 2-Aug | 16.8 | 16.5 | 16.4 | 16.2 | 16.3 | 16.2 | 16.2 | 16.4 | 16.7 | 15.9 | 15.4 | 15.5 | 15.4 | 16.0 | 17.1 | 17.9 | 17.6 | 17.3 | 16.8 | 15.9 | 14.5 | 13.4 | 12.8 | 12.4 | 15.9 | 17.9 |
| 3-Aug | 12.1 | 11.4 | 11.4 | 10.5 | 9.7 | 10.3 | 11.3 | 12.2 | 14.2 | 14.7 | 15.1 | 15.8 | 16.7 | 17.8 | 18.2 | 18.3 | 18.6 | 18.8 | 18.7 | 17.7 | 14.4 | 11.6 | 10.0 | 8.9 | 14.1 | 18.8 |
| 4-Aug | 7.7 | 7.4 | 7.4 | 7.7 | 8.0 | 9.4 | 12.4 | 14.5 | 17.8 | 20.1 | 20.7 | 22.0 | 23.4 | 24.5 | 23.9 | 21.6 | 17.0 | 17.1 | 16.1 | 15.8 | 16.0 | 15.3 | 15.0 | 14.3 | 15.6 | 24.5 |
| 5-Aug | 13.9 | 14.1 | 14.4 | 14.5 | 14.2 | 14.3 | 15.2 | 16.2 | 16.8 | 17.5 | 18.3 | 19.2 | 18.6 | 19.3 | 19.5 | 18.6 | 15.9 | 12.7 | 12.2 | 11.5 | 11.0 | 11.0 | 10.8 | 10.8 | 15.0 | 19.5 |
| 6-Aug | 10.6 | 10.3 | 10.6 | 11.4 | 10.6 | 10.6 | 11.4 | 12.4 | 13.7 | 14.5 | 15.7 | 16.9 | 17.1 | 17.3 | 16.5 | 18.1 | 18.7 | 16.4 | 16.9 | 16.3 | 15.2 | 14.2 | 13.9 | 13.4 | 14.3 | 18.7 |
| 7-Aug | 13.0 | 12.4 | 12.2 | 12.3 | 12.3 | 12.4 | 12.7 | 13.5 | 14.4 | 16.1 | 18.1 | 18.4 | 17.3 | 17.2 | 17.8 | 18.2 | 17.6 | 16.9 | 16.5 | 15.6 | 14.6 | 13.9 | 13.0 | 12.6 | 15.0 | 18.4 |
| 8-Aug | 13.2 | 11.6 | 10.1 | 9.5 | 9.9 | 10.9 | 12.1 | 14.7 | 15.9 | 16.6 | 17.1 | 17.8 | 18.7 | 19.6 | 17.6 | 19.6 | 19.6 | 19.3 | 18.8 | 18.1 | 16.9 | 15.7 | 14.6 | 13.7 | 15.5 | 19.6 |
| 9-Aug | 13.0 | 12.7 | 12.6 | 12.3 | 12.4 | 12.5 | 13.0 | 14.6 | 17.9 | 19.2 | 19.7 | 20.5 | 21.4 | 21.1 | 21.0 | 21.4 | 21.4 | 20.6 | 20.8 | 19.7 | 16.4 | 14.0 | 12.4 | 12.6 | 16.8 | 21.4 |
| 10-Aug | 12.6 | 11.9 | 11.9 | 11.6 | 11.4 | 10.6 | 11.6 | 13.4 | 15.0 | 17.2 | 19.2 | 20.3 | 20.4 | 20.8 | 21.1 | 21.4 | 21.6 | 21.5 | 21.0 | 19.9 | 18.1 | 15.3 | 13.4 | 12.8 | 16.4 | 21.6 |
| 11-Aug | 12.0 | 10.6 | 10.1 | 10.0 | 9.4 | 10.1 | 11.6 | 15.5 | 18.6 | 18.2 | 19.2 | 19.8 | 19.9 | 20.2 | 20.5 | 20.5 | 20.5 | 20.5 | 19.3 | 17.9 | 16.8 | 15.8 | 15.0 | 14.5 | 16.1 | 20.5 |
| 12-Aug | 11.1 | 11.2 | 10.7 | 10.4 | 10.8 | 10.9 | 11.7 | 12.6 | 13.0 | 13.2 | 13.8 | 14.2 | 15.0 | 15.7 | 15.8 | 14.7 | 15.5 | 16.5 | 16.5 | 15.7 | 14.8 | 14.7 | 14.0 | 13.4 | 13.6 | 16.5 |
| 13-Aug | 13.0 | 12.9 | 12.3 | 11.6 | 11.5 | 11.6 | 12.8 | 13.9 | 14.9 | 16.4 | 17.6 | 18.8 | 18.6 | 18.3 | 19.1 | 19.1 | 19.4 | 19.1 | 18.5 | 18.2 | 17.1 | 15.5 | 14.6 | 14.4 | 15.8 | 19.4 |
| 14-Aug | 13.9 | 13.7 | 13.5 | 13.1 | 12.7 | 12.6 | 13.4 | 14.7 | 15.5 | 16.0 | 17.3 | 19.9 | 21.6 | 21.2 | 20.5 | 20.4 | 20.1 | 20.9 | 19.6 | 17.8 | 16.2 | 15.3 | 13.4 | 11.4 | 16.5 | 21.6 |
| 15-Aug | 10.2 | 9.0 | 9.0 | 9.3 | 8.4 | 8.4 | 10.4 | 13.3 | 16.2 | 19.1 | 21.4 | 23.1 | 23.6 | 24.1 | 23.8 | 23.9 | 23.1 | 22.8 | 23.0 | 21.4 | 20.0 | 19.1 | 18.3 | 17.3 | 17.4 | 24.1 |
| 16-Aug | 15.7 | 14.9 | 14.1 | 13.7 | 13.1 | 12.5 | 13.0 | 14.0 | 13.9 | 14.2 | 15.3 | 16.6 | 17.0 | 17.8 | 18.3 | 19.9 | 18.2 | 17.1 | 17.1 | 15.2 | 12.9 | 11.4 | 9.9 | 9.1 | 14.8 | 19.9 |
| 17-Aug | 8.1 | 7.5 | 6.1 | 5.8 | 5.2 | 5.5 | 7.6 | 10.7 | 14.3 | 15.1 | 14.9 | 15.6 | 17.2 | 18.8 | 21.2 | 22.0 | 22.5 | 22.3 | 21.6 | 19.7 | 17.0 | 15.6 | 14.0 | 11.7 | 14.2 | 22.5 |
| 18-Aug | 10.5 | 10.0 | 9.9 | 9.9 | 9.6 | 9.6 | 12.1 | 15.0 | 16.5 | 18.3 | 20.5 | 23.4 | 25.0 | 26.1 | 26.7 | 26.6 | 25.5 | 25.5 | 25.0 | 22.5 | 20.8 | 20.5 | 18.6 | 15.8 | 18.5 | 26.7 |
| 19-Aug | 15.4 | 13.7 | 13.9 | 14.3 | 13.7 | 13.2 | 13.8 | 14.6 | 16.1 | 19.2 | 21.5 | 22.9 | 23.8 | 24.8 | 24.7 | 23.7 | 23.3 | 22.7 | 21.5 | 19.9 | 17.0 | 15.4 | 15.8 | 15.0 | 18.3 | 24.8 |
| 20-Aug | 13.8 | 13.3 | 11.8 | 11.1 | 10.7 | 9.8 | 10.8 | 13.3 | 15.1 | 17.2 | 18.7 | 19.5 | 20.9 | 21.8 | 21.9 | 22.4 | 22.0 | 22.1 | 21.8 | 18.9 | 16.1 | 14.5 | 12.3 | 11.1 | 16.3 | 22.4 |
| 21-Aug | 10.1 | 9.5 | 8.9 | 7.9 | 7.2 | 7.9 | 9.9 | 12.4 | 15.5 | 18.7 | 21.4 | 23.6 | 24.6 | 25.4 | 25.7 | 25.9 | 25.8 | 25.8 | 24.8 | 23.2 | 21.5 | 19.6 | 18.7 | 17.8 | 18.0 | 25.9 |
| 22-Aug | 16.1 | 14.7 | 14.4 | 13.2 | 12.8 | 12.5 | 15.2 | 16.4 | 18.0 | 19.5 | 20.2 | 21.3 | 23.6 | 25.2 | 26.6 | 27.5 | 28.2 | 28.3 | 27.5 | 25.2 | 22.7 | 22.0 | 21.7 | 20.5 | 20.6 | 28.3 |
| 23-Aug | 19.5 | 18.3 | 17.3 | 16.7 | 16.0 | 15.7 | 16.0 | 16.9 | 19.3 | 20.1 | 21.4 | 23.0 | 25.0 | 26.0 | 26.3 | 26.3 | 26.5 | 25.5 | 23.2 | 22.4 | 21.1 | 20.3 | 20.1 | 19.9 | 20.9 | 26.5 |
| 24-Aug | 20.2 | 19.5 | 18.9 | 18.9 | 17.9 | 17.6 | 18.0 | 18.7 | 20.7 | 21.8 | 22.1 | 23.5 | 24.5 | 24.8 | 25.8 | 25.8 | 25.4 | 24.6 | 23.8 | 20.8 | 16.7 | 15.3 | 14.2 | 12.2 | 20.5 | 25.8 |
| 25-Aug | 11.3 | 10.2 | 9.5 | 9.0 | 8.5 | 8.1 | 9.7 | 13.6 | 15.6 | 17.6 | 19.8 | 20.6 | 21.9 | 23.2 | 24.3 | 24.3 | 24.4 | 24.0 | 22.9 | 20.9 | 18.5 | 16.6 | 14.7 | 13.6 | 16.8 | 24.4 |
| 26-Aug | 12.7 | 11.9 | 10.9 | 10.2 | 9.7 | 9.1 | 11.2 | 15.0 | 18.1 | 20.9 | 23.3 | 25.3 | 27.2 | 28.3 | 28.8 | 29.5 | 29.5 | 29.2 | 27.8 | 24.6 | 21.8 | 22.0 | 21.0 | 19.9 | 20.3 | 29.5 |
| 27-Aug | 18.8 | 18.0 | 15.7 | 13.8 | 12.8 | 12.0 | 14.4 | 17.0 | 18.5 | 21.3 | 23.3 | 25.0 | 25.5 | 25.8 | 26.4 | 25.5 | 25.7 | 24.6 | 24.6 | 25.0 | 24.3 | 24.1 | 22.9 | 21.9 | 21.1 | 26.4 |
| 28-Aug | 20.2 | 19.1 | 16.5 | 17.6 | 18.0 | 17.5 | 17.4 | 16.8 | 16.5 | 18.1 | 19.2 | 20.1 | 21.3 | 21.5 | 19.3 | 17.8 | 18.0 | 16.4 | 14.8 | 13.3 | 12.5 | 12.5 | 12.1 | 11.9 | 17.0 | 21.5 |
| 29-Aug | 11.6 | 11.4 | 11.3 | 11.1 | 10.9 | 11.0 | 11.1 | 11.1 | 11.3 | 13.0 | 15.7 | 17.6 | 19.2 | 20.7 | 21.5 | 22.2 | 22.3 | 22.3 | 21.5 | 19.0 | 16.6 | 15.4 | 14.4 | 13.6 | 15.7 | 22.3 |
| 30-Aug | 11.6 | 10.1 | 9.2 | 9.8 | 9.6 | 8.9 | 8.4 | 9.8 | 13.8 | 16.9 | 19.7 | 21.8 | 23.4 | 24.5 | 25.3 | 25.5 | 24.4 | 24.3 | 22.0 | 20.0 | 19.0 | 18.4 | 17.2 | 16.6 | 17.1 | 25.5 |
| 31-Aug | 15.0 | 14.3 | 14.1 | 13.4 | 12.6 | 11.9 | 11.6 | 13.5 | 16.1 | 18.6 | 20.8 | 22.1 | 22.8 | 22.9 | 23.0 | 23.8 | 23.3 | 23.5 | 21.9 | 19.3 | 16.5 | 14.5 | 12.3 | 11.0 | 17.4 | 23.8 |
| | 13.5 | 12.7 | 12.2 | 11.9 | 11.6 | 11.5 | 12.6 | 14.2 | 16.0 | 17.5 | 18.9 | 20.2 | 21.0 | 21.7 | 22.0 | 22.1 | 21.8 | 21.4 | 20.6 | 19.1 | 17.3 | 16.1 | 15.1 | 14.2 | Diurnal Average | |
| | 20.2 | 19.5 | 18.9 | 18.9 | 18.0 | 17.6 | 18.0 | 18.7 | 20.7 | 21.8 | 23.3 | 25.3 | 27.2 | 28.3 | 28.8 | 29.5 | 29.5 | 29.2 | 27.8 | 25.2 | 24.3 | 24.1 | 22.9 | 21.9 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Ells River - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 51 | 6.85 | 6.85 |
| 10 - 20 | 490 | 65.86 | 72.72 |
| > 20 | 203 | 27.28 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Relative Humidity 2m (RH2) - %

## Ells River - August 2026

Maximum Value: 96.9 % on Aug 1 05:00

Maximum Daily Average: 87.0 % on Aug 1

Minimum Value: 26.2 % on Aug 24 15:00

Minimum Daily Average: 48.7 % on Aug 24

Maximum Diurnal Average: 87.7 % at hour 6

Minimum Diurnal Average: 48.5 % at hour 16

Monthly Average: 69.13 %

Percentiles: $P_1$ = 33.3 $P_{10}$ = 44.2 $Q_1$ = 53.2 Median = 71.2 $Q_3$ = 85.5 $P_{90}$ = 91.3 $P_{99}$ = 95.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

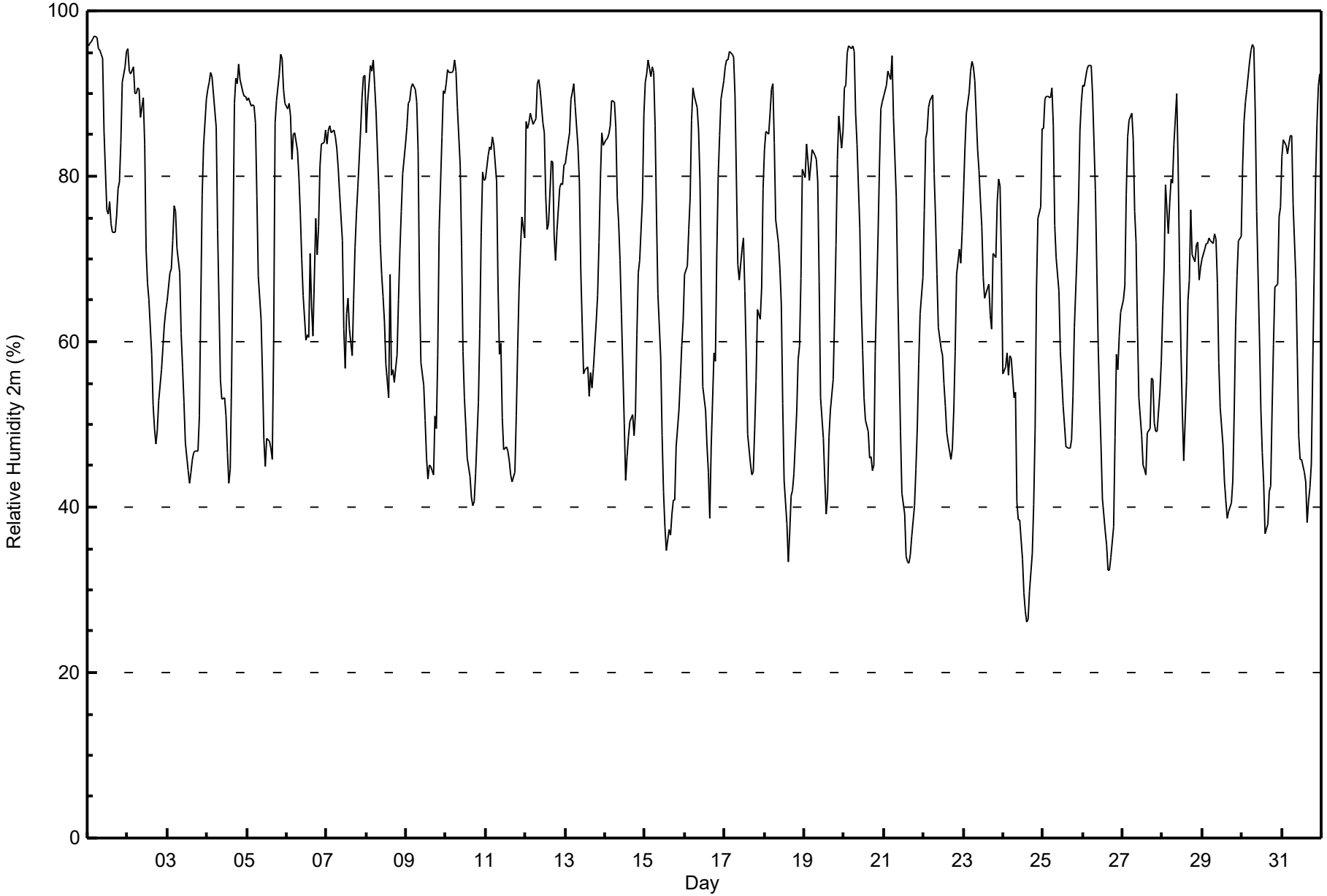
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 95.8 | 96.0 | 96.2 | 96.6 | 96.9 | 96.8 | 95.4 | 95.2 | 94.7 | 94.3 | 85.4 | 76.0 | 75.4 | 76.9 | 74.3 | 73.2 | 73.2 | 75.2 | 78.4 | 79.4 | 84.0 | 91.3 | 93.3 | 95.0 | 87.0 | 96.9 |
| 2-Aug | 95.4 | 92.7 | 92.3 | 93.3 | 90.1 | 90.0 | 90.7 | 90.5 | 87.1 | 89.6 | 83.9 | 71.2 | 67.1 | 65.1 | 58.4 | 52.4 | 49.4 | 47.6 | 49.4 | 52.8 | 56.6 | 59.4 | 62.1 | 63.7 | 72.9 | 95.4 |
| 3-Aug | 65.0 | 68.3 | 68.7 | 72.2 | 76.5 | 75.8 | 71.3 | 68.3 | 61.1 | 57.0 | 52.6 | 47.7 | 44.4 | 42.8 | 44.3 | 45.7 | 46.6 | 46.8 | 46.7 | 51.1 | 64.6 | 77.8 | 83.7 | 89.3 | 61.2 | 89.3 |
| 4-Aug | 90.6 | 91.4 | 92.5 | 92.1 | 90.1 | 86.0 | 73.6 | 64.6 | 55.4 | 53.1 | 53.2 | 51.1 | 46.6 | 42.9 | 44.6 | 55.8 | 88.9 | 91.8 | 91.3 | 93.6 | 91.6 | 90.2 | 89.6 | 89.7 | 75.4 | 93.6 |
| 5-Aug | 89.1 | 89.4 | 88.5 | 88.6 | 88.4 | 86.5 | 77.7 | 68.0 | 62.7 | 56.0 | 48.1 | 45.0 | 48.4 | 48.0 | 47.0 | 45.8 | 60.3 | 86.5 | 89.1 | 92.4 | 94.7 | 94.2 | 90.4 | 88.8 | 73.9 | 94.7 |
| 6-Aug | 88.2 | 88.8 | 87.3 | 82.0 | 85.1 | 85.2 | 83.0 | 79.8 | 75.4 | 70.1 | 65.6 | 60.2 | 60.9 | 60.6 | 70.7 | 64.3 | 60.7 | 74.9 | 70.5 | 73.9 | 81.1 | 83.9 | 84.1 | 85.7 | 75.9 | 88.8 |
| 7-Aug | 84.0 | 85.6 | 86.1 | 85.3 | 85.6 | 84.7 | 83.4 | 81.1 | 78.0 | 72.2 | 61.5 | 56.9 | 63.4 | 65.3 | 61.5 | 58.4 | 65.1 | 71.4 | 75.5 | 78.6 | 85.5 | 89.4 | 92.0 | 92.1 | 76.8 | 92.1 |
| 8-Aug | 85.2 | 89.0 | 93.5 | 92.8 | 94.0 | 91.1 | 87.8 | 78.3 | 71.9 | 68.1 | 65.4 | 62.4 | 57.2 | 53.2 | 68.1 | 55.9 | 56.7 | 55.1 | 58.5 | 65.1 | 71.1 | 75.8 | 80.4 | 83.9 | 73.4 | 94.0 |
| 9-Aug | 85.9 | 88.8 | 89.1 | 90.6 | 91.3 | 90.6 | 89.0 | 83.0 | 66.3 | 57.4 | 54.7 | 50.4 | 45.9 | 43.5 | 45.0 | 45.0 | 44.0 | 50.9 | 49.5 | 58.5 | 73.5 | 84.7 | 90.4 | 89.9 | 69.1 | 91.3 |
| 10-Aug | 91.3 | 92.9 | 92.6 | 92.5 | 92.6 | 94.1 | 92.8 | 88.4 | 81.4 | 71.5 | 58.8 | 53.2 | 49.9 | 45.9 | 43.7 | 41.2 | 40.2 | 40.7 | 44.1 | 52.7 | 61.6 | 73.2 | 80.6 | 79.6 | 69.0 | 94.1 |
| 11-Aug | 79.6 | 82.6 | 83.6 | 83.2 | 84.7 | 83.7 | 79.3 | 66.6 | 58.4 | 59.8 | 50.8 | 47.0 | 47.4 | 46.7 | 45.7 | 43.9 | 43.1 | 44.2 | 51.1 | 59.1 | 66.5 | 71.3 | 75.1 | 72.5 | 63.6 | 84.7 |
| 12-Aug | 86.7 | 85.8 | 86.4 | 87.7 | 86.3 | 86.6 | 87.0 | 91.2 | 91.8 | 90.4 | 86.4 | 85.2 | 77.6 | 73.6 | 74.2 | 81.9 | 81.7 | 72.9 | 69.9 | 73.4 | 78.6 | 79.1 | 79.0 | 81.3 | 82.3 | 91.8 |
| 13-Aug | 81.6 | 82.9 | 85.3 | 89.4 | 90.2 | 91.1 | 88.4 | 83.5 | 79.3 | 68.6 | 62.2 | 56.1 | 56.6 | 57.0 | 53.3 | 56.3 | 54.4 | 56.8 | 62.4 | 65.6 | 72.1 | 79.6 | 85.3 | 83.7 | 72.6 | 91.1 |
| 14-Aug | 84.4 | 84.7 | 85.1 | 86.2 | 89.2 | 89.1 | 85.9 | 77.4 | 74.3 | 69.8 | 63.3 | 50.2 | 43.1 | 46.2 | 48.4 | 50.3 | 51.1 | 48.6 | 51.4 | 60.9 | 68.2 | 69.8 | 77.3 | 87.5 | 68.4 | 89.2 |
| 15-Aug | 91.3 | 92.5 | 94.0 | 92.1 | 93.3 | 92.5 | 86.1 | 75.2 | 65.8 | 58.1 | 48.7 | 41.9 | 37.7 | 34.7 | 37.3 | 36.6 | 39.2 | 40.9 | 40.8 | 47.3 | 51.7 | 55.5 | 59.5 | 62.5 | 61.5 | 94.0 |
| 16-Aug | 68.2 | 69.2 | 73.5 | 77.4 | 86.7 | 90.7 | 89.6 | 88.3 | 85.5 | 79.4 | 66.2 | 54.6 | 51.7 | 47.4 | 44.3 | 38.7 | 47.2 | 58.6 | 57.7 | 70.6 | 80.0 | 84.9 | 89.3 | 91.6 | 70.5 | 91.6 |
| 17-Aug | 93.2 | 94.1 | 94.0 | 95.0 | 94.8 | 94.4 | 89.6 | 79.5 | 69.3 | 67.5 | 71.2 | 72.5 | 66.0 | 58.2 | 48.9 | 45.3 | 43.8 | 44.3 | 49.3 | 55.2 | 64.0 | 62.6 | 66.7 | 78.5 | 70.8 | 95.0 |
| 18-Aug | 83.2 | 85.4 | 85.1 | 87.6 | 90.5 | 91.2 | 84.1 | 74.7 | 71.8 | 68.8 | 64.6 | 52.6 | 43.2 | 37.9 | 33.4 | 36.9 | 41.4 | 42.1 | 44.1 | 51.5 | 57.8 | 59.4 | 67.6 | 80.8 | 64.0 | 91.2 |
| 19-Aug | 79.9 | 83.9 | 81.9 | 79.6 | 81.3 | 83.2 | 82.5 | 82.1 | 79.3 | 67.3 | 53.3 | 48.4 | 43.4 | 39.2 | 41.3 | 48.5 | 51.7 | 55.5 | 62.9 | 71.7 | 82.0 | 87.4 | 83.5 | 85.3 | 69.0 | 87.4 |
| 20-Aug | 90.7 | 91.0 | 94.9 | 95.7 | 95.4 | 95.8 | 95.1 | 87.7 | 83.8 | 73.6 | 64.7 | 59.0 | 53.2 | 50.6 | 49.1 | 45.9 | 46.1 | 44.4 | 45.0 | 58.9 | 72.9 | 81.2 | 88.2 | 89.0 | 73.0 | 95.8 |
| 21-Aug | 89.6 | 91.0 | 92.7 | 92.2 | 91.7 | 94.7 | 87.1 | 77.4 | 66.7 | 57.9 | 49.2 | 41.7 | 39.1 | 34.1 | 33.3 | 33.3 | 34.2 | 36.5 | 40.1 | 44.6 | 49.7 | 57.3 | 63.4 | 67.8 | 61.1 | 94.7 |
| 22-Aug | 76.0 | 84.6 | 85.5 | 88.3 | 89.1 | 89.9 | 80.3 | 74.8 | 68.1 | 61.7 | 59.1 | 58.2 | 54.9 | 52.2 | 49.0 | 47.7 | 45.8 | 47.1 | 51.7 | 58.8 | 68.1 | 71.3 | 69.6 | 73.4 | 66.9 | 89.9 |
| 23-Aug | 78.3 | 83.5 | 87.7 | 90.1 | 92.7 | 94.0 | 93.2 | 91.5 | 83.2 | 80.7 | 77.0 | 73.9 | 67.7 | 65.2 | 66.5 | 66.9 | 63.3 | 61.6 | 70.6 | 70.2 | 76.9 | 79.7 | 78.9 | 69.6 | 77.6 | 94.0 |
| 24-Aug | 56.1 | 57.0 | 58.7 | 55.9 | 58.3 | 58.0 | 53.3 | 53.8 | 40.7 | 38.4 | 38.4 | 33.7 | 29.6 | 27.4 | 26.2 | 26.5 | 29.9 | 34.4 | 40.4 | 49.3 | 66.4 | 74.9 | 76.2 | 85.7 | 48.7 | 85.7 |
| 25-Aug | 85.7 | 89.3 | 89.6 | 89.6 | 89.5 | 90.6 | 86.1 | 74.1 | 70.2 | 66.1 | 58.7 | 55.6 | 52.2 | 49.8 | 47.2 | 47.1 | 47.1 | 48.1 | 53.4 | 61.7 | 71.0 | 77.0 | 85.6 | 89.0 | 69.8 | 90.6 |
| 26-Aug | 90.9 | 90.8 | 92.9 | 93.4 | 93.3 | 93.4 | 89.8 | 78.2 | 68.8 | 59.5 | 52.9 | 47.5 | 41.1 | 37.1 | 35.3 | 32.4 | 32.3 | 33.9 | 37.7 | 48.5 | 58.4 | 56.6 | 60.6 | 63.6 | 62.0 | 93.4 |
| 27-Aug | 65.1 | 66.8 | 77.8 | 84.8 | 86.8 | 87.6 | 84.5 | 75.7 | 72.0 | 61.7 | 53.2 | 48.6 | 45.2 | 44.6 | 43.9 | 48.9 | 49.5 | 55.6 | 55.5 | 50.2 | 49.2 | 49.2 | 53.8 | 57.6 | 61.2 | 87.6 |
| 28-Aug | 63.7 | 68.8 | 79.1 | 73.1 | 76.7 | 79.6 | 79.2 | 84.0 | 89.9 | 81.3 | 69.5 | 59.2 | 51.5 | 45.6 | 55.2 | 64.8 | 67.4 | 75.9 | 70.5 | 69.6 | 71.7 | 72.0 | 67.4 | 68.9 | 70.2 | 89.9 |
| 29-Aug | 70.1 | 71.2 | 71.8 | 71.9 | 72.5 | 72.2 | 71.9 | 73.0 | 72.3 | 67.1 | 57.4 | 52.0 | 47.5 | 43.2 | 40.8 | 38.6 | 39.5 | 40.4 | 43.2 | 51.5 | 61.8 | 68.0 | 72.2 | 72.7 | 60.1 | 73.0 |
| 30-Aug | 81.2 | 86.6 | 89.1 | 90.5 | 93.9 | 95.2 | 95.9 | 95.6 | 87.7 | 75.7 | 60.4 | 51.9 | 46.6 | 42.9 | 36.7 | 38.0 | 41.9 | 42.5 | 51.7 | 59.6 | 66.6 | 67.0 | 75.1 | 76.4 | 68.7 | 95.9 |
| 31-Aug | 82.4 | 84.5 | 83.7 | 82.8 | 83.8 | 84.9 | 84.9 | 76.6 | 67.5 | 58.3 | 48.6 | 45.7 | 45.8 | 44.2 | 43.1 | 38.1 | 40.6 | 42.4 | 45.3 | 68.5 | 79.6 | 86.2 | 90.8 | 92.4 | 66.7 | 92.4 |
| | 82.2 | 84.2 | 85.8 | 86.2 | 87.5 | 87.7 | 84.5 | 79.3 | 73.6 | 67.8 | 60.8 | 55.1 | 51.6 | 49.1 | 48.7 | 48.5 | 50.9 | 53.8 | 56.4 | 62.7 | 70.2 | 74.5 | 77.8 | 80.2 | Diurnal Average | |
| | 95.8 | 96.0 | 96.2 | 96.6 | 96.9 | 96.8 | 95.9 | 95.6 | 94.7 | 94.3 | 86.4 | 85.2 | 77.6 | 76.9 | 74.3 | 81.9 | 88.9 | 91.8 | 91.3 | 93.6 | 94.7 | 94.2 | 93.3 | 95.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Ells River - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 36 | 4.84 | 4.84 |
| 40 - 60 | 223 | 29.97 | 34.81 |
| 60 - 80 | 222 | 29.84 | 64.65 |
| 80 - 100 | 263 | 35.35 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Global Radiation (GR) - W/m2

## Ells River - August 2026

Maximum Value: 917.0 W/m2 on Aug 15 13:00

Maximum Daily Average: 278.0 W/m2 on Aug 11

Minimum Value: 0.0 W/m2 on Aug 1 01:00

Minimum Daily Average: 117.8 W/m2 on Aug 23

Maximum Diurnal Average: 640.6 W/m2 at hour 13

Minimum Diurnal Average: 0.0 W/m2 at hour 1

Monthly Average: 207.84 W/m2

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 65.2 $Q_3$ = 398.3 $P_{90}$ = 641.7 $P_{99}$ = 822.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

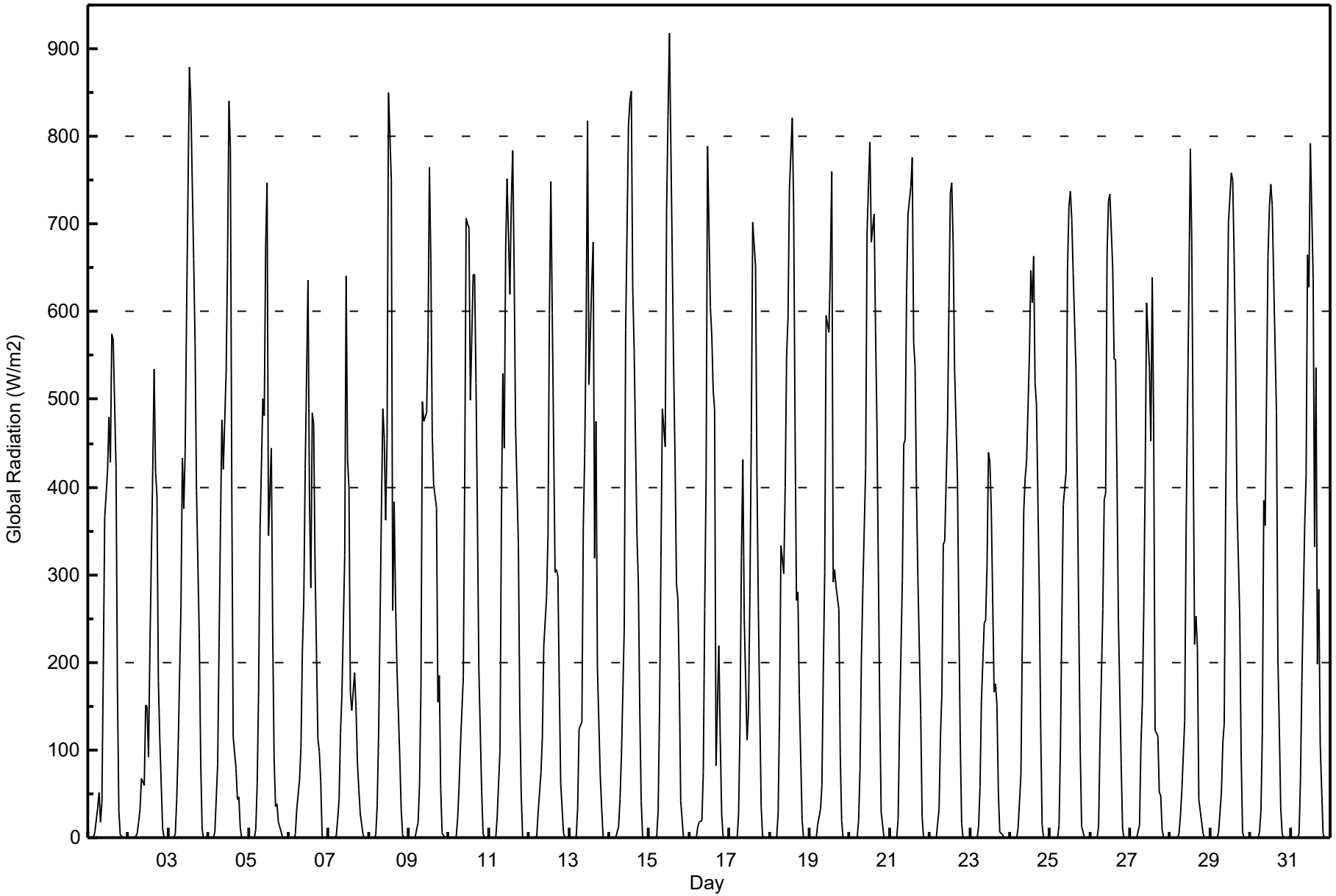
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 33.3 | 51.9 | 17.5 | 40.6 | 194.8 | 365.4 | 418.3 | 479.5 | 427.6 | 574.6 | 568.2 | 422.3 | 171.3 | 30.3 | 3.7 | 1.3 | 0.0 | 0.0 | 0.0 | 158.7 | 574.6 |
| 2-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 5.3 | 18.0 | 32.7 | 67.7 | 59.9 | 151.3 | 149.5 | 92.5 | 215.8 | 418.9 | 534.9 | 417.7 | 389.7 | 178.5 | 112.4 | 11.6 | 0.0 | 0.0 | 0.0 | 119.1 | 534.9 |
| 3-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 5.2 | 42.9 | 102.0 | 263.8 | 432.4 | 375.3 | 443.4 | 603.0 | 879.3 | 836.6 | 747.7 | 660.8 | 563.0 | 395.5 | 226.0 | 85.4 | 9.4 | 0.0 | 0.0 | 0.0 | 278.0 | 879.3 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 6.4 | 84.1 | 222.8 | 359.4 | 476.2 | 419.7 | 530.8 | 659.6 | 841.2 | 787.4 | 396.4 | 114.6 | 79.6 | 44.2 | 47.4 | 11.0 | 0.7 | 0.0 | 0.0 | 0.0 | 211.7 | 841.2 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 9.0 | 61.4 | 168.4 | 349.0 | 500.4 | 480.9 | 675.2 | 747.2 | 345.3 | 444.3 | 231.9 | 89.1 | 34.6 | 38.1 | 17.4 | 5.8 | 0.2 | 0.0 | 0.0 | 0.0 | 174.9 | 747.2 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 32.8 | 65.6 | 103.1 | 212.1 | 270.6 | 420.3 | 635.8 | 391.9 | 284.5 | 484.8 | 472.2 | 308.8 | 113.4 | 97.6 | 65.0 | 2.1 | 0.0 | 0.0 | 0.0 | 165.1 | 635.8 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 20.6 | 44.1 | 119.3 | 162.8 | 322.3 | 641.3 | 432.0 | 400.1 | 166.1 | 145.5 | 188.2 | 147.4 | 84.7 | 54.0 | 27.9 | 3.1 | 0.0 | 0.0 | 0.0 | 123.4 | 641.3 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 37.3 | 118.2 | 374.3 | 489.0 | 456.1 | 362.5 | 455.9 | 850.6 | 750.3 | 259.2 | 382.5 | 269.9 | 192.6 | 91.2 | 32.4 | 3.6 | 0.0 | 0.0 | 0.0 | 213.7 | 850.6 |
| 9-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 17.0 | 60.5 | 171.2 | 497.5 | 475.7 | 484.6 | 566.8 | 764.7 | 658.0 | 458.7 | 403.0 | 376.1 | 154.3 | 185.4 | 54.1 | 4.9 | 0.0 | 0.0 | 0.0 | 222.3 | 764.7 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 22.9 | 58.7 | 106.0 | 183.3 | 411.0 | 706.8 | 700.8 | 695.0 | 499.8 | 642.7 | 641.9 | 517.7 | 363.9 | 193.2 | 53.4 | 5.2 | 0.0 | 0.0 | 0.0 | 241.9 | 706.8 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 24.6 | 99.5 | 367.7 | 529.0 | 444.7 | 671.9 | 752.5 | 620.5 | 726.2 | 783.7 | 646.7 | 470.3 | 334.8 | 147.8 | 50.6 | 1.6 | 0.0 | 0.0 | 0.0 | 278.0 | 783.7 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 29.2 | 52.3 | 73.6 | 114.4 | 219.0 | 275.4 | 346.9 | 596.9 | 748.8 | 599.2 | 302.1 | 305.7 | 297.1 | 172.8 | 62.0 | 4.2 | 0.0 | 0.0 | 0.0 | 175.0 | 748.8 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 33.1 | 124.3 | 132.5 | 356.3 | 438.5 | 578.6 | 817.4 | 516.7 | 634.5 | 678.9 | 319.5 | 475.1 | 192.5 | 71.0 | 33.9 | 1.6 | 0.0 | 0.0 | 0.0 | 225.2 | 817.4 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 12.6 | 44.2 | 94.1 | 165.9 | 238.9 | 579.6 | 813.7 | 840.9 | 851.1 | 628.4 | 557.1 | 343.8 | 290.1 | 144.4 | 41.3 | 2.2 | 0.0 | 0.0 | 0.0 | 235.4 | 851.1 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 30.0 | 144.9 | 319.0 | 489.4 | 445.2 | 717.0 | 822.7 | 917.0 | 790.3 | 535.4 | 429.6 | 290.4 | 271.5 | 178.3 | 41.7 | 0.8 | 0.0 | 0.0 | 0.0 | 267.7 | 917.0 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 11.5 | 18.5 | 19.5 | 76.1 | 261.3 | 415.1 | 788.9 | 605.1 | 573.9 | 511.0 | 487.1 | 82.0 | 219.0 | 112.6 | 27.0 | 1.1 | 0.0 | 0.0 | 0.0 | 175.4 | 788.9 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 28.1 | 127.5 | 320.1 | 431.2 | 249.9 | 111.6 | 145.7 | 277.1 | 462.1 | 701.6 | 652.4 | 414.5 | 260.4 | 145.2 | 36.2 | 0.9 | 0.0 | 0.0 | 0.0 | 181.9 | 701.6 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 28.1 | 140.9 | 333.7 | 300.3 | 399.7 | 549.3 | 593.1 | 738.9 | 821.5 | 720.3 | 465.0 | 270.4 | 280.1 | 163.3 | 19.5 | 0.3 | 0.0 | 0.0 | 0.0 | 242.7 | 821.5 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 14.9 | 32.2 | 60.1 | 188.2 | 303.2 | 596.2 | 576.1 | 652.4 | 760.6 | 290.9 | 305.2 | 286.8 | 261.5 | 94.7 | 19.6 | 0.4 | 0.0 | 0.0 | 0.0 | 185.2 | 760.6 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 20.1 | 77.3 | 206.4 | 283.8 | 421.1 | 690.4 | 743.9 | 793.9 | 679.3 | 710.9 | 579.4 | 470.6 | 305.6 | 144.6 | 29.1 | 0.4 | 0.0 | 0.0 | 0.0 | 256.5 | 793.9 |
| 21-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 21.5 | 128.3 | 295.0 | 449.8 | 454.7 | 623.8 | 711.1 | 741.7 | 776.2 | 565.9 | 537.8 | 395.5 | 296.2 | 140.8 | 24.7 | 0.4 | 0.0 | 0.0 | 0.0 | 256.8 | 776.2 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 32.6 | 115.5 | 166.1 | 335.6 | 337.4 | 472.3 | 606.3 | 736.2 | 746.6 | 677.0 | 534.9 | 412.5 | 255.0 | 111.3 | 16.1 | 0.0 | 0.0 | 0.0 | 0.0 | 231.5 | 746.6 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.4 | 58.3 | 156.1 | 245.0 | 247.8 | 311.8 | 439.7 | 427.5 | 374.0 | 166.2 | 175.0 | 151.5 | 50.9 | 6.9 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 117.8 | 439.7 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.0 | 72.3 | 231.5 | 373.0 | 411.4 | 430.3 | 551.4 | 646.9 | 610.9 | 663.0 | 518.4 | 495.1 | 279.9 | 123.6 | 15.3 | 0.0 | 0.0 | 0.0 | 0.0 | 226.5 | 663.0 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 14.3 | 106.5 | 252.8 | 380.1 | 417.5 | 649.9 | 719.8 | 737.5 | 705.1 | 644.6 | 532.9 | 397.8 | 243.0 | 98.3 | 12.7 | 0.0 | 0.0 | 0.0 | 0.0 | 246.4 | 737.5 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.7 | 109.4 | 261.3 | 386.1 | 392.8 | 665.6 | 726.5 | 733.5 | 650.7 | 546.4 | 545.6 | 417.8 | 251.0 | 84.3 | 9.3 | 0.0 | 0.0 | 0.0 | 0.0 | 241.4 | 733.5 |
| 27-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 14.1 | 106.3 | 155.3 | 258.6 | 412.3 | 609.5 | 536.5 | 452.4 | 639.6 | 477.2 | 123.1 | 116.7 | 51.6 | 48.0 | 10.1 | 0.0 | 0.0 | 0.0 | 0.0 | 167.1 | 639.6 |
| 28-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 25.8 | 55.4 | 134.1 | 352.3 | 492.8 | 629.6 | 786.0 | 679.5 | 221.0 | 252.2 | 216.2 | 43.8 | 30.0 | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 163.7 | 786.0 |
| 29-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 | 51.2 | 108.3 | 129.8 | 376.7 | 555.5 | 702.1 | 758.4 | 751.0 | 664.2 | 552.4 | 385.4 | 251.5 | 91.8 | 7.1 | 0.0 | 0.0 | 0.0 | 0.0 | 224.7 | 758.4 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 30.2 | 120.9 | 385.0 | 355.5 | 662.7 | 719.9 | 745.0 | 722.0 | 639.9 | 485.4 | 205.4 | 126.4 | 36.2 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 218.6 | 745.0 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 | 65.4 | 178.1 | 356.1 | 413.2 | 665.8 | 627.5 | 793.0 | 638.1 | 331.7 | 536.0 | 197.5 | 283.2 | 106.8 | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 216.8 | 793.0 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 23.6 | 85.2 | 187.2 | 304.2 | 356.7 | 519.6 | 604.5 | 640.6 | 626.2 | 519.9 | 438.5 | 320.6 | 219.1 | 108.8 | 29.9 | 1.8 | 0.0 | 0.0 | 0.0 | Diurnal Average | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 9.0 | 84.1 | 222.8 | 374.3 | 529.0 | 480.9 | 717.0 | 822.7 | 917.0 | 851.1 | 783.7 | 660.8 | 563.0 | 395.5 | 226.0 | 112.4 | 11.6 | 0.0 | 0.0 | 0.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Global Radiation (GR) - W/m2**

**Ells River - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Ells River - August 2026

Maximum Speed: 34 km/h on Aug 2 12:00

Maximum Daily Speed Average: 23.2 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 16 23:00

Minimum Daily Speed Average: 2.2 km/h on Aug 30

Maximum Diurnal Speed Average: 4.6 km/h at hour 17

Minimum Diurnal Speed Average: 1.7 km/h at hour 21

Monthly Average Velocity: 2.4 km/h 294.9 deg

Percentiles: $P_1 = 1$ $P_{10} = 3$ $Q_1 = 5$ Median = 8 $Q_3 = 12$ $P_{90} = 16$ $P_{99} = 30$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 736 |
| Hours of Missing Data: | 8 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | UO | SW1 | S3 | S3 | S5 | S8 | S6 | S5 | ESE3 | SSE3 | N1 | NE7 | NNE11 | N15 | N16 | N21 | N21 | N21 | N17 | NNW17 | NNW20 | NNW21 | N14 | N11 | N7.6 | N21 |
| 2-Aug | NNW9 | NNW17 | N17 | N20 | N19 | N10 | N16 | N18 | N21 | N28 | NNW30 | NNW34 | NNW31 | NNW33 | NNW33 | NNW31 | NNW32 | NW31 | NNW26 | NNW31 | NW24 | NW21 | NW20 | NW18 | NNW23.2 | NNW34 |
| 3-Aug | NW17 | NW15 | NW14 | WNW10 | WNW9 | WNW10 | WNW13 | NW12 | NNW15 | NW18 | NNW17 | NW16 | NNW12 | NNW9 | NNE10 | NNE10 | NNE8 | NE9 | ENE8 | ESE6 | SSE5 | SSW3 | UO | WSW1 | NNW7.9 | NNW18 |
| 4-Aug | S3 | S8 | S7 | SSW3 | S7 | S7 | S10 | S9 | SSW8 | SW7 | SW11 | SW12 | SW13 | SW13 | SSW11 | WSW12 | ESE5 | WNW4 | W6 | SW6 | NW12 | WNW9 | WNW10 | W8 | SW6.2 | SW13 |
| 5-Aug | W8 | WSW7 | W7 | WNW8 | WNW11 | WNW8 | NW10 | NW17 | NW21 | NW21 | NW24 | NW22 | NW20 | WNW14 | WNW13 | NNW16 | NNW17 | NW9 | NW12 | WNW8 | WSW6 | W8 | WNW12 | WNW12 | WNW12.4 | NW24 |
| 6-Aug | WNW10 | WNW11 | WNW12 | NW14 | W11 | WNW12 | WNW11 | WNW13 | NW16 | NNW18 | NW15 | NNW14 | N15 | NNW13 | N9 | NNW8 | WNW12 | W8 | NNE7 | S1 | W6 | W8 | W8 | WNW7 | NW9.5 | NNW18 |
| 7-Aug | NW7 | W6 | WNW7 | W8 | WNW4 | W4 | W5 | W9 | W9 | W10 | W12 | WNW12 | NNE13 | N6 | WNW6 | NW8 | NNE12 | NNE7 | NNE10 | NNE4 | WSW4 | WSW3 | W2 | WSW3 | WNW4.8 | NNE13 |
| 8-Aug | W7 | WSW2 | WSW5 | WSW2 | WSW5 | W7 | W5 | NNW7 | NNE7 | NNE11 | N6 | N9 | N7 | NNW9 | NNW7 | NW3 | NNE4 | N6 | N8 | N7 | N5 | NNW3 | NNW4 | WNW3 | NNW4.3 | NNE11 |
| 9-Aug | W3 | WSW1 | SSW3 | W2 | WSW2 | W2 | WSW2 | NW2 | N2 | ENE2 | N4 | N3 | N3 | N8 | NNE7 | N6 | N9 | N9 | N7 | NNE5 | NNW2 | UO | WSW3 | WSW2 | N2.7 | N9 |
| 10-Aug | W6 | W3 | SW3 | W1 | SW1 | SSW1 | WSW1 | W2 | NNW3 | N8 | NNE9 | NNE10 | N13 | N12 | N11 | N16 | N17 | N16 | N13 | N8 | N7 | NW5 | W7 | WSW5 | NNW5.9 | N17 |
| 11-Aug | W7 | WSW5 | SW4 | SSW4 | S5 | SSW3 | SW4 | WSW4 | N8 | N15 | N18 | NNE20 | NNE19 | N22 | N23 | N23 | N20 | NNE19 | N22 | N14 | N9 | NNW6 | NNW8 | NNW7 | N9.6 | N23 |
| 12-Aug | W6 | W9 | W10 | W10 | W9 | W9 | W8 | NW6 | NNW8 | NNW10 | N12 | N15 | N16 | N18 | N21 | NNW14 | N13 | N10 | NNW13 | N12 | N8 | NNW12 | NNW14 | N14 | NNW9.6 | N21 |
| 13-Aug | N15 | N12 | N6 | N6 | N6 | N5 | N11 | N14 | N11 | NNE13 | NNE12 | NE11 | N16 | N18 | NNE18 | NE15 | NNE15 | NE14 | N9 | NNW6 | NNW5 | WNW4 | W3 | W8 | N9.4 | N18 |
| 14-Aug | W6 | W5 | W7 | W5 | W4 | WNW5 | NW5 | NNW6 | NNW6 | N9 | N8 | NNE3 | NNE4 | NNW11 | NW17 | W13 | W8 | W5 | S8 | S6 | SW6 | SW7 | SW5 | WSW3 | WNW4.2 | NW17 |
| 15-Aug | S6 | SSE6 | S6 | SW8 | S7 | S7 | S7 | SSW8 | S8 | S8 | S8 | SW8 | SSW12 | SW11 | WSW9 | SW9 | WSW8 | SSW7 | SSW7 | SSW7 | SW7 | SW7 | SW8 | SW10 | SSW7.3 | SSW12 |
| 16-Aug | SW9 | SW9 | W3 | WSW3 | SSE1 | W8 | WNW6 | N20 | N18 | N17 | N16 | N16 | NNE15 | N13 | N10 | WNW8 | N11 | NNE11 | E3 | WSW1 | SSW3 | UO | WNW0 | UO | NNW6.1 | N20 |
| 17-Aug | WNW2 | WSW3 | SSW4 | S8 | SSW5 | SSW4 | SSW5 | SW5 | WNW6 | WSW5 | SW4 | SSE5 | SE8 | SE10 | ESE10 | SE12 | SSE11 | SSE12 | SSE9 | SSE8 | S9 | S10 | S5 | UO | S5.3 | SSE12 |
| 18-Aug | SSW1 | S1 | SSE5 | SSE7 | SSE8 | SSE6 | S6 | S9 | S10 | S11 | SSE13 | SSW12 | SW10 | SW13 | SSW15 | WSW12 | WSW10 | SW10 | SW8 | SSW8 | SSW7 | WSW8 | WSW5 | WSW6 | SSW7.4 | SSW15 |
| 19-Aug | WSW6 | S5 | SSW6 | SSW5 | SSW6 | S5 | SSE6 | SSW5 | W5 | W6 | WNW4 | NNW6 | NW10 | N9 | N5 | N13 | NNW17 | NNE15 | N11 | N7 | SW3 | SSW3 | W8 | W5 | NW2.8 | NNW17 |
| 20-Aug | WSW9 | WSW4 | SSE3 | SSW4 | SSW3 | WSW1 | WSW2 | SE2 | W1 | NNW8 | N15 | NNE15 | N10 | N9 | N9 | NNE12 | NNE15 | NNE11 | NNE7 | WSW2 | NNW2 | NNW2 | WSW2 | W2 | N3.9 | NNE15 |
| 21-Aug | W2 | SW1 | WSW1 | SSW3 | SE5 | S9 | SSW5 | S7 | S9 | S7 | SE7 | S9 | SSE11 | S11 | S10 | SSE15 | SSE15 | SE15 | SSE14 | SSE13 | SSE12 | SSE10 | SSE11 | SSE7 | SSE8.3 | SE15 |
| 22-Aug | SSE3 | NW2 | UO | SSE1 | SSE4 | S7 | SSE8 | SSE8 | SSE9 | S11 | SSE12 | S12 | S12 | SSE11 | SSE13 | SSE14 | SE12 | SSE11 | SE9 | SSE6 | SSE7 | SSE9 | S8 | SSE7 | SSE8.1 | SSE14 |
| 23-Aug | SSE5 | SSE8 | SSE8 | SSE9 | S8 | SSE7 | SSE7 | S7 | S10 | S12 | SSE12 | S9 | S8 | S9 | SSE6 | SSW2 | WSW5 | WSW7 | NW14 | NW9 | WNW6 | W6 | W9 | WNW9 | SSW4.5 | NW14 |
| 24-Aug | NW8 | WNW10 | WNW10 | NW10 | WNW11 | WNW12 | WNW11 | WNW6 | NW12 | WNW12 | W9 | WNW14 | NW16 | NNW20 | NW19 | NW18 | NNE14 | NNE14 | N8 | NNW5 | WSW2 | W7 | WNW4 | W3 | NW9.3 | NNW20 |
| 25-Aug | UO | WSW3 | SW2 | WSW2 | W1 | W2 | WSW1 | W4 | N9 | NNW5 | NNW4 | N5 | NNE6 | E8 | ENE9 | ENE12 | NE13 | NE12 | NE8 | NNE6 | N4 | NNW3 | NNW2 | WNW1 | NNE3.3 | NE13 |
| 26-Aug | NW1 | NW1 | WNW2 | WSW3 | WSW2 | S5 | S5 | S7 | S9 | SSE10 | SSE12 | SSE12 | SSE15 | SSE19 | SE16 | SSE20 | SSE20 | SSE17 | SSE12 | SE8 | SSE10 | SSE11 | SSE11 | SSE11 | SSE9.3 | SSE20 |
| 27-Aug | S11 | S9 | SSW3 | SW1 | S4 | SSE5 | S4 | SSE5 | NNE1 | SE5 | SE9 | ESE9 | SSE13 | SSE15 | SSE14 | SSE6 | E4 | NNW4 | SW3 | ESE8 | ESE12 | SE16 | SE13 | SSE10 | SE6.7 | SE16 |
| 28-Aug | SSE7 | SE2 | S3 | SSE13 | SW12 | WNW6 | SSE16 | SSE14 | S12 | SSW15 | SSW17 | SW17 | SSW23 | SSW26 | SW20 | SSW20 | SW16 | SW16 | SW16 | SW14 | SW13 | SW13 | SW17 | SW16 | SSW13.0 | SSW26 |
| 29-Aug | SW14 | SSW13 | SSW13 | SW14 | SSW14 | SSW14 | SSW14 | SSW16 | SSW14 | SW14 | SW16 | SW16 | SW16 | SW15 | SW17 | SW15 | SSW13 | SSW12 | SSW10 | S6 | S9 | S10 | S10 | S5 | SSW12.6 | SSW17 |
| 30-Aug | SSW0 | WSW2 | SSW2 | S5 | S6 | WSW2 | S5 | SSW7 | S8 | S8 | SSE8 | SE7 | SSE6 | SSE2 | SE5 | SE1 | NE7 | E7 | SE5 | SSW6 | N5 | NNW5 | NW7 | NW9 | SSE2.2 | NW9 |
| 31-Aug | NW5 | NW3 | WSW6 | W9 | W6 | SW4 | SSW3 | SSW3 | S3 | WSW4 | NE4 | N3 | S3 | SSW5 | NNW4 | SW6 | W5 | WNW13 | NW12 | N10 | NNW3 | NW2 | W3 | WSW1 | W3.0 | WNW13 |
| | W3.8 | WSW3.2 | WSW3.4 | WSW3.3 | SW3.2 | WSW3.5 | SW2.9 | WSW2.3 | WNW2.6 | NW3.1 | NW2.8 | NW3.5 | NNW3.1 | NNW3.3 | NNW3.3 | NNW3.7 | N4.6 | N3.7 | N3.4 | NW1.8 | W1.7 | WSW3.0 | W3.3 | W3.5 | Diurnal Average | |
| | NW17 | NNW17 | NNW17 | N20 | N19 | SSW14 | SSE16 | N20 | NW21 | N28 | NNW30 | NNW34 | NNW31 | NNW33 | NNW33 | NNW31 | NNW32 | NW31 | NNW26 | NNW31 | NW24 | NNW21 | NW20 | NW18 | Diurnal Maximum | |

UO - Unstable Operation

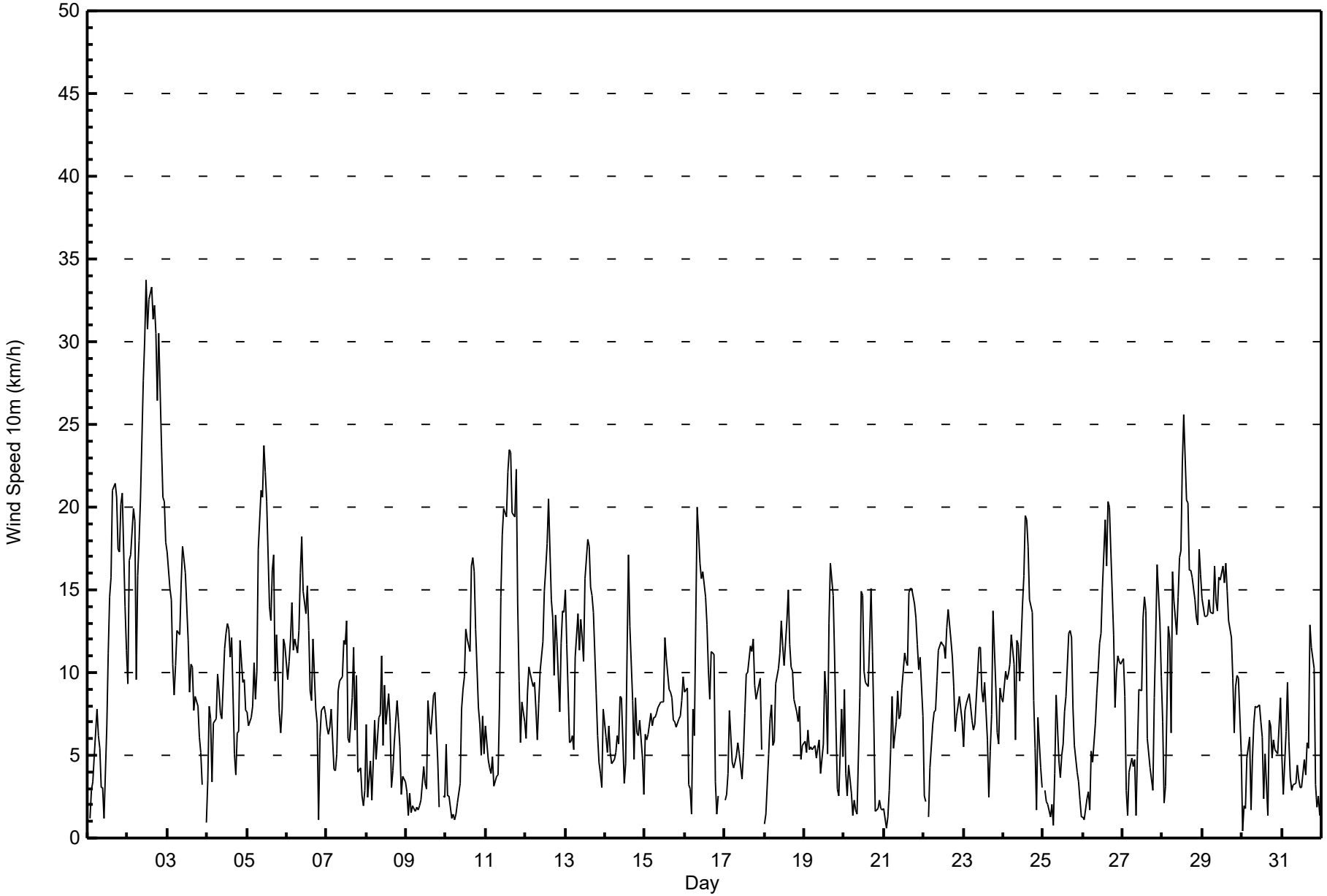
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Ells River - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 209 | 28.40 | 28.40 |
| 6 - 11 | 305 | 41.44 | 69.84 |
| 12 - 19 | 181 | 24.59 | 94.43 |
| 20 - 28 | 32 | 4.35 | 98.78 |
| 29 - 38 | 9 | 1.22 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 736

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Ells River - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 12 | 6 | 1 | 1 | 2 | 2 | 7 | 14 | 20 | 26 | 14 | 42 | 24 | 12 | 10 | 16 | 209 |
| 6 - 11 | 41 | 18 | 5 | 2 | 2 | 4 | 7 | 37 | 50 | 16 | 18 | 11 | 40 | 26 | 11 | 17 | 305 |
| 12 - 19 | 36 | 15 | 4 | 1 | 0 | 1 | 6 | 23 | 4 | 15 | 22 | 2 | 2 | 14 | 19 | 17 | 181 |
| 20 - 28 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 1 | 0 | 0 | 0 | 8 | 4 | 32 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 9 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 101 | 41 | 10 | 4 | 4 | 7 | 20 | 76 | 74 | 60 | 55 | 55 | 66 | 52 | 49 | 62 | 736 |

Total Number of Valid Hours: 736

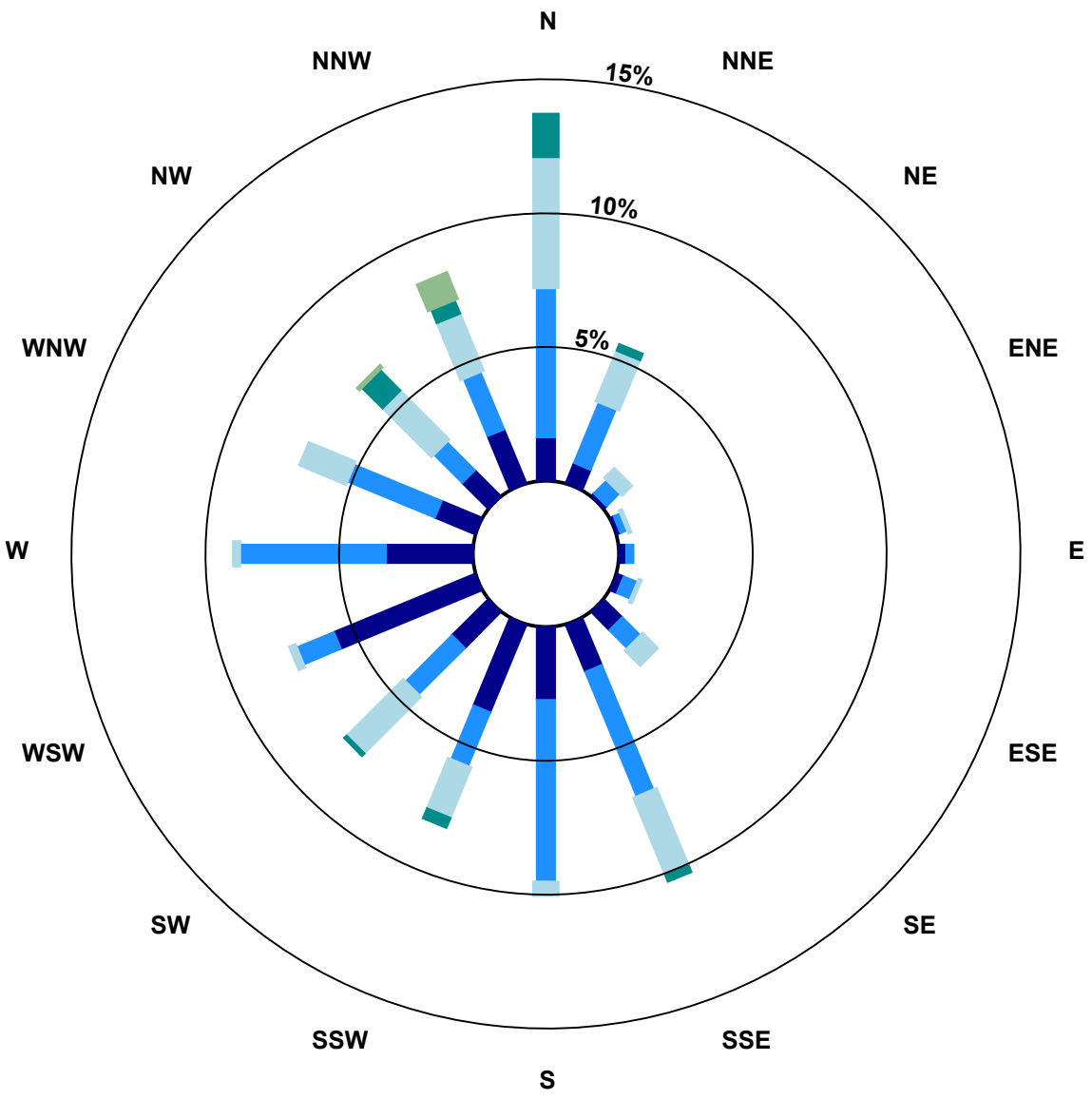
Total Number of Hours: 744

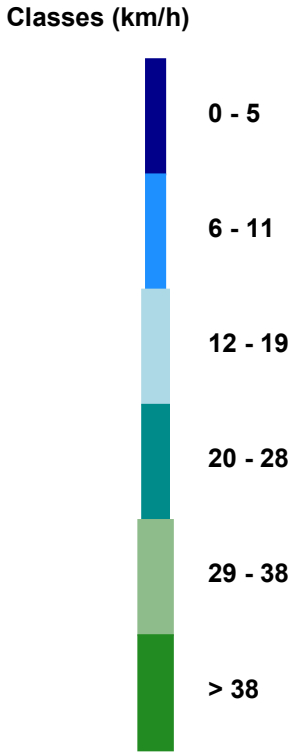
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Ells River**




**Total Number of Valid Hours: 736**

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Ells River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Aug 28 14:00

Minimum Value: 0 km/h on Aug 29 20:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 736 |
| Hours of Missing Data: | 8 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | UO | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 7 | 7 | 3 | 3 | 7 |
| 2-Aug | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 8 | 4 | 5 | 6 | 6 | 6 | 8 | 8 | 7 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 8 |
| 3-Aug | 3 | 3 | 3 | 2 | 1 | 3 | 2 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | UO | 1 | 4 |
| 4-Aug | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 4 | 3 | 6 | 2 | 4 | 2 | 2 | 3 | 3 | 2 | 2 | 6 |
| 5-Aug | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 5 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 2 | 3 | 3 | 5 |
| 6-Aug | 3 | 2 | 4 | 4 | 3 | 2 | 2 | 4 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 3 | 3 | 2 | 3 | 1 | 3 | 2 | 2 | 2 | 5 |
| 7-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 2 | 1 | 4 |
| 8-Aug | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 6 | 6 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 6 |
| 9-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 1 | 1 | 3 | 1 | UO | 1 | 2 | 3 |
| 10-Aug | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 4 |
| 11-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 5 | 4 | 2 | 1 | 4 | 2 | 5 |
| 12-Aug | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 4 |
| 13-Aug | 2 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 6 | 3 | 4 | 4 | 3 | 4 | 1 | 1 | 2 | 1 | 2 | 1 | 6 |
| 14-Aug | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 3 | 6 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 6 |
| 15-Aug | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 4 |
| 16-Aug | 2 | 2 | 4 | 2 | 3 | 1 | 3 | 5 | 4 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 3 | 4 | 1 | 1 | 2 | UO | 1 | UO | 5 |
| 17-Aug | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | UO | 4 |
| 18-Aug | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 5 |
| 19-Aug | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 5 | 5 | 5 |
| 20-Aug | 4 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 4 | 3 | 3 | 4 | 5 | 4 | 5 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 5 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 5 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 5 |
| 22-Aug | 2 | 1 | UO | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 3 |
| 23-Aug | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 4 | 2 | 2 | 2 | 1 | 2 | 4 |
| 24-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 3 | 6 | 5 | 4 | 4 | 4 | 2 | 3 | 2 | 1 | 3 | 1 | 1 | 6 |
| 25-Aug | UO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 26-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 4 | 5 | 4 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 5 |
| 27-Aug | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 4 | 3 | 2 | 3 | 4 | 2 | 4 |
| 28-Aug | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 4 | 5 | 6 | 8 | 8 | 7 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 6 | 8 |
| 29-Aug | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 3 | 3 | 0 | 2 | 1 | 1 | 2 | 6 |
| 30-Aug | 1 | 1 | 2 | 5 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 2 | 2 | 1 | 1 | 1 | 5 | 2 | 2 | 1 | 5 |
| 31-Aug | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 3 | 3 | 2 | 4 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 4 |
| | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 8 | 5 | 5 | 6 | 8 | 8 | 8 | 8 | 7 | 6 | 6 | 6 | 7 | 7 | 5 | 6 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Ells River - August 2026

Direction of Maximum Speed: 344 deg on Aug 2 12:00
Direction of Maximum Daily Speed Average: 339.1 deg on Aug 2

Direction of Minimum Speed: 301 deg on Aug 16 23:00

Direction of Minimum Daily Speed Average: 2.2 deg on Aug 30

Monthly Average Direction: 294.9 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 736 |
| Hours of Missing Data: | 8 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | UO | 232 | 189 | 187 | 169 | 189 | 184 | 190 | 108 | 150 | 357 | 47 | 15 | 357 | 355 | 360 | 357 | 2 | 356 | 346 | 342 | 344 | 3 | 354 | 356.3 |
| 2-Aug | 332 | 341 | 349 | 351 | 352 | 359 | 357 | 357 | 350 | 353 | 344 | 344 | 345 | 346 | 339 | 337 | 334 | 325 | 332 | 328 | 323 | 317 | 322 | 318 | 339.1 |
| 3-Aug | 314 | 306 | 310 | 303 | 285 | 294 | 300 | 315 | 329 | 326 | 330 | 310 | 331 | 330 | 31 | 31 | 21 | 43 | 68 | 106 | 162 | 194 | UO | 257 | 327.3 |
| 4-Aug | 185 | 176 | 184 | 206 | 177 | 174 | 188 | 185 | 213 | 217 | 221 | 228 | 231 | 232 | 207 | 245 | 112 | 282 | 273 | 233 | 307 | 299 | 296 | 279 | 226.9 |
| 5-Aug | 273 | 247 | 274 | 287 | 289 | 291 | 307 | 305 | 307 | 306 | 312 | 305 | 305 | 293 | 297 | 329 | 328 | 321 | 316 | 298 | 255 | 267 | 289 | 302 | 301.5 |
| 6-Aug | 291 | 285 | 293 | 307 | 280 | 288 | 286 | 299 | 310 | 330 | 325 | 330 | 357 | 335 | 2 | 337 | 287 | 281 | 13 | 170 | 279 | 261 | 274 | 296 | 308.7 |
| 7-Aug | 311 | 280 | 284 | 273 | 282 | 261 | 264 | 273 | 266 | 270 | 269 | 283 | 18 | 359 | 297 | 314 | 12 | 24 | 33 | 16 | 242 | 241 | 262 | 248 | 302.4 |
| 8-Aug | 272 | 237 | 237 | 249 | 257 | 263 | 271 | 331 | 13 | 16 | 359 | 8 | 11 | 329 | 341 | 316 | 14 | 5 | 3 | 358 | 350 | 348 | 332 | 295 | 336.3 |
| 9-Aug | 272 | 254 | 210 | 274 | 254 | 264 | 247 | 306 | 10 | 64 | 2 | 356 | 351 | 11 | 15 | 2 | 7 | 6 | 10 | 14 | 341 | UO | 254 | 257 | 351.2 |
| 10-Aug | 276 | 280 | 233 | 259 | 222 | 197 | 239 | 261 | 336 | 354 | 15 | 19 | 357 | 4 | 6 | 1 | 358 | 359 | 0 | 353 | 350 | 307 | 265 | 254 | 347.7 |
| 11-Aug | 261 | 245 | 225 | 212 | 171 | 198 | 222 | 255 | 4 | 2 | 7 | 15 | 16 | 11 | 11 | 11 | 10 | 15 | 3 | 10 | 10 | 346 | 348 | 342 | 3.3 |
| 12-Aug | 275 | 269 | 272 | 271 | 264 | 270 | 275 | 307 | 345 | 343 | 356 | 2 | 353 | 353 | 358 | 344 | 9 | 5 | 346 | 351 | 350 | 338 | 347 | 351 | 335.9 |
| 13-Aug | 350 | 350 | 357 | 354 | 5 | 350 | 3 | 8 | 10 | 12 | 31 | 40 | 8 | 2 | 12 | 37 | 23 | 34 | 6 | 340 | 345 | 294 | 262 | 265 | 6.8 |
| 14-Aug | 264 | 261 | 268 | 276 | 279 | 293 | 321 | 344 | 328 | 349 | 0 | 20 | 23 | 335 | 325 | 277 | 274 | 261 | 177 | 183 | 221 | 222 | 226 | 254 | 291.5 |
| 15-Aug | 173 | 162 | 188 | 217 | 178 | 190 | 191 | 197 | 172 | 174 | 185 | 231 | 210 | 223 | 240 | 236 | 239 | 198 | 205 | 206 | 214 | 214 | 221 | 217 | 205.6 |
| 16-Aug | 227 | 221 | 272 | 240 | 168 | 272 | 285 | 4 | 0 | 359 | 354 | 6 | 16 | 6 | 355 | 294 | 360 | 31 | 88 | 241 | 206 | UO | 301 | UO | 348.3 |
| 17-Aug | 282 | 252 | 193 | 188 | 201 | 204 | 209 | 215 | 282 | 258 | 224 | 164 | 145 | 127 | 119 | 139 | 151 | 150 | 152 | 162 | 169 | 188 | 180 | UO | 170.4 |
| 18-Aug | 192 | 172 | 168 | 163 | 166 | 168 | 191 | 175 | 178 | 171 | 166 | 205 | 225 | 214 | 204 | 239 | 237 | 224 | 217 | 204 | 206 | 241 | 256 | 250 | 202.5 |
| 19-Aug | 238 | 185 | 211 | 211 | 209 | 171 | 162 | 199 | 262 | 270 | 288 | 329 | 321 | 356 | 4 | 350 | 347 | 22 | 11 | 357 | 215 | 199 | 281 | 264 | 311.0 |
| 20-Aug | 246 | 248 | 159 | 207 | 209 | 251 | 249 | 124 | 268 | 348 | 10 | 13 | 10 | 7 | 11 | 14 | 18 | 20 | 24 | 241 | 332 | 334 | 248 | 270 | 359.3 |
| 21-Aug | 272 | 224 | 246 | 201 | 142 | 182 | 193 | 178 | 187 | 172 | 132 | 180 | 165 | 178 | 176 | 159 | 156 | 146 | 152 | 157 | 158 | 165 | 157 | 162 | 164.9 |
| 22-Aug | 157 | 311 | UO | 147 | 157 | 175 | 165 | 155 | 152 | 172 | 167 | 180 | 172 | 158 | 164 | 155 | 142 | 151 | 140 | 147 | 158 | 168 | 174 | 165 | 161.2 |
| 23-Aug | 166 | 149 | 156 | 162 | 170 | 160 | 164 | 174 | 177 | 169 | 166 | 175 | 174 | 176 | 159 | 205 | 238 | 258 | 320 | 306 | 283 | 265 | 281 | 297 | 195.9 |
| 24-Aug | 305 | 294 | 300 | 308 | 294 | 297 | 301 | 301 | 313 | 288 | 277 | 299 | 312 | 327 | 313 | 320 | 14 | 19 | 7 | 327 | 257 | 264 | 285 | 259 | 312.2 |
| 25-Aug | UO | 246 | 225 | 244 | 265 | 261 | 250 | 281 | 358 | 327 | 343 | 354 | 17 | 80 | 76 | 58 | 53 | 55 | 40 | 25 | 353 | 336 | 327 | 297 | 25.8 |
| 26-Aug | 314 | 315 | 286 | 254 | 237 | 185 | 177 | 177 | 174 | 153 | 147 | 151 | 148 | 154 | 146 | 159 | 153 | 148 | 152 | 143 | 149 | 164 | 159 | 161 | 157.1 |
| 27-Aug | 170 | 177 | 198 | 228 | 173 | 160 | 171 | 155 | 22 | 129 | 143 | 121 | 153 | 156 | 147 | 149 | 93 | 329 | 221 | 116 | 120 | 128 | 140 | 158 | 146.2 |
| 28-Aug | 156 | 138 | 179 | 160 | 214 | 288 | 149 | 168 | 171 | 192 | 203 | 216 | 200 | 205 | 223 | 212 | 218 | 227 | 233 | 218 | 215 | 223 | 218 | 218 | 205.4 |
| 29-Aug | 216 | 211 | 213 | 215 | 202 | 200 | 196 | 196 | 199 | 218 | 220 | 220 | 225 | 225 | 203 | 215 | 208 | 206 | 202 | 181 | 172 | 173 | 184 | 188 | 206.3 |
| 30-Aug | 198 | 241 | 209 | 181 | 176 | 239 | 182 | 193 | 186 | 183 | 148 | 142 | 157 | 152 | 138 | 136 | 55 | 98 | 145 | 206 | 4 | 335 | 320 | 317 | 168.5 |
| 31-Aug | 308 | 307 | 237 | 271 | 267 | 218 | 204 | 199 | 174 | 255 | 35 | 360 | 171 | 194 | 337 | 218 | 275 | 295 | 309 | 3 | 330 | 317 | 266 | 240 | 279.7 |
| | 265.8 | 258.7 | 253.1 | 250.9 | 233.5 | 238.7 | 234.2 | 257.3 | 298.5 | 309.7 | 321.9 | 322.6 | 333.0 | 326.9 | 339.1 | 328.6 | 355.6 | 1.3 | 350.7 | 326.2 | 275.2 | 258.0 | 267.1 | 270.6 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

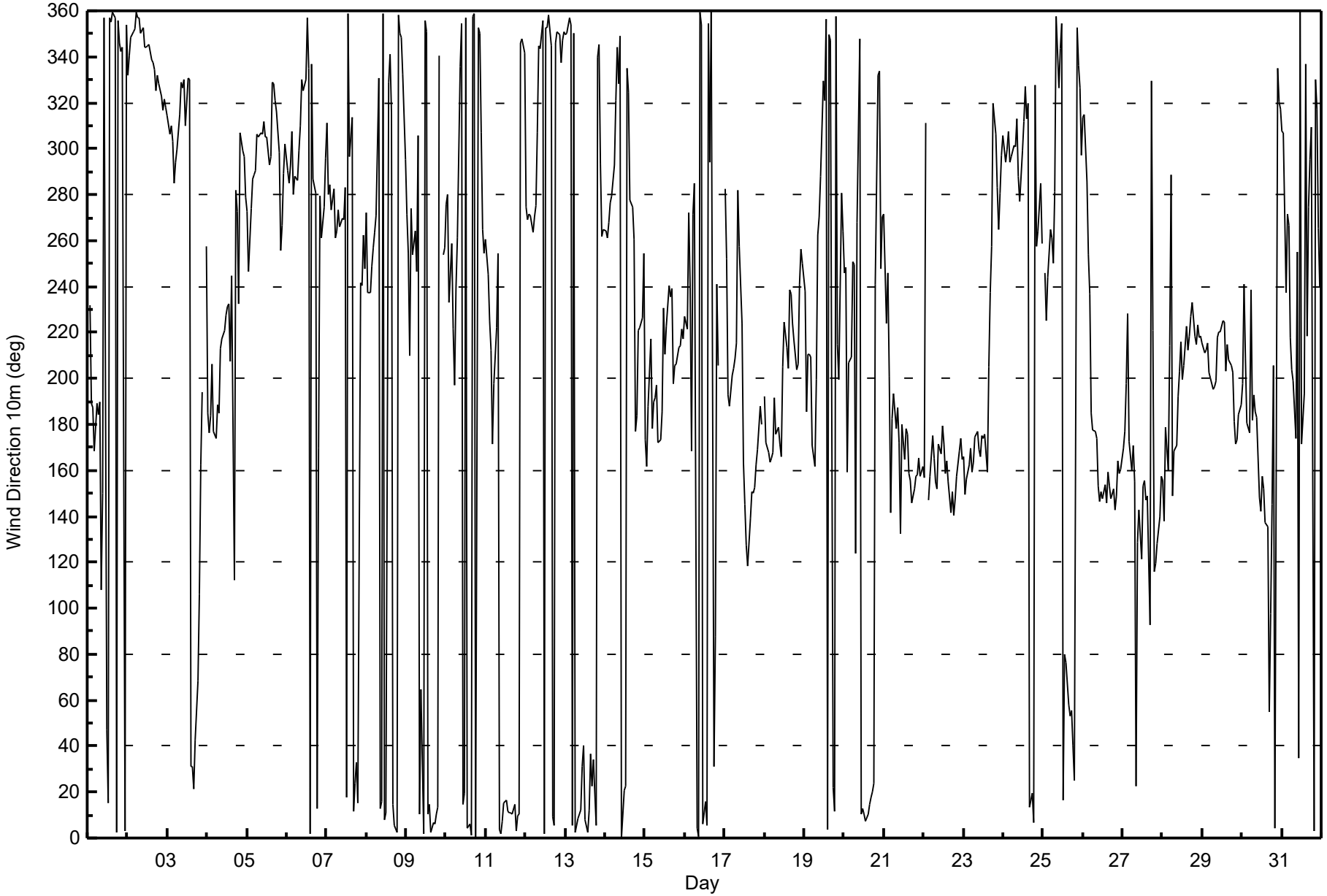
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Ells River - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Ells River - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Aug 30 14:00

Minimum Value: 4 deg on Aug 29 23:00

Percentiles: $P_1$ = 6 $P_{10}$ = 11 $Q_1$ = 14 Median = 20 $Q_3$ = 31 $P_{90}$ = 54 $P_{99}$ = 85

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 736 |
| Hours of Missing Data: | 8 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 98.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | UO | 72 | 69 | 42 | 12 | 17 | 24 | 38 | 76 | 39 | 76 | 28 | 17 | 11 | 12 | 12 | 12 | 12 | 13 | 14 | 24 | 22 | 20 | 23 | 76 |
| 2-Aug | 25 | 11 | 9 | 11 | 12 | 12 | 13 | 12 | 12 | 13 | 12 | 12 | 12 | 12 | 14 | 15 | 14 | 11 | 14 | 11 | 11 | 12 | 11 | 11 | 25 |
| 3-Aug | 11 | 10 | 9 | 11 | 10 | 16 | 12 | 13 | 15 | 13 | 14 | 16 | 31 | 43 | 36 | 31 | 50 | 27 | 25 | 23 | 14 | 38 | UO | 63 | 63 |
| 4-Aug | 53 | 6 | 9 | 29 | 22 | 18 | 15 | 17 | 26 | 29 | 27 | 26 | 26 | 28 | 25 | 32 | 47 | 79 | 19 | 21 | 25 | 15 | 16 | 13 | 79 |
| 5-Aug | 21 | 27 | 20 | 16 | 15 | 17 | 13 | 14 | 14 | 14 | 15 | 16 | 14 | 19 | 17 | 11 | 12 | 14 | 15 | 24 | 20 | 22 | 15 | 13 | 27 |
| 6-Aug | 14 | 14 | 20 | 13 | 15 | 13 | 15 | 18 | 12 | 13 | 16 | 21 | 21 | 22 | 21 | 39 | 21 | 34 | 31 | 77 | 42 | 17 | 17 | 18 | 77 |
| 7-Aug | 20 | 18 | 20 | 17 | 49 | 41 | 24 | 20 | 20 | 22 | 24 | 30 | 11 | 31 | 24 | 14 | 20 | 16 | 13 | 56 | 19 | 38 | 53 | 37 | 56 |
| 8-Aug | 13 | 33 | 28 | 39 | 27 | 14 | 22 | 20 | 22 | 21 | 41 | 28 | 63 | 41 | 40 | 55 | 45 | 25 | 9 | 15 | 10 | 30 | 22 | 15 | 63 |
| 9-Aug | 37 | 55 | 50 | 43 | 64 | 58 | 54 | 53 | 59 | 69 | 40 | 49 | 81 | 28 | 26 | 31 | 25 | 8 | 13 | 31 | 20 | UO | 30 | 51 | 81 |
| 10-Aug | 18 | 29 | 33 | 71 | 62 | 86 | 69 | 46 | 31 | 16 | 27 | 34 | 17 | 27 | 20 | 15 | 12 | 12 | 10 | 11 | 10 | 33 | 10 | 25 | 86 |
| 11-Aug | 35 | 25 | 21 | 23 | 19 | 22 | 30 | 44 | 23 | 14 | 13 | 13 | 12 | 15 | 13 | 12 | 13 | 12 | 13 | 9 | 11 | 18 | 15 | 33 | 44 |
| 12-Aug | 50 | 8 | 8 | 8 | 9 | 10 | 11 | 18 | 24 | 14 | 14 | 12 | 14 | 17 | 15 | 13 | 14 | 16 | 15 | 16 | 20 | 9 | 9 | 9 | 50 |
| 13-Aug | 10 | 10 | 17 | 19 | 34 | 34 | 14 | 9 | 13 | 18 | 27 | 29 | 24 | 14 | 25 | 19 | 21 | 13 | 17 | 11 | 23 | 22 | 21 | 7 | 34 |
| 14-Aug | 9 | 11 | 7 | 24 | 25 | 17 | 21 | 17 | 15 | 12 | 15 | 67 | 65 | 28 | 12 | 22 | 21 | 39 | 14 | 8 | 22 | 11 | 28 | 35 | 67 |
| 15-Aug | 16 | 12 | 14 | 16 | 14 | 15 | 17 | 20 | 19 | 24 | 33 | 48 | 30 | 34 | 47 | 30 | 28 | 19 | 14 | 11 | 16 | 16 | 18 | 16 | 48 |
| 16-Aug | 19 | 20 | 93 | 53 | 83 | 12 | 33 | 15 | 12 | 14 | 16 | 21 | 20 | 23 | 33 | 39 | 33 | 15 | 41 | 49 | 49 | UO | 59 | UO | 93 |
| 17-Aug | 24 | 25 | 10 | 7 | 19 | 29 | 30 | 38 | 26 | 28 | 28 | 19 | 15 | 17 | 20 | 23 | 19 | 11 | 10 | 7 | 6 | 5 | 25 | UO | 38 |
| 18-Aug | 53 | 82 | 23 | 9 | 8 | 15 | 23 | 18 | 17 | 20 | 15 | 26 | 28 | 34 | 25 | 30 | 24 | 25 | 20 | 13 | 15 | 23 | 37 | 16 | 82 |
| 19-Aug | 22 | 22 | 21 | 31 | 38 | 37 | 19 | 37 | 23 | 21 | 58 | 58 | 34 | 47 | 69 | 35 | 16 | 13 | 11 | 14 | 44 | 71 | 56 | 67 | 71 |
| 20-Aug | 28 | 68 | 68 | 28 | 67 | 40 | 53 | 72 | 82 | 29 | 17 | 15 | 31 | 34 | 34 | 35 | 16 | 16 | 13 | 81 | 32 | 32 | 52 | 40 | 82 |
| 21-Aug | 45 | 81 | 62 | 26 | 14 | 13 | 17 | 15 | 19 | 34 | 26 | 32 | 38 | 35 | 30 | 22 | 14 | 12 | 10 | 9 | 8 | 8 | 9 | 13 | 81 |
| 22-Aug | 67 | 38 | UO | 79 | 10 | 7 | 15 | 10 | 15 | 21 | 18 | 23 | 29 | 27 | 21 | 18 | 19 | 12 | 8 | 9 | 9 | 16 | 9 | 9 | 79 |
| 23-Aug | 8 | 9 | 10 | 14 | 11 | 8 | 14 | 12 | 14 | 13 | 18 | 21 | 23 | 20 | 44 | 52 | 20 | 23 | 27 | 18 | 21 | 23 | 11 | 13 | 52 |
| 24-Aug | 13 | 11 | 13 | 11 | 11 | 9 | 12 | 29 | 24 | 16 | 24 | 16 | 20 | 17 | 17 | 16 | 31 | 13 | 20 | 18 | 43 | 10 | 18 | 27 | 43 |
| 25-Aug | UO | 39 | 41 | 50 | 57 | 27 | 48 | 30 | 18 | 29 | 46 | 23 | 37 | 36 | 27 | 19 | 16 | 11 | 10 | 21 | 17 | 17 | 10 | 47 | 57 |
| 26-Aug | 39 | 59 | 30 | 13 | 57 | 14 | 18 | 18 | 21 | 18 | 16 | 21 | 20 | 14 | 15 | 14 | 15 | 11 | 9 | 5 | 6 | 8 | 8 | 8 | 59 |
| 27-Aug | 8 | 9 | 59 | 75 | 49 | 19 | 25 | 21 | 70 | 59 | 24 | 22 | 16 | 19 | 21 | 81 | 76 | 68 | 93 | 17 | 8 | 8 | 11 | 17 | 93 |
| 28-Aug | 12 | 77 | 55 | 12 | 36 | 61 | 14 | 16 | 16 | 20 | 20 | 24 | 20 | 22 | 24 | 22 | 23 | 24 | 23 | 23 | 20 | 23 | 21 | 23 | 77 |
| 29-Aug | 21 | 21 | 22 | 21 | 18 | 17 | 18 | 17 | 20 | 24 | 24 | 25 | 26 | 30 | 25 | 28 | 26 | 19 | 14 | 8 | 6 | 6 | 4 | 54 | 54 |
| 30-Aug | 86 | 32 | 64 | 70 | 29 | 65 | 38 | 27 | 29 | 21 | 25 | 31 | 58 | 100 | 80 | 94 | 22 | 22 | 24 | 18 | 92 | 37 | 17 | 13 | 100 |
| 31-Aug | 28 | 71 | 22 | 11 | 18 | 35 | 35 | 58 | 56 | 59 | 45 | 42 | 99 | 85 | 55 | 62 | 18 | 16 | 18 | 12 | 29 | 40 | 15 | 27 | 99 |
| | 86 | 82 | 93 | 79 | 83 | 86 | 69 | 72 | 82 | 69 | 76 | 67 | 99 | 100 | 80 | 94 | 76 | 79 | 93 | 81 | 92 | 71 | 59 | 67 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS31
## BLACKROD
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 708 | 35 | 36 | 99.87 | 2.4 | 0 | 0.6 | 0 |
| H2S (ppb) Average | 706 | 37 | 38 | 99.87 | 0.7 | 0 | 0.2 | 0 |
| THC(ppm) Average | 708 | 35 | 36 | 99.87 | 13.1 | - | 4.2 | - |
| NO2 (ppb) Average | 707 | 37 | 37 | 100 | 11.5 | 0 | 3 | - |
| NO (ppb) Average | 707 | 37 | 37 | 100 | 31.9 | - | 5.6 | - |
| NOX (ppb) Average | 707 | 37 | 37 | 100 | 37 | - | 7.7 | - |
| Temperature 2 m (C) Average | 742 | 0 | 2 | 99.73 | 27.5 | - | 22.2 | - |
| Relative Humidity (%) Average | 742 | 0 | 2 | 99.73 | 99.1 | - | 92.1 | - |
| Wind Speed 10 m (km/h) Average | 739 | 5 | 5 | 100 | 28 | - | 17 | - |
| Wind Direction 10 m (deg) Average | 739 | 5 | 5 | 100 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 708 | 0.11 | 0.2 | - | 0 | 0 | 0 | 0 | 0.1 | 0.3 | 2.4 |
| H2S (ppb) Average | 706 | 0.14 | 0.1 | - | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.7 |
| THC (ppm) Average | 708 | 2.69 | 1.2 | - | 2.1 | 2.2 | 2.2 | 2.3 | 2.5 | 3.4 | 13.1 |
| NO2 (ppb) Average | 707 | 1.56 | 1.5 | - | 0 | 0.4 | 0.6 | 1.1 | 1.9 | 3.3 | 11.5 |
| NO (ppb) Average | 707 | 1.56 | 2.9 | - | 0 | 0 | 0.1 | 0.5 | 1.6 | 4.2 | 31.9 |
| NOX (ppb) Average | 707 | 3.12 | 4.1 | - | 0.1 | 0.5 | 0.8 | 1.7 | 3.6 | 7.7 | 37 |
| Temperature 2 m (C) Average | 742 | 15.84 | 4.6 | - | 6 | 10.1 | 12.5 | 15.6 | 18.8 | 22.1 | 27.5 |
| Relative Humidity (%) Average | 742 | 74.02 | 17.4 | - | 31.8 | 48.1 | 60.7 | 76.8 | 89.3 | 95.1 | 99.1 |
| Wind Speed 10 m (km/h) Average | 739 | 8.9 | 5 | - | 1 | 2 | 5 | 8 | 13 | 16 | 28 |
| Wind Direction 10 m (deg) Average | 739 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| H2S, SO2, THC | 24 Aug 2026 14:00 | 24 Aug 2026 14:00 | 1 | DAS Failure - data not recorded |
| Ambient Temperature/Relative Humidity | 24 Aug 2026 14:00 | 24 Aug 2026 14:00 | 1 | DAS Failure - data not recorded |
| Ambient Temperature/Relative Humidity | 24 Aug 2026 16:00 | 24 Aug 2026 16:00 | 1 | Maintenance - sensor replaced |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Blackrod - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.4 ppb on Aug 2 05:00 Maximum Daily Average: 0.6 ppb on Aug 2

Minimum Value: 0.0 ppb on Aug 2 00:00 Minimum Daily Average: 0.0 ppb on Aug 19
Maximum Diurnal Average: 0.2 ppb at hour 11 Minimum Diurnal Average: 0.0 ppb at hour 1
Monthly Average: 0.11 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.1 $P_{90}$ = 0.3 $P_{99}$ = 1.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | Z | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.0 | 0.2 | 0.4 |
| 2-Aug | 0.0 | 0.2 | Z | 1.4 | 2.4 | 0.9 | 1.7 | 1.8 | 0.6 | 1.5 | 2.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.6 | 2.4 |
| 3-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 0.9 | 0.4 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 |
| 4-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.7 | 0.8 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 1.6 | 0.9 | 0.2 | 0.2 | 1.6 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 6-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.1 | 0.0 | 0.4 | 0.3 | 0.1 | 0.0 | 0.1 | 0.4 |
| 7-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.2 | 0.0 | 0.1 | 0.1 | 0.9 | 0.5 | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.9 |
| 8-Aug | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 9-Aug | 0.1 | 0.0 | 0.1 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 11-Aug | 0.0 | 0.2 | 0.3 | 0.1 | 0.2 | Z | 0.2 | 0.6 | 0.5 | 0.4 | 0.6 | 0.4 | 0.2 | 0.5 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.5 | 0.1 | 0.5 |
| 13-Aug | 0.3 | Z | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.4 | 0.4 | C | C | C | C | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 |
| 14-Aug | 0.1 | 0.2 | Z | 0.0 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.0 | 0.1 | 0.0 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 15-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 |
| 18-Aug | Z | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 19-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 |
| 20-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.8 | 0.5 | 0.3 | 0.2 | 0.1 | 0.0 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.8 |
| 22-Aug | 0.1 | 0.2 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.3 | 0.5 | 0.6 | 0.7 | 0.4 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 23-Aug | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 24-Aug | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | DF | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 25-Aug | 0.0 | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| 26-Aug | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 27-Aug | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 |
| 28-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 29-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 |
| 30-Aug | 0.1 | 0.2 | Z | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 |
| 31-Aug | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.3 | 0.2 | 0.3 | 1.4 | 2.4 | 0.9 | 1.7 | 1.8 | 0.6 | 1.5 | 2.2 | 1.0 | 0.9 | 0.5 | 0.7 | 0.8 | 0.5 | 0.9 | 0.4 | 0.6 | 0.4 | 1.6 | 0.9 | 0.5 | Diurnal Maximum | |

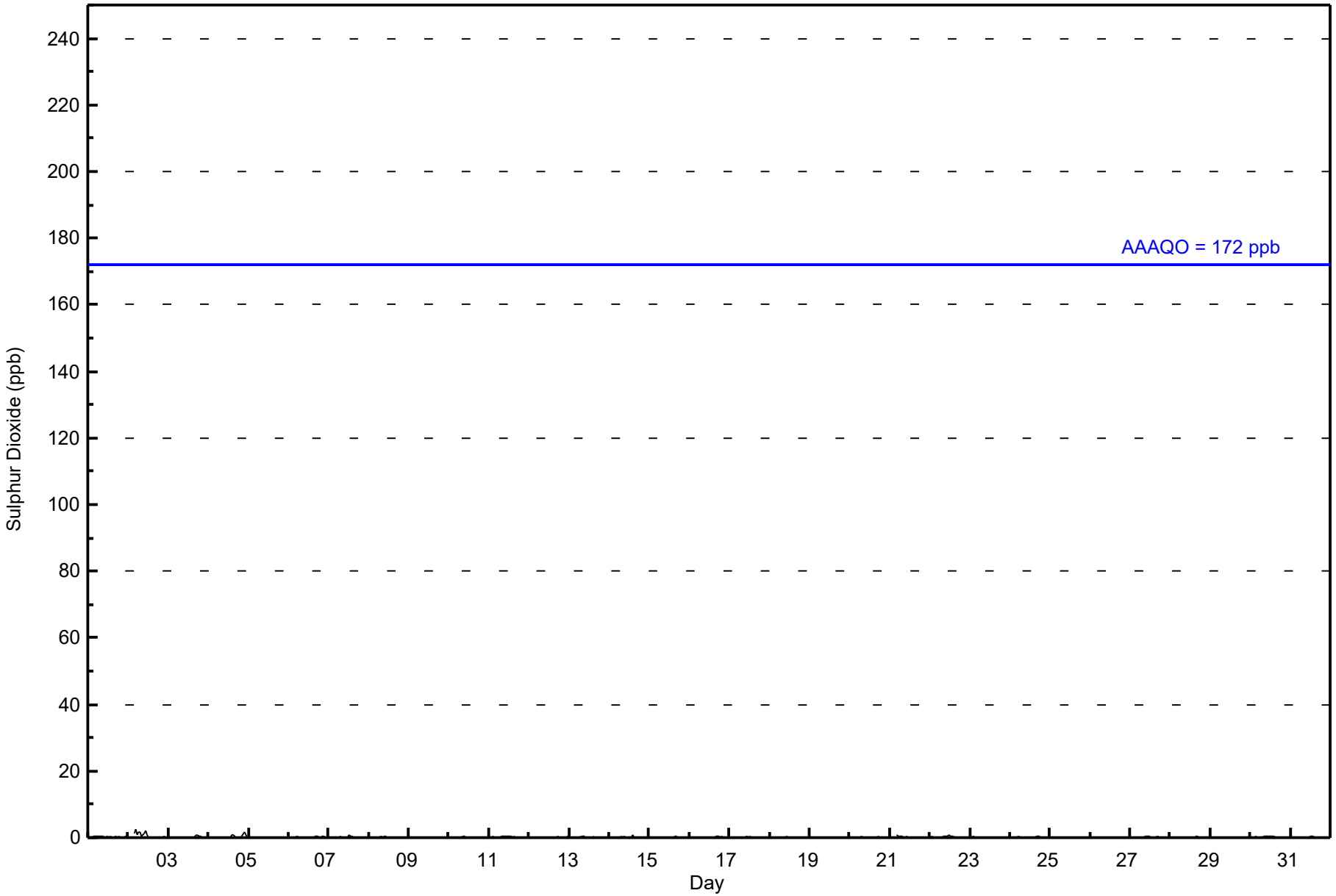
Z - zerospan C - Calibration DF - DAS Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Blackrod - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb

## Blackrod - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 708 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Blackrod - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 34 | 17 | 22 | 12 | 22 | 29 | 67 | 117 | 80 | 35 | 19 | 11 | 30 | 89 | 62 | 58 | 704 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 17 | 22 | 12 | 22 | 29 | 67 | 117 | 80 | 35 | 19 | 11 | 30 | 89 | 62 | 58 | 704 |

Total Number of Valid Hours: 704

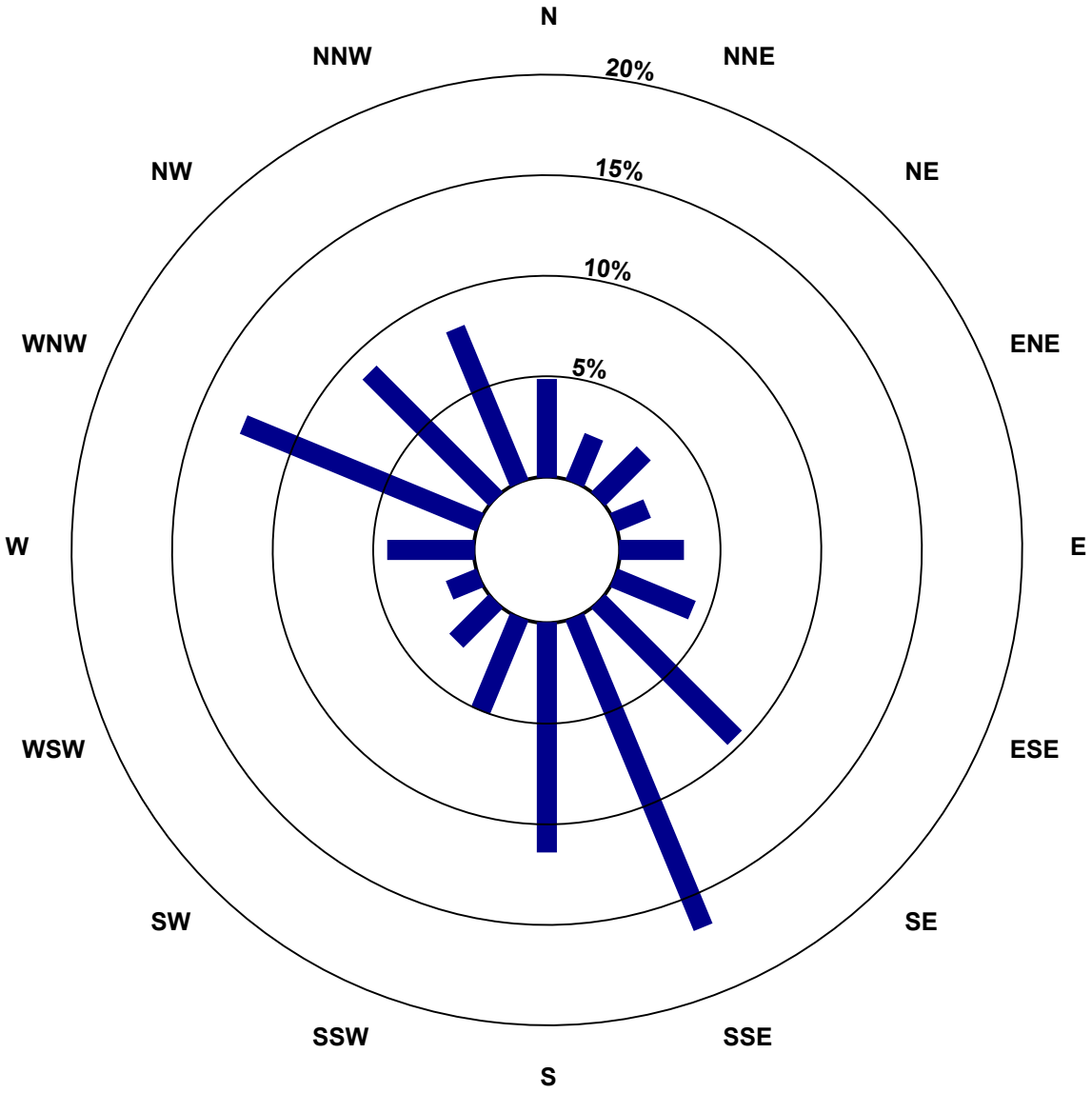
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Blackrod




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

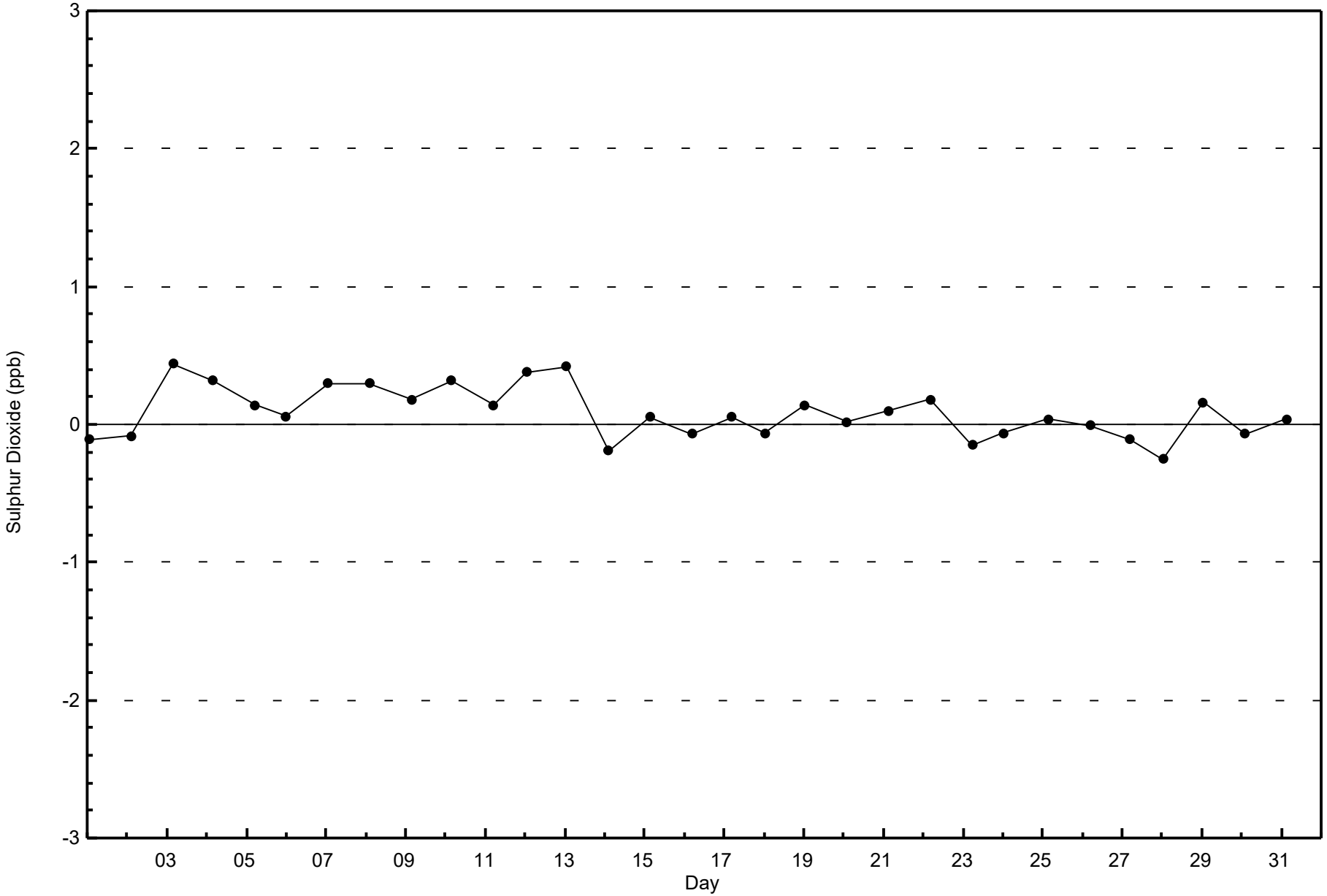
Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Blackrod - August 2026**

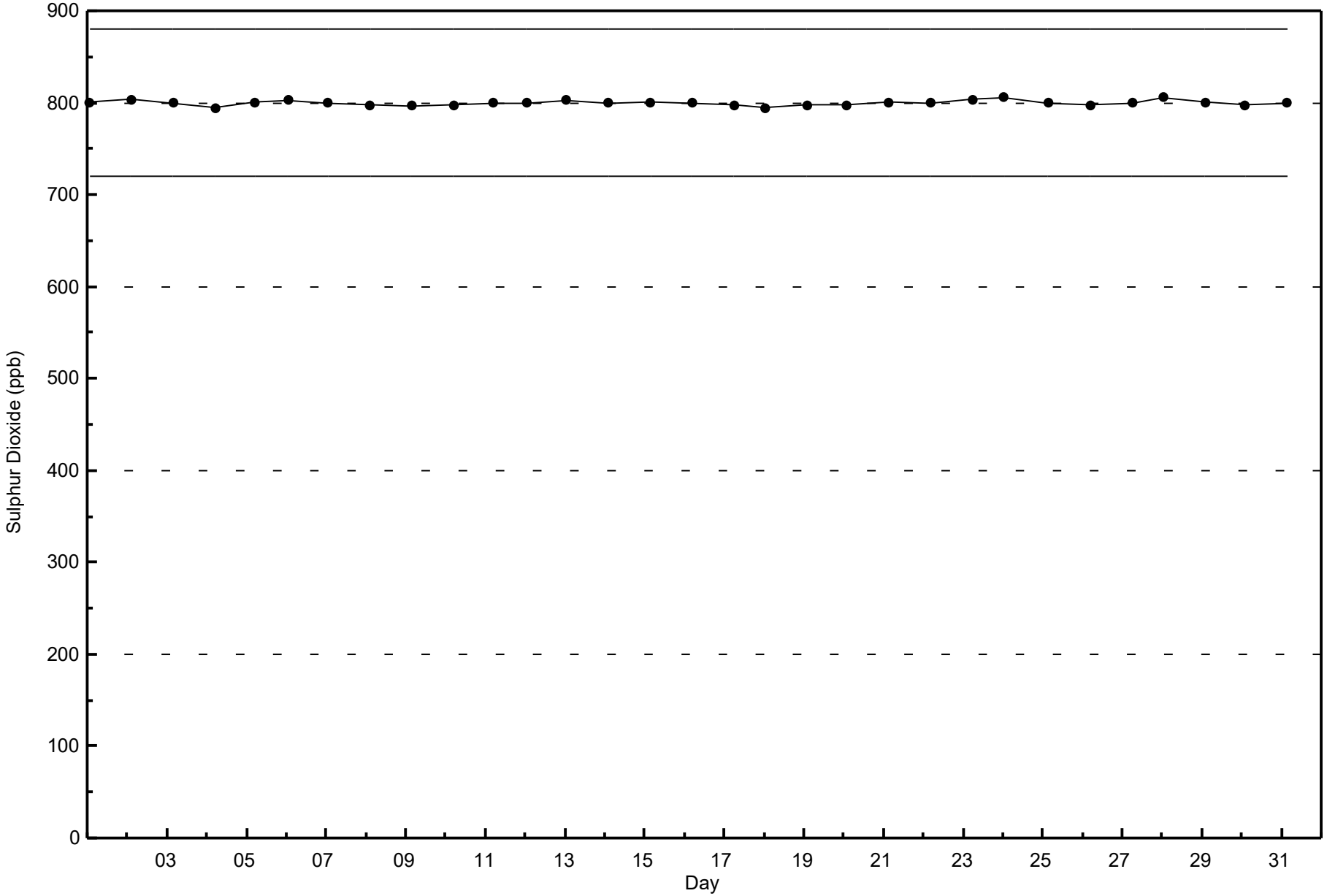


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Blackrod - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## Blackrod - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.7 ppb on Aug 28 13:00 Maximum Daily Average: 0.2 ppb on Aug 2

Minimum Value: 0.0 ppb on Aug 12 16:00 Minimum Daily Average: 0.1 ppb on Aug 25
Maximum Diurnal Average: 0.2 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 16
Monthly Average: 0.14 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.2 $P_{99}$ = 0.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 706 |
| Hours of Missing Data: | 38 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.2 | Z | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 |
| 2-Aug | 0.2 | 0.2 | 0.1 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.3 | 0.4 | 0.2 | 0.5 |
| 3-Aug | 0.4 | 0.3 | 0.4 | 0.3 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 4-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 |
| 5-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.3 |
| 6-Aug | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| 8-Aug | 0.2 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 9-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 10-Aug | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 11-Aug | Z | 0.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 12-Aug | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | C | C | C | C | C | C | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.3 | 0.2 | -- | 0.3 |
| 13-Aug | 0.2 | 0.3 | Z | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 14-Aug | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 |
| 15-Aug | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 16-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 17-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 18-Aug | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 19-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 20-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 21-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | Z | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 23-Aug | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 24-Aug | 0.1 | Z | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | DF | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 25-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 26-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 27-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 28-Aug | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.7 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.7 |
| 29-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 |
| 30-Aug | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 31-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.7 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | Diurnal Maximum | |

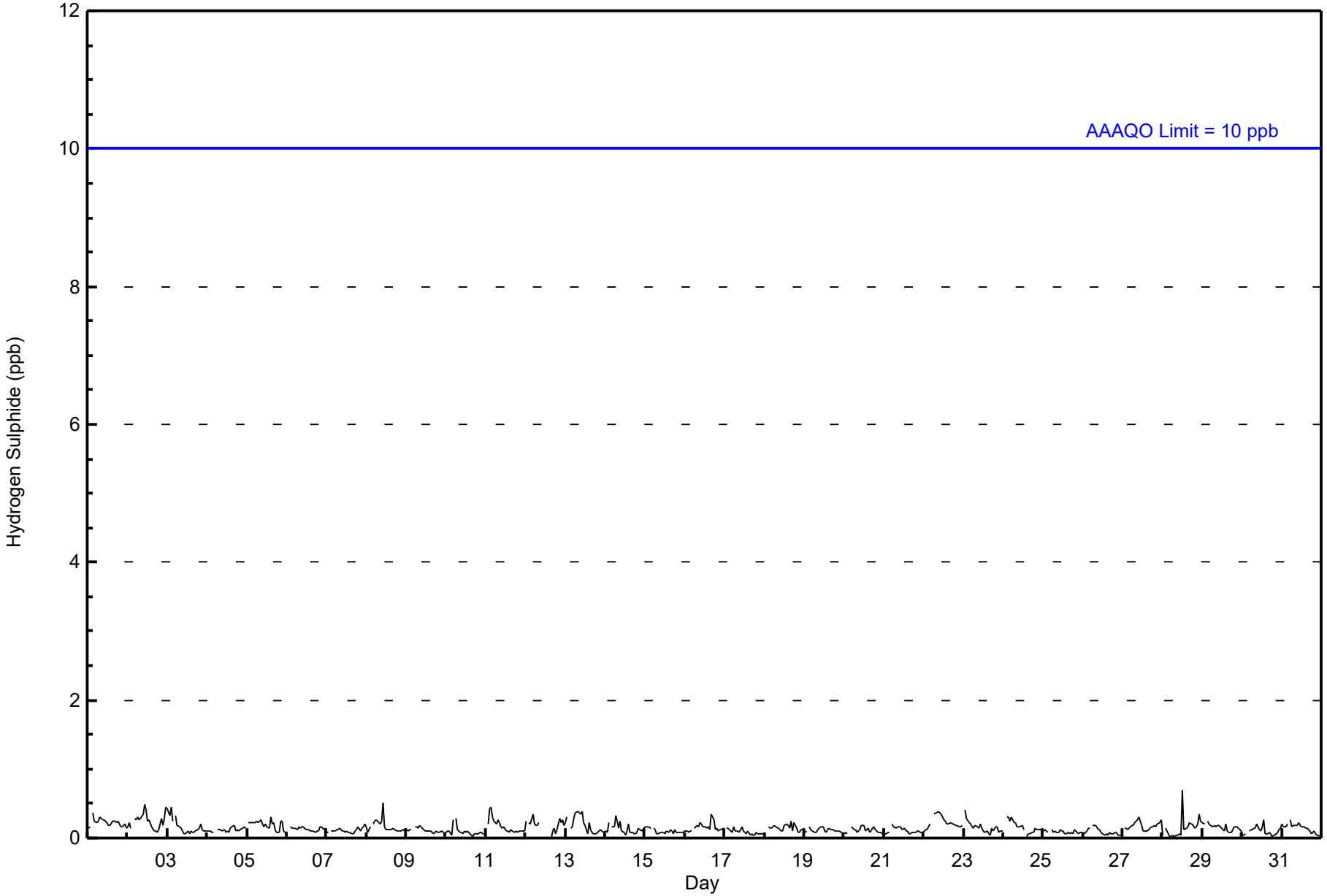
Z - zerospan C - Calibration DF - DAS Failure
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Blackrod - August 2026**



# Hydrogen Sulphide ($H_2S$) - ppb

## Blackrod - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 706 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 706

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Blackrod - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 30 | 20 | 22 | 13 | 22 | 31 | 70 | 111 | 81 | 33 | 19 | 12 | 27 | 89 | 62 | 60 | 702 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 30 | 20 | 22 | 13 | 22 | 31 | 70 | 111 | 81 | 33 | 19 | 12 | 27 | 89 | 62 | 60 | 702 |

Total Number of Valid Hours: 702

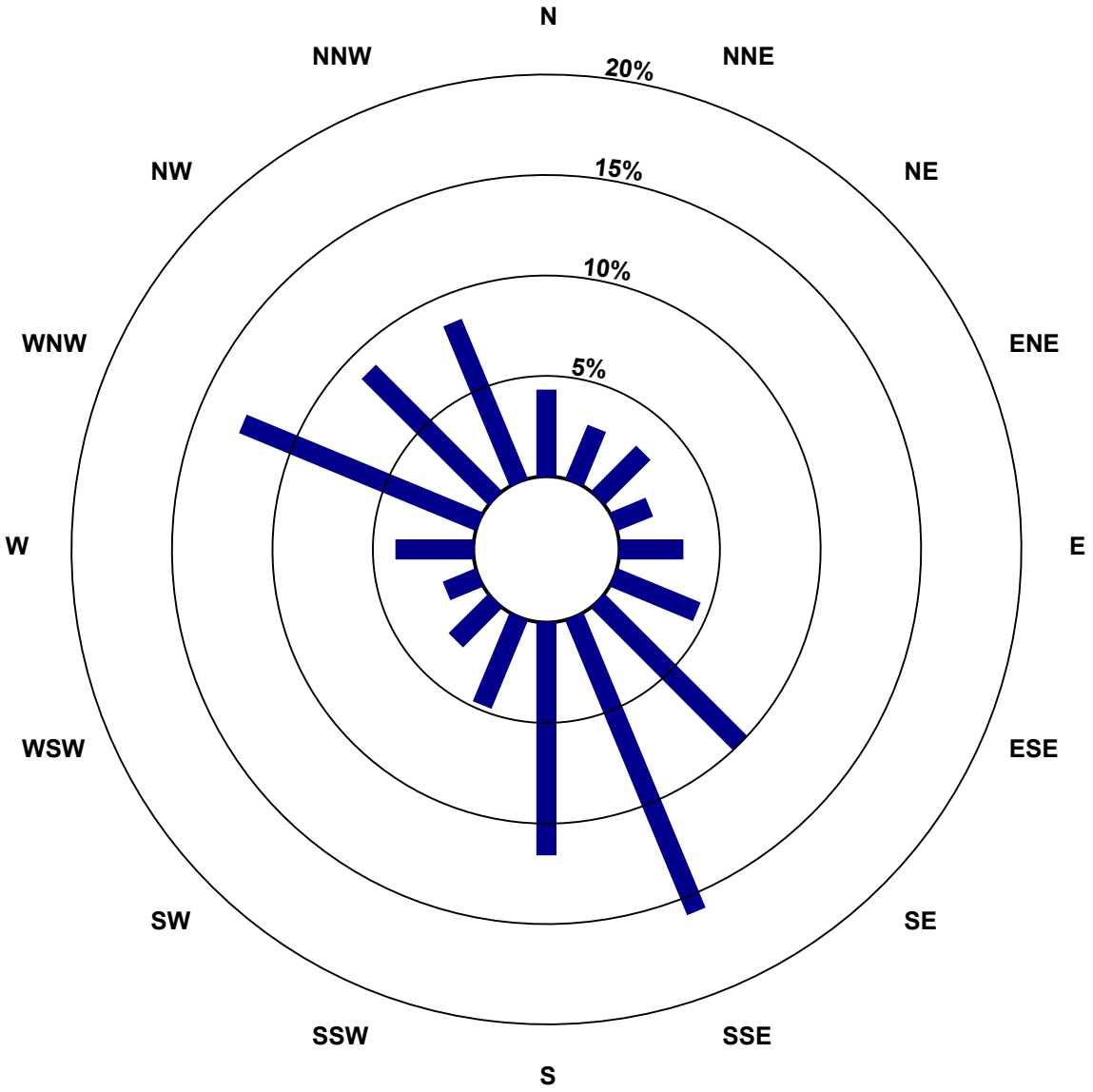
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Blackrod




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

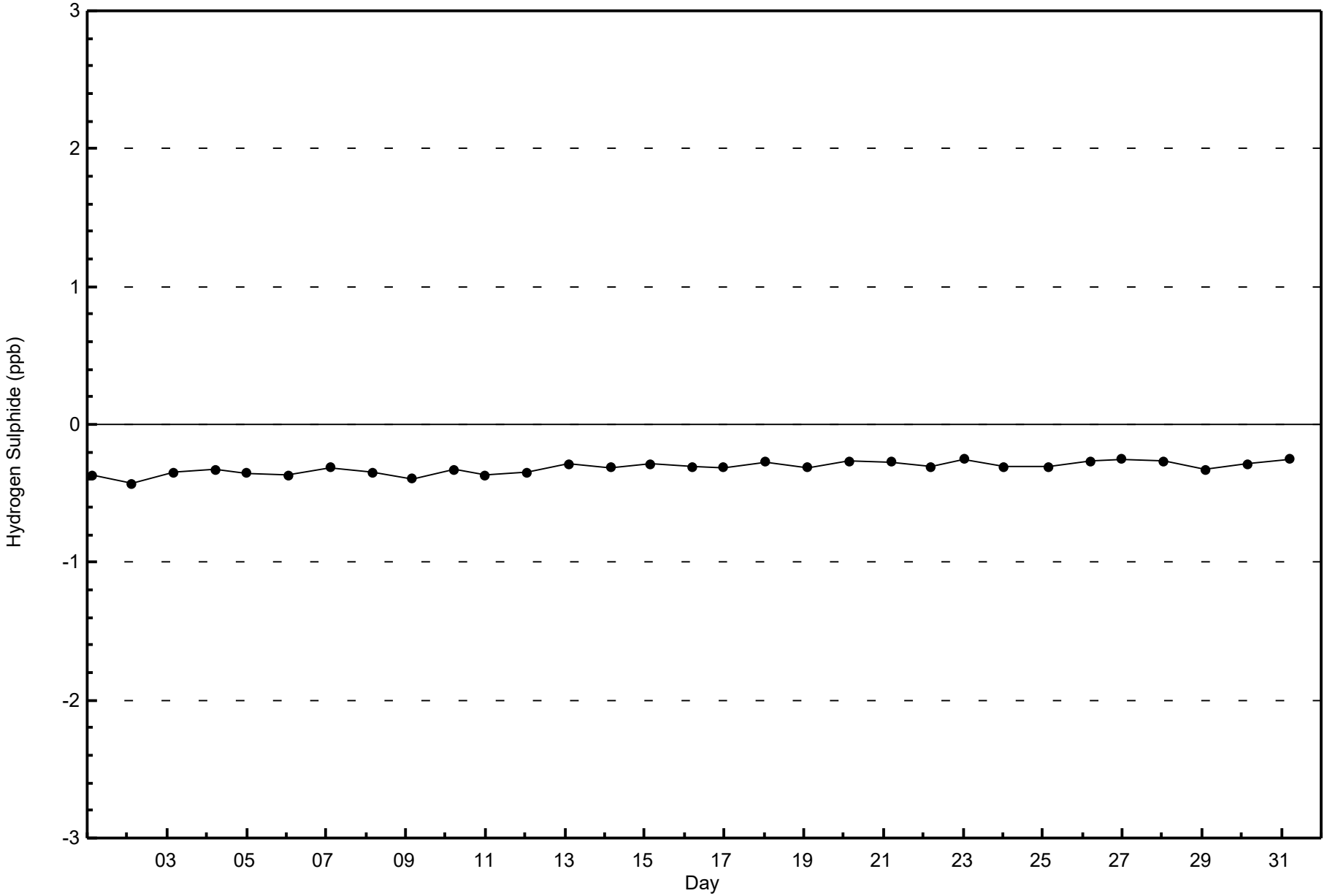
Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Blackrod - August 2026**

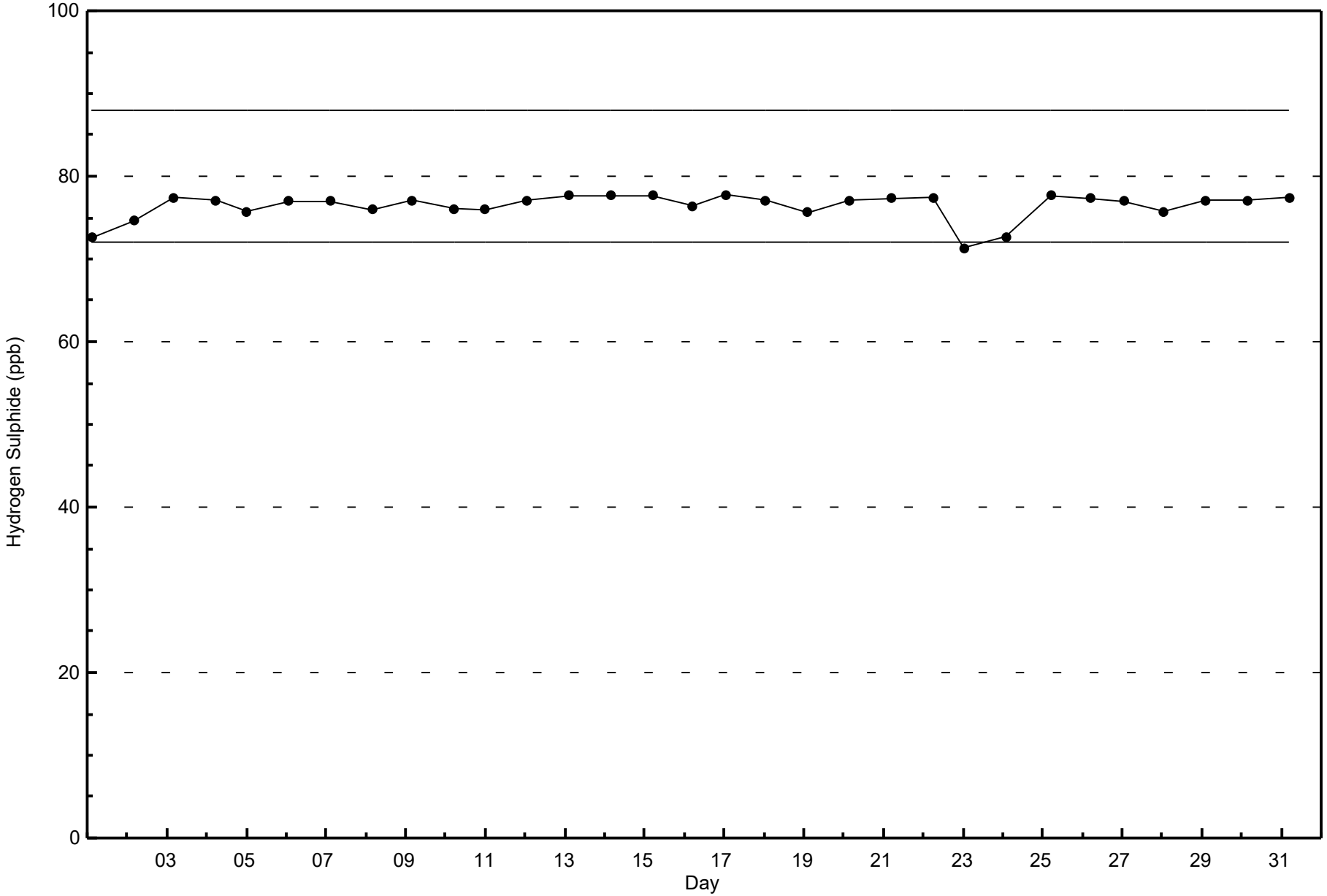


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Blackrod - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Hydrocarbons (THC) - ppm

## Blackrod - August 2026

Maximum Value: 13.1 ppm on Aug 3 01:00

Maximum Daily Average: 4.2 ppm on Aug 3

Minimum Value: 2.1 ppm on Aug 25 07:00

Minimum Daily Average: 2.2 ppm on Aug 25

Maximum Diurnal Average: 3.2 ppm at hour 5

Minimum Diurnal Average: 2.4 ppm at hour 16

Monthly Average: 2.69 ppm

Percentiles: $P_1$ = 2.1 $P_{10}$ = 2.2 $Q_1$ = 2.2 Median = 2.3 $Q_3$ = 2.5 $P_{90}$ = 3.4 $P_{99}$ = 9.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.5 | 2.5 | 2.4 | 2.3 | 2.9 | 2.5 | 2.4 | 2.9 |
| 2-Aug | 2.2 | 4.0 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 3.2 | 2.6 | 3.1 | 4.1 | 3.7 | 2.7 | 2.5 | 2.2 | 2.3 | 3.9 | 8.6 | 5.8 | 9.5 | 11.9 | 3.8 | 11.9 |
| 3-Aug | 13.1 | 9.4 | 10.6 | Z | 10.5 | 6.9 | 2.7 | 2.6 | 2.9 | 2.7 | 2.5 | 2.9 | 2.5 | 2.6 | 3.1 | 2.4 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.2 | 2.2 | 2.2 | 4.2 | 13.1 |
| 4-Aug | 2.3 | 2.3 | 2.3 | 2.2 | Z | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.3 | 2.3 | 2.3 | 2.6 | 2.4 | 5.0 | 2.4 | 3.1 | 2.2 | 2.5 | 2.4 | 2.7 | 2.4 | 2.5 | 5.0 |
| 5-Aug | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | Z | 2.3 | 2.3 | 3.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 4.2 | 2.3 | 2.5 | 2.3 | 2.1 | 2.2 | 2.9 | 3.0 | 3.6 | 2.2 | 2.5 | 4.2 |
| 6-Aug | Z | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.4 | 2.2 | 2.4 | 2.2 | 2.2 | 2.2 | 2.5 | 4.8 | 2.9 | 2.4 | 2.3 | 2.4 | 4.8 |
| 7-Aug | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.6 | 2.6 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.4 | 2.2 | 2.3 | 2.3 | 2.5 | 2.3 | 3.5 | 2.5 | 3.5 | 2.4 | 3.5 |
| 8-Aug | 2.4 | 2.3 | Z | 2.4 | 2.6 | 3.7 | 4.2 | 3.6 | 3.2 | 3.1 | 2.8 | 2.8 | 2.4 | 2.4 | 2.3 | 2.5 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.6 | 4.2 |
| 9-Aug | 2.2 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 | 2.3 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.7 |
| 10-Aug | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.4 | 4.9 | 2.8 | 2.3 | 2.4 | 2.3 | 2.3 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 4.9 |
| 11-Aug | 2.5 | 2.3 | 10.1 | 12.5 | 6.0 | Z | 3.7 | 4.2 | 2.8 | 2.5 | 2.3 | 2.6 | 2.4 | 2.3 | 2.5 | 2.6 | 2.3 | 2.2 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 3.5 | 12.5 |
| 12-Aug | Z | 2.5 | 4.2 | 5.3 | 9.8 | 3.1 | 2.6 | 3.5 | 3.1 | 3.8 | 2.7 | 2.4 | 2.3 | 2.6 | 2.5 | 2.7 | 2.4 | 3.6 | 5.1 | 5.3 | 8.3 | 4.2 | 5.1 | 2.9 | 3.9 | 9.8 |
| 13-Aug | 7.3 | Z | 2.7 | 2.4 | 2.7 | 7.2 | 6.2 | 3.1 | 3.5 | 3.4 | C | C | C | C | 3.1 | 2.4 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 3.2 | 7.3 |
| 14-Aug | 2.4 | 2.2 | Z | 4.0 | 2.7 | 3.3 | 6.5 | 4.7 | 2.5 | 2.7 | 2.3 | 2.1 | 2.2 | 2.9 | 3.1 | 2.6 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.8 | 6.5 |
| 15-Aug | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.3 | 2.4 | 2.4 | 2.2 | 2.6 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.6 |
| 16-Aug | 2.3 | 2.3 | 2.4 | 2.4 | Z | 2.3 | 2.4 | 2.6 | 3.3 | 2.9 | 3.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.8 | 4.9 | 4.0 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.6 | 4.9 |
| 17-Aug | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 |
| 18-Aug | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.7 | 2.9 | 3.1 | 2.8 | 3.0 | 2.4 | 3.0 | 2.6 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 3.1 |
| 19-Aug | 2.3 | Z | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 3.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 3.4 |
| 20-Aug | 2.3 | 2.2 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.5 | 3.1 | 2.6 | 2.5 | 2.9 | 2.5 | 2.6 | 2.3 | 2.3 | 4.4 | 2.9 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.5 | 4.4 |
| 21-Aug | 2.2 | 2.2 | 2.3 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 |
| 22-Aug | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 23-Aug | 2.3 | 2.4 | 2.4 | 2.4 | 2.7 | Z | 2.4 | 2.4 | 2.5 | 2.6 | 3.3 | 3.5 | 2.7 | 2.4 | 2.4 | 2.3 | 2.8 | 5.0 | 4.1 | 5.0 | 4.7 | 2.5 | 2.3 | 2.4 | 2.9 | 5.0 |
| 24-Aug | Z | 2.4 | 4.8 | 7.0 | 4.1 | 5.9 | 6.0 | 5.9 | 4.0 | 3.4 | 3.1 | 2.9 | 2.3 | DF | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 3.4 | 7.0 |
| 25-Aug | 2.1 | 2.2 | 2.2 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.2 | 2.2 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 |
| 26-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 27-Aug | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 3.8 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 2.5 | 3.7 | 2.4 | 3.8 |
| 28-Aug | Z | 2.3 | 4.3 | 2.5 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 | 2.4 | 2.4 | 5.1 | 2.5 | 2.6 | 2.4 | 2.3 | 2.4 | 2.6 | 2.3 | 2.3 | 2.4 | 2.6 | 2.5 | 2.6 | 5.1 |
| 29-Aug | 2.5 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.5 |
| 30-Aug | 2.2 | 2.2 | Z | 5.4 | 2.8 | 2.7 | 2.8 | 3.3 | 3.0 | 2.9 | 2.6 | 2.6 | 2.5 | 2.6 | 2.3 | 2.3 | 3.4 | 2.2 | 2.2 | 2.3 | 2.5 | 3.2 | 2.9 | 3.4 | 2.8 | 5.4 |
| 31-Aug | 4.4 | 2.6 | 3.4 | Z | 4.4 | 3.2 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.6 | 2.3 | 2.2 | 2.2 | 2.4 | 2.2 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.5 | 4.4 |
| | 3.0 | 2.6 | 3.2 | 3.2 | 3.2 | 3.0 | 2.9 | 2.7 | 2.6 | 2.6 | 2.5 | 2.5 | 2.5 | 2.4 | 2.5 | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | 2.9 | 2.6 | 2.7 | 2.7 | Diurnal Average | |
| | 13.1 | 9.4 | 10.6 | 12.5 | 10.5 | 7.2 | 6.5 | 5.9 | 4.0 | 3.8 | 3.3 | 3.8 | 5.1 | 4.1 | 4.2 | 2.8 | 5.0 | 5.0 | 5.1 | 5.3 | 8.6 | 5.8 | 9.5 | 11.9 | Diurnal Maximum | |

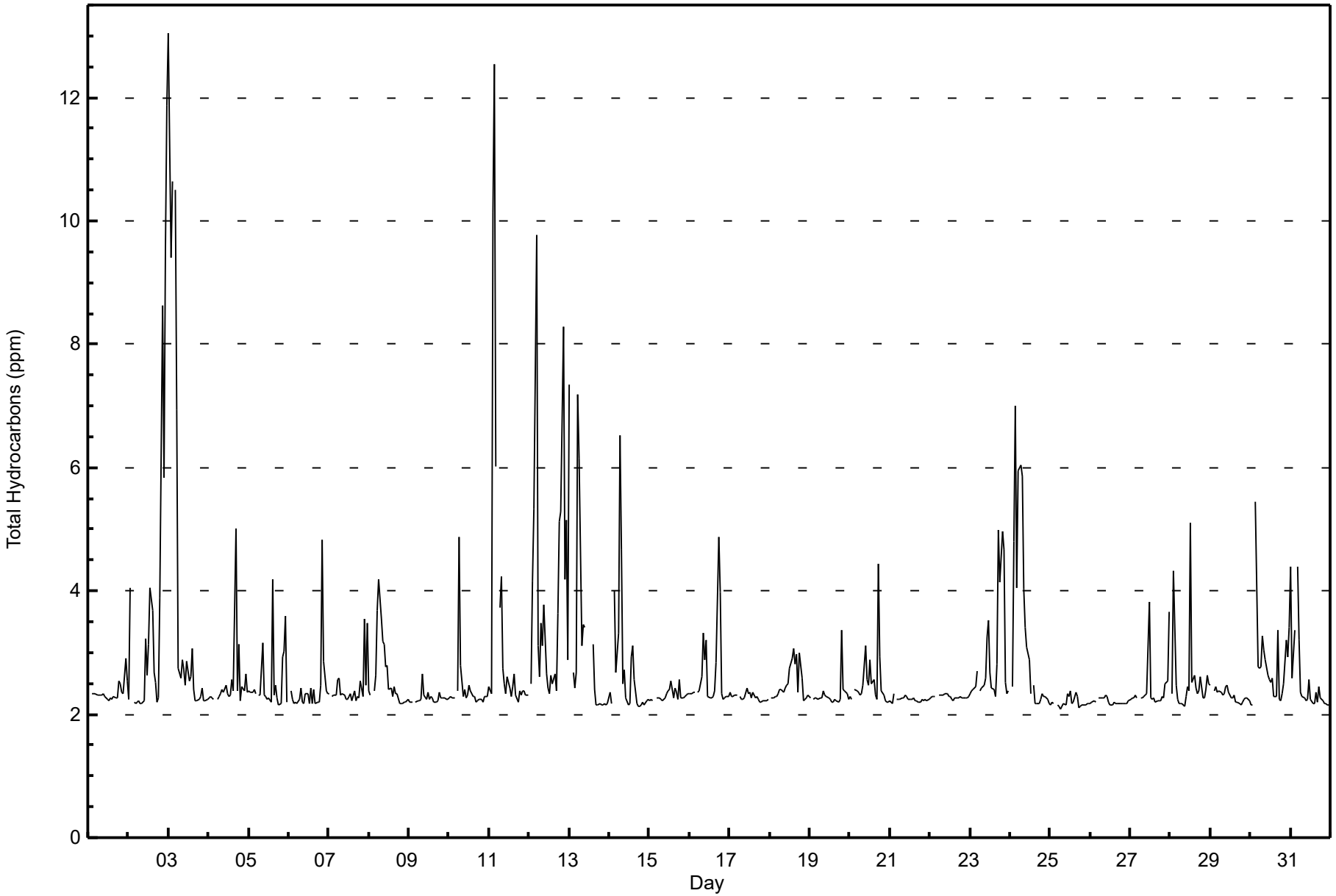
Z - zerospan C - Calibration DF - DAS Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Blackrod - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 0 | 0.00 | 0.00 |
| 2.1 - 3.0 | 612 | 86.44 | 86.44 |
| 3.1 - 10.0 | 90 | 12.71 | 99.15 |
| > 10.0 | 6 | 0.85 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Blackrod - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.1 - 3.0 | 15 | 12 | 19 | 12 | 20 | 29 | 67 | 117 | 80 | 35 | 16 | 10 | 29 | 85 | 46 | 16 | 608 |
| 3.1 - 10.0 | 18 | 5 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 4 | 16 | 38 | 90 |
| > 10.0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 |
| **Totals** | 34 | 17 | 22 | 12 | 22 | 29 | 67 | 117 | 80 | 35 | 19 | 11 | 30 | 89 | 62 | 58 | 704 |

Total Number of Valid Hours: 704

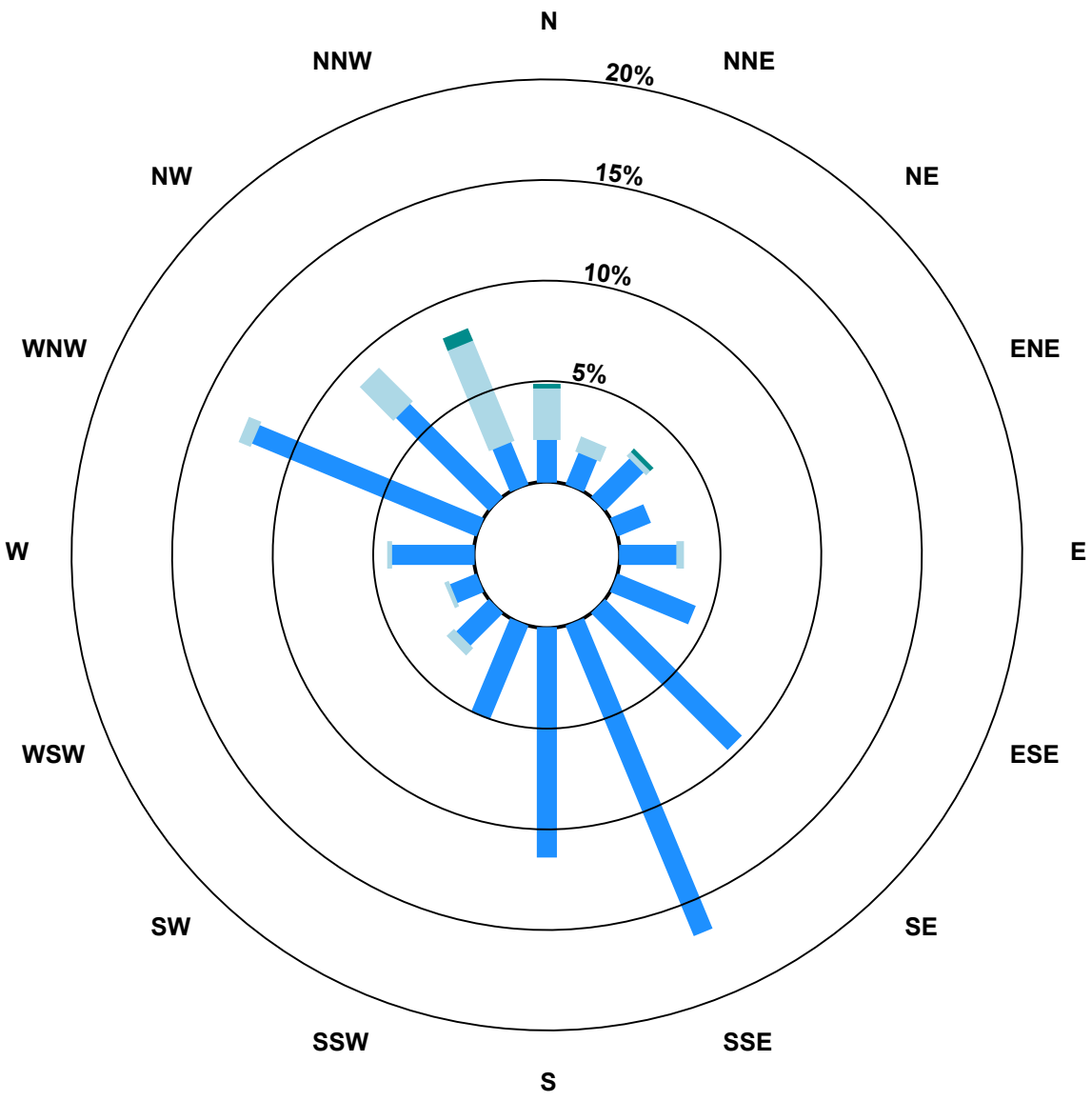
Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Total Hydrocarbons (THC) - ppm

## Blackrod




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

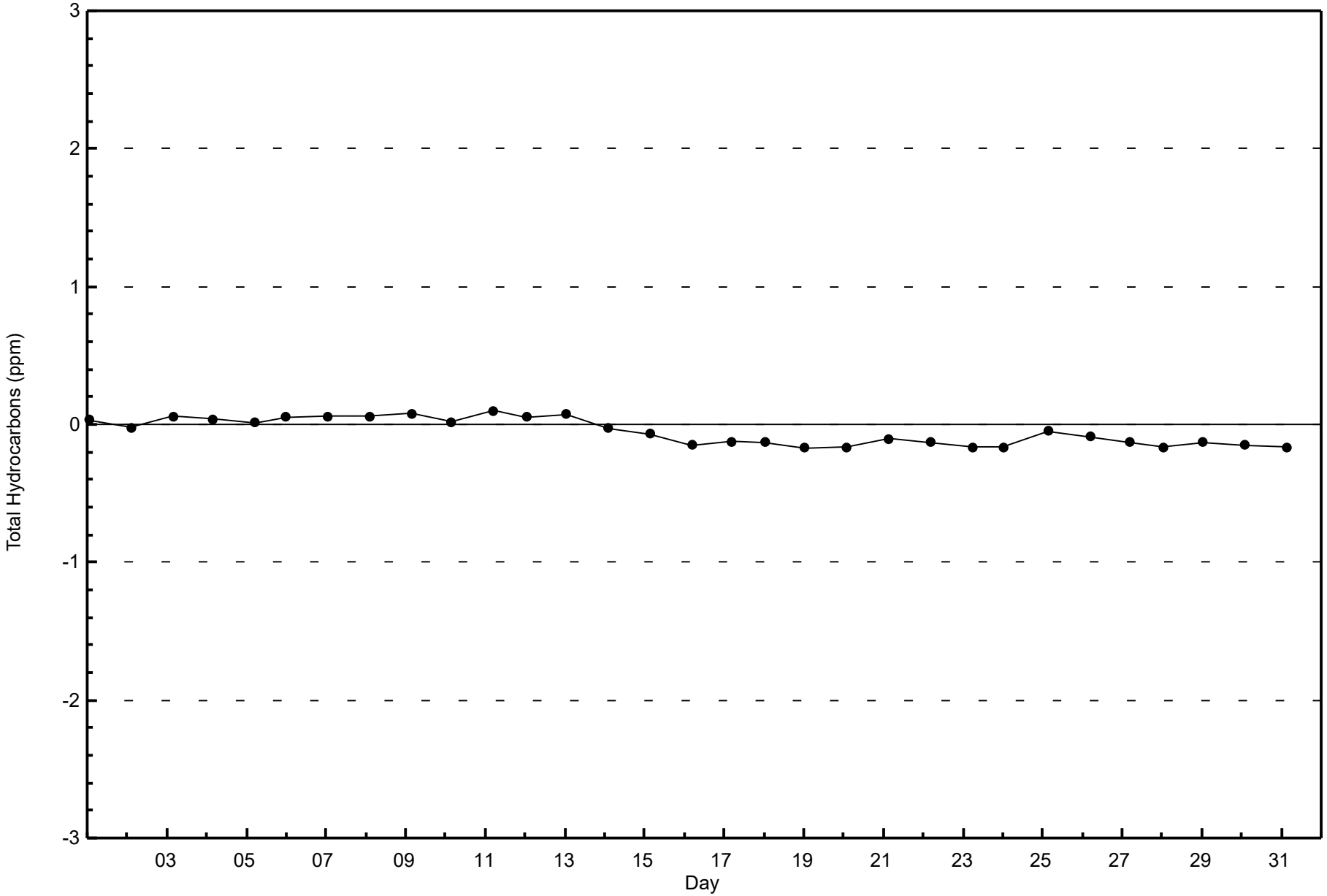
Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Blackrod - August 2026**

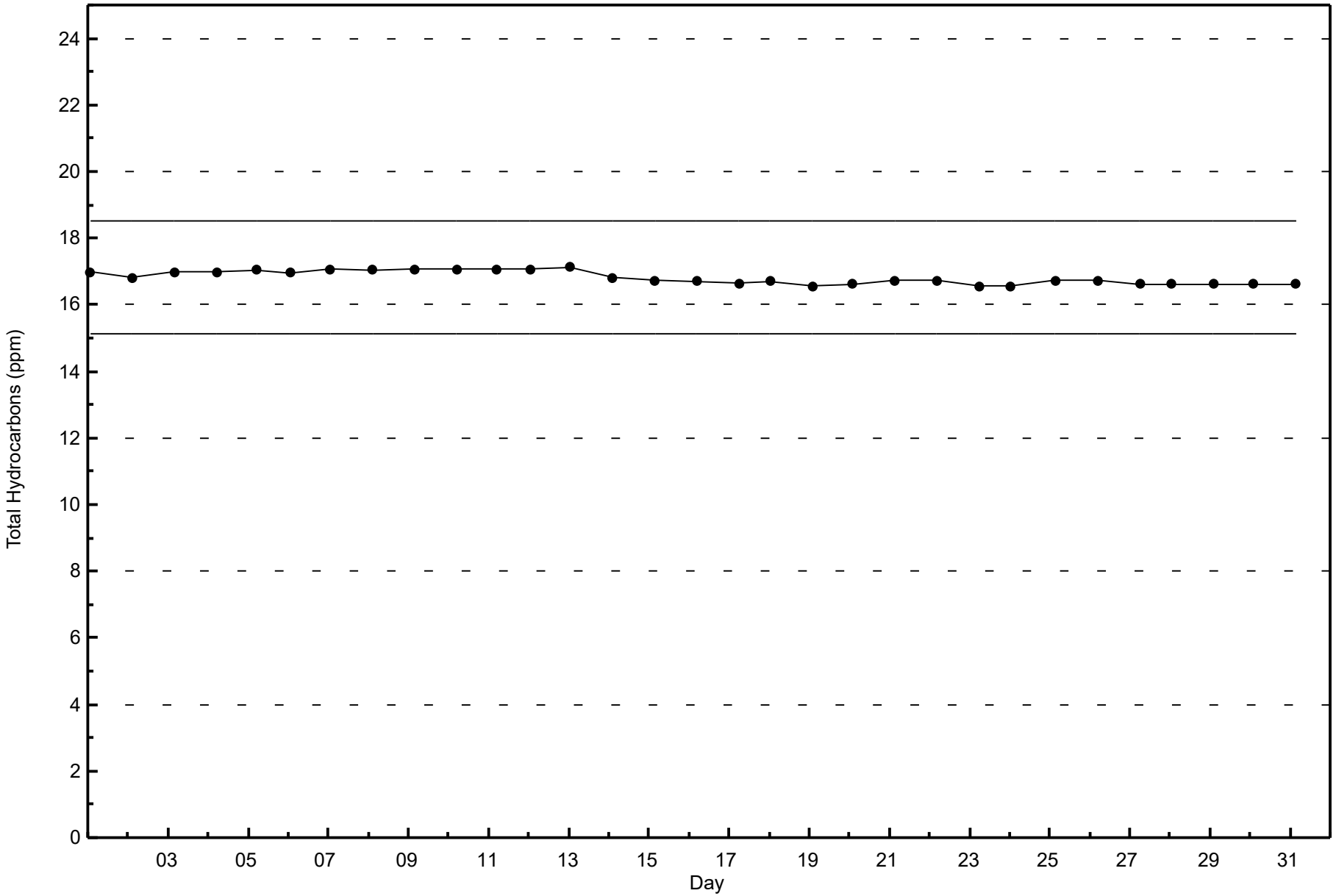


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Blackrod - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxide (NO) - ppb

## Blackrod - August 2026

Maximum Value: 31.9 ppb on Aug 13 03:00

Maximum Daily Average: 5.6 ppb on Aug 13

Minimum Value: 0.0 ppb on Aug 3 01:00

Minimum Daily Average: 0.1 ppb on Aug 21

Maximum Diurnal Average: 2.7 ppb at hour 11

Minimum Diurnal Average: 0.4 ppb at hour 1

Monthly Average: 1.56 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.5 $Q_3$ = 1.6 $P_{90}$ = 4.2 $P_{99}$ = 13.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 2.4 | 0.0 | 0.2 | 2.4 |
| 2-Aug | Z | 0.7 | 0.5 | 2.4 | 4.1 | 1.6 | 4.2 | 3.9 | 3.1 | 6.7 | 20.3 | 7.1 | 0.2 | 2.0 | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 3.3 | 2.7 | 20.3 |
| 3-Aug | 0.0 | Z | 2.4 | 1.3 | 0.3 | 0.3 | 0.4 | 0.3 | 1.5 | 2.1 | 0.7 | 0.3 | 3.0 | 0.3 | 1.6 | 1.9 | 1.7 | 2.3 | 1.7 | 0.6 | 0.2 | 0.3 | 0.1 | 0.1 | 1.0 | 3.0 |
| 4-Aug | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.1 | 0.4 | 0.2 | 0.2 | 0.6 | 1.0 | 0.2 | 0.1 | 0.2 | 1.5 | 3.0 | 0.9 | 1.0 | 2.7 | 0.2 | 0.5 | 2.4 | 1.1 | 0.3 | 0.7 | 3.0 |
| 5-Aug | 0.0 | 0.0 | 0.0 | Z | 0.5 | 1.5 | 2.5 | 1.5 | 4.5 | 2.7 | 0.3 | 0.6 | 1.4 | 0.9 | 1.6 | 5.1 | 2.4 | 1.3 | 0.0 | 0.1 | 11.7 | 14.0 | 0.0 | 0.0 | 2.3 | 14.0 |
| 6-Aug | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.7 | 0.7 | 0.6 | 0.6 | 1.1 | 4.2 | 0.3 | 0.8 | 0.4 | 0.8 | 0.4 | 1.3 | 0.6 | 0.4 | 1.4 | 2.9 | 1.9 | 0.6 | 0.2 | 0.9 | 4.2 |
| 7-Aug | 0.1 | 0.1 | 0.1 | 0.7 | 3.5 | Z | 3.6 | 1.9 | 5.1 | 1.8 | 0.7 | 1.2 | 3.1 | 2.3 | 1.8 | 1.5 | 0.8 | 0.4 | 0.3 | 0.6 | 0.8 | 0.1 | 0.5 | 2.4 | 1.5 | 5.1 |
| 8-Aug | Z | 0.6 | 7.2 | 0.9 | 5.2 | 4.8 | 2.5 | 5.2 | 5.2 | 7.9 | 7.4 | 3.9 | 1.6 | 1.1 | 1.3 | 0.9 | 2.5 | 2.4 | 0.8 | 0.3 | 0.1 | 0.7 | 1.1 | 0.0 | 2.8 | 7.9 |
| 9-Aug | 0.8 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.5 | 0.1 | 0.0 | 0.9 | 1.4 | 0.4 | 1.2 | 0.1 | 0.3 | 0.8 | 0.6 | 0.0 | 0.9 | 0.4 | 1.4 |
| 10-Aug | 1.0 | 0.9 | Z | 0.4 | 11.4 | 2.3 | 1.5 | 0.4 | 0.3 | 0.3 | 0.1 | 2.2 | 0.4 | 3.3 | 1.5 | 0.9 | 0.1 | 0.0 | 0.5 | 0.4 | 1.8 | 3.9 | 0.4 | 1.0 | 1.5 | 11.4 |
| 11-Aug | 0.5 | 0.3 | 0.5 | Z | 1.5 | 4.9 | 4.4 | 8.5 | 7.3 | 1.7 | 2.6 | 5.9 | 2.0 | 1.6 | 0.9 | 1.3 | 2.1 | 0.7 | 0.2 | 0.1 | 0.5 | 0.9 | 0.4 | 0.4 | 2.1 | 8.5 |
| 12-Aug | 1.2 | 3.3 | 0.8 | 1.5 | Z | 8.0 | 6.9 | 1.3 | 0.5 | 0.8 | 1.8 | 0.6 | 0.7 | 12.6 | 11.7 | 3.0 | 13.9 | 9.5 | 0.0 | 1.5 | 2.2 | 12.1 | 13.5 | 8.1 | 5.0 | 13.9 |
| 13-Aug | 0.5 | 20.6 | 31.9 | 1.3 | 2.0 | Z | 7.1 | 13.5 | 12.3 | 8.9 | 10.6 | 2.9 | 0.9 | 0.4 | 3.3 | 3.4 | 0.6 | 0.4 | 1.0 | 0.6 | 1.0 | 1.8 | 2.0 | 1.5 | 5.6 | 31.9 |
| 14-Aug | Z | 1.7 | 0.9 | 0.8 | 2.2 | 2.4 | 4.7 | 6.0 | 4.8 | 5.1 | 4.3 | 1.0 | 0.5 | 4.6 | 10.5 | 1.8 | 0.5 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 2.3 | 10.5 |
| 15-Aug | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.4 | 1.3 | 0.4 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 1.8 | 0.1 | 1.2 | 1.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.8 |
| 16-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.2 | 0.2 | 0.8 | 0.8 | 5.5 | 0.3 | 0.8 | 1.1 | 0.6 | 0.6 | 0.4 | 18.6 | 7.5 | 0.2 | 4.6 | 0.6 | 0.7 | 0.4 | 0.7 | 1.9 | 18.6 |
| 17-Aug | 0.2 | 0.0 | 0.0 | Z | 0.1 | 2.1 | 1.3 | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.7 | 0.5 | 1.3 | 0.1 | 0.1 | 0.0 | 0.0 | 3.9 | 0.1 | 0.1 | 0.0 | 0.0 | 0.5 | 3.9 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.1 | 0.3 | 0.1 | 0.8 | 0.9 | 0.6 | 1.1 | 1.5 | 2.5 | 0.5 | 1.3 | 0.4 | 0.8 | 0.6 | 0.2 | 1.0 | 1.5 | 0.5 | 0.7 | 2.5 |
| 19-Aug | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | Z | 0.9 | 0.2 | 1.3 | 0.6 | 1.3 | 2.3 | 0.7 | 0.8 | 1.0 | 0.9 | 0.5 | 0.5 | 0.1 | 0.0 | 0.2 | 3.5 | 0.4 | 0.1 | 0.7 | 3.5 |
| 20-Aug | Z | 1.5 | 2.7 | 3.3 | 3.1 | 5.5 | 6.3 | 3.3 | 0.5 | 0.6 | 6.5 | 6.7 | 6.3 | 1.9 | 5.5 | 0.5 | 1.1 | 2.0 | 3.4 | 2.1 | 0.8 | 0.8 | 0.9 | 0.9 | 2.9 | 6.7 |
| 21-Aug | 0.5 | Z | 0.6 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 22-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 |
| 23-Aug | 0.1 | 0.1 | 0.0 | Z | 0.4 | 0.8 | 0.5 | 0.5 | 0.1 | 0.3 | 5.1 | 1.2 | 1.7 | 0.6 | 1.6 | 0.5 | 0.3 | 1.3 | 0.3 | 4.0 | 0.1 | 0.1 | 0.2 | 0.7 | 0.9 | 5.1 |
| 24-Aug | 0.2 | 0.2 | 0.0 | 0.2 | Z | 6.7 | 0.2 | 0.5 | 1.1 | C | C | C | C | C | C | 4.5 | 2.9 | 1.8 | 0.4 | 0.9 | 1.2 | 0.1 | 1.1 | 0.2 | -- | 6.7 |
| 25-Aug | 0.1 | Z | 2.1 | 0.1 | 4.5 | 0.2 | 0.8 | 1.4 | 0.4 | 0.1 | 0.7 | 0.4 | 1.2 | 1.1 | 0.2 | 0.9 | 0.4 | 0.2 | 0.0 | 1.6 | 0.5 | 0.1 | 0.1 | 0.0 | 0.8 | 4.5 |
| 26-Aug | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.6 | 0.3 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 |
| 27-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.1 | 0.3 | 3.9 | 1.6 | 1.0 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 1.5 | 2.0 | 3.9 | 0.8 | 0.7 | 0.8 | 3.9 |
| 28-Aug | 0.2 | 0.4 | 2.2 | 1.6 | Z | 0.1 | 0.8 | 0.5 | 0.2 | 0.4 | 1.9 | 1.6 | 3.3 | 3.9 | 3.5 | 4.3 | 2.2 | 1.1 | 0.7 | 0.0 | 0.0 | 0.1 | 0.3 | 0.5 | 1.3 | 4.3 |
| 29-Aug | 0.3 | 0.5 | 0.6 | 0.3 | 1.0 | Z | 1.7 | 0.5 | 0.2 | 0.3 | 1.4 | 1.4 | 0.9 | 0.3 | 0.7 | 0.1 | 0.2 | 0.1 | 0.1 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.5 | 1.7 |
| 30-Aug | Z | 0.0 | 0.2 | 16.0 | 0.2 | 6.2 | 5.0 | 3.4 | 3.1 | 10.0 | 2.1 | 2.1 | 8.8 | 20.2 | 3.1 | 2.9 | 1.6 | 2.4 | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.6 | 3.9 | 20.2 |
| 31-Aug | 3.2 | Z | 4.7 | 10.6 | 4.0 | 7.1 | 4.1 | 1.5 | 2.0 | 2.3 | 3.9 | 1.8 | 4.8 | 2.4 | 1.5 | 1.5 | 1.3 | 0.5 | 0.1 | 2.1 | 0.4 | 0.0 | 0.1 | 0.0 | 2.6 | 10.6 |
| | 0.4 | 1.3 | 2.2 | 1.6 | 1.7 | 2.2 | 2.0 | 1.9 | 1.8 | 2.1 | 2.7 | 1.7 | 1.6 | 2.2 | 2.0 | 1.4 | 1.9 | 1.2 | 0.5 | 0.9 | 1.0 | 1.6 | 0.9 | 0.8 | Diurnal Average | |
| | 3.2 | 20.6 | 31.9 | 16.0 | 11.4 | 8.0 | 7.1 | 13.5 | 12.3 | 10.0 | 20.3 | 7.1 | 8.8 | 20.2 | 11.7 | 5.1 | 18.6 | 9.5 | 3.4 | 4.6 | 11.7 | 14.0 | 13.5 | 8.1 | Diurnal Maximum | |

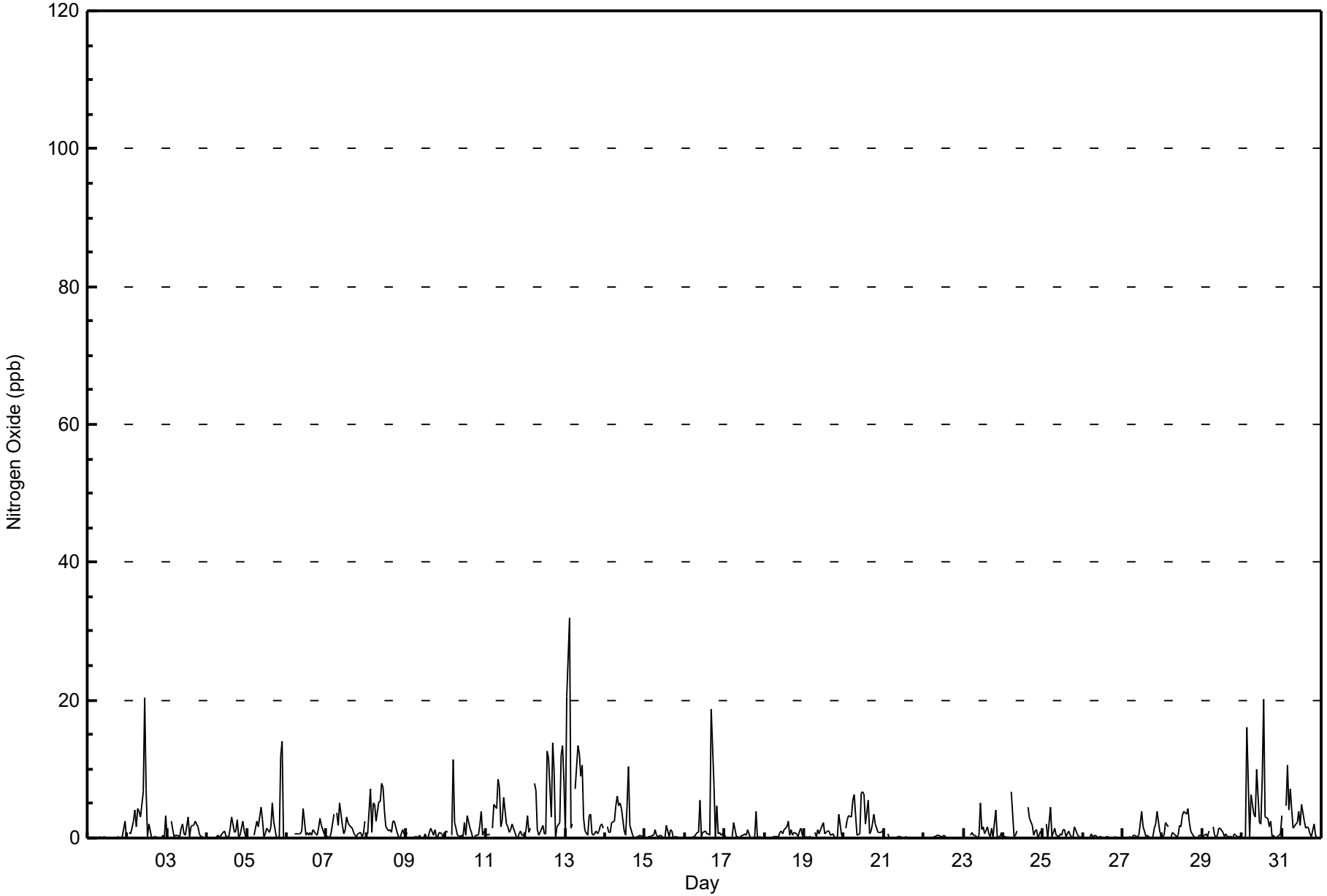
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxide (NO) - ppb**

**Blackrod - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 99.72 | 99.72 |
| 21 - 40 | 2 | 0.28 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxide (NO) - ppb**

**Blackrod - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 33 | 20 | 21 | 13 | 20 | 31 | 68 | 114 | 80 | 35 | 19 | 12 | 30 | 90 | 62 | 56 | 704 |
| 21 - 40 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 20 | 21 | 13 | 20 | 31 | 68 | 114 | 80 | 35 | 19 | 12 | 30 | 90 | 62 | 57 | 706 |

Total Number of Valid Hours: 706

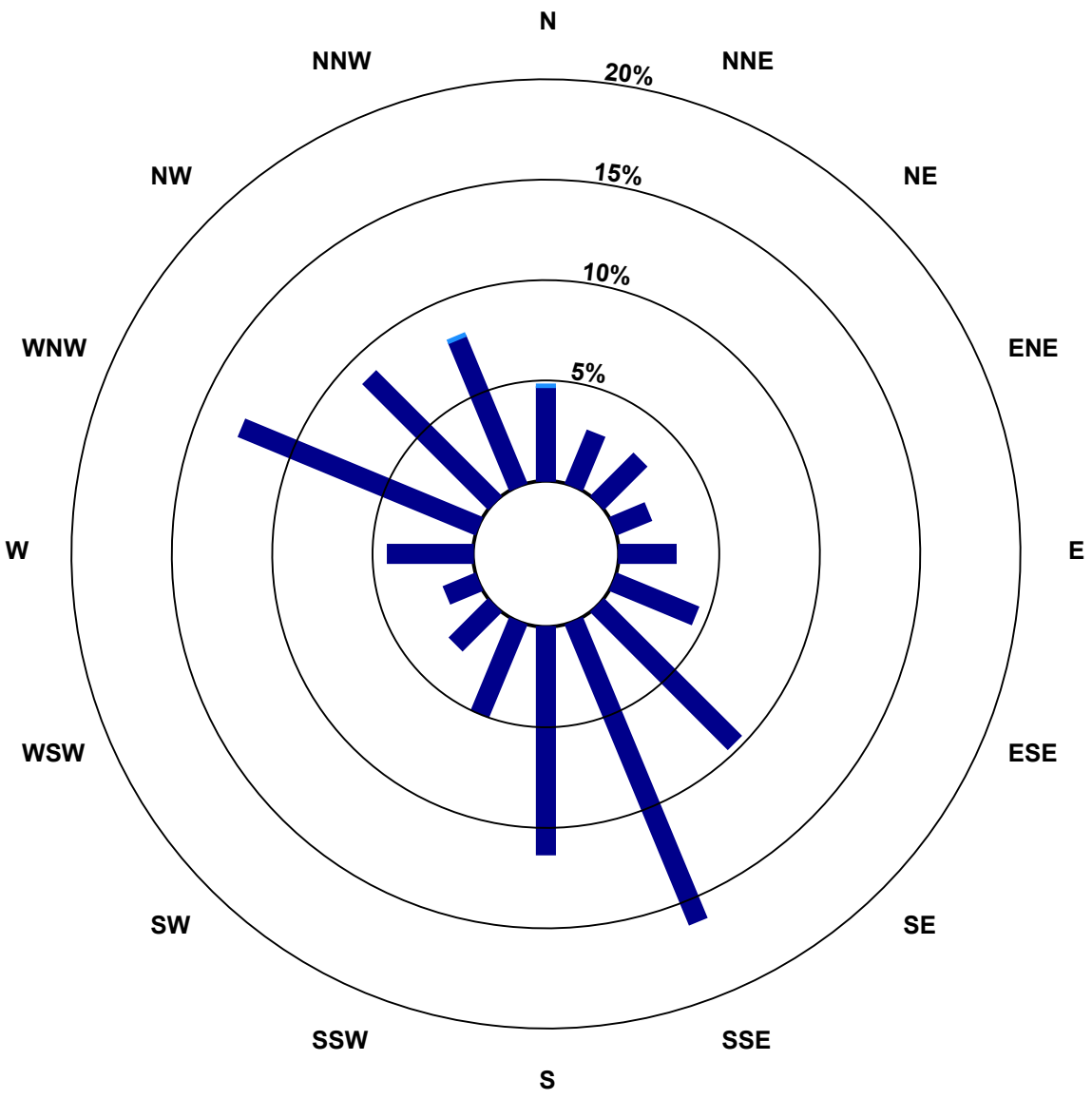
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxide (NO) - ppb

Blackrod




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

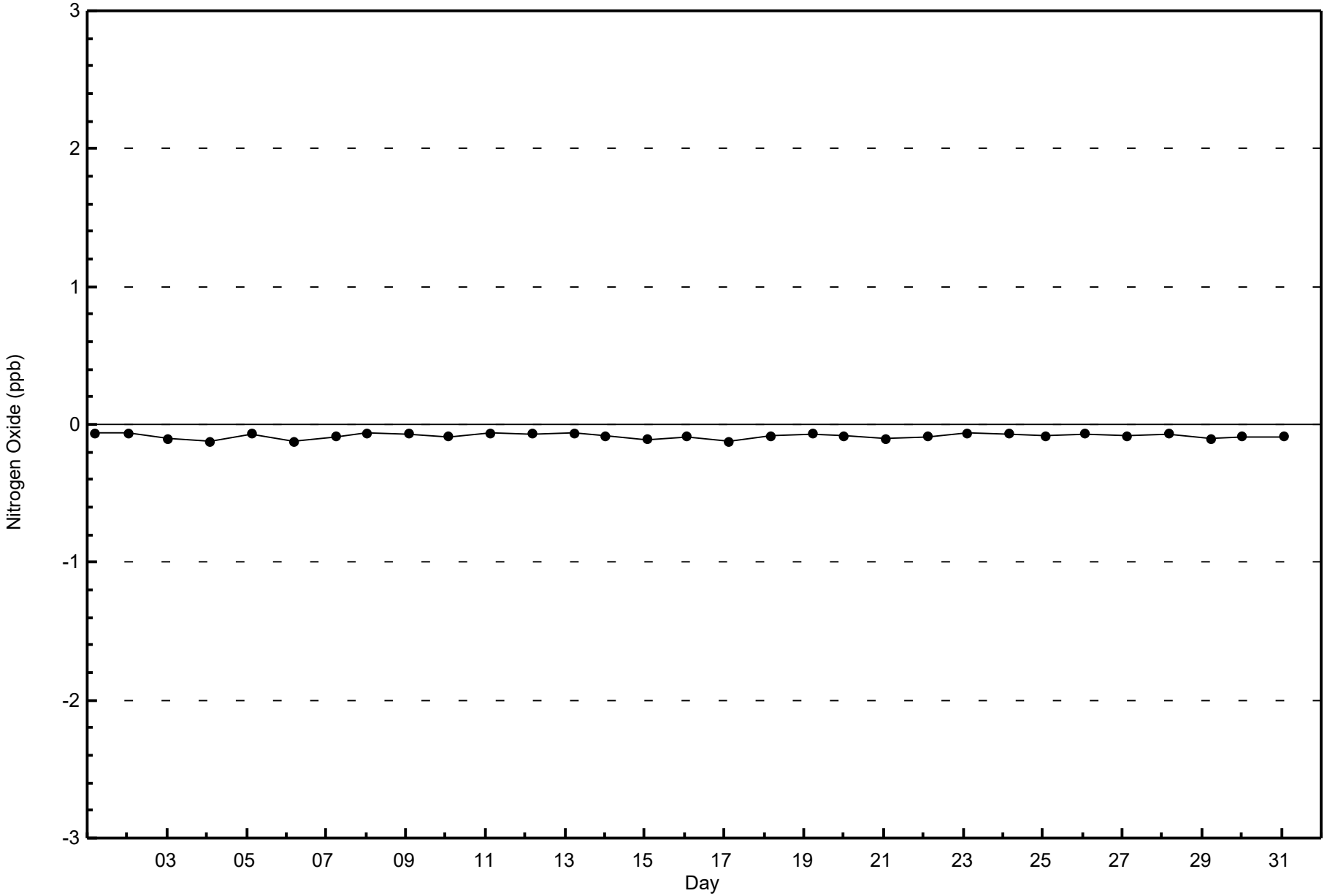
Total Number of Valid Hours: 706

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxide (NO) - ppb**

**Blackrod - August 2026**

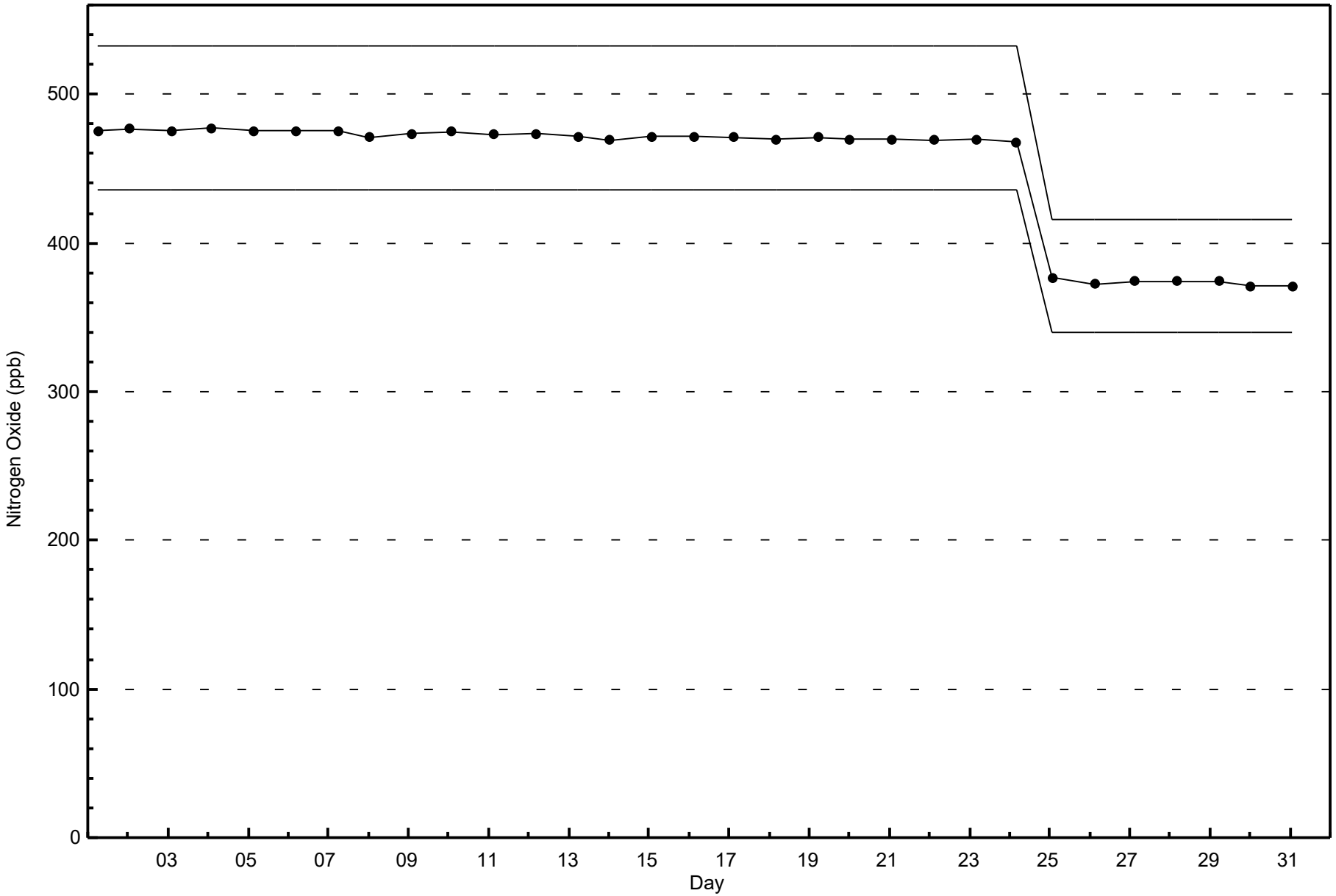


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxide (NO) - ppb**

**Blackrod - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Blackrod - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.5 ppb on Aug 5 22:00 Maximum Daily Average: 3.0 ppb on Aug 20

Minimum Value: 0.0 ppb on Aug 3 11:00 Minimum Daily Average: 0.5 ppb on Aug 6
Maximum Diurnal Average: 2.1 ppb at hour 22 Minimum Diurnal Average: 1.1 ppb at hour 1
Monthly Average: 1.56 ppb Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.4 $Q_1$ = 0.6 Median = 1.1 $Q_3$ = 1.9 $P_{90}$ = 3.3 $P_{99}$ = 7.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | Z | 1.1 | 1.2 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.9 | 1.0 | 0.9 | 1.1 | 2.6 | 0.7 | 0.9 | 2.6 |
| 2-Aug | Z | 1.2 | 1.1 | 2.2 | 3.2 | 1.6 | 3.7 | 3.0 | 1.9 | 4.4 | 6.1 | 3.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 1.8 | 1.5 | 6.1 |
| 3-Aug | 0.1 | Z | 1.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.1 | 0.7 | 1.5 | 0.0 | 0.3 | 1.3 | 0.3 | 0.5 | 0.9 | 2.0 | 1.6 | 1.4 | 1.0 | 0.8 | 0.4 | 0.3 | 0.4 | 0.7 | 2.0 |
| 4-Aug | 0.4 | 0.2 | Z | 0.5 | 0.6 | 0.6 | 1.3 | 0.8 | 0.7 | 1.0 | 1.2 | 0.6 | 0.5 | 0.5 | 1.4 | 3.3 | 0.8 | 1.1 | 5.0 | 0.8 | 1.6 | 4.7 | 2.5 | 0.8 | 1.3 | 5.0 |
| 5-Aug | 0.5 | 0.6 | 0.6 | Z | 0.7 | 1.9 | 2.0 | 1.7 | 1.7 | 1.1 | 0.5 | 0.9 | 1.5 | 0.9 | 1.7 | 3.9 | 2.8 | 1.3 | 0.3 | 0.4 | 9.0 | 11.5 | 0.2 | 0.2 | 2.0 | 11.5 |
| 6-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 1.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.4 | 0.4 | 0.5 | 1.3 | 1.1 | 0.6 | 0.5 | 0.5 | 1.4 |
| 7-Aug | 0.4 | 0.5 | 0.2 | 1.0 | 2.3 | Z | 2.8 | 1.8 | 2.8 | 1.9 | 1.1 | 1.4 | 2.8 | 2.4 | 2.3 | 1.2 | 1.2 | 1.0 | 0.7 | 1.1 | 1.6 | 1.0 | 1.3 | 3.7 | 1.6 | 3.7 |
| 8-Aug | Z | 1.2 | 4.6 | 1.2 | 2.2 | 2.8 | 2.0 | 1.7 | 2.1 | 2.2 | 2.0 | 2.3 | 1.0 | 0.9 | 1.0 | 1.2 | 1.5 | 1.8 | 1.1 | 0.7 | 1.3 | 1.7 | 2.6 | 0.3 | 1.7 | 4.6 |
| 9-Aug | 0.9 | Z | 0.3 | 0.3 | 0.3 | 0.8 | 0.6 | 0.5 | 0.8 | 0.3 | 0.2 | 0.9 | 0.2 | 0.2 | 1.0 | 1.3 | 0.5 | 1.8 | 0.5 | 0.9 | 1.3 | 1.5 | 0.4 | 1.9 | 0.8 | 1.9 |
| 10-Aug | 2.3 | 2.1 | Z | 0.7 | 4.1 | 2.1 | 2.0 | 1.2 | 1.5 | 1.6 | 1.1 | 2.1 | 1.1 | 2.5 | 2.3 | 1.3 | 0.4 | 0.4 | 1.9 | 0.8 | 2.6 | 5.4 | 1.3 | 1.7 | 1.8 | 5.4 |
| 11-Aug | 1.1 | 1.1 | 2.4 | Z | 2.6 | 5.0 | 3.3 | 4.6 | 4.5 | 1.6 | 2.9 | 4.7 | 2.4 | 2.3 | 1.7 | 2.6 | 2.3 | 2.1 | 1.1 | 0.7 | 2.3 | 2.4 | 1.4 | 1.5 | 2.5 | 5.0 |
| 12-Aug | 2.6 | 6.6 | 1.6 | 0.9 | Z | 4.6 | 2.7 | 0.8 | 1.2 | 0.8 | 1.4 | 0.8 | 0.9 | 3.4 | 3.6 | 1.4 | 4.9 | 3.1 | 0.2 | 0.9 | 1.5 | 2.2 | 3.5 | 2.8 | 2.3 | 6.6 |
| 13-Aug | 0.6 | 4.2 | 5.1 | 0.4 | 1.6 | Z | 1.9 | 3.6 | 3.8 | 3.4 | 4.3 | 2.3 | 1.4 | 1.0 | 3.0 | 2.1 | 0.7 | 0.5 | 1.2 | 0.9 | 0.8 | 2.0 | 2.1 | 1.7 | 2.1 | 5.1 |
| 14-Aug | Z | 2.6 | 1.7 | 0.6 | 1.4 | 2.6 | 1.8 | 3.7 | 2.2 | 2.4 | 1.7 | 0.9 | 0.4 | 3.0 | 2.7 | 1.2 | 0.7 | 0.2 | 0.1 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 1.4 | 3.7 |
| 15-Aug | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.4 | 1.1 | 0.6 | 0.3 | 0.4 | 0.2 | 0.2 | 0.3 | 1.7 | 0.3 | 1.5 | 1.6 | 0.2 | 0.7 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 1.7 |
| 16-Aug | 0.7 | 0.7 | Z | 0.8 | 0.8 | 1.1 | 0.7 | 1.7 | 1.0 | 2.0 | 0.3 | 0.7 | 1.3 | 0.7 | 0.7 | 0.5 | 6.0 | 3.8 | 0.5 | 8.5 | 1.1 | 1.5 | 1.0 | 1.4 | 1.6 | 8.5 |
| 17-Aug | 0.6 | 0.3 | 0.2 | Z | 0.4 | 1.6 | 1.4 | 0.5 | 0.3 | 0.3 | 0.9 | 0.8 | 1.0 | 0.7 | 1.7 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 1.1 | 0.9 | 0.4 | 0.5 | 0.7 | 1.7 |
| 18-Aug | 0.5 | 0.5 | 0.6 | 0.7 | Z | 1.2 | 0.8 | 0.7 | 0.6 | 1.2 | 1.3 | 1.1 | 1.8 | 2.5 | 2.9 | 0.7 | 2.1 | 0.9 | 1.8 | 1.0 | 0.6 | 1.4 | 2.4 | 1.3 | 1.2 | 2.9 |
| 19-Aug | 0.5 | 0.6 | 0.5 | 0.9 | 1.3 | Z | 2.1 | 1.1 | 1.8 | 1.3 | 0.8 | 1.8 | 1.0 | 1.1 | 1.4 | 1.6 | 1.0 | 1.0 | 0.6 | 0.4 | 1.3 | 4.9 | 1.6 | 1.9 | 1.3 | 4.9 |
| 20-Aug | Z | 1.6 | 2.5 | 6.0 | 6.6 | 6.6 | 5.6 | 3.9 | 1.5 | 1.3 | 3.7 | 4.0 | 1.5 | 2.0 | 2.3 | 1.3 | 1.5 | 1.8 | 6.7 | 4.1 | 2.1 | 1.0 | 0.7 | 0.9 | 3.0 | 6.7 |
| 21-Aug | 1.3 | Z | 0.7 | 1.7 | 2.0 | 1.5 | 1.1 | 0.8 | 0.8 | 0.7 | 1.0 | 0.5 | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.8 | 2.0 |
| 22-Aug | 0.9 | 1.1 | Z | 1.3 | 1.1 | 1.0 | 1.0 | 0.8 | 1.1 | 1.4 | 1.1 | 1.2 | 1.3 | 0.8 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 1.0 | 1.1 | 0.9 | 1.2 | 1.0 | 1.4 |
| 23-Aug | 1.3 | 2.6 | 2.8 | Z | 1.7 | 1.7 | 1.0 | 1.4 | 1.2 | 1.6 | 3.9 | 2.3 | 2.2 | 1.8 | 2.3 | 1.2 | 0.7 | 1.8 | 0.6 | 1.6 | 0.5 | 0.7 | 0.7 | 1.6 | 1.6 | 3.9 |
| 24-Aug | 0.9 | 0.5 | 0.4 | 0.4 | Z | 1.9 | 0.4 | 0.2 | 0.3 | C | C | C | C | C | C | 2.4 | 3.0 | 2.4 | 0.7 | 2.3 | 2.7 | 2.3 | 4.9 | 4.7 | -- | 4.9 |
| 25-Aug | 1.4 | Z | 6.0 | 1.2 | 3.8 | 1.3 | 0.7 | 0.8 | 0.5 | 0.5 | 1.2 | 1.1 | 1.5 | 1.2 | 0.5 | 1.3 | 0.6 | 0.7 | 0.2 | 1.7 | 1.5 | 0.7 | 0.7 | 0.5 | 1.3 | 6.0 |
| 26-Aug | 0.7 | 1.0 | Z | 1.4 | 1.4 | 1.9 | 1.2 | 1.2 | 0.6 | 0.4 | 0.7 | 0.7 | 0.4 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 1.6 | 1.2 | 0.9 | 1.5 | 1.3 | 0.9 | 1.9 |
| 27-Aug | 1.9 | 2.0 | 2.0 | Z | 1.8 | 1.3 | 1.7 | 1.5 | 1.4 | 1.1 | 1.6 | 5.6 | 2.4 | 2.2 | 0.8 | 1.1 | 0.9 | 0.9 | 1.4 | 3.9 | 3.1 | 9.4 | 8.9 | 2.3 | 2.6 | 9.4 |
| 28-Aug | 1.5 | 2.1 | 4.6 | 3.7 | Z | 0.8 | 1.8 | 1.5 | 0.5 | 0.9 | 2.6 | 1.8 | 3.4 | 4.0 | 4.3 | 5.3 | 3.4 | 2.5 | 1.7 | 0.8 | 0.8 | 0.9 | 1.2 | 1.8 | 2.3 | 5.3 |
| 29-Aug | 1.2 | 1.2 | 1.7 | 1.4 | 2.7 | Z | 1.9 | 1.1 | 0.7 | 0.7 | 1.4 | 1.1 | 1.0 | 0.4 | 0.9 | 0.4 | 0.4 | 0.5 | 0.7 | 2.9 | 3.0 | 2.1 | 2.7 | 1.3 | 1.4 | 3.0 |
| 30-Aug | Z | 1.2 | 1.5 | 6.5 | 2.2 | 2.9 | 3.5 | 4.1 | 1.9 | 4.2 | 2.1 | 2.1 | 4.3 | 9.1 | 3.0 | 0.7 | 2.8 | 2.1 | 0.8 | 1.3 | 0.4 | 1.1 | 0.8 | 1.4 | 2.6 | 9.1 |
| 31-Aug | 5.0 | Z | 6.4 | 9.6 | 6.6 | 7.1 | 3.0 | 1.3 | 1.0 | 3.1 | 1.7 | 0.9 | 2.9 | 1.8 | 0.7 | 1.1 | 1.7 | 0.8 | 0.9 | 3.2 | 1.2 | 0.5 | 0.4 | 0.4 | 2.7 | 9.6 |
| | 1.1 | 1.5 | 1.9 | 1.7 | 2.0 | 2.1 | 1.8 | 1.6 | 1.3 | 1.5 | 1.6 | 1.6 | 1.4 | 1.7 | 1.5 | 1.4 | 1.5 | 1.2 | 1.1 | 1.5 | 1.5 | 2.1 | 1.6 | 1.4 | Diurnal Average | |
| | 5.0 | 6.6 | 6.4 | 9.6 | 6.6 | 7.1 | 5.6 | 4.6 | 4.5 | 4.4 | 6.1 | 5.6 | 4.3 | 9.1 | 4.3 | 5.3 | 6.0 | 3.8 | 6.7 | 8.5 | 9.0 | 11.5 | 8.9 | 4.7 | Diurnal Maximum | |

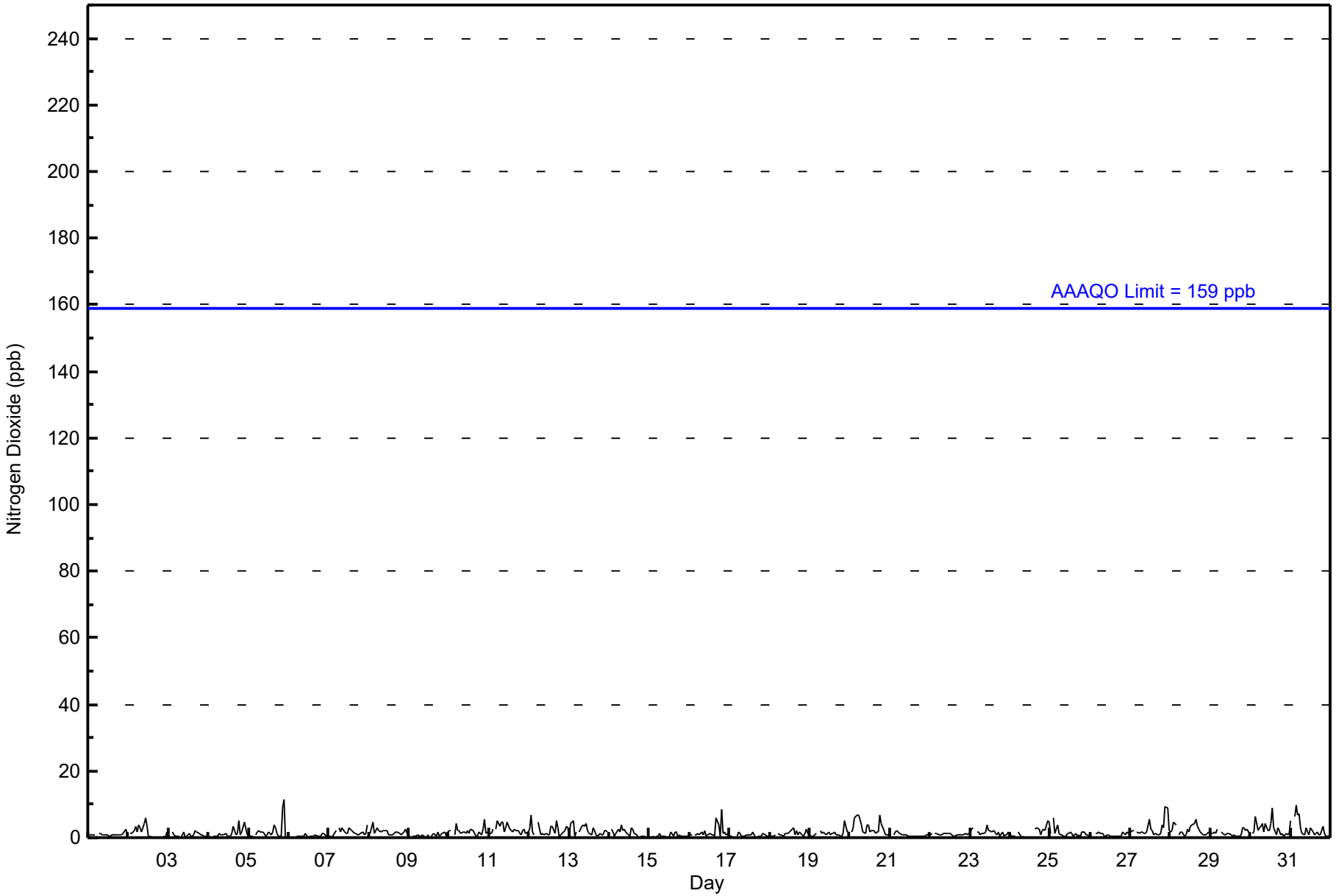
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Blackrod - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Blackrod - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 707 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Blackrod - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 34 | 20 | 21 | 13 | 20 | 31 | 68 | 114 | 80 | 35 | 19 | 12 | 30 | 90 | 62 | 57 | 706 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 20 | 21 | 13 | 20 | 31 | 68 | 114 | 80 | 35 | 19 | 12 | 30 | 90 | 62 | 57 | 706 |

Total Number of Valid Hours: 706

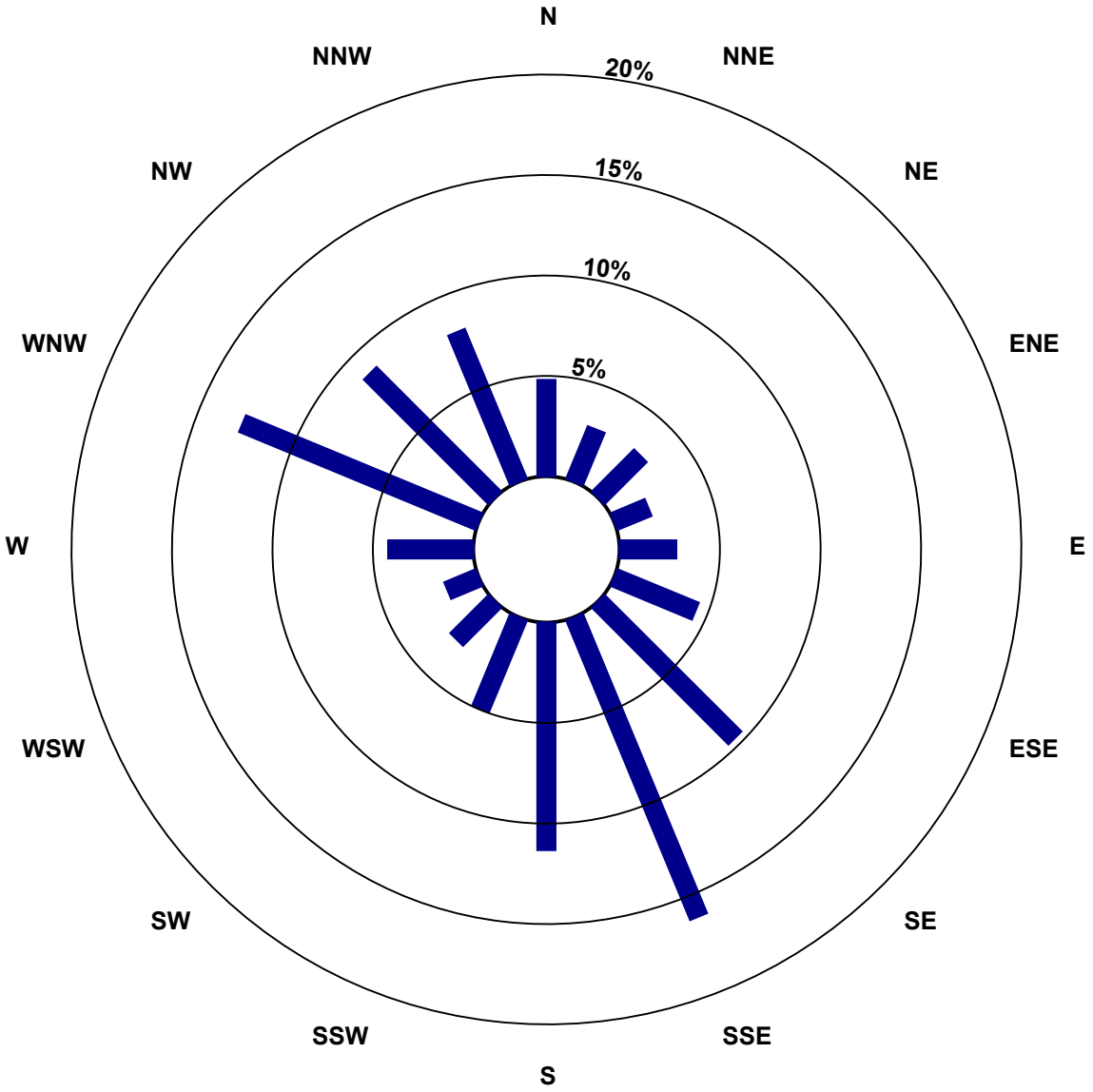
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Blackrod




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

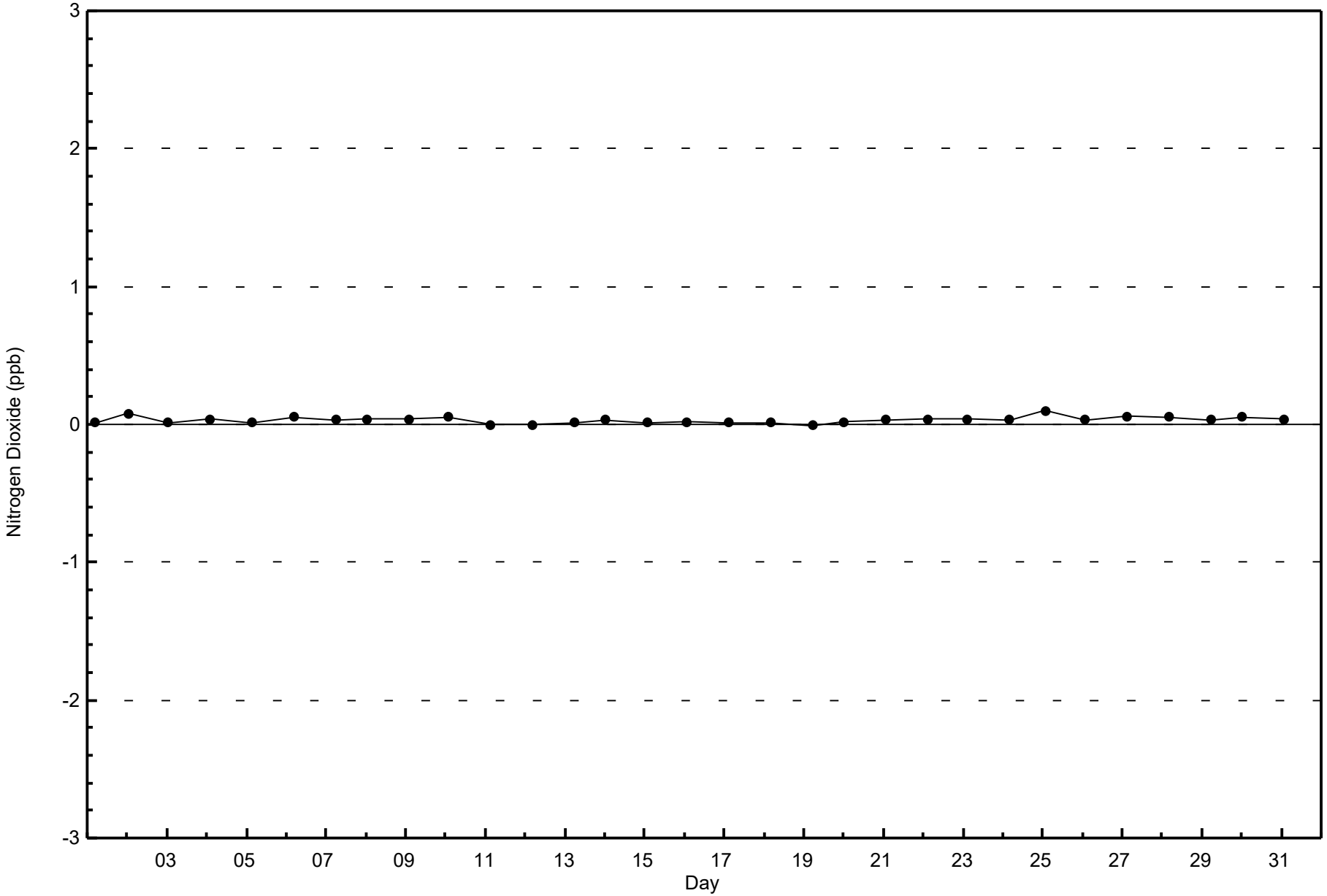
Total Number of Valid Hours: 706

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Blackrod - August 2026**

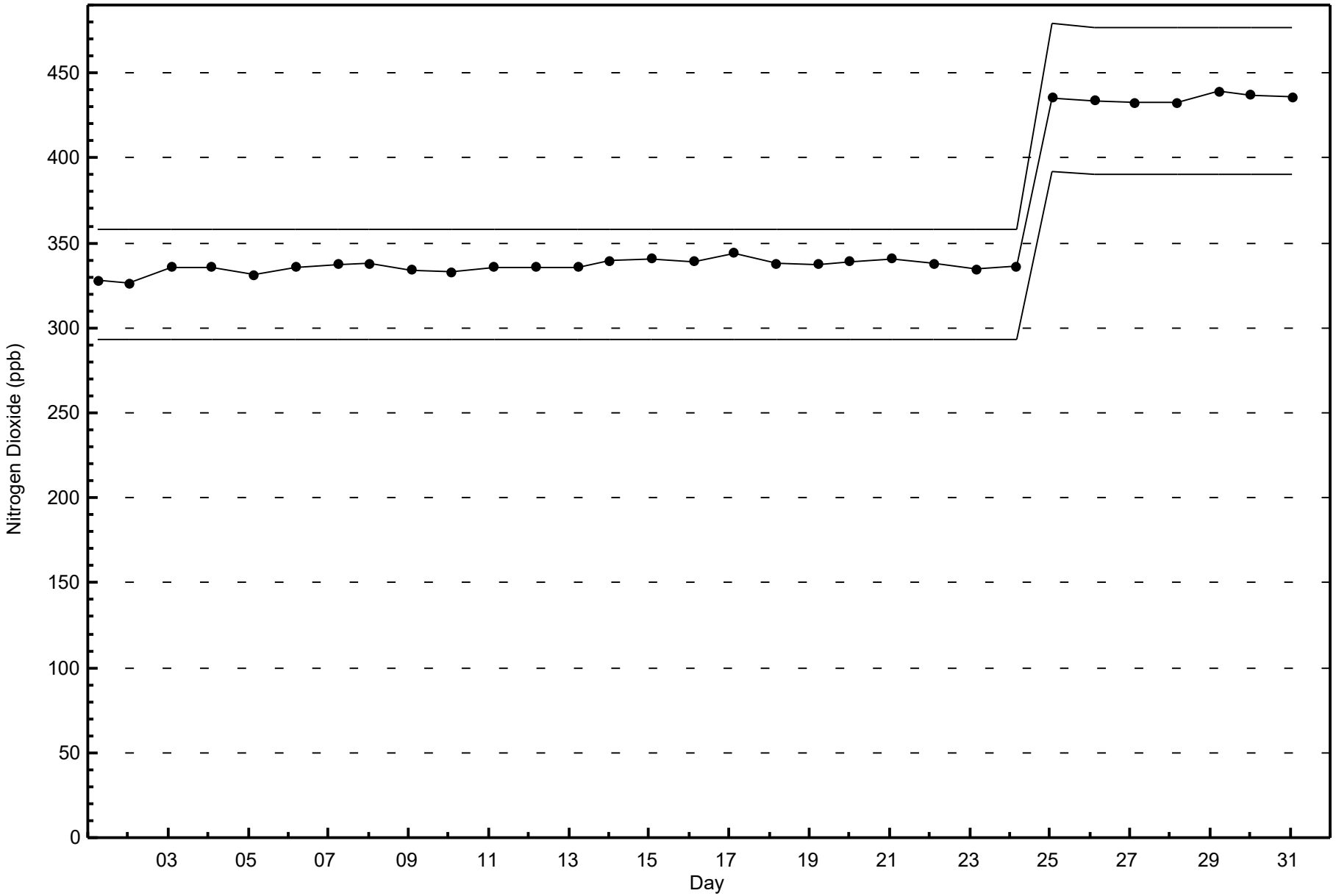


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Blackrod - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Blackrod - August 2026

Maximum Value: 37.0 ppb on Aug 13 03:00

Maximum Daily Average: 7.7 ppb on Aug 13

Minimum Value: 0.1 ppb on Aug 3 01:00

Minimum Daily Average: 0.9 ppb on Aug 21

Maximum Diurnal Average: 4.3 ppb at hour 6

Minimum Diurnal Average: 1.4 ppb at hour 1

Monthly Average: 3.12 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.5$ $Q_1 = 0.8$ Median = 1.7 $Q_3 = 3.6$ $P_{90} = 7.7$ $P_{99} = 20.6$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.7 | 0.8 | 0.7 | 0.7 | 0.8 | Z | 1.2 | 1.4 | 1.0 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 1.1 | 1.0 | 0.9 | 1.2 | 5.0 | 0.7 | 1.1 | 5.0 |
| 2-Aug | Z | 1.9 | 1.6 | 4.6 | 7.3 | 3.2 | 7.9 | 6.9 | 5.0 | 11.1 | 26.4 | 10.4 | 0.4 | 2.3 | 0.2 | 0.1 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.7 | 0.3 | 5.1 | 4.2 | 26.4 |
| 3-Aug | 0.1 | Z | 4.1 | 2.0 | 0.7 | 0.7 | 0.8 | 0.4 | 2.2 | 3.6 | 0.7 | 0.6 | 4.3 | 0.6 | 2.1 | 2.8 | 3.7 | 3.9 | 3.1 | 1.6 | 1.0 | 0.7 | 0.4 | 0.5 | 1.8 | 4.3 |
| 4-Aug | 0.4 | 0.3 | Z | 0.5 | 0.6 | 0.7 | 1.7 | 1.0 | 0.9 | 1.6 | 2.2 | 0.8 | 0.6 | 0.7 | 2.9 | 6.3 | 1.7 | 2.1 | 7.7 | 1.0 | 2.1 | 7.1 | 3.6 | 1.1 | 2.1 | 7.7 |
| 5-Aug | 0.5 | 0.6 | 0.6 | Z | 1.2 | 3.4 | 4.5 | 3.2 | 6.2 | 3.8 | 0.8 | 1.5 | 2.9 | 1.8 | 3.3 | 9.0 | 5.2 | 2.6 | 0.3 | 0.5 | 20.7 | 25.5 | 0.2 | 0.2 | 4.3 | 25.5 |
| 6-Aug | 0.2 | 0.2 | 0.3 | 0.2 | Z | 1.2 | 1.1 | 0.9 | 1.0 | 1.5 | 5.6 | 0.5 | 1.1 | 0.8 | 1.2 | 0.8 | 2.0 | 1.0 | 0.8 | 1.9 | 4.2 | 3.0 | 1.2 | 0.7 | 1.4 | 5.6 |
| 7-Aug | 0.5 | 0.6 | 0.3 | 1.7 | 5.8 | Z | 6.4 | 3.7 | 7.9 | 3.7 | 1.8 | 2.6 | 5.9 | 4.7 | 4.1 | 2.7 | 2.0 | 1.4 | 1.0 | 1.7 | 2.4 | 1.1 | 1.8 | 6.1 | 3.0 | 7.9 |
| 8-Aug | Z | 1.8 | 11.8 | 2.1 | 7.4 | 7.6 | 4.5 | 6.9 | 7.3 | 10.1 | 9.4 | 6.2 | 2.6 | 2.0 | 2.3 | 2.1 | 4.0 | 4.2 | 1.9 | 1.0 | 1.4 | 2.4 | 3.7 | 0.3 | 4.5 | 11.8 |
| 9-Aug | 1.7 | Z | 0.3 | 0.3 | 0.3 | 1.0 | 0.7 | 0.6 | 1.1 | 0.4 | 0.3 | 1.4 | 0.3 | 0.2 | 1.9 | 2.7 | 0.9 | 3.0 | 0.6 | 1.2 | 2.1 | 2.1 | 0.4 | 2.8 | 1.1 | 3.0 |
| 10-Aug | 3.3 | 3.0 | Z | 1.1 | 15.6 | 4.4 | 3.5 | 1.6 | 1.8 | 1.9 | 1.2 | 4.3 | 1.5 | 5.8 | 3.8 | 2.2 | 0.5 | 0.4 | 2.4 | 1.2 | 4.4 | 9.3 | 1.7 | 2.7 | 3.4 | 15.6 |
| 11-Aug | 1.6 | 1.4 | 2.9 | Z | 4.1 | 9.9 | 7.7 | 13.1 | 11.8 | 3.3 | 5.5 | 10.6 | 4.4 | 3.9 | 2.6 | 3.9 | 4.4 | 2.8 | 1.3 | 0.8 | 2.8 | 3.3 | 1.8 | 1.9 | 4.6 | 13.1 |
| 12-Aug | 3.8 | 9.9 | 2.4 | 2.4 | Z | 12.6 | 9.6 | 2.1 | 1.7 | 1.6 | 3.2 | 1.4 | 1.6 | 16.0 | 15.3 | 4.4 | 18.8 | 12.6 | 0.2 | 2.4 | 3.7 | 14.3 | 17.0 | 10.9 | 7.3 | 18.8 |
| 13-Aug | 1.1 | 24.8 | 37.0 | 1.7 | 3.6 | Z | 9.0 | 17.1 | 16.1 | 12.3 | 14.9 | 5.2 | 2.3 | 1.4 | 6.3 | 5.5 | 1.3 | 0.9 | 2.2 | 1.5 | 1.8 | 3.8 | 4.1 | 3.2 | 7.7 | 37.0 |
| 14-Aug | Z | 4.3 | 2.6 | 1.4 | 3.6 | 5.0 | 6.5 | 9.7 | 7.0 | 7.5 | 6.0 | 1.9 | 0.9 | 7.6 | 13.2 | 3.0 | 1.2 | 0.3 | 0.2 | 0.5 | 0.6 | 0.6 | 0.4 | 0.4 | 3.7 | 13.2 |
| 15-Aug | 0.4 | Z | 0.5 | 0.4 | 0.6 | 0.8 | 2.4 | 1.0 | 0.4 | 0.7 | 0.5 | 0.3 | 0.4 | 3.5 | 0.4 | 2.7 | 2.6 | 0.3 | 0.9 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 3.5 |
| 16-Aug | 0.7 | 0.7 | Z | 0.8 | 0.9 | 1.3 | 0.9 | 2.5 | 1.8 | 7.5 | 0.6 | 1.5 | 2.4 | 1.3 | 1.3 | 0.9 | 24.6 | 11.3 | 0.7 | 13.1 | 1.7 | 2.2 | 1.4 | 2.1 | 3.6 | 24.6 |
| 17-Aug | 0.8 | 0.3 | 0.2 | Z | 0.5 | 3.7 | 2.7 | 0.6 | 0.4 | 0.4 | 1.2 | 1.3 | 1.7 | 1.2 | 3.0 | 0.3 | 0.3 | 0.3 | 0.3 | 4.5 | 1.2 | 1.0 | 0.4 | 0.5 | 1.2 | 4.5 |
| 18-Aug | 0.5 | 0.5 | 0.6 | 0.7 | Z | 1.4 | 0.9 | 1.0 | 0.7 | 2.0 | 2.2 | 1.7 | 2.9 | 4.0 | 5.4 | 1.2 | 3.4 | 1.3 | 2.6 | 1.6 | 0.8 | 2.4 | 3.9 | 1.8 | 1.9 | 5.4 |
| 19-Aug | 0.5 | 0.7 | 0.6 | 1.1 | 1.5 | Z | 3.0 | 1.3 | 3.1 | 1.9 | 2.1 | 4.1 | 1.7 | 1.9 | 2.4 | 2.5 | 1.5 | 1.5 | 0.7 | 0.4 | 1.5 | 8.4 | 2.0 | 2.0 | 2.0 | 8.4 |
| 20-Aug | Z | 3.1 | 5.2 | 9.3 | 9.7 | 12.1 | 11.9 | 7.2 | 2.0 | 1.9 | 10.2 | 10.7 | 7.8 | 3.9 | 7.8 | 1.8 | 2.6 | 3.8 | 10.1 | 6.2 | 2.9 | 1.8 | 1.6 | 1.8 | 5.9 | 12.1 |
| 21-Aug | 1.8 | Z | 1.3 | 1.7 | 2.0 | 1.5 | 1.2 | 0.9 | 0.9 | 0.8 | 1.1 | 0.6 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 2.0 |
| 22-Aug | 0.9 | 1.1 | Z | 1.3 | 1.1 | 1.1 | 1.1 | 1.0 | 1.5 | 1.7 | 1.3 | 1.5 | 1.6 | 0.9 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 1.1 | 1.2 | 0.9 | 1.2 | 1.1 | 1.7 |
| 23-Aug | 1.4 | 2.7 | 2.8 | Z | 2.1 | 2.5 | 1.5 | 1.9 | 1.3 | 1.9 | 9.0 | 3.5 | 3.9 | 2.4 | 3.9 | 1.7 | 1.0 | 3.1 | 0.9 | 5.6 | 0.6 | 0.8 | 0.9 | 2.3 | 2.5 | 9.0 |
| 24-Aug | 1.1 | 0.7 | 0.4 | 0.6 | Z | 8.6 | 0.6 | 0.7 | 1.4 | C | C | C | C | C | C | 6.9 | 5.9 | 4.2 | 1.1 | 3.2 | 3.9 | 2.4 | 6.0 | 4.9 | -- | 8.6 |
| 25-Aug | 1.5 | Z | 8.1 | 1.3 | 8.3 | 1.5 | 1.5 | 2.2 | 0.9 | 0.6 | 1.9 | 1.5 | 2.7 | 2.3 | 0.7 | 2.2 | 1.0 | 0.9 | 0.2 | 3.3 | 2.0 | 0.8 | 0.8 | 0.5 | 2.0 | 8.3 |
| 26-Aug | 0.7 | 1.1 | Z | 1.4 | 1.4 | 2.5 | 1.5 | 1.6 | 0.7 | 0.5 | 0.9 | 0.9 | 0.5 | 0.6 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 1.7 | 1.3 | 1.0 | 1.6 | 1.4 | 1.1 | 2.5 |
| 27-Aug | 2.0 | 2.1 | 2.1 | Z | 1.9 | 1.4 | 2.1 | 1.8 | 1.6 | 1.2 | 1.9 | 9.5 | 4.0 | 3.2 | 1.0 | 1.5 | 1.0 | 1.0 | 1.5 | 5.4 | 5.1 | 13.3 | 9.7 | 3.0 | 3.4 | 13.3 |
| 28-Aug | 1.7 | 2.5 | 6.8 | 5.3 | Z | 0.9 | 2.6 | 2.0 | 0.7 | 1.3 | 4.5 | 3.4 | 6.7 | 7.9 | 7.8 | 9.6 | 5.6 | 3.6 | 2.4 | 0.8 | 0.8 | 1.0 | 1.5 | 2.3 | 3.5 | 9.6 |
| 29-Aug | 1.5 | 1.7 | 2.3 | 1.7 | 3.7 | Z | 3.6 | 1.6 | 0.9 | 1.0 | 2.8 | 2.5 | 1.9 | 0.7 | 1.6 | 0.5 | 0.6 | 0.6 | 0.8 | 3.4 | 3.4 | 2.3 | 2.9 | 1.4 | 1.9 | 3.7 |
| 30-Aug | Z | 1.2 | 1.7 | 22.5 | 2.4 | 9.1 | 8.5 | 7.5 | 5.0 | 14.2 | 4.2 | 4.2 | 13.1 | 29.3 | 6.1 | 3.6 | 4.4 | 4.5 | 1.0 | 1.6 | 0.5 | 1.3 | 1.1 | 2.0 | 6.5 | 29.3 |
| 31-Aug | 8.2 | Z | 11.1 | 20.2 | 10.6 | 14.2 | 7.1 | 2.8 | 3.0 | 5.4 | 5.6 | 2.7 | 7.7 | 4.2 | 2.2 | 2.6 | 3.0 | 1.3 | 1.0 | 5.3 | 1.6 | 0.5 | 0.5 | 0.4 | 5.3 | 20.2 |
| | 1.4 | 2.7 | 4.2 | 3.3 | 3.8 | 4.3 | 3.8 | 3.4 | 3.1 | 3.5 | 4.3 | 3.3 | 3.0 | 3.9 | 3.5 | 2.8 | 3.4 | 2.4 | 1.6 | 2.4 | 2.5 | 3.7 | 2.5 | 2.1 | Diurnal Average | |
| | 8.2 | 24.8 | 37.0 | 22.5 | 15.6 | 14.2 | 11.9 | 17.1 | 16.1 | 14.2 | 26.4 | 10.7 | 13.1 | 29.3 | 15.3 | 9.6 | 24.6 | 12.6 | 10.1 | 13.1 | 20.7 | 25.5 | 17.0 | 10.9 | Diurnal Maximum | |

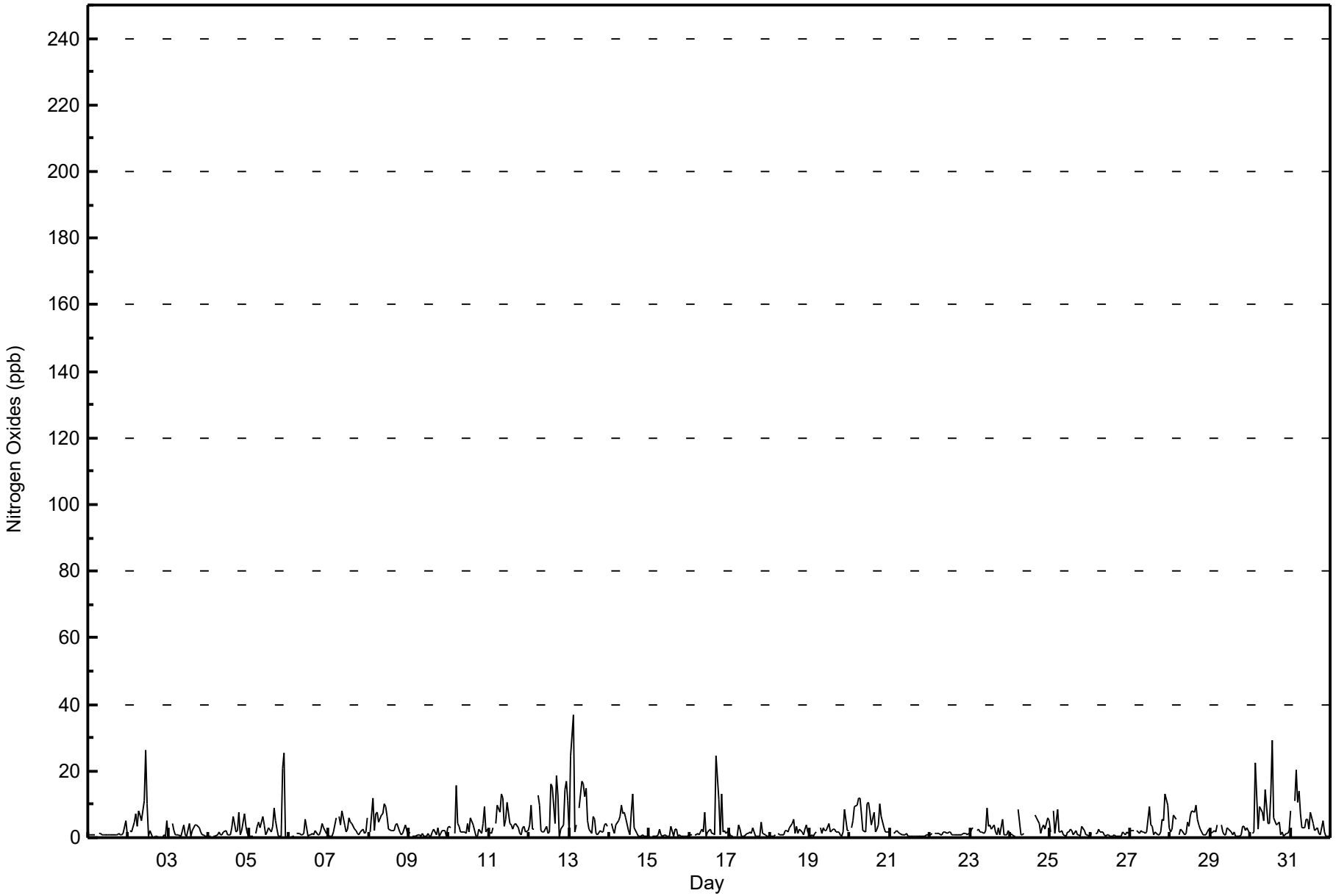
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Blackrod - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Blackrod - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 699 | 98.87 | 98.87 |
| 21 - 40 | 8 | 1.13 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Blackrod - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 29 | 20 | 21 | 13 | 20 | 31 | 68 | 114 | 80 | 35 | 19 | 12 | 29 | 90 | 62 | 55 | 698 |
| 21 - 40 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 8 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 20 | 21 | 13 | 20 | 31 | 68 | 114 | 80 | 35 | 19 | 12 | 30 | 90 | 62 | 57 | 706 |

Total Number of Valid Hours: 706

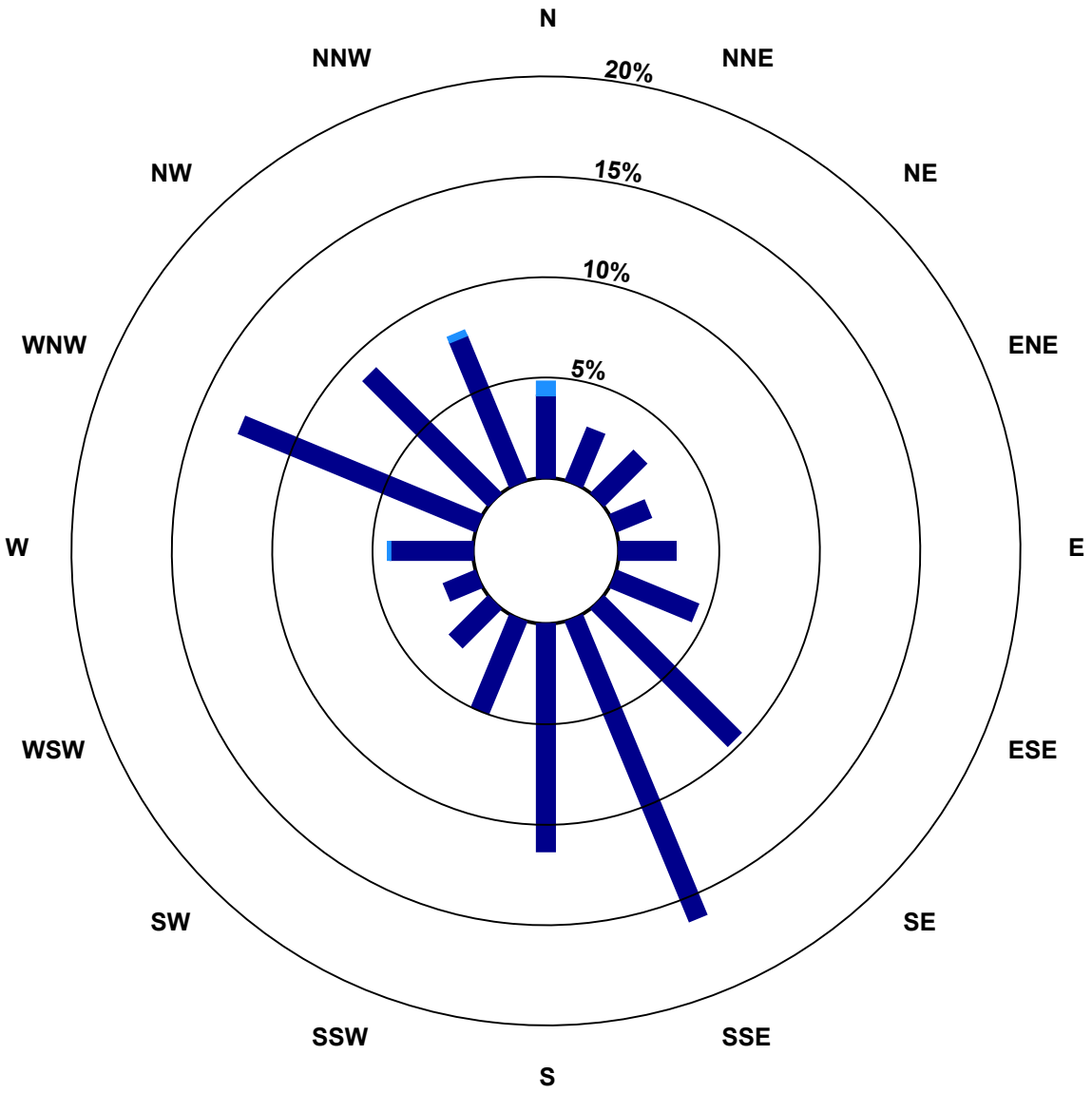
Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Nitrogen Oxides ($NO_X$) - ppb

## Blackrod




Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

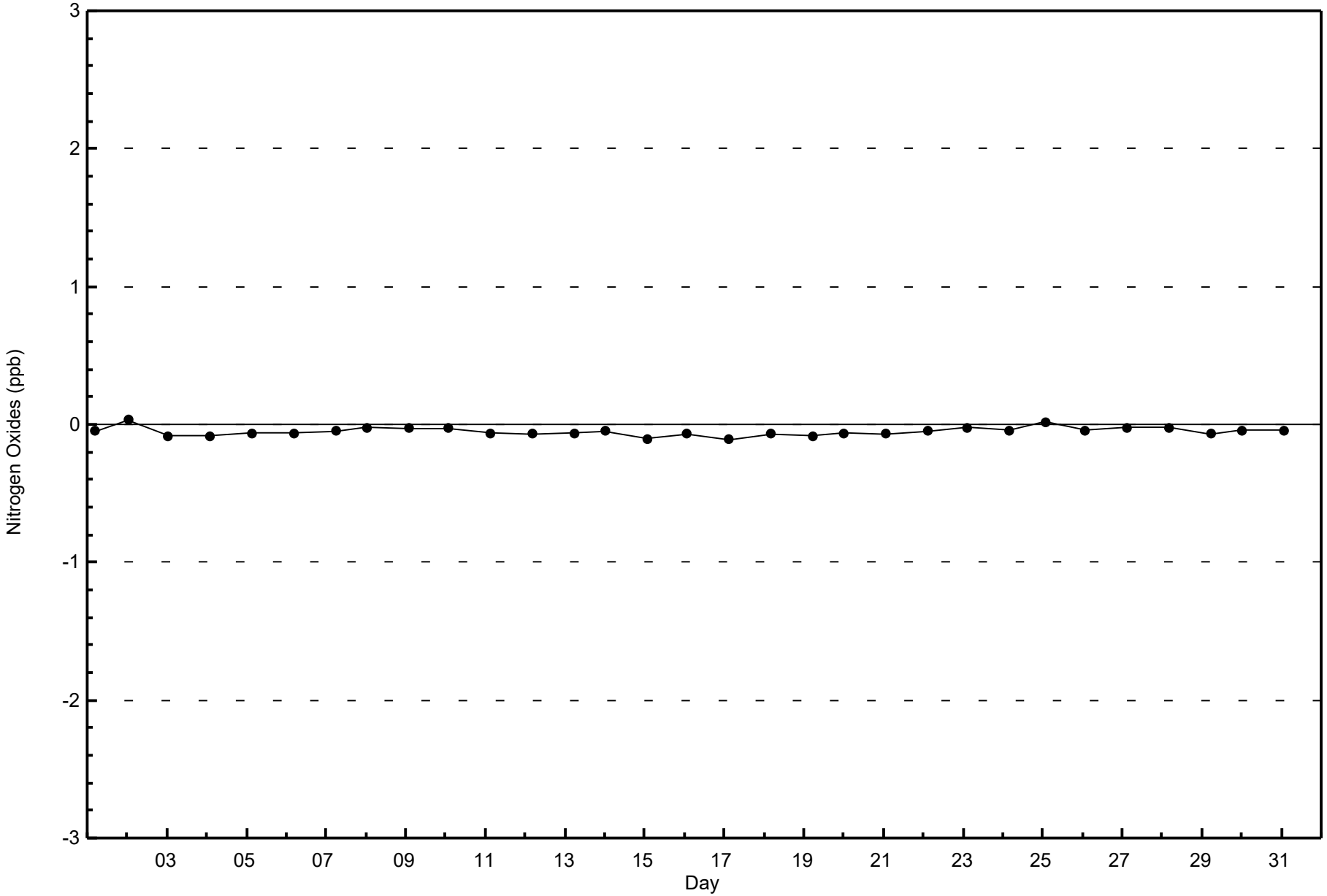
Total Number of Valid Hours: 706

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Blackrod - August 2026**

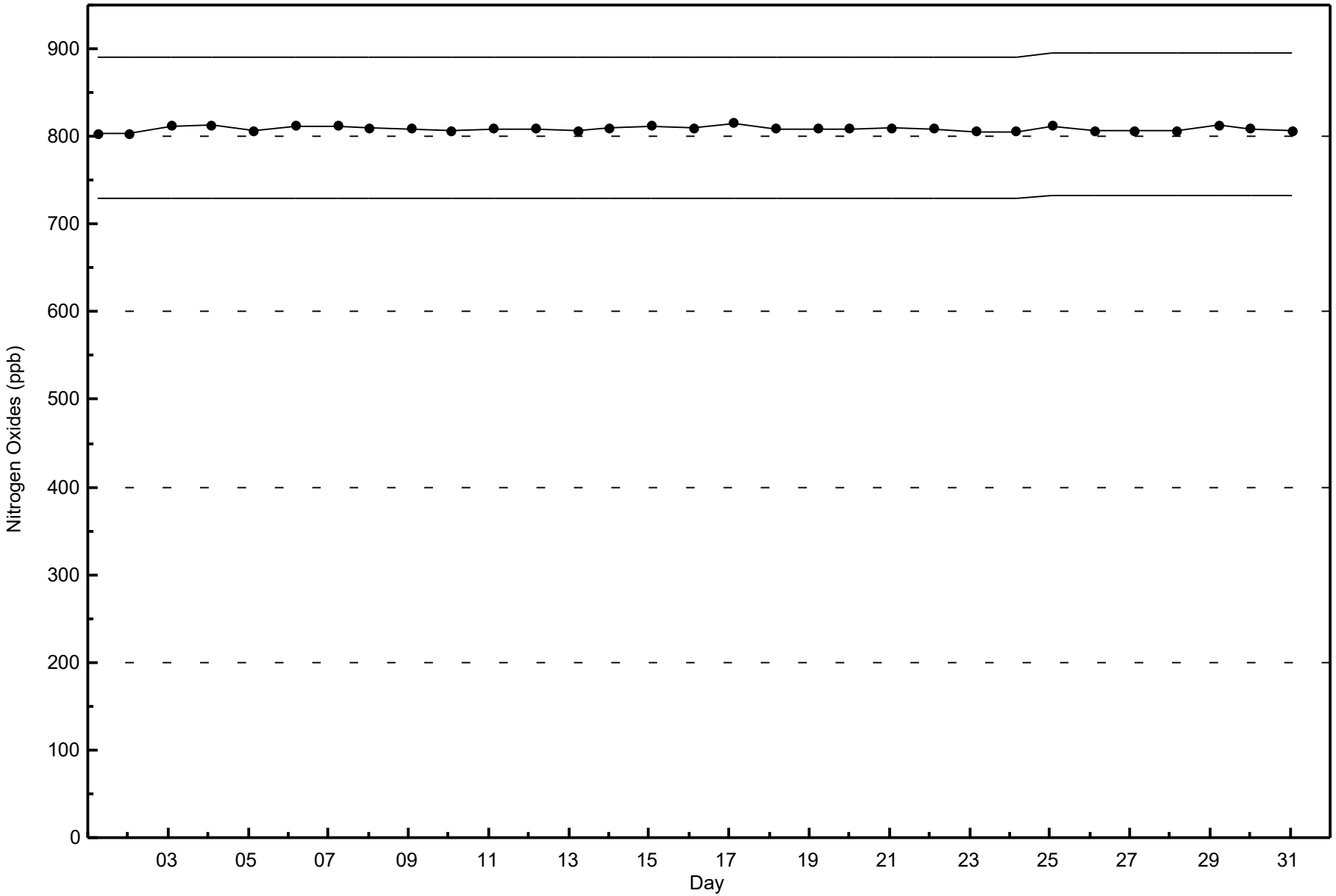


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Blackrod - August 2026**



Maximum Value: 27.5 C on Aug 27 15:00

Maximum Daily Average: 22.2 C on Aug 1

Minimum Value: 6.0 C on Aug 17 06:00

Minimum Daily Average: 11.7 C on Aug 6

Maximum Diurnal Average: 20.6 C at hour 15

Minimum Diurnal Average: 11.9 C at hour 6

Monthly Average: 15.84 C

Percentiles: $P_1$ = 7.3 $P_{10}$ = 10.1 $Q_1$ = 12.5 Median = 15.6 $Q_3$ = 18.8 $P_{90}$ = 22.1 $P_{99}$ = 26.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 16.7 | 17.1 | 18.1 | 18.9 | 18.5 | 18.7 | 19.3 | 19.7 | 21.1 | 22.6 | 24.0 | 25.5 | 26.7 | 27.3 | 27.3 | 26.9 | 27.0 | 26.3 | 25.1 | 24.1 | 23.0 | 21.9 | 19.7 | 18.1 | 22.2 | 27.3 |
| 2-Aug | 17.5 | 17.2 | 16.3 | 16.0 | 15.6 | 15.1 | 14.9 | 14.4 | 13.3 | 12.7 | 12.8 | 12.7 | 12.8 | 12.3 | 11.6 | 11.4 | 11.8 | 13.7 | 13.9 | 13.3 | 11.9 | 10.9 | 10.6 | 9.6 | 13.4 | 17.5 |
| 3-Aug | 9.2 | 8.6 | 7.8 | 7.3 | 6.6 | 6.6 | 8.1 | 9.5 | 11.0 | 12.3 | 13.2 | 14.0 | 15.0 | 16.0 | 16.9 | 18.0 | 18.3 | 19.0 | 18.8 | 18.4 | 14.7 | 10.8 | 9.4 | 8.6 | 12.4 | 19.0 |
| 4-Aug | 8.2 | 8.0 | 8.5 | 10.0 | 10.7 | 11.3 | 11.9 | 12.3 | 12.5 | 14.0 | 15.6 | 16.9 | 18.2 | 20.1 | 21.6 | 20.4 | 19.4 | 18.1 | 14.9 | 15.2 | 14.3 | 14.4 | 13.8 | 13.3 | 14.3 | 21.6 |
| 5-Aug | 13.0 | 13.3 | 13.4 | 13.1 | 12.9 | 12.7 | 12.9 | 13.5 | 14.5 | 15.8 | 16.6 | 17.5 | 17.9 | 18.7 | 18.9 | 18.0 | 17.3 | 16.7 | 16.3 | 15.6 | 11.8 | 9.8 | 9.1 | 8.9 | 14.5 | 18.9 |
| 6-Aug | 8.6 | 8.0 | 8.4 | 8.7 | 8.7 | 8.5 | 8.7 | 9.3 | 10.6 | 11.1 | 11.8 | 12.5 | 13.3 | 13.7 | 13.9 | 13.2 | 14.3 | 15.6 | 15.7 | 15.1 | 13.4 | 12.9 | 12.3 | 11.6 | 11.7 | 15.7 |
| 7-Aug | 9.7 | 10.3 | 10.2 | 8.9 | 7.9 | 7.6 | 10.1 | 11.6 | 13.2 | 14.6 | 15.1 | 16.2 | 17.2 | 17.8 | 18.6 | 18.7 | 18.6 | 18.2 | 17.4 | 14.8 | 13.0 | 13.7 | 13.5 | 12.7 | 13.7 | 18.7 |
| 8-Aug | 11.2 | 9.3 | 10.0 | 9.4 | 7.9 | 8.4 | 9.2 | 10.9 | 12.8 | 13.5 | 15.4 | 16.6 | 17.8 | 18.5 | 18.7 | 18.7 | 19.1 | 18.8 | 18.2 | 16.9 | 14.8 | 14.3 | 15.1 | 14.0 | 14.1 | 19.1 |
| 9-Aug | 14.0 | 15.0 | 14.7 | 14.2 | 13.1 | 13.8 | 14.8 | 15.4 | 15.4 | 16.1 | 17.7 | 18.4 | 18.8 | 19.6 | 21.3 | 20.3 | 20.3 | 19.8 | 18.2 | 16.9 | 15.9 | 15.1 | 14.7 | 14.7 | 16.6 | 21.3 |
| 10-Aug | 15.2 | 14.9 | 14.7 | 14.8 | 14.2 | 13.7 | 14.5 | 15.7 | 17.2 | 18.0 | 18.2 | 17.6 | 17.7 | 18.5 | 19.6 | 18.7 | 16.9 | 16.5 | 15.9 | 15.2 | 14.6 | 14.3 | 13.4 | 12.9 | 16.0 | 19.6 |
| 11-Aug | 13.0 | 13.2 | 13.1 | 11.9 | 11.5 | 11.9 | 12.4 | 13.6 | 15.2 | 16.9 | 18.7 | 19.2 | 20.5 | 20.7 | 19.2 | 18.2 | 16.7 | 17.0 | 16.5 | 16.0 | 12.9 | 12.0 | 10.2 | 10.4 | 15.0 | 20.7 |
| 12-Aug | 12.3 | 12.1 | 12.0 | 11.5 | 11.0 | 10.4 | 10.9 | 11.1 | 11.7 | 12.5 | 13.1 | 12.8 | 13.4 | 13.6 | 12.8 | 14.2 | 11.6 | 12.6 | 12.7 | 12.3 | 12.0 | 11.2 | 10.3 | 10.2 | 12.0 | 14.2 |
| 13-Aug | 10.1 | 10.1 | 10.1 | 9.9 | 9.9 | 9.7 | 9.8 | 10.4 | 10.9 | 12.2 | 12.9 | 14.2 | 14.3 | 11.8 | 14.1 | 15.1 | 14.4 | 15.0 | 13.7 | 12.9 | 11.4 | 11.4 | 11.8 | 12.3 | 12.0 | 15.1 |
| 14-Aug | 11.7 | 11.7 | 10.9 | 10.7 | 10.5 | 10.3 | 10.2 | 11.7 | 12.9 | 14.2 | 16.2 | 18.0 | 18.5 | 18.9 | 18.0 | 18.1 | 14.3 | 16.6 | 16.5 | 14.3 | 11.9 | 10.1 | 9.2 | 9.0 | 13.5 | 18.9 |
| 15-Aug | 8.4 | 7.9 | 7.5 | 7.3 | 7.3 | 8.5 | 10.2 | 13.5 | 15.1 | 17.0 | 18.8 | 19.7 | 20.4 | 17.9 | 20.7 | 19.9 | 21.4 | 19.5 | 20.0 | 18.0 | 14.9 | 15.0 | 15.2 | 14.5 | 14.9 | 21.4 |
| 16-Aug | 13.4 | 12.4 | 12.4 | 11.9 | 11.5 | 11.8 | 13.1 | 14.5 | 14.7 | 14.3 | 13.3 | 13.0 | 13.3 | 14.2 | 15.0 | 15.7 | 16.1 | 16.3 | 15.7 | 14.2 | 9.8 | 8.2 | 7.7 | 7.5 | 12.9 | 16.3 |
| 17-Aug | 7.6 | 6.9 | 6.3 | 6.3 | 6.2 | 6.0 | 8.2 | 10.7 | 13.4 | 16.0 | 17.7 | 18.4 | 19.1 | 19.8 | 20.4 | 20.5 | 20.7 | 20.6 | 19.6 | 17.2 | 15.6 | 15.6 | 15.4 | 15.2 | 14.3 | 20.7 |
| 18-Aug | 15.1 | 14.4 | 14.2 | 14.2 | 14.2 | 13.5 | 13.7 | 15.7 | 17.4 | 19.6 | 20.6 | 22.0 | 23.3 | 24.2 | 23.7 | 22.6 | 22.2 | 21.7 | 22.0 | 19.5 | 15.4 | 14.4 | 13.5 | 13.3 | 17.9 | 24.2 |
| 19-Aug | 13.3 | 12.7 | 12.7 | 13.3 | 13.1 | 13.3 | 13.7 | 14.4 | 16.2 | 17.4 | 18.0 | 19.5 | 22.0 | 22.7 | 23.0 | 23.4 | 22.9 | 22.3 | 21.0 | 20.1 | 16.8 | 14.4 | 12.8 | 12.1 | 17.1 | 23.4 |
| 20-Aug | 12.3 | 12.4 | 11.2 | 10.3 | 10.0 | 10.7 | 12.1 | 16.6 | 16.4 | 16.6 | 18.8 | 20.6 | 21.2 | 21.6 | 22.1 | 17.6 | 21.1 | 20.2 | 17.8 | 16.0 | 12.8 | 11.8 | 11.3 | 10.8 | 15.5 | 22.1 |
| 21-Aug | 10.2 | 10.0 | 10.3 | 12.6 | 14.7 | 14.9 | 15.2 | 15.9 | 17.5 | 19.1 | 20.3 | 21.3 | 22.3 | 23.3 | 23.7 | 23.0 | 23.0 | 23.2 | 22.3 | 20.6 | 19.5 | 19.2 | 18.8 | 18.3 | 18.3 | 23.7 |
| 22-Aug | 17.7 | 17.5 | 17.1 | 16.5 | 15.9 | 15.4 | 15.1 | 15.9 | 17.4 | 18.9 | 20.5 | 21.9 | 23.3 | 25.3 | 25.8 | 25.1 | 23.7 | 22.5 | 21.3 | 19.7 | 18.9 | 18.5 | 18.0 | 18.1 | 19.6 | 25.8 |
| 23-Aug | 17.5 | 17.6 | 17.8 | 16.8 | 15.0 | 14.7 | 16.0 | 17.0 | 17.7 | 17.4 | 19.5 | 20.2 | 21.9 | 22.2 | 22.2 | 21.5 | 20.9 | 20.1 | 18.9 | 17.8 | 17.2 | 16.5 | 16.2 | 16.2 | 18.3 | 22.2 |
| 24-Aug | 16.1 | 16.1 | 16.1 | 16.0 | 15.8 | 15.8 | 15.3 | 15.8 | 16.8 | 18.7 | 20.7 | 22.1 | 22.9 | DF | 23.6 | M | 23.7 | 23.8 | 23.3 | 20.3 | 15.1 | 13.2 | 12.2 | 11.6 | 18.0 | 23.8 |
| 25-Aug | 11.0 | 10.6 | 10.0 | 9.4 | 9.2 | 9.0 | 10.0 | 14.8 | 19.6 | 21.3 | 23.3 | 24.4 | 24.9 | 25.8 | 26.6 | 26.7 | 25.9 | 24.5 | 24.1 | 19.4 | 16.4 | 16.4 | 17.7 | 17.7 | 18.3 | 26.7 |
| 26-Aug | 18.1 | 17.3 | 17.3 | 17.3 | 17.1 | 16.8 | 17.2 | 18.3 | 19.8 | 21.8 | 23.6 | 25.5 | 26.4 | 26.9 | 27.2 | 26.9 | 26.9 | 26.0 | 24.1 | 23.2 | 22.5 | 22.1 | 21.5 | 20.3 | 21.8 | 27.2 |
| 27-Aug | 19.5 | 19.1 | 18.7 | 18.2 | 17.6 | 17.2 | 17.2 | 18.1 | 18.6 | 18.5 | 17.0 | 20.8 | 22.6 | 25.5 | 27.5 | 27.2 | 25.5 | 23.6 | 22.6 | 19.8 | 17.3 | 16.9 | 16.8 | 18.4 | 20.2 | 27.5 |
| 28-Aug | 18.0 | 16.9 | 14.9 | 13.8 | 12.4 | 12.5 | 12.7 | 13.8 | 15.4 | 16.8 | 17.5 | 18.2 | 18.6 | 19.7 | 20.1 | 20.3 | 19.3 | 18.6 | 18.0 | 16.1 | 14.9 | 13.7 | 11.7 | 10.5 | 16.0 | 20.3 |
| 29-Aug | 10.0 | 9.1 | 9.2 | 8.7 | 8.2 | 7.6 | 7.4 | 9.8 | 11.8 | 14.2 | 16.2 | 18.1 | 19.7 | 20.5 | 21.1 | 21.1 | 20.9 | 20.5 | 19.1 | 16.8 | 16.1 | 16.1 | 15.8 | 15.3 | 14.7 | 21.1 |
| 30-Aug | 14.6 | 14.7 | 14.9 | 12.0 | 10.7 | 10.3 | 10.3 | 12.8 | 15.1 | 16.7 | 18.7 | 20.1 | 21.3 | 21.5 | 22.2 | 22.5 | 22.6 | 21.9 | 20.4 | 19.1 | 17.3 | 16.4 | 15.6 | 14.5 | 16.9 | 22.6 |
| 31-Aug | 13.3 | 11.1 | 10.8 | 10.1 | 10.4 | 10.9 | 11.8 | 13.1 | 14.6 | 16.2 | 17.3 | 18.4 | 19.4 | 19.8 | 20.1 | 20.3 | 20.8 | 20.8 | 20.3 | 14.7 | 11.6 | 10.7 | 10.3 | 11.4 | 14.9 | 20.8 |
| | 13.1 | 12.8 | 12.6 | 12.3 | 11.9 | 11.9 | 12.5 | 13.9 | 15.2 | 16.4 | 17.5 | 18.6 | 19.5 | 19.9 | 20.6 | 20.1 | 19.9 | 19.7 | 18.9 | 17.2 | 15.1 | 14.3 | 13.7 | 13.3 | Diurnal Average | |
| | 19.5 | 19.1 | 18.7 | 18.9 | 18.5 | 18.7 | 19.3 | 19.7 | 21.1 | 22.6 | 24.0 | 25.5 | 26.7 | 27.3 | 27.5 | 27.2 | 27.0 | 26.3 | 25.1 | 24.1 | 23.0 | 22.1 | 21.5 | 20.3 | Diurnal Maximum | |

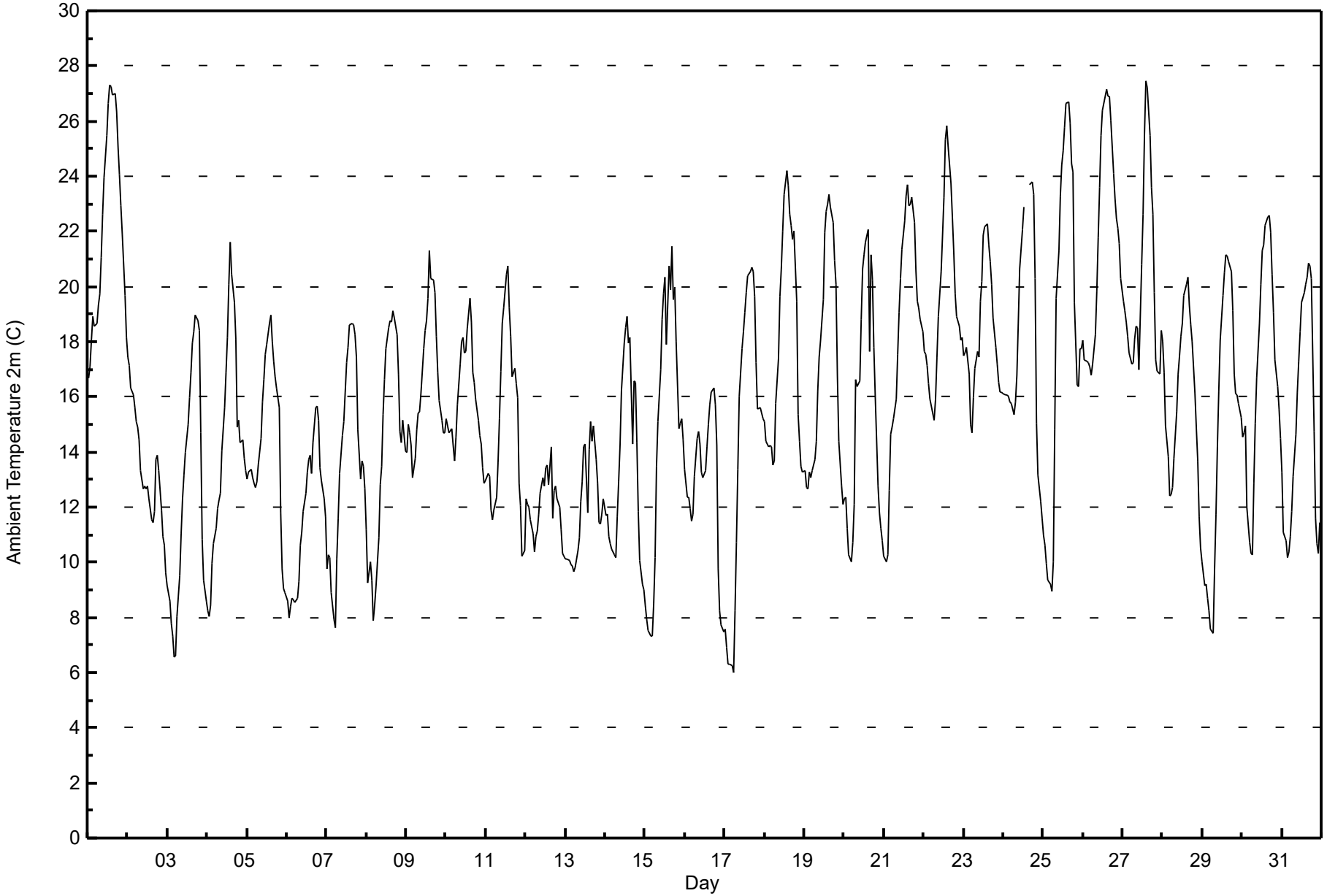
M - Maintenance DF - DAS Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Blackrod - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 70 | 9.43 | 9.43 |
| 10 - 20 | 533 | 71.83 | 81.27 |
| > 20 | 139 | 18.73 | 100.00 |

Total Number of Valid Hours: 742

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Blackrod - August 2026

Maximum Value: 99.1 % on Aug 8 06:00

Maximum Daily Average: 92.1 % on Aug 12

Minimum Value: 31.8 % on Aug 24 12:00

Minimum Daily Average: 53.7 % on Aug 26

Maximum Diurnal Average: 88.1 % at hour 5

Minimum Diurnal Average: 53.7 % at hour 15

Monthly Average: 74.02 %

Percentiles: $P_1$ = 36.7 $P_{10}$ = 48.1 $Q_1$ = 60.7 Median = 76.8 $Q_3$ = 89.3 $P_{90}$ = 95.1 $P_{99}$ = 98.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 89.1 | 88.8 | 85.5 | 81.2 | 81.7 | 79.6 | 77.1 | 79.6 | 76.6 | 70.3 | 62.7 | 54.2 | 47.7 | 47.7 | 50.3 | 56.0 | 58.2 | 61.7 | 66.9 | 67.0 | 69.3 | 65.5 | 77.0 | 83.0 | 69.9 | 89.1 |
| 2-Aug | 77.3 | 73.8 | 72.7 | 72.2 | 74.9 | 74.8 | 76.2 | 78.1 | 85.6 | 91.2 | 93.8 | 96.7 | 95.7 | 91.2 | 88.8 | 92.1 | 90.5 | 80.0 | 76.0 | 64.2 | 69.5 | 73.0 | 72.6 | 78.3 | 80.8 | 96.7 |
| 3-Aug | 79.8 | 79.6 | 83.6 | 84.4 | 87.1 | 86.7 | 81.8 | 76.7 | 67.8 | 61.0 | 56.3 | 52.5 | 49.5 | 47.7 | 45.4 | 43.3 | 44.2 | 43.3 | 44.2 | 46.8 | 68.5 | 88.0 | 91.4 | 92.9 | 66.8 | 92.9 |
| 4-Aug | 93.1 | 94.5 | 92.9 | 83.4 | 79.9 | 79.0 | 82.5 | 88.4 | 90.4 | 87.6 | 81.0 | 76.5 | 69.8 | 65.9 | 59.3 | 59.8 | 69.8 | 72.7 | 87.8 | 82.4 | 86.2 | 86.4 | 88.9 | 91.7 | 81.2 | 94.5 |
| 5-Aug | 95.0 | 94.7 | 93.9 | 95.1 | 95.0 | 94.9 | 94.2 | 92.8 | 89.0 | 79.2 | 71.3 | 67.0 | 65.8 | 60.8 | 61.3 | 69.0 | 76.8 | 77.5 | 82.3 | 85.7 | 90.6 | 94.1 | 97.0 | 95.5 | 84.1 | 97.0 |
| 6-Aug | 95.1 | 95.0 | 93.4 | 94.1 | 94.2 | 92.5 | 91.2 | 88.3 | 81.7 | 81.1 | 78.0 | 74.1 | 72.8 | 70.9 | 71.5 | 79.2 | 73.5 | 65.4 | 65.9 | 68.7 | 84.1 | 84.0 | 85.9 | 88.1 | 82.0 | 95.1 |
| 7-Aug | 95.1 | 93.4 | 92.3 | 95.2 | 96.4 | 96.8 | 89.0 | 82.0 | 77.2 | 70.6 | 66.7 | 58.9 | 50.4 | 49.5 | 46.7 | 47.5 | 48.5 | 51.7 | 58.5 | 81.3 | 90.8 | 84.1 | 86.8 | 91.1 | 75.0 | 96.8 |
| 8-Aug | 94.4 | 97.5 | 98.6 | 98.6 | 98.7 | 99.1 | 99.0 | 96.6 | 90.0 | 87.0 | 70.3 | 61.9 | 57.8 | 55.0 | 54.6 | 54.9 | 54.1 | 55.5 | 59.7 | 71.6 | 79.4 | 77.9 | 68.2 | 79.9 | 77.5 | 99.1 |
| 9-Aug | 78.5 | 67.8 | 69.6 | 71.5 | 79.3 | 76.5 | 76.5 | 78.0 | 76.8 | 77.5 | 66.8 | 65.3 | 62.7 | 60.8 | 51.3 | 54.7 | 54.4 | 57.5 | 69.7 | 77.8 | 84.9 | 84.9 | 83.8 | 84.8 | 71.3 | 84.9 |
| 10-Aug | 76.9 | 78.9 | 83.1 | 82.2 | 84.8 | 89.5 | 86.9 | 83.4 | 73.7 | 66.3 | 64.6 | 72.0 | 73.1 | 67.2 | 58.1 | 67.2 | 68.7 | 73.7 | 80.6 | 88.4 | 88.3 | 87.2 | 92.6 | 93.3 | 78.4 | 93.3 |
| 11-Aug | 91.7 | 87.8 | 85.2 | 90.8 | 93.2 | 93.6 | 93.0 | 87.1 | 77.8 | 68.3 | 48.6 | 43.1 | 41.6 | 40.9 | 47.8 | 56.1 | 66.2 | 66.9 | 70.4 | 69.2 | 85.0 | 87.5 | 92.7 | 93.6 | 74.1 | 93.6 |
| 12-Aug | 88.9 | 94.9 | 96.3 | 95.7 | 95.9 | 98.2 | 97.8 | 96.7 | 91.9 | 89.8 | 88.0 | 89.1 | 85.2 | 83.2 | 86.8 | 78.5 | 93.4 | 89.9 | 90.0 | 93.9 | 95.5 | 95.5 | 97.5 | 98.3 | 92.1 | 98.3 |
| 13-Aug | 98.2 | 98.1 | 97.7 | 97.6 | 97.7 | 98.4 | 98.8 | 97.4 | 94.9 | 91.2 | 87.0 | 80.6 | 84.7 | 89.0 | 78.0 | 75.8 | 78.9 | 71.2 | 79.2 | 86.5 | 95.6 | 94.9 | 90.8 | 85.2 | 89.5 | 98.8 |
| 14-Aug | 88.5 | 87.0 | 93.7 | 94.8 | 93.3 | 93.8 | 93.8 | 88.1 | 83.9 | 82.2 | 68.8 | 55.3 | 52.7 | 50.7 | 56.7 | 58.4 | 86.2 | 70.9 | 76.5 | 90.8 | 96.3 | 97.3 | 97.9 | 98.0 | 81.5 | 98.0 |
| 15-Aug | 98.3 | 98.5 | 98.7 | 98.7 | 98.8 | 98.2 | 95.9 | 85.5 | 79.8 | 69.3 | 54.7 | 53.4 | 50.0 | 67.9 | 50.4 | 50.1 | 41.9 | 59.5 | 61.0 | 63.9 | 78.2 | 71.4 | 71.9 | 76.9 | 73.9 | 98.8 |
| 16-Aug | 82.3 | 84.3 | 85.0 | 86.5 | 88.6 | 85.5 | 80.0 | 76.0 | 78.1 | 82.8 | 91.0 | 94.7 | 93.4 | 87.6 | 83.1 | 75.6 | 67.7 | 58.3 | 58.6 | 72.4 | 92.6 | 94.9 | 95.8 | 96.3 | 83.0 | 96.3 |
| 17-Aug | 95.1 | 95.9 | 96.8 | 97.6 | 97.5 | 98.2 | 95.4 | 87.3 | 78.7 | 67.4 | 53.1 | 50.0 | 43.5 | 41.4 | 40.4 | 41.0 | 40.6 | 40.9 | 49.3 | 65.0 | 69.0 | 66.4 | 68.0 | 69.0 | 68.6 | 98.2 |
| 18-Aug | 72.0 | 78.8 | 82.7 | 83.5 | 83.8 | 87.2 | 87.7 | 79.6 | 73.4 | 59.2 | 53.4 | 52.1 | 46.6 | 37.5 | 38.6 | 44.7 | 48.2 | 53.1 | 50.6 | 64.4 | 83.4 | 86.3 | 89.5 | 90.1 | 67.8 | 90.1 |
| 19-Aug | 88.9 | 91.2 | 90.9 | 88.5 | 90.5 | 88.7 | 87.9 | 85.9 | 77.8 | 72.1 | 64.9 | 57.3 | 46.9 | 46.1 | 46.3 | 45.6 | 48.2 | 51.9 | 56.4 | 57.9 | 73.6 | 84.7 | 89.8 | 91.2 | 71.8 | 91.2 |
| 20-Aug | 91.6 | 92.3 | 94.2 | 95.2 | 95.4 | 94.2 | 91.5 | 69.2 | 65.2 | 66.4 | 60.4 | 53.4 | 52.6 | 46.7 | 46.6 | 74.4 | 54.5 | 56.5 | 79.2 | 89.7 | 94.9 | 95.4 | 96.9 | 97.4 | 77.2 | 97.4 |
| 21-Aug | 97.0 | 97.1 | 95.7 | 85.2 | 73.2 | 72.4 | 72.8 | 73.3 | 69.5 | 60.6 | 54.2 | 49.7 | 47.2 | 45.6 | 45.0 | 48.9 | 50.2 | 49.2 | 52.9 | 59.2 | 64.6 | 64.5 | 64.7 | 66.0 | 64.9 | 97.1 |
| 22-Aug | 68.3 | 66.4 | 65.3 | 66.7 | 68.5 | 70.5 | 73.6 | 73.8 | 71.4 | 68.2 | 65.7 | 63.2 | 60.6 | 55.4 | 52.1 | 54.0 | 60.0 | 65.4 | 70.4 | 75.5 | 79.3 | 81.3 | 84.9 | 85.7 | 68.6 | 85.7 |
| 23-Aug | 89.0 | 89.7 | 90.8 | 93.1 | 96.8 | 97.0 | 95.7 | 93.9 | 92.1 | 91.9 | 84.9 | 80.8 | 66.8 | 66.9 | 67.8 | 64.8 | 66.2 | 71.6 | 76.6 | 79.9 | 85.7 | 90.3 | 91.7 | 93.1 | 84.0 | 97.0 |
| 24-Aug | 94.7 | 93.9 | 90.1 | 88.4 | 84.2 | 75.6 | 75.0 | 71.6 | 64.9 | 49.9 | 37.5 | 31.8 | 32.1 | DF | 32.4 | M | 36.7 | 36.5 | 37.2 | 52.3 | 77.9 | 85.1 | 88.4 | 90.4 | 64.8 | 94.7 |
| 25-Aug | 93.0 | 94.6 | 94.7 | 95.7 | 96.5 | 96.6 | 93.0 | 77.4 | 60.8 | 50.2 | 46.0 | 44.4 | 41.2 | 36.8 | 33.5 | 32.8 | 35.9 | 44.0 | 43.9 | 69.8 | 80.7 | 77.2 | 68.5 | 69.4 | 65.7 | 96.6 |
| 26-Aug | 67.4 | 69.4 | 68.7 | 66.9 | 66.5 | 67.1 | 64.2 | 62.2 | 58.7 | 53.4 | 48.2 | 41.7 | 37.9 | 37.5 | 38.0 | 39.4 | 40.5 | 42.7 | 49.5 | 52.1 | 53.5 | 52.4 | 53.2 | 58.2 | 53.7 | 69.4 |
| 27-Aug | 61.5 | 62.8 | 63.5 | 64.1 | 64.9 | 64.5 | 62.0 | 58.2 | 57.6 | 60.6 | 71.5 | 58.9 | 56.6 | 52.1 | 46.0 | 41.9 | 46.8 | 57.1 | 64.3 | 78.5 | 88.0 | 88.9 | 89.3 | 79.7 | 64.1 | 89.3 |
| 28-Aug | 63.3 | 68.8 | 85.0 | 90.4 | 96.8 | 97.0 | 95.8 | 90.4 | 83.7 | 71.8 | 66.5 | 61.7 | 59.3 | 55.7 | 51.9 | 48.0 | 53.7 | 58.5 | 59.0 | 66.2 | 71.8 | 79.5 | 89.3 | 91.6 | 73.2 | 97.0 |
| 29-Aug | 91.7 | 93.0 | 93.6 | 93.2 | 93.7 | 95.3 | 95.5 | 88.8 | 81.1 | 66.6 | 60.9 | 57.5 | 51.4 | 48.2 | 45.2 | 48.1 | 50.3 | 52.3 | 61.1 | 73.1 | 76.7 | 77.0 | 77.2 | 73.5 | 72.7 | 95.5 |
| 30-Aug | 69.9 | 73.5 | 75.2 | 85.9 | 93.3 | 94.4 | 94.7 | 86.2 | 78.8 | 72.7 | 64.6 | 55.1 | 50.0 | 48.8 | 44.6 | 41.0 | 41.1 | 43.1 | 49.9 | 55.4 | 61.6 | 66.7 | 70.2 | 74.6 | 66.3 | 94.7 |
| 31-Aug | 79.8 | 88.4 | 88.7 | 90.5 | 89.5 | 88.3 | 86.0 | 81.1 | 73.1 | 63.1 | 58.7 | 52.6 | 45.9 | 43.5 | 45.1 | 45.1 | 42.4 | 41.1 | 44.8 | 72.5 | 82.8 | 85.8 | 87.9 | 82.5 | 69.1 | 90.5 |
| | 85.3 | 86.1 | 87.0 | 87.3 | 88.1 | 87.9 | 86.6 | 82.4 | 77.5 | 71.9 | 65.8 | 61.5 | 57.8 | 56.6 | 53.7 | 56.3 | 57.7 | 58.7 | 63.6 | 71.7 | 80.6 | 82.2 | 83.9 | 85.1 | Diurnal Average | |
| | 98.3 | 98.5 | 98.7 | 98.7 | 98.8 | 99.1 | 99.0 | 97.4 | 94.9 | 91.9 | 93.8 | 96.7 | 95.7 | 91.2 | 88.8 | 92.1 | 93.4 | 89.9 | 90.0 | 93.9 | 96.3 | 97.3 | 97.9 | 98.3 | Diurnal Maximum | |

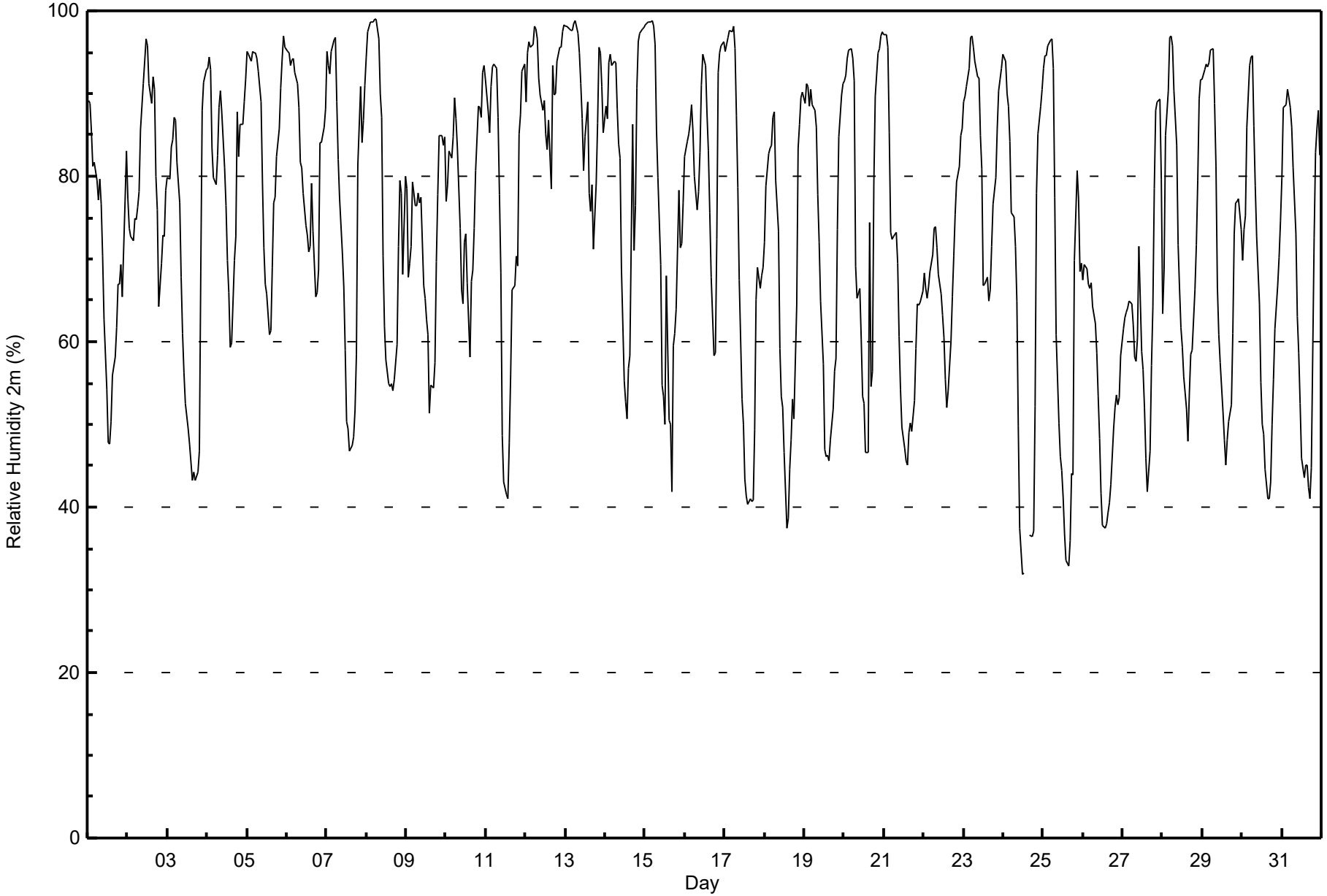
M - Maintenance DF - DAS Failure

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Blackrod - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 17 | 2.29 | 2.29 |
| 40 - 60 | 164 | 22.10 | 24.39 |
| 60 - 80 | 244 | 32.88 | 57.28 |
| 80 - 100 | 317 | 42.72 | 100.00 |

Total Number of Valid Hours: 742

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Blackrod - August 2026

Maximum Speed: 28 km/h on Aug 5 21:00

Maximum Daily Speed Average: 16.2 km/h on Aug 22

Minimum Speed Value: 1 km/h on Aug 11 21:00

Minimum Daily Speed Average: 1.6 km/h on Aug 10

Maximum Diurnal Speed Average: 5.3 km/h at hour 15

Minimum Diurnal Speed Average: 0.7 km/h at hour 21

Monthly Average Velocity: 2.1 km/h 223.5 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 5 Median = 8 $Q_3$ = 13 $P_{90}$ = 16 $P_{99}$ = 21

Hours in Service: 744

Hours of Data: 739

Hours of Missing Data: 5

Percent Operational Time: 100.0

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSE5 | SE7 | SE8 | SE10 | SE11 | SE15 | SSE16 | SSE16 | SSE17 | SSE18 | SE21 | SE21 | SE24 | SSE24 | S23 | SSE19 | S16 | S11 | SSW6 | WNW15 | WNW16 | WNW14 | WNW9 | WNW11 | SSE9.8 | SE24 |
| 2-Aug | WNW9 | WNW4 | WSW10 | W16 | W17 | WNW16 | W16 | W17 | WNW17 | W15 | W13 | WNW15 | NNW21 | NNW21 | NNW18 | NW19 | NW17 | NW16 | NW15 | NNW18 | NNW12 | NNW9 | NNW9 | NNW8 | NW13.0 | NNW21 |
| 3-Aug | NNW8 | NNW9 | NNW7 | NW6 | NNW6 | NNW8 | NW11 | NW12 | NW14 | NW14 | NW15 | NNW15 | NW15 | NW16 | NNW16 | NW14 | WNW12 | WNW13 | WNW11 | WNW12 | SSW2 | E2 | ESE2 | SSE2 | NW9.2 | NNW16 |
| 4-Aug | ESE2 | ESE1 | SSE3 | SSE9 | SE8 | SSE9 | SSE8 | S10 | SSE10 | S4 | SW4 | S8 | SSW9 | S12 | SW10 | WSW12 | NW8 | NW17 | N6 | WNW13 | W7 | W10 | WSW8 | WNW10 | SW4.1 | NW17 |
| 5-Aug | W9 | WNW9 | WNW10 | W10 | WNW11 | W11 | WNW13 | WNW13 | WNW14 | NW16 | NW15 | WNW17 | WNW14 | NW14 | WNW13 | WNW13 | W7 | SW4 | SSE8 | S12 | N28 | N14 | NNW15 | NW15 | WNW10.0 | N28 |
| 6-Aug | WNW13 | WNW12 | WNW15 | WNW15 | WNW15 | NW16 | NW13 | NW15 | WNW17 | WNW17 | NW16 | WNW15 | WNW15 | WNW14 | WNW11 | WNW12 | W14 | W15 | W15 | NW9 | NNW6 | W5 | W7 | W6 | WNW12.6 | WNW17 |
| 7-Aug | SE4 | SE3 | SE3 | SE3 | ESE3 | E1 | WNW4 | WNW8 | WNW8 | WNW10 | WNW10 | WNW10 | W11 | WNW11 | WNW13 | NW11 | WNW11 | WNW10 | W10 | SW6 | S1 | WNW3 | WSW4 | N4 | WNW5.1 | WNW13 |
| 8-Aug | NNE3 | SE3 | NNE4 | ESE1 | E1 | NNE3 | NW1 | N5 | NNW4 | N5 | NNW7 | NNW7 | NW6 | N5 | N5 | N6 | NNE7 | NE6 | NE6 | ESE3 | E4 | E6 | E5 | SE3 | NNE3.0 | NNW7 |
| 9-Aug | SE5 | SE8 | SE8 | SE8 | SSE8 | SSE8 | SSE6 | SSE7 | SSW6 | SSW6 | S7 | SSW8 | S6 | S8 | ESE3 | ENE5 | E5 | NE6 | SE2 | SSE3 | ENE2 | SE5 | SE5 | SE5 | SSE4.7 | SE8 |
| 10-Aug | E5 | SE5 | E5 | SE6 | NNW4 | ESE3 | SW2 | SSW3 | S5 | S9 | S7 | W6 | NW5 | NNE6 | ENE4 | NE5 | S11 | S5 | ESE2 | ESE2 | NE2 | NE3 | ESE1 | NE4 | SE1.6 | S11 |
| 11-Aug | NNE5 | NE7 | NE4 | N4 | N2 | N1 | NNE3 | NNW5 | N5 | NW6 | N8 | NNW9 | NNW5 | NNW5 | WNW11 | W9 | NNE12 | ENE4 | WNW6 | WNW4 | NE1 | ENE3 | ESE2 | ESE2 | N3.5 | NNE12 |
| 12-Aug | NW5 | NE2 | NNE4 | N5 | NNW3 | E1 | NNE5 | N4 | N1 | NW7 | WNW8 | W12 | W10 | WNW12 | N8 | NNW8 | N9 | NNW10 | NW9 | NNW7 | NNW6 | N6 | N5 | NNW7 | NNW5.4 | WNW12 |
| 13-Aug | NNW7 | NNW5 | N7 | NE7 | NNE6 | NW8 | NNW8 | N9 | NNW9 | NNW11 | NNW13 | NNE10 | NE7 | NNE4 | NNW2 | NNE12 | NE11 | NE8 | NE6 | ENE4 | ENE2 | ENE4 | ENE6 | ENE7 | NNE6.0 | NNW13 |
| 14-Aug | NE6 | ENE6 | NNE3 | N3 | NE6 | NE6 | N3 | NNE3 | NNE4 | N4 | NNE5 | NE6 | E5 | NNE3 | N6 | N3 | SSE7 | ESE4 | S5 | SSE5 | ESE2 | SE2 | SE3 | SE5 | ENE2.5 | SSE7 |
| 15-Aug | SE5 | ESE1 | ESE3 | ESE2 | SE5 | SSE7 | SSE6 | SSE9 | S10 | S9 | S9 | S10 | SSW11 | SE4 | SW5 | W8 | W7 | SSE5 | SSE3 | S7 | SSE8 | SSE10 | SSE9 | SSE9 | S5.4 | SSW11 |
| 16-Aug | SSE8 | SSE9 | SSE10 | SSE9 | SE10 | SSE10 | S9 | SSW5 | NW10 | NW12 | NW11 | NW9 | WNW13 | WNW13 | WNW12 | NW13 | NNW13 | NNW10 | NNW7 | NNE3 | SE2 | ESE3 | SE2 | ESE2 | WNW2.2 | NW13 |
| 17-Aug | SSE2 | SSE3 | SSE3 | SE2 | S3 | SE4 | SSE7 | SSE9 | S6 | SSE6 | SSW6 | SSW6 | SW6 | S7 | SSW9 | S10 | S11 | S9 | SSE8 | SSE7 | SE10 | SSE13 | SSE16 | SSE17 | SSE6.9 | SSE17 |
| 18-Aug | ESE16 | SE15 | SE14 | SE15 | SE15 | SE14 | SSE10 | S9 | S9 | WSW3 | W7 | SSW6 | SSW10 | SW13 | SW16 | SSW13 | SW12 | W8 | WSW11 | WSW3 | ESE2 | SE5 | SE4 | SE4 | S6.9 | ESE16 |
| 19-Aug | SE3 | ESE3 | SSE4 | SSE6 | SSE3 | SSE7 | SSE5 | S9 | WSW6 | WNW9 | WNW10 | W10 | WNW15 | WNW17 | WNW18 | WNW16 | WNW15 | WNW11 | WNW10 | NW5 | SW2 | E1 | ESE2 | SE2 | W4.5 | WNW18 |
| 20-Aug | E2 | SE2 | E2 | E2 | E2 | E2 | SE2 | W1 | WNW5 | NW4 | N7 | N8 | NNW9 | WNW10 | NNW12 | WSW2 | WNW8 | NW8 | E1 | ESE2 | SE2 | ESE2 | ESE2 | E2 | NNW2.0 | NNW12 |
| 21-Aug | SE3 | SSE2 | S3 | SE7 | SE11 | SSE12 | SSE12 | SSE13 | SSE12 | S16 | S15 | S17 | S15 | S13 | S13 | S12 | S13 | S15 | SSE11 | SSE11 | SSE14 | SSE16 | SSE18 | SSE17 | SSE11.9 | SSE18 |
| 22-Aug | SSE17 | SSE19 | SE21 | SE20 | SE19 | SSE21 | SSE20 | SSE17 | S16 | S15 | S13 | SSE12 | SSE11 | SSE11 | S19 | S20 | SSE18 | SSE16 | S13 | S15 | S16 | S16 | SSE16 | SSE15 | SSE16.2 | SE21 |
| 23-Aug | SSE13 | SSE11 | SSE10 | SE5 | S4 | SSE4 | S8 | SSE9 | S9 | SSE8 | NE3 | NW8 | NW7 | W8 | WNW10 | NW12 | NW16 | NNW13 | NW9 | NNW8 | NW6 | WNW7 | W7 | WNW5 | W2.7 | NW16 |
| 24-Aug | WNW7 | NW9 | NNW8 | NNW8 | NW7 | NNW12 | NNW12 | NNW10 | NNW9 | NNW15 | NNW17 | C | C | C | C | C | WNW15 | WNW13 | WNW11 | WNW3 | E2 | SE2 | ESE1 | ESE1 | NW7.3 | NNW17 |
| 25-Aug | SE2 | ESE1 | SE2 | ESE1 | SE1 | SE1 | SSE2 | SSW3 | S4 | S7 | SW6 | WNW2 | WNW3 | NW2 | S7 | SSW8 | SSW6 | SSE6 | S6 | SE4 | SE4 | SE7 | SE8 | SE10 | S3.3 | SE10 |
| 26-Aug | SE11 | SE9 | SE10 | SSE12 | SSE13 | SSE14 | SSE15 | SSE15 | SSE15 | S15 | SSE17 | S16 | S20 | S19 | S18 | S16 | S17 | S17 | SSE13 | SSE14 | SSE17 | SSE17 | SSE18 | SSE15 | SSE14.8 | S20 |
| 27-Aug | SSE18 | SSE18 | SSE18 | SSE18 | SSE19 | SSE19 | SSE19 | SSE16 | SSE10 | S19 | S16 | E5 | SSE11 | ENE5 | SSE10 | SSE15 | S20 | S13 | S6 | E3 | E2 | SSE2 | S4 | WSW8 | SSE11.2 | S20 |
| 28-Aug | WNW10 | SSW11 | N5 | NE2 | S6 | S10 | S10 | S9 | SSW13 | SW15 | SW16 | SW18 | SW19 | SW19 | WSW20 | WSW21 | WNW15 | WNW9 | SW12 | SSW10 | SSW10 | W5 | SSW4 | SW2 | SW9.2 | WSW21 |
| 29-Aug | SSW4 | S4 | SSW8 | S6 | S8 | SSE7 | SSE3 | S10 | S10 | SSW11 | SSW11 | SSW12 | SSW14 | SSW16 | SSW14 | S14 | SSW14 | SSW14 | S11 | SSE7 | SSE9 | SSE9 | SSE9 | SE10 | S9.1 | SSW16 |
| 30-Aug | SE8 | SE8 | SE2 | N3 | SE1 | ESE2 | SSW1 | NNE3 | NNW8 | NNW7 | NNW6 | NW9 | NNW9 | N9 | NW11 | NW9 | NW11 | WNW11 | NW8 | NW5 | NW5 | NW5 | NNW6 | NNW3 | NNW4.1 | NW11 |
| 31-Aug | N6 | NE2 | NNW3 | NE4 | N4 | NNW4 | NW7 | NW10 | WNW13 | NW14 | WNW15 | NW13 | WNW17 | WNW18 | NW13 | NW10 | WNW11 | NW8 | WNW4 | ESE2 | SE3 | SE4 | SE5 | SSE7 | NW6.0 | WNW18 |
| | SSE1.8 | SE3.1 | SSE2.4 | SSE2.6 | SSE2.7 | SSE3.1 | S2.9 | SSW3.1 | SW3.2 | WSW3.8 | W3.9 | W3.9 | WSW4.6 | W4.3 | W5.3 | W4.7 | W4.1 | W3.6 | WSW2.9 | SW1.9 | SSE0.7 | SSE1.7 | SSE2.5 | SSE2.1 | Diurnal Average | |
| | SSE18 | SSE19 | SE21 | SE20 | SE19 | SSE21 | SSE20 | SSE17 | SSE17 | S19 | SE21 | SE21 | SE24 | SSE24 | S23 | WSW21 | S20 | S17 | W15 | NNW18 | N28 | SSE17 | SSE18 | SSE17 | Diurnal Maximum | |

C - Calibration

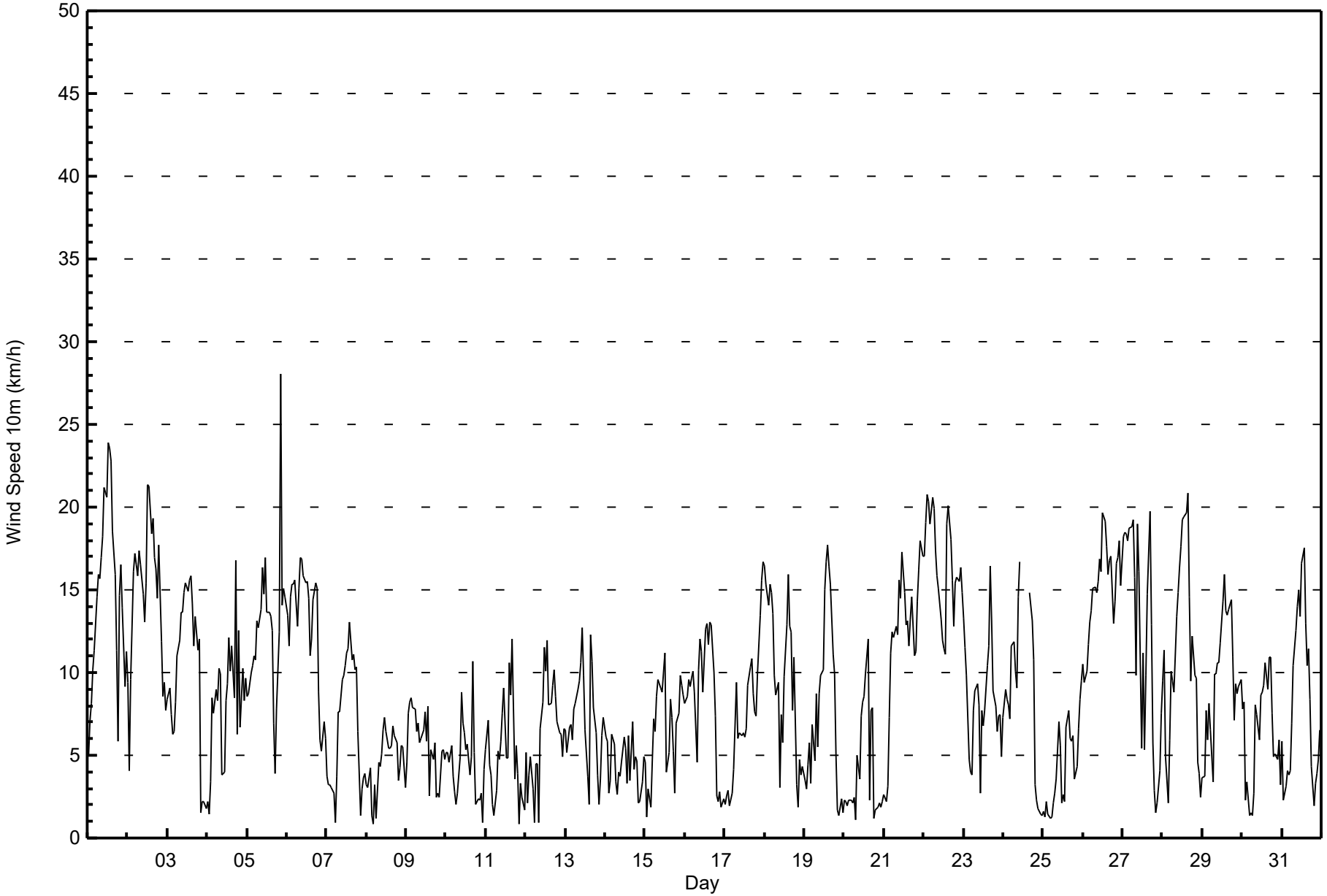
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Blackrod - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 232 | 31.39 | 31.39 |
| 6 - 11 | 287 | 38.84 | 70.23 |
| 12 - 19 | 203 | 27.47 | 97.70 |
| 20 - 28 | 17 | 2.30 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 739

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Blackrod - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 20 | 15 | 11 | 9 | 22 | 32 | 44 | 18 | 11 | 7 | 6 | 4 | 3 | 10 | 9 | 11 | 232 |
| 6 - 11 | 13 | 4 | 12 | 4 | 1 | 0 | 21 | 50 | 36 | 20 | 4 | 5 | 19 | 36 | 28 | 34 | 287 |
| 12 - 19 | 1 | 2 | 0 | 0 | 0 | 1 | 6 | 49 | 30 | 8 | 9 | 1 | 9 | 46 | 27 | 14 | 203 |
| 20 - 28 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 17 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 21 | 23 | 13 | 23 | 33 | 76 | 120 | 81 | 35 | 19 | 12 | 31 | 92 | 64 | 61 | 739 |

Total Number of Valid Hours: 739

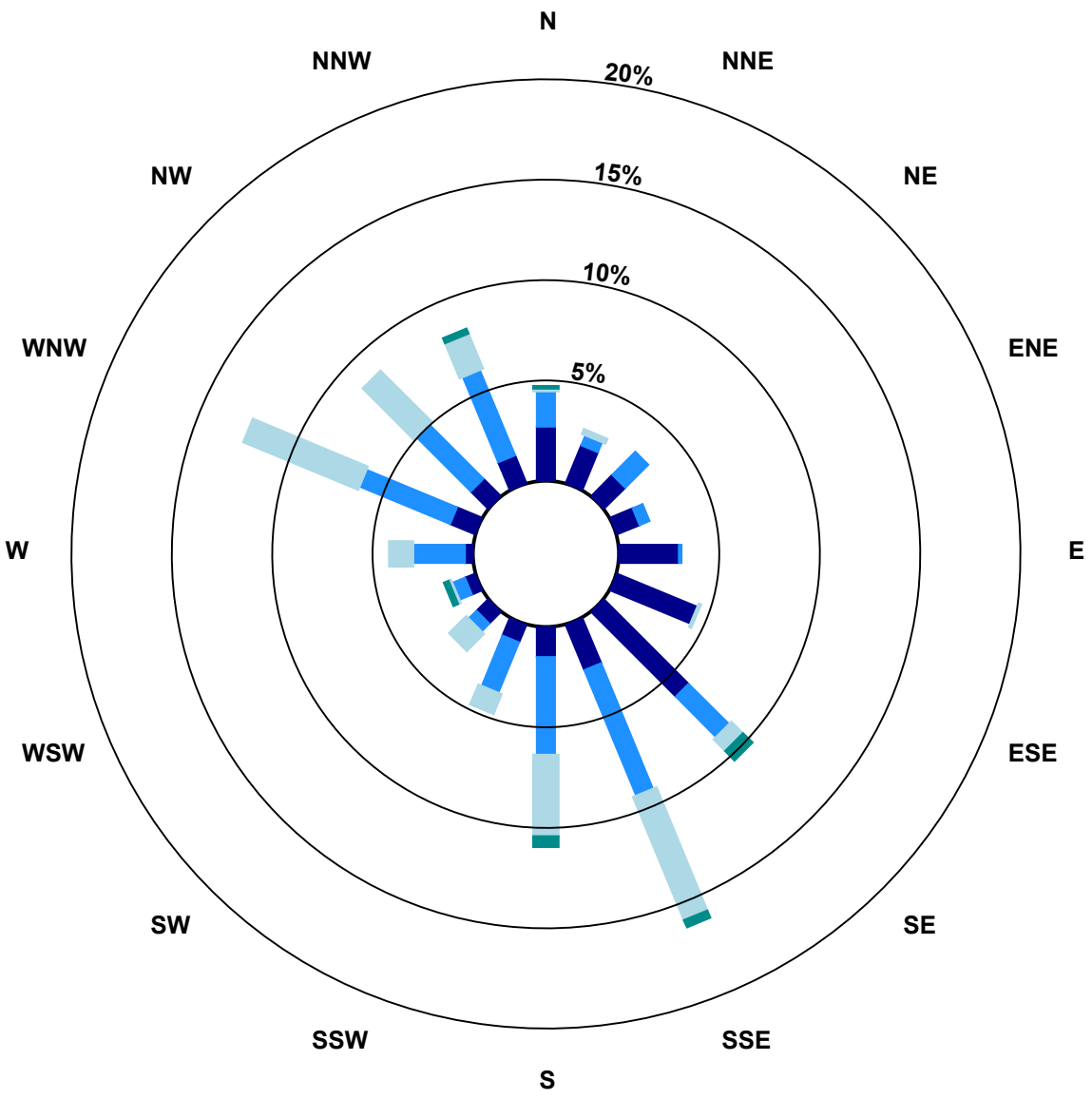
Total Number of Hours: 744

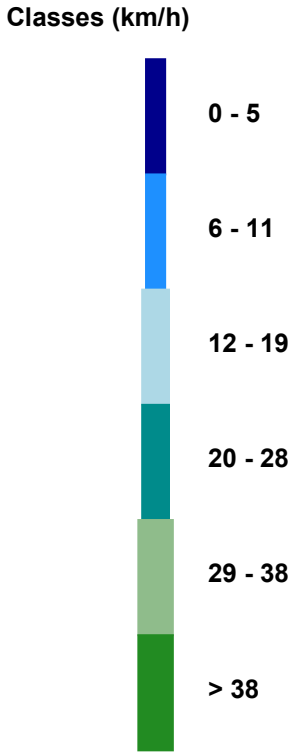
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Wind Speed 10m (WS10) - km/h

## Blackrod




Total Number of Valid Hours: 739

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Blackrod - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12 km/h on Aug 5 21:00

Minimum Value: 1 km/h on Aug 24 22:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Hours of Calibration: | 5 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 5 | 6 | 5 | 5 | 6 | 5 | 5 | 4 | 3 | 2 | 6 | 4 | 4 | 3 | 4 | 6 |
| 2-Aug | 4 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 5 |
| 3-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 5 |
| 4-Aug | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 4 | 3 | 6 | 2 | 9 | 2 | 3 | 4 | 3 | 3 | 2 | 9 |
| 5-Aug | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 1 | 4 | 12 | 5 | 3 | 4 | 12 |
| 6-Aug | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 5 |
| 7-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 4 | 2 | 1 | 2 | 2 | 4 |
| 8-Aug | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 3 |
| 9-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 3 |
| 10-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 3 |
| 11-Aug | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 1 | 4 |
| 12-Aug | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 2 | 5 | 3 | 5 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 5 |
| 13-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 4 |
| 14-Aug | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 4 | 5 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 5 |
| 15-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 16-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 4 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 4 |
| 18-Aug | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 1 | 3 | 2 | 2 | 4 |
| 19-Aug | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 4 | 5 | 4 | 4 | 5 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 5 |
| 20-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 6 | 5 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| 21-Aug | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 |
| 22-Aug | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 |
| 23-Aug | 2 | 2 | 2 | 3 | 1 | 2 | 1 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 2 | 3 | 2 | 4 |
| 24-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 4 | C | C | C | C | C | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 4 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 |
| 26-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 2 | 3 | 3 | 4 | 3 | 3 | 5 |
| 27-Aug | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 5 | 4 | 7 | 4 | 5 | 5 | 2 | 4 | 5 | 4 | 4 | 2 | 1 | 1 | 1 | 2 | 3 | 7 |
| 28-Aug | 3 | 3 | 3 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 5 | 6 | 5 | 6 | 6 | 4 | 2 | 3 | 2 | 2 | 3 | 1 | 2 | 6 |
| 29-Aug | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 4 | 3 | 4 | 5 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 5 |
| 30-Aug | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 2 | 3 | 1 | 4 |
| 31-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 4 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 2 | 1 | 5 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 7 | 6 | 5 | 6 | 6 | 6 | 6 | 5 | 9 | 4 | 6 | 12 | 5 | 3 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Blackrod - August 2026

Direction of Maximum Speed: 356 deg on Aug 5 21:00
Direction of Maximum Daily Speed Average: 160.7 deg on Aug 22

Direction of Minimum Speed: 44 deg on Aug 11 21:00

Direction of Minimum Daily Speed Average: 1.6 deg on Aug 10

Monthly Average Direction: 223.5 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 148 | 128 | 129 | 145 | 142 | 139 | 149 | 156 | 155 | 154 | 143 | 139 | 144 | 160 | 171 | 163 | 169 | 177 | 193 | 282 | 294 | 288 | 300 | 295 | 163.5 |
| 2-Aug | 302 | 302 | 256 | 273 | 277 | 283 | 276 | 277 | 283 | 276 | 264 | 289 | 329 | 340 | 332 | 326 | 323 | 311 | 318 | 330 | 337 | 334 | 339 | 343 | 305.1 |
| 3-Aug | 341 | 331 | 342 | 308 | 332 | 331 | 325 | 320 | 325 | 319 | 317 | 327 | 322 | 322 | 333 | 315 | 301 | 288 | 286 | 284 | 207 | 99 | 121 | 149 | 317.8 |
| 4-Aug | 123 | 108 | 149 | 153 | 134 | 163 | 165 | 173 | 167 | 185 | 220 | 182 | 195 | 182 | 224 | 253 | 324 | 306 | 351 | 291 | 270 | 270 | 257 | 286 | 222.9 |
| 5-Aug | 279 | 299 | 291 | 280 | 284 | 268 | 289 | 291 | 300 | 308 | 312 | 290 | 301 | 306 | 287 | 285 | 263 | 226 | 160 | 180 | 356 | 358 | 329 | 319 | 300.0 |
| 6-Aug | 290 | 291 | 285 | 298 | 297 | 308 | 309 | 310 | 297 | 301 | 305 | 299 | 290 | 303 | 300 | 296 | 279 | 281 | 277 | 307 | 331 | 259 | 273 | 280 | 295.2 |
| 7-Aug | 143 | 139 | 141 | 145 | 119 | 83 | 291 | 285 | 293 | 292 | 291 | 291 | 277 | 297 | 287 | 305 | 293 | 287 | 281 | 233 | 180 | 289 | 255 | 356 | 284.1 |
| 8-Aug | 25 | 146 | 14 | 113 | 79 | 17 | 321 | 357 | 336 | 6 | 339 | 333 | 319 | 7 | 350 | 10 | 23 | 35 | 55 | 111 | 87 | 79 | 91 | 140 | 21.8 |
| 9-Aug | 131 | 131 | 145 | 134 | 152 | 147 | 147 | 152 | 201 | 196 | 184 | 195 | 180 | 190 | 112 | 75 | 87 | 56 | 144 | 160 | 78 | 130 | 140 | 139 | 148.1 |
| 10-Aug | 91 | 124 | 100 | 146 | 338 | 106 | 228 | 199 | 184 | 191 | 185 | 278 | 320 | 20 | 62 | 56 | 172 | 186 | 117 | 118 | 49 | 47 | 105 | 52 | 136.7 |
| 11-Aug | 33 | 50 | 34 | 6 | 354 | 4 | 27 | 346 | 0 | 315 | 1 | 347 | 331 | 333 | 301 | 269 | 32 | 62 | 291 | 299 | 44 | 60 | 119 | 116 | 353.7 |
| 12-Aug | 321 | 54 | 29 | 7 | 331 | 87 | 17 | 4 | 0 | 323 | 284 | 278 | 278 | 298 | 353 | 327 | 4 | 336 | 322 | 329 | 329 | 352 | 351 | 340 | 328.8 |
| 13-Aug | 334 | 342 | 1 | 37 | 23 | 325 | 341 | 355 | 348 | 341 | 346 | 19 | 56 | 17 | 328 | 12 | 47 | 47 | 48 | 58 | 74 | 65 | 64 | 69 | 14.5 |
| 14-Aug | 43 | 76 | 33 | 357 | 38 | 39 | 352 | 20 | 21 | 357 | 33 | 53 | 99 | 20 | 10 | 349 | 153 | 103 | 180 | 154 | 110 | 129 | 136 | 136 | 61.2 |
| 15-Aug | 135 | 104 | 118 | 104 | 136 | 151 | 152 | 166 | 179 | 185 | 185 | 185 | 198 | 132 | 214 | 278 | 275 | 157 | 148 | 169 | 151 | 156 | 167 | 164 | 172.9 |
| 16-Aug | 155 | 154 | 147 | 152 | 141 | 158 | 174 | 207 | 325 | 324 | 325 | 311 | 285 | 288 | 296 | 315 | 335 | 343 | 330 | 14 | 131 | 116 | 130 | 119 | 291.4 |
| 17-Aug | 161 | 149 | 149 | 144 | 171 | 130 | 156 | 165 | 171 | 167 | 210 | 211 | 218 | 179 | 202 | 189 | 189 | 184 | 166 | 149 | 138 | 147 | 149 | 149 | 167.9 |
| 18-Aug | 118 | 136 | 146 | 146 | 144 | 144 | 157 | 170 | 169 | 249 | 266 | 201 | 201 | 215 | 225 | 212 | 226 | 259 | 256 | 244 | 114 | 138 | 136 | 135 | 178.3 |
| 19-Aug | 138 | 121 | 153 | 155 | 147 | 150 | 165 | 172 | 249 | 301 | 299 | 277 | 295 | 299 | 297 | 294 | 300 | 298 | 297 | 311 | 220 | 89 | 122 | 137 | 280.4 |
| 20-Aug | 86 | 124 | 88 | 91 | 97 | 92 | 132 | 277 | 302 | 320 | 350 | 355 | 328 | 302 | 338 | 245 | 285 | 318 | 88 | 114 | 125 | 103 | 104 | 89 | 339.7 |
| 21-Aug | 133 | 147 | 178 | 145 | 141 | 154 | 155 | 165 | 167 | 175 | 181 | 179 | 173 | 170 | 180 | 175 | 170 | 170 | 167 | 156 | 155 | 151 | 149 | 149 | 163.4 |
| 22-Aug | 148 | 147 | 140 | 146 | 137 | 147 | 158 | 166 | 172 | 174 | 171 | 153 | 160 | 161 | 177 | 172 | 167 | 166 | 169 | 173 | 169 | 171 | 165 | 163 | 160.7 |
| 23-Aug | 164 | 166 | 152 | 145 | 172 | 153 | 172 | 167 | 184 | 158 | 34 | 318 | 314 | 277 | 282 | 305 | 318 | 334 | 321 | 328 | 321 | 296 | 281 | 282 | 264.6 |
| 24-Aug | 286 | 304 | 328 | 336 | 325 | 337 | 337 | 332 | 328 | 333 | 340 | C | C | C | C | C | 288 | 288 | 292 | 296 | 99 | 126 | 120 | 118 | 319.4 |
| 25-Aug | 130 | 118 | 142 | 121 | 128 | 139 | 156 | 203 | 186 | 172 | 227 | 283 | 284 | 307 | 180 | 206 | 205 | 164 | 174 | 131 | 133 | 144 | 143 | 146 | 170.6 |
| 26-Aug | 145 | 146 | 146 | 149 | 152 | 151 | 152 | 161 | 164 | 171 | 165 | 169 | 178 | 182 | 177 | 173 | 175 | 169 | 168 | 156 | 151 | 148 | 153 | 165 | 162.5 |
| 27-Aug | 157 | 150 | 152 | 153 | 157 | 160 | 160 | 159 | 165 | 186 | 172 | 88 | 159 | 75 | 161 | 166 | 179 | 178 | 179 | 83 | 81 | 163 | 171 | 258 | 162.1 |
| 28-Aug | 286 | 194 | 352 | 42 | 175 | 186 | 177 | 190 | 196 | 217 | 229 | 225 | 234 | 235 | 243 | 258 | 283 | 286 | 224 | 206 | 204 | 271 | 201 | 226 | 229.0 |
| 29-Aug | 204 | 180 | 196 | 182 | 172 | 165 | 157 | 177 | 187 | 197 | 212 | 204 | 202 | 200 | 208 | 188 | 192 | 198 | 173 | 152 | 157 | 157 | 149 | 142 | 184.8 |
| 30-Aug | 140 | 144 | 128 | 3 | 131 | 109 | 208 | 33 | 342 | 347 | 336 | 326 | 347 | 4 | 310 | 323 | 314 | 300 | 317 | 319 | 325 | 326 | 330 | 332 | 331.5 |
| 31-Aug | 1 | 37 | 338 | 37 | 355 | 337 | 310 | 304 | 302 | 308 | 295 | 305 | 293 | 288 | 304 | 325 | 298 | 304 | 293 | 108 | 133 | 137 | 141 | 147 | 306.5 |
| | 148.7 | 146.1 | 147.0 | 152.4 | 156.2 | 161.7 | 182.4 | 202.1 | 231.8 | 248.1 | 261.9 | 261.8 | 252.8 | 263.9 | 259.3 | 262.8 | 262.0 | 265.3 | 249.9 | 229.8 | 150.0 | 154.7 | 160.5 | 163.8 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

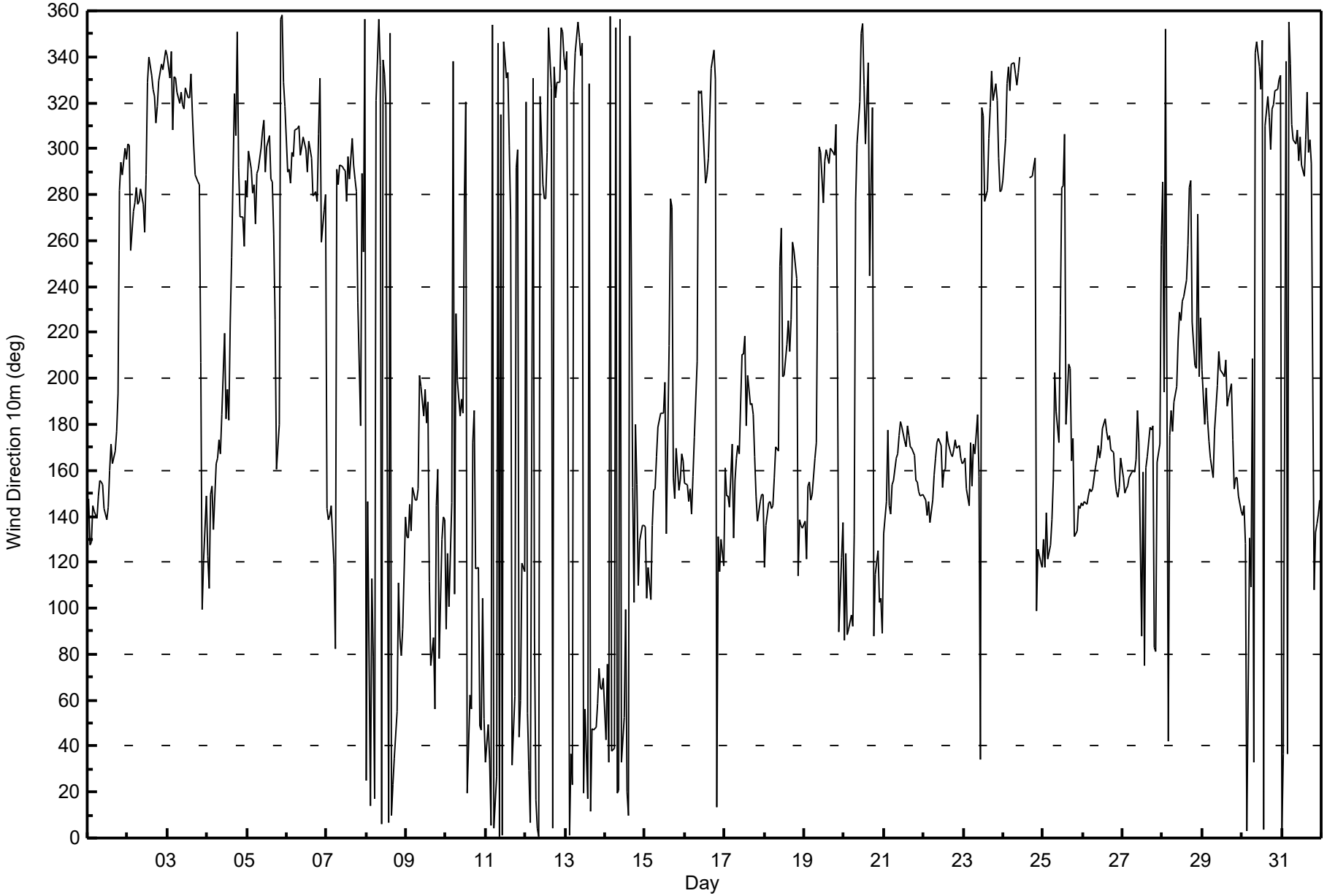
C - Calibration
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Blackrod - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Blackrod - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Aug 20 08:00

Minimum Value: 7 deg on Aug 16 04:00

Percentiles: $P_1$ = 9 $P_{10}$ = 13 $Q_1$ = 15 Median = 21 $Q_3$ = 35 $P_{90}$ = 59 $P_{99}$ = 88

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 739 |
| Hours of Missing Data: | 5 |
| Hours of Calibration: | 5 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 14 | 13 | 16 | 13 | 15 | 15 | 16 | 15 | 17 | 19 | 18 | 19 | 18 | 19 | 16 | 17 | 17 | 14 | 36 | 28 | 17 | 19 | 29 | 20 | 36 |
| 2-Aug | 23 | 54 | 30 | 12 | 13 | 13 | 16 | 15 | 12 | 17 | 19 | 25 | 16 | 15 | 14 | 13 | 14 | 16 | 15 | 14 | 12 | 12 | 12 | 13 | 54 |
| 3-Aug | 11 | 12 | 14 | 17 | 15 | 14 | 14 | 16 | 19 | 18 | 18 | 19 | 23 | 21 | 23 | 28 | 22 | 19 | 13 | 14 | 76 | 35 | 30 | 62 | 76 |
| 4-Aug | 60 | 77 | 76 | 14 | 21 | 13 | 17 | 16 | 28 | 62 | 69 | 25 | 17 | 28 | 33 | 38 | 20 | 23 | 31 | 19 | 49 | 20 | 29 | 13 | 77 |
| 5-Aug | 14 | 18 | 14 | 11 | 11 | 17 | 15 | 15 | 17 | 19 | 18 | 16 | 21 | 19 | 14 | 12 | 34 | 59 | 10 | 25 | 21 | 21 | 12 | 12 | 59 |
| 6-Aug | 19 | 17 | 13 | 16 | 16 | 15 | 15 | 19 | 17 | 14 | 17 | 19 | 17 | 20 | 18 | 21 | 17 | 13 | 13 | 26 | 24 | 51 | 37 | 28 | 51 |
| 7-Aug | 33 | 38 | 54 | 61 | 38 | 90 | 62 | 17 | 21 | 22 | 22 | 20 | 30 | 29 | 25 | 23 | 19 | 12 | 9 | 44 | 87 | 64 | 63 | 42 | 90 |
| 8-Aug | 55 | 39 | 18 | 69 | 75 | 37 | 80 | 28 | 33 | 24 | 37 | 37 | 58 | 68 | 54 | 46 | 30 | 24 | 16 | 31 | 45 | 16 | 24 | 36 | 80 |
| 9-Aug | 23 | 17 | 12 | 14 | 21 | 12 | 20 | 16 | 35 | 19 | 25 | 23 | 29 | 27 | 88 | 25 | 36 | 31 | 63 | 55 | 46 | 35 | 13 | 31 | 88 |
| 10-Aug | 26 | 19 | 19 | 20 | 52 | 40 | 66 | 30 | 38 | 19 | 24 | 44 | 28 | 33 | 60 | 59 | 14 | 20 | 52 | 63 | 46 | 50 | 78 | 35 | 78 |
| 11-Aug | 18 | 9 | 33 | 31 | 72 | 92 | 30 | 23 | 31 | 35 | 41 | 29 | 82 | 65 | 27 | 43 | 25 | 63 | 64 | 56 | 69 | 78 | 38 | 54 | 92 |
| 12-Aug | 31 | 60 | 24 | 21 | 40 | 73 | 27 | 35 | 94 | 16 | 19 | 15 | 13 | 39 | 25 | 32 | 25 | 15 | 13 | 13 | 15 | 23 | 25 | 15 | 94 |
| 13-Aug | 9 | 20 | 13 | 15 | 23 | 10 | 18 | 22 | 19 | 19 | 16 | 28 | 22 | 92 | 72 | 27 | 17 | 20 | 15 | 28 | 49 | 68 | 13 | 14 | 92 |
| 14-Aug | 26 | 27 | 40 | 27 | 18 | 16 | 41 | 43 | 33 | 35 | 47 | 48 | 74 | 78 | 52 | 82 | 43 | 47 | 18 | 16 | 43 | 26 | 21 | 11 | 82 |
| 15-Aug | 12 | 37 | 26 | 42 | 22 | 8 | 10 | 12 | 11 | 23 | 31 | 28 | 30 | 63 | 51 | 43 | 36 | 24 | 67 | 21 | 9 | 11 | 9 | 8 | 67 |
| 16-Aug | 7 | 8 | 9 | 7 | 11 | 10 | 13 | 48 | 15 | 14 | 13 | 16 | 13 | 14 | 19 | 18 | 23 | 18 | 14 | 45 | 39 | 35 | 82 | 78 | 82 |
| 17-Aug | 63 | 34 | 31 | 64 | 38 | 42 | 21 | 8 | 16 | 25 | 59 | 60 | 59 | 44 | 46 | 27 | 30 | 22 | 14 | 12 | 13 | 10 | 11 | 12 | 64 |
| 18-Aug | 18 | 12 | 12 | 11 | 15 | 12 | 25 | 26 | 16 | 71 | 39 | 49 | 32 | 27 | 23 | 20 | 28 | 46 | 19 | 59 | 44 | 38 | 45 | 27 | 71 |
| 19-Aug | 24 | 40 | 18 | 61 | 61 | 12 | 34 | 14 | 56 | 18 | 19 | 21 | 23 | 18 | 18 | 17 | 17 | 16 | 15 | 27 | 76 | 67 | 25 | 66 | 76 |
| 20-Aug | 70 | 41 | 33 | 26 | 34 | 43 | 54 | 100 | 28 | 51 | 37 | 32 | 21 | 25 | 44 | 81 | 21 | 26 | 54 | 23 | 29 | 33 | 29 | 35 | 100 |
| 21-Aug | 39 | 42 | 41 | 19 | 13 | 11 | 11 | 14 | 15 | 15 | 21 | 16 | 21 | 26 | 25 | 16 | 14 | 15 | 12 | 10 | 12 | 13 | 14 | 15 | 42 |
| 22-Aug | 14 | 13 | 14 | 14 | 15 | 13 | 14 | 14 | 14 | 16 | 17 | 24 | 23 | 27 | 16 | 16 | 17 | 16 | 15 | 12 | 11 | 11 | 11 | 13 | 27 |
| 23-Aug | 14 | 12 | 11 | 54 | 38 | 70 | 18 | 21 | 26 | 47 | 87 | 20 | 23 | 15 | 19 | 18 | 16 | 13 | 14 | 16 | 16 | 20 | 19 | 25 | 87 |
| 24-Aug | 21 | 18 | 14 | 14 | 18 | 15 | 13 | 14 | 16 | 17 | 17 | C | C | C | C | C | 19 | 14 | 12 | 83 | 36 | 16 | 29 | 25 | 83 |
| 25-Aug | 18 | 28 | 21 | 23 | 22 | 41 | 30 | 25 | 31 | 21 | 50 | 88 | 73 | 97 | 47 | 37 | 38 | 21 | 16 | 15 | 16 | 12 | 13 | 11 | 97 |
| 26-Aug | 14 | 14 | 13 | 12 | 12 | 13 | 12 | 14 | 16 | 17 | 18 | 20 | 19 | 18 | 19 | 17 | 19 | 16 | 13 | 14 | 14 | 16 | 14 | 14 | 20 |
| 27-Aug | 13 | 14 | 12 | 12 | 12 | 12 | 13 | 19 | 34 | 16 | 27 | 66 | 30 | 58 | 37 | 25 | 17 | 13 | 41 | 15 | 55 | 50 | 27 | 45 | 66 |
| 28-Aug | 38 | 32 | 59 | 84 | 48 | 15 | 13 | 19 | 17 | 20 | 21 | 20 | 22 | 21 | 23 | 23 | 18 | 26 | 16 | 14 | 14 | 55 | 41 | 61 | 84 |
| 29-Aug | 43 | 40 | 20 | 28 | 8 | 32 | 43 | 10 | 20 | 23 | 27 | 29 | 23 | 25 | 28 | 26 | 21 | 19 | 12 | 11 | 11 | 13 | 12 | 13 | 43 |
| 30-Aug | 14 | 14 | 89 | 50 | 60 | 48 | 75 | 53 | 19 | 29 | 44 | 29 | 32 | 27 | 28 | 26 | 25 | 16 | 15 | 12 | 18 | 31 | 25 | 35 | 89 |
| 31-Aug | 21 | 53 | 33 | 24 | 22 | 31 | 18 | 17 | 17 | 19 | 17 | 26 | 23 | 16 | 22 | 20 | 23 | 21 | 76 | 34 | 21 | 16 | 16 | 13 | 76 |
| | 70 | 77 | 89 | 84 | 75 | 92 | 80 | 100 | 94 | 71 | 87 | 88 | 82 | 97 | 88 | 82 | 43 | 63 | 76 | 83 | 87 | 78 | 82 | 78 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS02
## PIHEW POINT
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 707 | 37 | 37 | 100 | 33.3 | 0 | 5.6 | 0 |
| H2S (ppb) Average | 708 | 36 | 36 | 100 | 27.1 | 13 | 3.3 | 2 |
| THC (ppm) Average | 693 | 37 | 51 | 98.12 | 5.5 | - | 2.7 | - |
| NMHC(ppm) Average | 693 | 37 | 51 | 98.12 | 0.238 | - | 0.011 | - |
| CH4(ppm) Average | 693 | 37 | 51 | 98.12 | 5.5 | - | 2.7 | - |
| Temperature (C) Average | 744 | 0 | 0 | 100 | 29.9 | - | 21.5 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 97 | - | 83.6 | - |
| Wind Speed 10 m (km/h) Average | 741 | 0 | 3 | 99.6 | 37 | - | 26 | - |
| Wind Direction 10 m (deg) Average | 741 | 0 | 3 | 99.6 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 707 | 0.88 | 3 | - | 0 | 0 | 0.1 | 0.1 | 0.4 | 1.1 | 33.3 |
| H2S (ppb) Average | 708 | 1.26 | 2.6 | - | 0 | 0.1 | 0.1 | 0.4 | 1 | 3.6 | 27.1 |
| THC (ppm) Average | 693 | 2.23 | 0.4 | - | 1.9 | 2 | 2.1 | 2.1 | 2.3 | 2.5 | 5.5 |
| NMHC(ppm) Average | 693 | 0.002 | 0.013 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0.238 |
| CH4(ppm) Average | 693 | 2.23 | 0.3 | - | 1.9 | 2 | 2.1 | 2.1 | 2.2 | 2.5 | 5.5 |
| Temperature 2 m (C) Average | 744 | 17.35 | 4.5 | - | 7.6 | 12 | 14 | 16.7 | 20.4 | 23.8 | 29.9 |
| Relative Humidity (%) Average | 744 | 69.52 | 16.9 | - | 32.6 | 46.1 | 56 | 72.1 | 83.7 | 91.1 | 97 |
| Wind Speed 10 m (km/h) Average | 741 | 9.1 | 6 | - | 0 | 3 | 4 | 8 | 13 | 17 | 37 |
| Wind Direction 10 m (deg) Average | 741 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| THC/NMHC/CH4 | 03 Aug 2026 10:00 | 03 Aug 2026 20:00 | 11 | Unstable Operation - excessive baseline drift |
| THC/NMHC/CH4 | 24 Aug 2026 10:00 | 24 Aug 2026 12:00 | 3 | Maintenance - replaced support gas cylinder |
| Wind Speed, Wind Direction | 31 Aug 2026 21:00 | 31 Aug 2026 21:00 | 1 | Flat line in sensor output signal |
| Wind Speed, Wind Direction | 31 Aug 2026 23:00 | 01 Sep 2026 00:00 | 2 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Pihew Point - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 33.3 ppb on Aug 30 15:00
Maximum Daily Average: 5.6 ppb on Aug 31

Minimum Value: 0.0 ppb on Aug 2 10:00
Minimum Daily Average: 0.0 ppb on Aug 2
Maximum Diurnal Average: 3.1 ppb at hour 17
Minimum Diurnal Average: 0.1 ppb at hour 7
Monthly Average: 0.88 ppb
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.4 $P_{90}$ = 1.1 $P_{99}$ = 16.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 1.0 | 1.0 | 0.4 | 0.8 | 0.7 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 1.0 |
| 2-Aug | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.4 | 0.4 | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 4-Aug | 0.1 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 2.2 | 6.0 | 2.4 | 0.4 | 0.1 | 0.6 | 1.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 6.0 |
| 5-Aug | 0.1 | 0.1 | 0.4 | Z | 0.1 | 0.1 | 0.1 | 0.0 | C | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | -- | 0.4 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 8.8 | 0.4 | 1.7 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 8.8 |
| 7-Aug | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 2.9 | 1.5 | 0.2 | 6.0 | 2.7 | 0.3 | 0.4 | 0.2 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 6.0 |
| 8-Aug | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 |
| 9-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 4.4 | 14.3 | 4.1 | 0.7 | 0.3 | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 1.2 | 14.3 |
| 10-Aug | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.8 | 0.7 | 0.7 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.8 |
| 11-Aug | 0.3 | 0.3 | 0.1 | Z | 0.1 | 0.2 | 0.3 | 0.7 | 1.0 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 1.0 |
| 12-Aug | 0.0 | 0.2 | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 14-Aug | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.5 |
| 15-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 13.0 | 12.0 | 3.0 | 0.2 | 1.1 | 9.8 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.8 | 13.0 |
| 16-Aug | 0.9 | Z | 2.1 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 2.1 |
| 17-Aug | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.3 | 0.2 | 0.4 | 5.8 | 8.0 | 0.6 | 0.6 | 0.4 | 6.9 | 5.1 | 2.0 | 1.8 | 0.7 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 1.5 | 8.0 |
| 18-Aug | 0.1 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 2.0 | 0.2 | 5.3 | 6.6 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.6 | 0.5 | 0.8 | 6.6 |
| 19-Aug | 0.5 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.0 | 0.4 | 2.7 | 1.3 | 0.3 | 0.7 | 0.3 | 0.1 | 0.2 | 0.6 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 2.7 |
| 20-Aug | 1.1 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.4 | 0.7 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 1.1 |
| 21-Aug | Z | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.6 | 0.6 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.2 | 0.1 | 0.2 | 0.6 |
| 22-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.6 |
| 23-Aug | 0.1 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 2.3 | 1.1 | 0.4 | 0.3 | 0.3 | 0.3 | 2.0 | 0.8 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 2.3 |
| 24-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.2 | 0.1 | 0.3 |
| 25-Aug | 0.1 | Z | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.5 | 5.0 | 13.7 | 7.2 | 19.1 | 21.0 | 15.9 | 3.0 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 3.9 | 21.0 |
| 26-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.3 | 0.5 |
| 27-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.5 | 2.5 | 3.3 | 2.1 | 0.6 | 0.6 | 0.7 | 0.6 | 1.7 | 0.7 | 0.2 | 0.7 | 5.9 | 1.2 | 0.6 | 0.4 | 1.0 | 5.9 |
| 28-Aug | 0.3 | 0.7 | 0.5 | Z | 12.6 | 2.1 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 1.0 | 0.4 | 0.1 | 0.1 | 7.6 | 0.3 | 0.1 | 2.2 | 5.3 | 1.5 | 12.6 |
| 29-Aug | 3.2 | 0.2 | 1.3 | 2.7 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.5 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.4 | 3.2 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.4 | 6.2 | 33.3 | 3.6 | 21.3 | 12.2 | 7.9 | 1.7 | 0.4 | 0.3 | 0.4 | 0.3 | 3.9 | 33.3 |
| 31-Aug | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.7 | 1.7 | 3.9 | 1.1 | 5.3 | 16.0 | 19.2 | 4.7 | 7.5 | 31.2 | 12.4 | 19.3 | 2.1 | 0.7 | 0.4 | 0.2 | 0.1 | 5.6 | 31.2 |
| | 0.3 | 0.1 | 0.2 | 0.2 | 0.6 | 0.2 | 0.1 | 0.2 | 0.7 | 0.8 | 0.6 | 1.6 | 1.9 | 2.0 | 2.3 | 1.5 | 3.1 | 1.5 | 1.1 | 0.5 | 0.3 | 0.1 | 0.2 | 0.3 | Diurnal Average | |
| | 3.2 | 0.7 | 2.1 | 2.7 | 12.6 | 2.1 | 0.6 | 0.7 | 5.8 | 8.0 | 4.4 | 14.3 | 16.0 | 19.2 | 33.3 | 21.0 | 31.2 | 12.4 | 19.3 | 7.6 | 5.9 | 1.2 | 2.2 | 5.3 | Diurnal Maximum | |

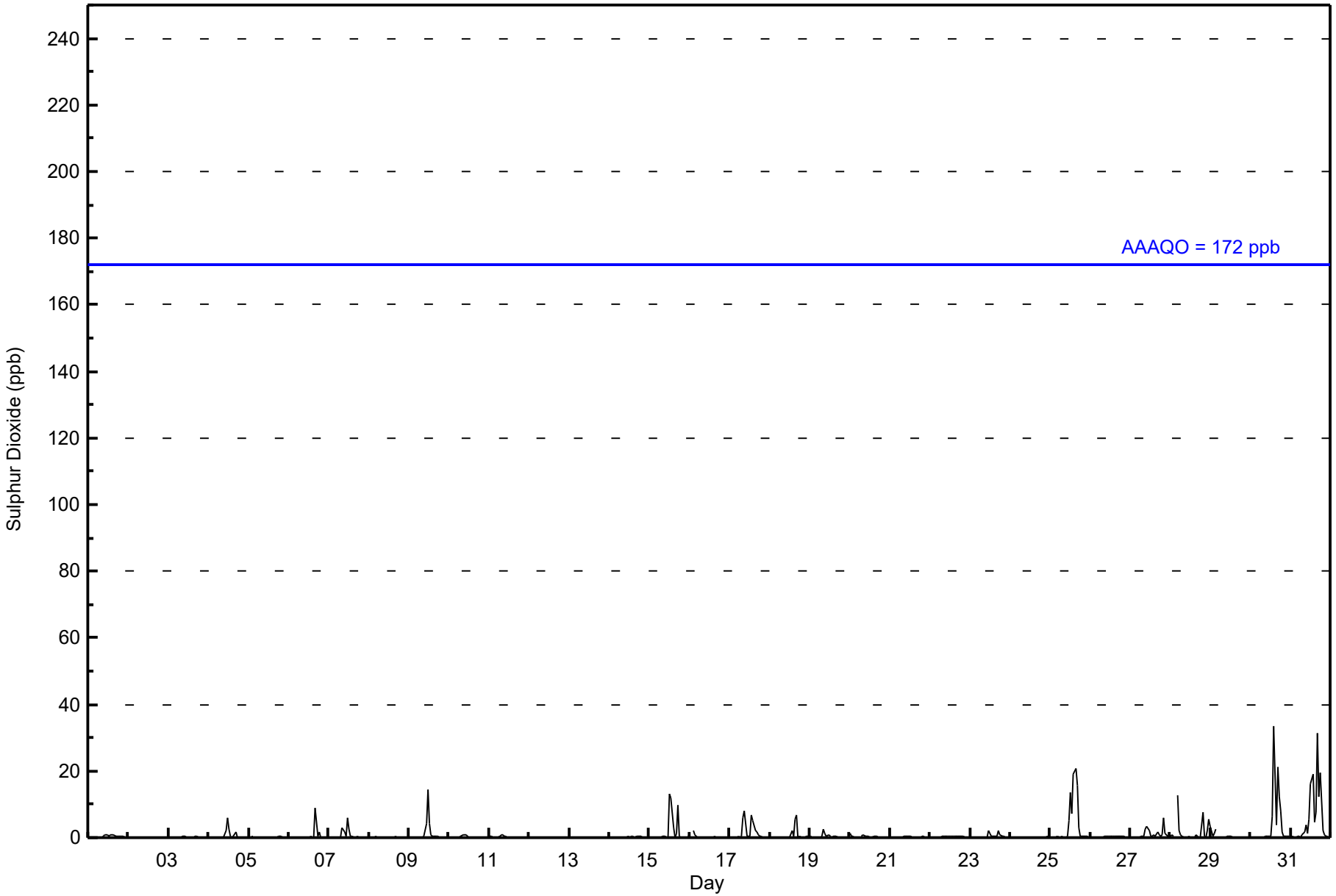
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Pihew Point - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb

## Pihew Point - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 691 | 97.74 | 97.74 |
| 11 - 20 | 12 | 1.70 | 99.43 |
| 21 - 60 | 4 | 0.57 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Pihew Point - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 104 | 59 | 22 | 11 | 20 | 24 | 64 | 55 | 34 | 41 | 61 | 11 | 27 | 40 | 41 | 74 | 688 |
| 11 - 20 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 4 | 1 | 0 | 0 | 1 | 12 |
| 21 - 60 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 104 | 61 | 23 | 12 | 21 | 25 | 64 | 55 | 34 | 41 | 65 | 15 | 28 | 40 | 41 | 75 | 704 |

Total Number of Valid Hours: 704

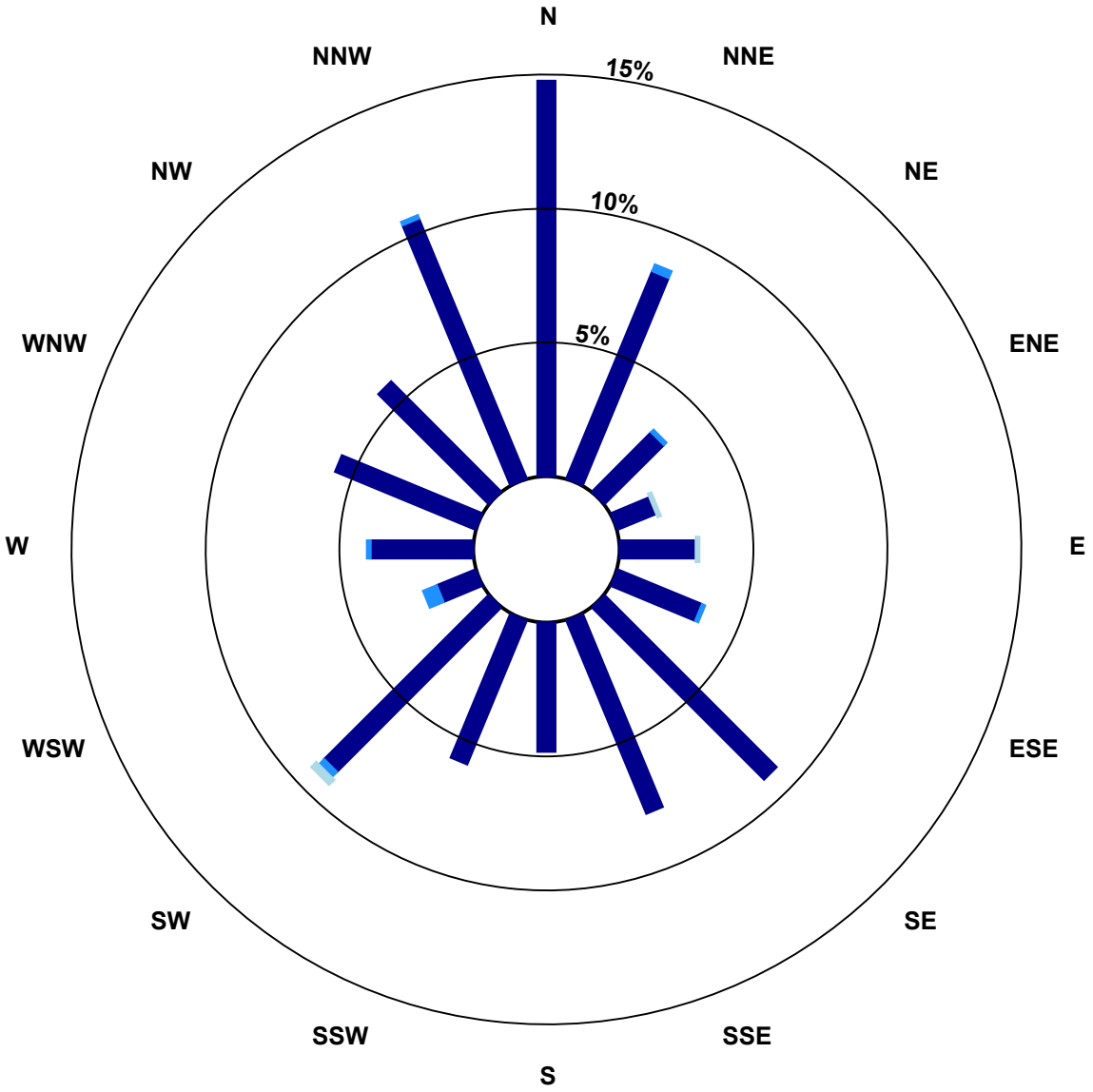
Total Number of Hours: 744

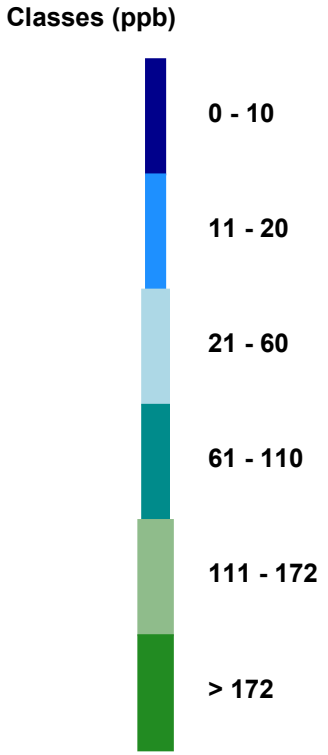
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Pihew Point



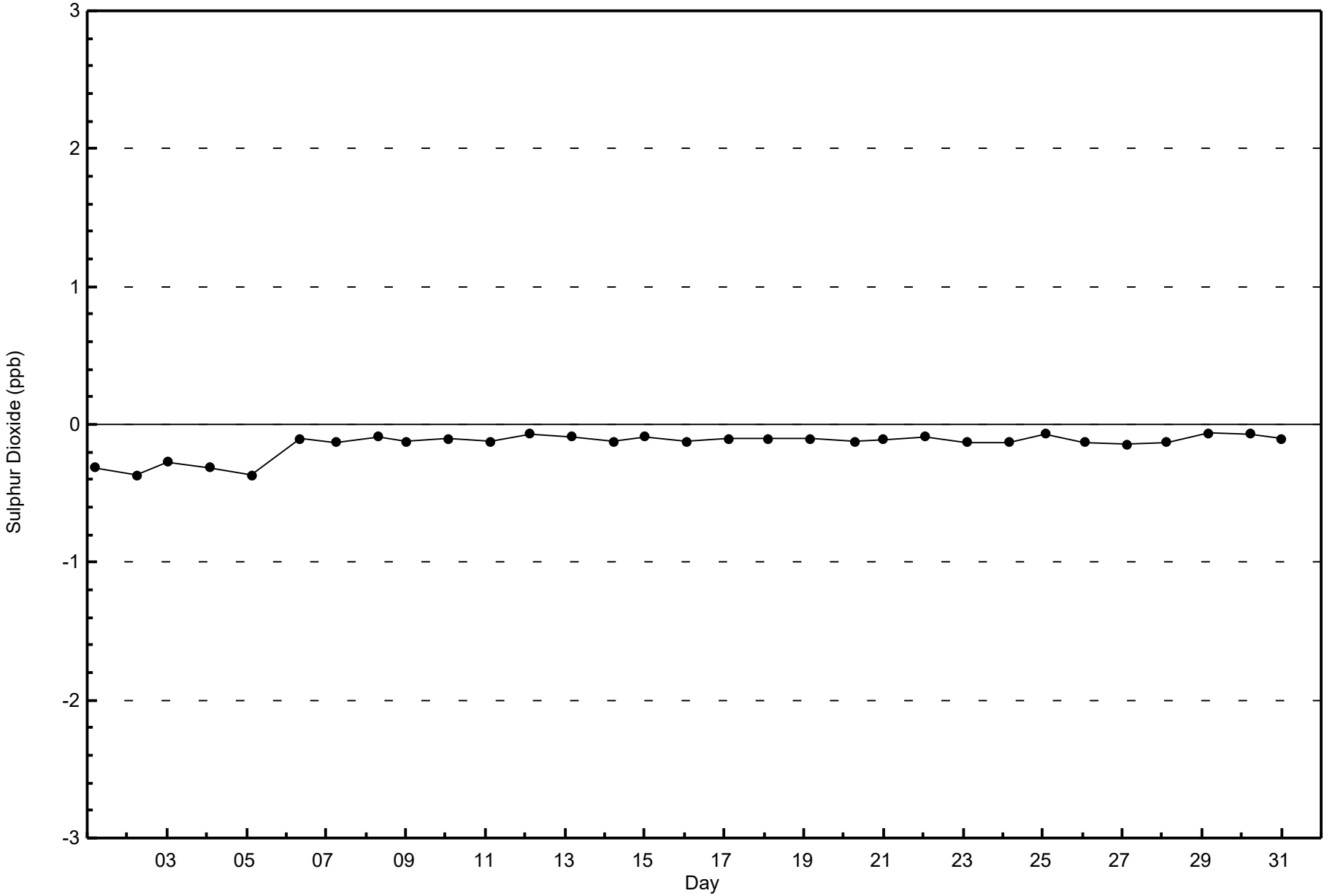

Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Pihew Point - August 2026**

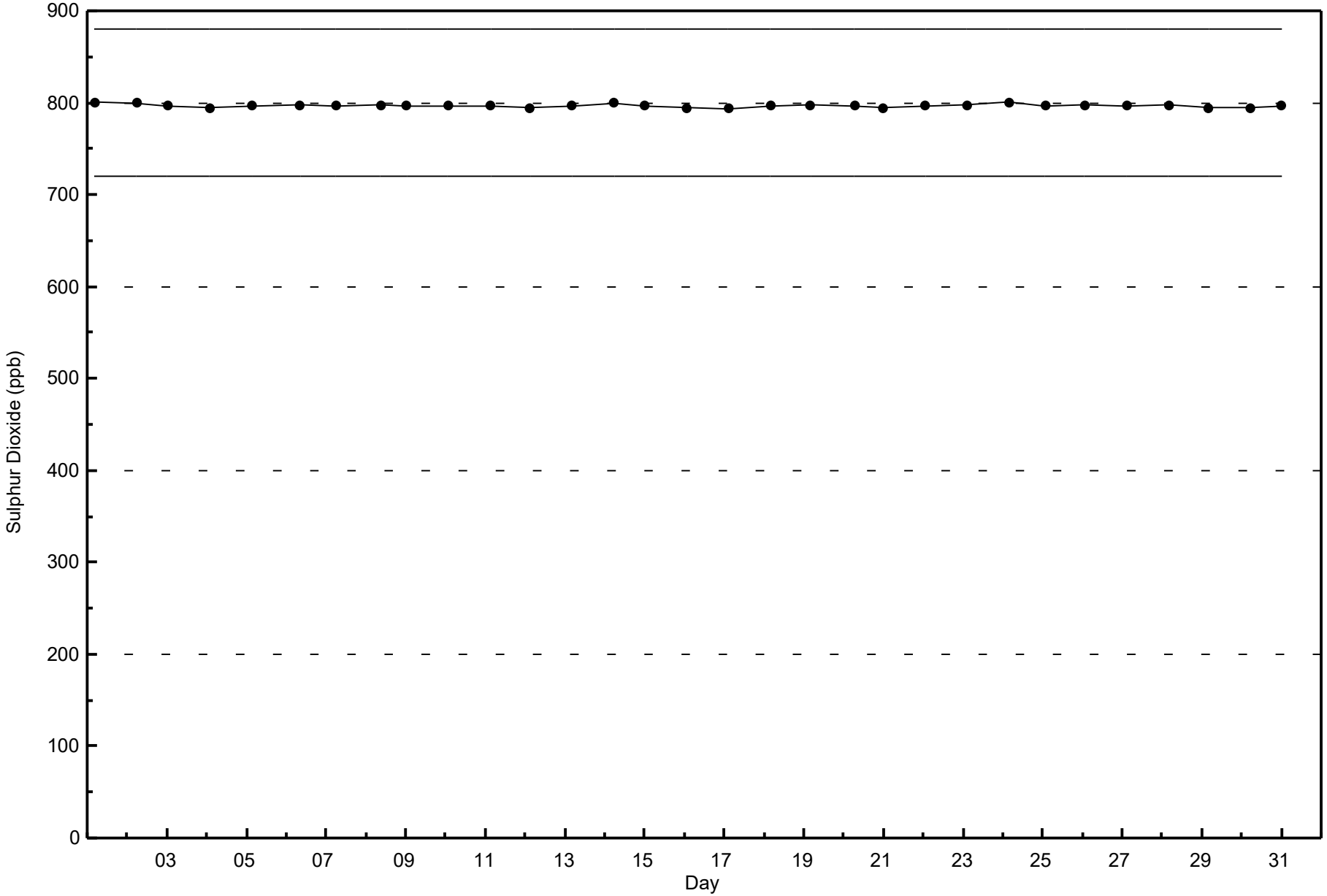


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Pihew Point - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Pihew Point - August 2026

Number of Exceedances (AAAQO): 1-hr: 13 24-hr: 2
Maximum Value: 27.1 ppb on Aug 25 05:00 Maximum Daily Average: 3.3 ppb on Aug 6

Minimum Value: 0.0 ppb on Aug 5 12:00 Minimum Daily Average: 0.1 ppb on Aug 2
Maximum Diurnal Average: 3.7 ppb at hour 5 Minimum Diurnal Average: 0.2 ppb at hour 14
Monthly Average: 1.26 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.4 $Q_3$ = 1.0 $P_{90}$ = 3.6 $P_{99}$ = 13.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | Z | 0.5 | 0.4 | 0.8 | 3.2 | 5.6 | 4.5 | 0.4 | 1.1 | 1.7 | 0.6 | 0.3 | 0.6 | 0.4 | 0.6 | 0.5 | 2.1 | 0.3 | 0.2 | 1.1 | 5.6 |
| 2-Aug | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 3-Aug | 0.2 | Z | 2.7 | 1.2 | 9.7 | 8.9 | 4.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.2 | 1.8 | 0.9 | 1.4 | 9.7 |
| 4-Aug | 0.6 | 0.5 | Z | 0.5 | 0.6 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.1 | 4.3 | 8.0 | 6.5 | 0.4 | 7.2 | 9.2 | 1.8 | 9.2 |
| 5-Aug | 10.5 | 4.1 | 3.3 | 7.4 | Z | 6.8 | 6.2 | 3.4 | 0.1 | 0.7 | 0.1 | 0.0 | 0.0 | 0.5 | 1.4 | 0.6 | 0.0 | 0.0 | 0.3 | 0.1 | 4.3 | 5.1 | 5.9 | 6.7 | 2.9 | 10.5 |
| 6-Aug | 7.8 | 5.6 | 6.4 | 7.1 | 6.0 | 6.2 | 4.8 | 4.3 | 3.4 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 3.9 | 1.5 | 0.6 | 2.9 | 5.2 | 4.9 | 4.7 | 3.3 | 7.8 |
| 7-Aug | 5.0 | 0.3 | 7.6 | 4.6 | 2.6 | 5.0 | Z | 5.0 | 3.0 | 3.4 | 2.3 | 2.0 | 0.9 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.2 | 1.9 | 7.6 |
| 8-Aug | Z | 0.6 | 3.4 | 13.0 | 14.7 | 11.0 | 5.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 2.2 | 14.7 |
| 9-Aug | 0.2 | Z | 0.5 | 0.4 | 0.6 | 0.6 | 1.0 | 0.5 | 0.9 | 0.9 | 0.6 | 1.3 | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 1.9 | 0.5 | 1.9 |
| 10-Aug | 1.5 | 2.0 | Z | 0.9 | 1.0 | 0.8 | 0.7 | 1.0 | 1.1 | 1.7 | 1.4 | 0.9 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 7.4 | 0.9 | 7.4 |
| 11-Aug | 18.4 | 8.3 | 1.3 | 1.1 | Z | 3.6 | 3.9 | 1.7 | 13.8 | C | C | C | C | C | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 3.0 | 18.4 |
| 12-Aug | 0.5 | 1.0 | 1.6 | 4.0 | Z | 15.1 | 7.0 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 1.3 | 15.1 |
| 13-Aug | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.1 | 0.3 |
| 14-Aug | Z | 1.4 | 1.0 | 0.3 | 0.3 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.6 | 0.8 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.6 | 0.4 | 0.5 | 1.4 |
| 15-Aug | 0.6 | Z | 0.4 | 0.6 | 0.5 | 1.0 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 1.1 | 0.2 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 1.1 |
| 16-Aug | 0.5 | 0.5 | Z | 8.3 | 2.1 | 1.5 | 0.9 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.8 | 1.2 | 1.5 | 0.9 | 8.3 |
| 17-Aug | 2.7 | 2.0 | 1.2 | Z | 1.2 | 1.1 | 0.9 | 0.4 | 0.4 | 0.8 | 3.6 | 2.8 | 0.3 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 0.8 | 0.5 | 0.3 | 0.1 | 0.9 | 3.6 |
| 18-Aug | 0.3 | 0.3 | 0.7 | 0.7 | Z | 0.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.7 | 2.5 | 0.3 | 2.5 |
| 19-Aug | 2.2 | 1.2 | 0.8 | 0.6 | 1.1 | Z | 0.3 | 0.2 | 0.5 | 4.0 | 3.0 | 1.1 | 0.6 | 0.1 | 0.1 | 1.8 | 2.3 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.9 | 2.0 | 1.1 | 4.0 |
| 20-Aug | 2.6 | Z | 14.5 | 2.1 | 2.1 | 1.7 | 1.0 | 2.1 | 8.1 | 0.9 | 1.2 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 | 1.1 | 2.2 | 1.8 | 14.5 |
| 21-Aug | 1.7 | Z | 1.7 | 0.9 | 1.4 | 1.3 | 1.3 | 0.6 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 1.7 |
| 22-Aug | 0.3 | 0.2 | Z | 0.0 | 0.3 | 0.8 | 0.6 | 0.5 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.8 |
| 23-Aug | 0.6 | 0.7 | 0.8 | Z | 0.8 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.3 | 0.5 | 0.6 | 0.8 | 1.2 | 1.8 | 6.8 | 5.0 | 0.9 | 4.5 | 8.3 | 10.7 | 2.1 | 10.7 |
| 24-Aug | 9.9 | 1.9 | 1.0 | 0.7 | Z | 1.0 | 0.9 | 6.4 | 7.8 | 2.5 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.9 | 4.5 | 7.1 | 2.0 | 9.9 |
| 25-Aug | 2.3 | 2.4 | 1.7 | Z | 27.1 | 2.8 | 2.3 | 1.4 | 0.6 | 0.4 | 0.4 | 0.7 | 1.5 | 1.1 | 1.1 | 0.9 | 0.7 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 2.1 | 27.1 |
| 26-Aug | 0.5 | 1.0 | Z | 1.1 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 1.1 |
| 27-Aug | 0.3 | 0.7 | 0.7 | Z | 0.5 | 0.9 | 0.8 | 0.4 | 0.3 | 2.4 | 2.3 | 1.0 | 0.2 | 0.2 | 0.2 | 0.3 | 2.6 | 1.3 | 0.2 | 0.8 | 3.6 | 0.6 | 0.3 | 0.3 | 0.9 | 3.6 |
| 28-Aug | 0.4 | 0.8 | 0.6 | 0.3 | Z | 7.3 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.3 | 0.4 | 0.7 | 0.3 | 0.3 | 0.5 | 0.4 | 0.6 | 7.3 |
| 29-Aug | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | Z | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 |
| 30-Aug | Z | 0.2 | 0.3 | 0.5 | 0.5 | 0.8 | 1.0 | 0.6 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.5 | 0.2 | 0.3 | 1.0 |
| 31-Aug | 0.3 | Z | 0.1 | 11.5 | 18.6 | 14.6 | 2.4 | 4.2 | 5.0 | 3.7 | 2.7 | 1.3 | 0.5 | 0.2 | 0.1 | 0.2 | 0.2 | 0.6 | 0.5 | 2.7 | 3.3 | 0.4 | 0.4 | 1.0 | 3.2 | 18.6 |
| | 2.6 | 1.5 | 2.1 | 2.5 | 3.7 | 3.5 | 1.7 | 1.2 | 1.6 | 1.0 | 0.9 | 0.7 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 0.9 | 1.4 | 2.0 | Diurnal Average | |
| | 18.4 | 8.3 | 14.5 | 13.0 | 27.1 | 15.1 | 7.0 | 6.4 | 13.8 | 4.0 | 5.6 | 4.5 | 1.5 | 1.1 | 1.7 | 1.8 | 2.6 | 3.9 | 6.8 | 8.0 | 6.5 | 5.2 | 8.3 | 10.7 | Diurnal Maximum | |

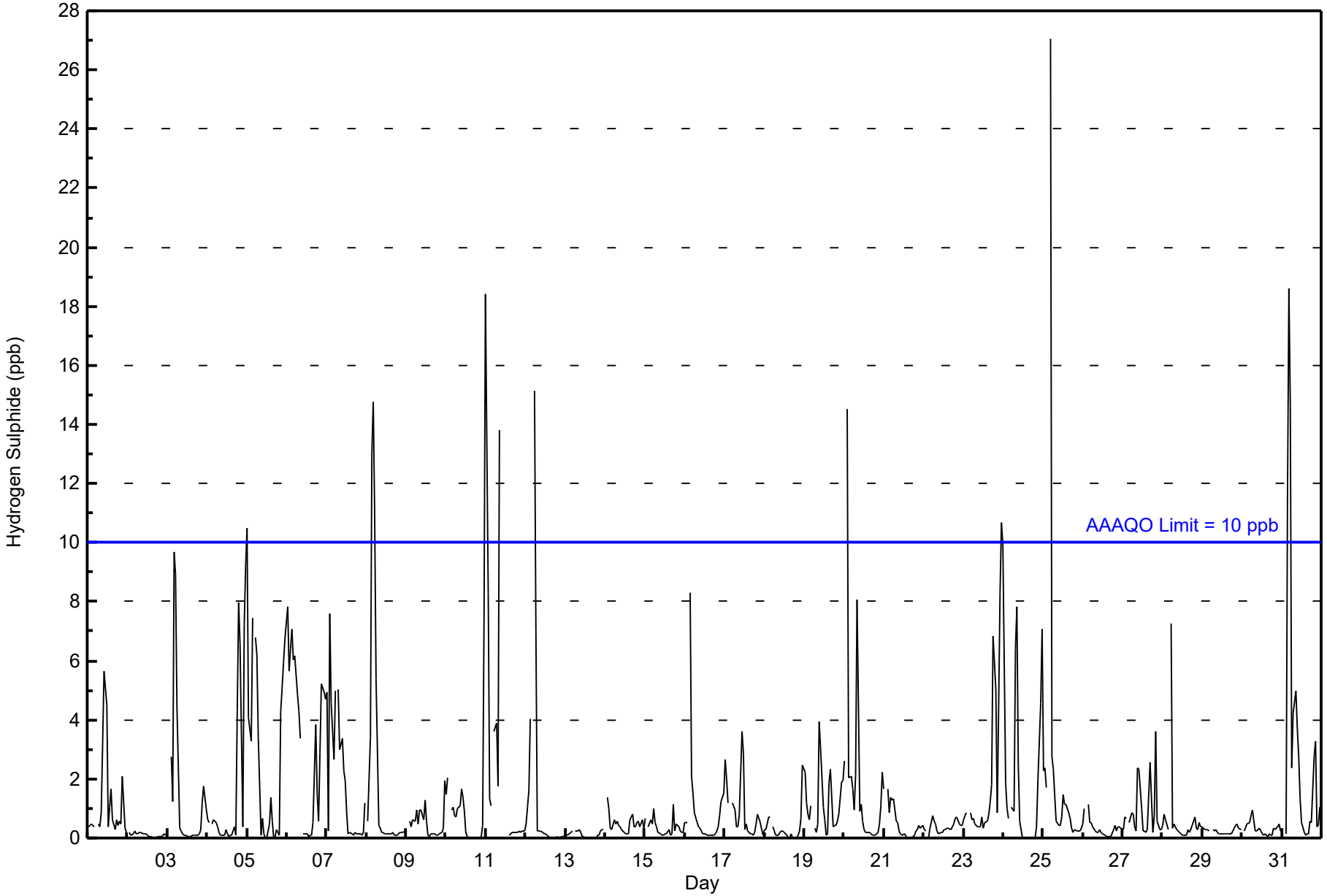
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Pihew Point - August 2026**



# Hydrogen Sulphide ($H_2S$) - ppb
## Pihew Point - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 616 | 87.01 | 87.01 |
| 3 - 4 | 34 | 4.80 | 91.81 |
| 5 - 7 | 33 | 4.66 | 96.47 |
| 8 - 11 | 13 | 1.84 | 98.31 |
| > 11 | 12 | 1.69 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Pihew Point - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 102 | 58 | 22 | 11 | 19 | 21 | 66 | 55 | 32 | 40 | 63 | 12 | 6 | 11 | 31 | 65 | 614 |
| 3 - 4 | 2 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 2 | 1 | 1 | 6 | 8 | 6 | 1 | 33 |
| 5 - 7 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 9 | 7 | 1 | 33 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 8 | 1 | 1 | 13 |
| > 11 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 3 | 12 |
| **Totals** | 104 | 61 | 22 | 12 | 22 | 23 | 66 | 55 | 34 | 42 | 65 | 13 | 28 | 39 | 48 | 71 | 705 |

Total Number of Valid Hours: 705

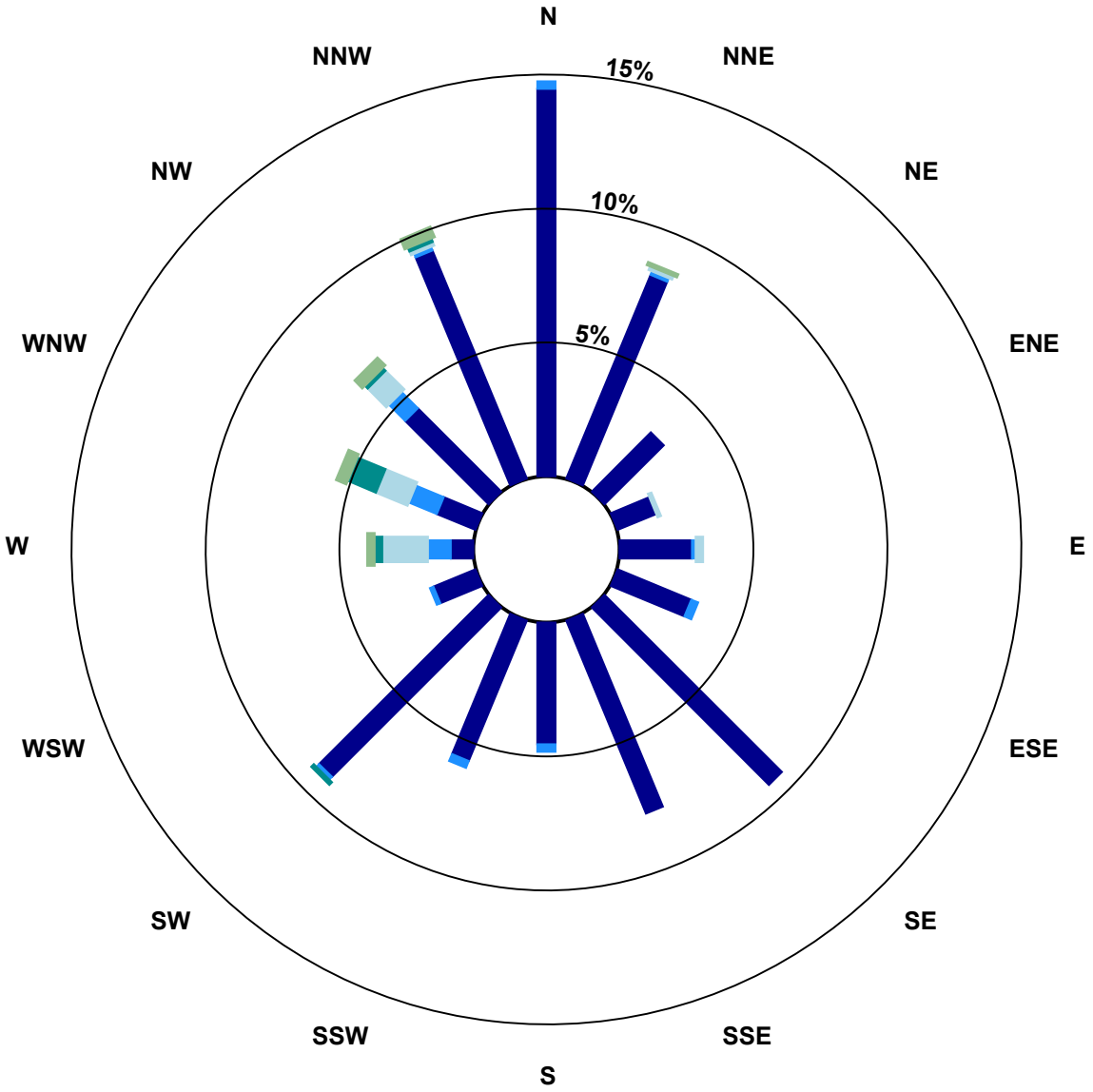
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Pihew Point




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

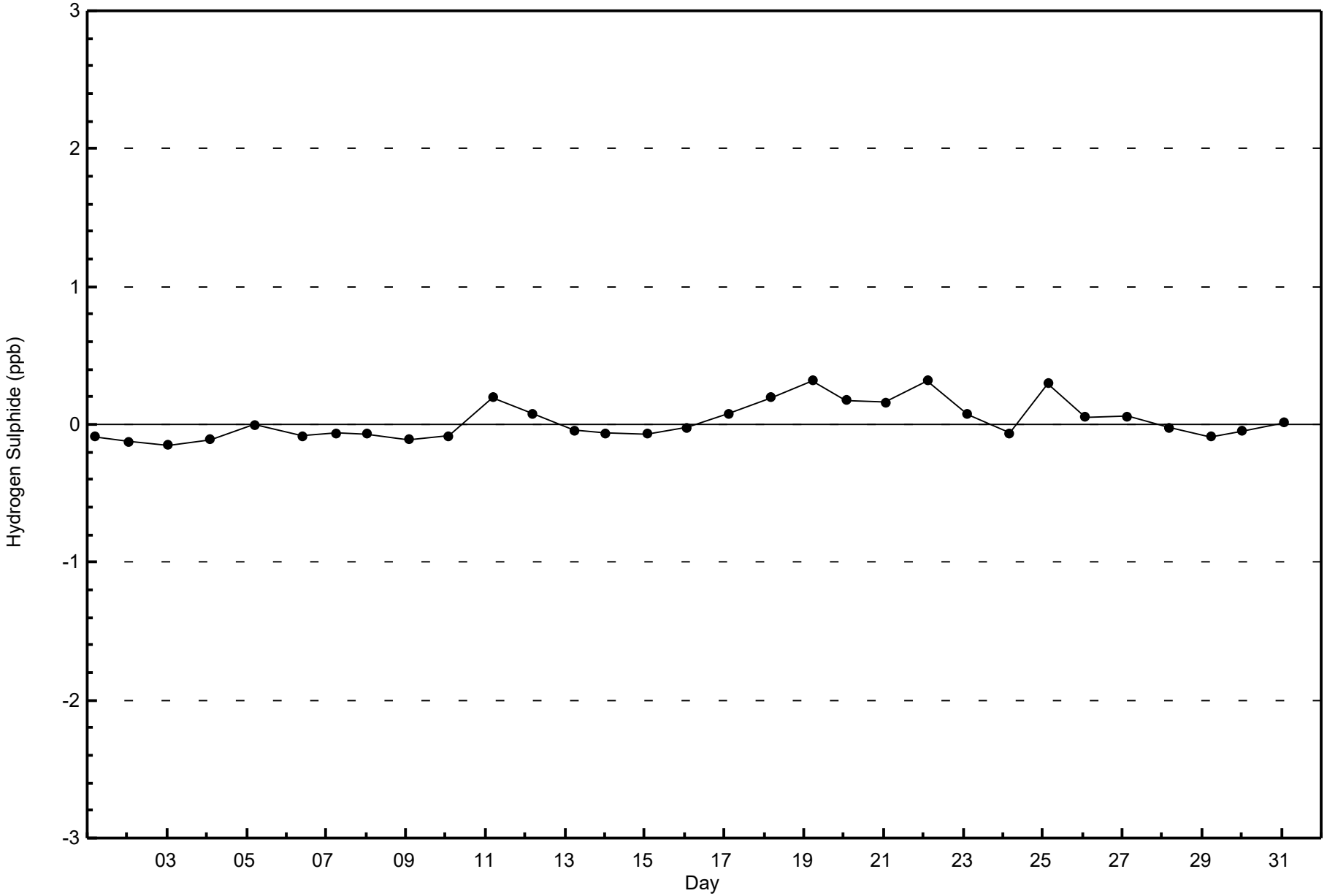
Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Pihew Point - August 2026**

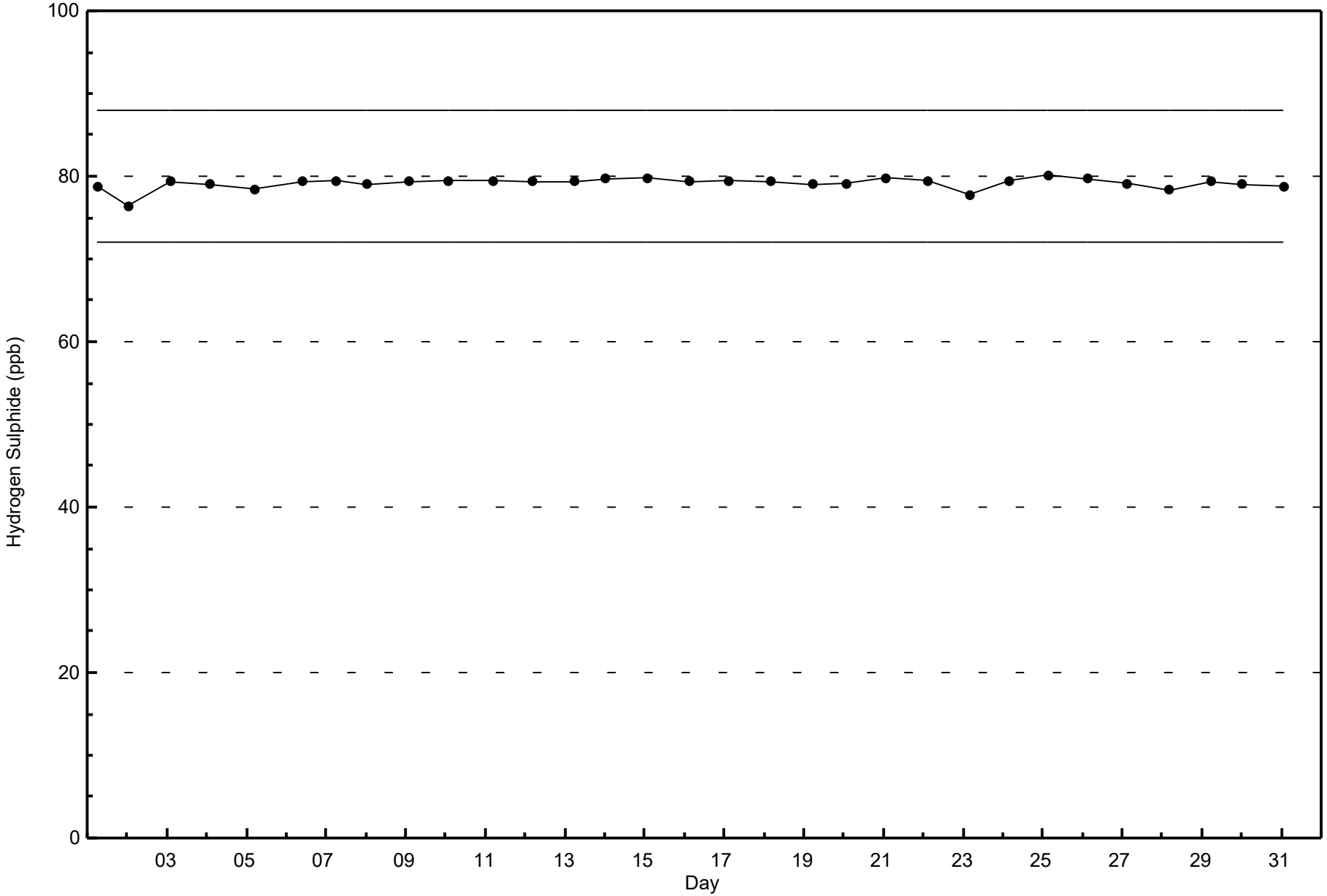


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Pihew Point - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Total Hydrocarbons (THC) - ppm

## Pihew Point - August 2026

Maximum Value: 5.5 ppm on Aug 25 05:00

Maximum Daily Average: 2.7 ppm on Aug 25

Minimum Value: 1.9 ppm on Aug 2 19:00

Minimum Daily Average: 2.0 ppm on Aug 2

Maximum Diurnal Average: 2.5 ppm at hour 5

Minimum Diurnal Average: 2.1 ppm at hour 18

Monthly Average: 2.23 ppm

Percentiles: $P_1$ = 1.9 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.1 $Q_3$ = 2.3 $P_{90}$ = 2.5 $P_{99}$ = 3.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 693 |
| Hours of Missing Data: | 51 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 98.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.4 | 2.6 | 2.6 | 2.5 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 | 2.1 | 2.1 | 2.2 | 2.6 |
| 2-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.1 |
| 3-Aug | Z | 2.4 | 2.4 | 2.6 | 2.2 | 2.1 | 2.3 | 2.2 | 2.1 | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 2.0 | 2.0 | 2.1 | 2.1 | -- | 2.6 |
| 4-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.4 | 2.3 | 2.3 | 2.6 | 2.6 | 2.2 | 2.6 |
| 5-Aug | 2.5 | 2.2 | 2.1 | Z | 2.1 | 2.3 | 2.2 | 2.2 | C | C | C | C | C | C | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 | 2.1 | 2.4 | 2.2 | 2.2 | 2.2 | -- | 2.5 |
| 6-Aug | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 | 2.2 | 2.4 | 2.3 | 2.2 | 2.6 |
| 7-Aug | 2.5 | 2.2 | 2.6 | 2.3 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.8 | 2.2 | 2.8 |
| 8-Aug | 3.2 | 2.5 | 3.0 | 3.0 | 3.4 | 3.2 | 3.2 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 3.4 |
| 9-Aug | Z | 2.2 | 2.1 | 2.2 | 2.2 | 2.4 | 2.6 | 2.4 | 2.3 | 2.3 | 2.2 | 2.4 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.6 |
| 10-Aug | 2.2 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.5 | 2.4 | 2.8 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.9 | 2.3 | 2.9 |
| 11-Aug | 3.3 | 2.9 | 2.7 | Z | 2.7 | 2.8 | 3.0 | 2.9 | 3.6 | 2.2 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 3.6 |
| 12-Aug | 2.2 | 3.3 | 3.7 | Z | 2.4 | 2.8 | 3.0 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 3.7 |
| 13-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.5 | 2.2 | 2.5 |
| 14-Aug | 4.1 | 4.6 | 3.1 | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 4.6 |
| 15-Aug | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 16-Aug | 2.3 | Z | 2.7 | 2.7 | 2.7 | 3.3 | 2.8 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 3.3 |
| 17-Aug | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 18-Aug | 2.1 | 2.1 | 2.1 | Z | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.3 |
| 19-Aug | 2.4 | 2.5 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.5 | 2.2 | 2.5 |
| 20-Aug | 2.1 | 2.4 | 3.0 | 2.3 | 2.2 | 2.2 | Z | 2.3 | 3.1 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 3.1 |
| 21-Aug | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 |
| 22-Aug | 2.1 | Z | 2.1 | 2.1 | 2.4 | 2.3 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 23-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 | 2.6 | 2.5 | 2.4 | 2.3 | 2.5 | 2.3 | 2.5 | 3.1 | 2.9 | 3.3 | 2.4 | 3.3 |
| 24-Aug | 2.8 | 2.8 | 3.0 | Z | 2.4 | 2.6 | 2.2 | 3.1 | 2.4 | M | M | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.8 | 3.5 | 2.4 | 3.5 |
| 25-Aug | 2.5 | Z | 3.3 | 5.5 | 5.5 | 3.6 | 3.5 | 3.0 | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.7 | 5.5 |
| 26-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 |
| 27-Aug | 2.1 | 2.3 | Z | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 28-Aug | 2.2 | 2.3 | 2.2 | Z | 2.3 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.4 |
| 29-Aug | 2.1 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| 30-Aug | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.3 |
| 31-Aug | Z | 2.2 | 2.2 | 3.2 | 3.8 | 3.8 | 3.1 | 2.9 | 2.8 | 2.6 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.2 | 2.2 | 2.1 | 2.4 | 3.8 |
| | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | Diurnal Average | |
| | 4.1 | 4.6 | 3.7 | 5.5 | 5.5 | 3.8 | 3.5 | 3.1 | 3.6 | 2.8 | 2.6 | 2.5 | 2.4 | 2.5 | 2.6 | 2.5 | 2.4 | 2.3 | 2.5 | 2.4 | 2.6 | 3.1 | 2.9 | 3.5 | Diurnal Maximum | |

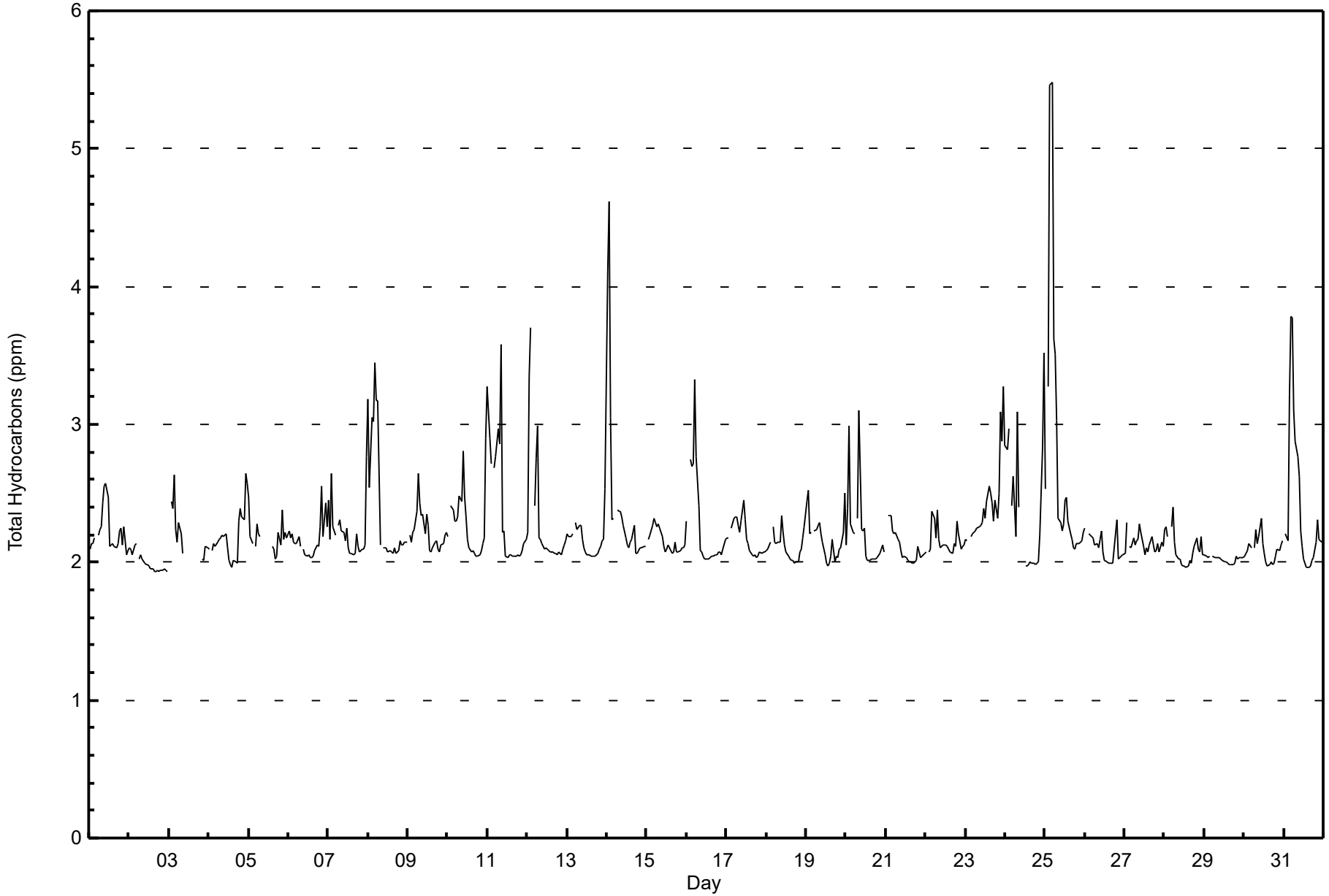
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Pihew Point - August 2026**



| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 151 | 21.79 | 21.79 |
| 2.1 - 3.0 | 516 | 74.46 | 96.25 |
| 3.1 - 10.0 | 26 | 3.75 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 693

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Pihew Point - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 29 | 12 | 4 | 1 | 4 | 3 | 15 | 7 | 7 | 3 | 38 | 3 | 2 | 0 | 3 | 20 | 151 |
| 2.1 - 3.0 | 71 | 46 | 18 | 10 | 17 | 21 | 49 | 48 | 27 | 38 | 27 | 12 | 25 | 34 | 30 | 40 | 513 |
| 3.1 - 10.0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 6 | 10 | 26 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 101 | 60 | 22 | 11 | 21 | 25 | 64 | 55 | 34 | 41 | 65 | 15 | 28 | 39 | 39 | 70 | 690 |

Total Number of Valid Hours: 690

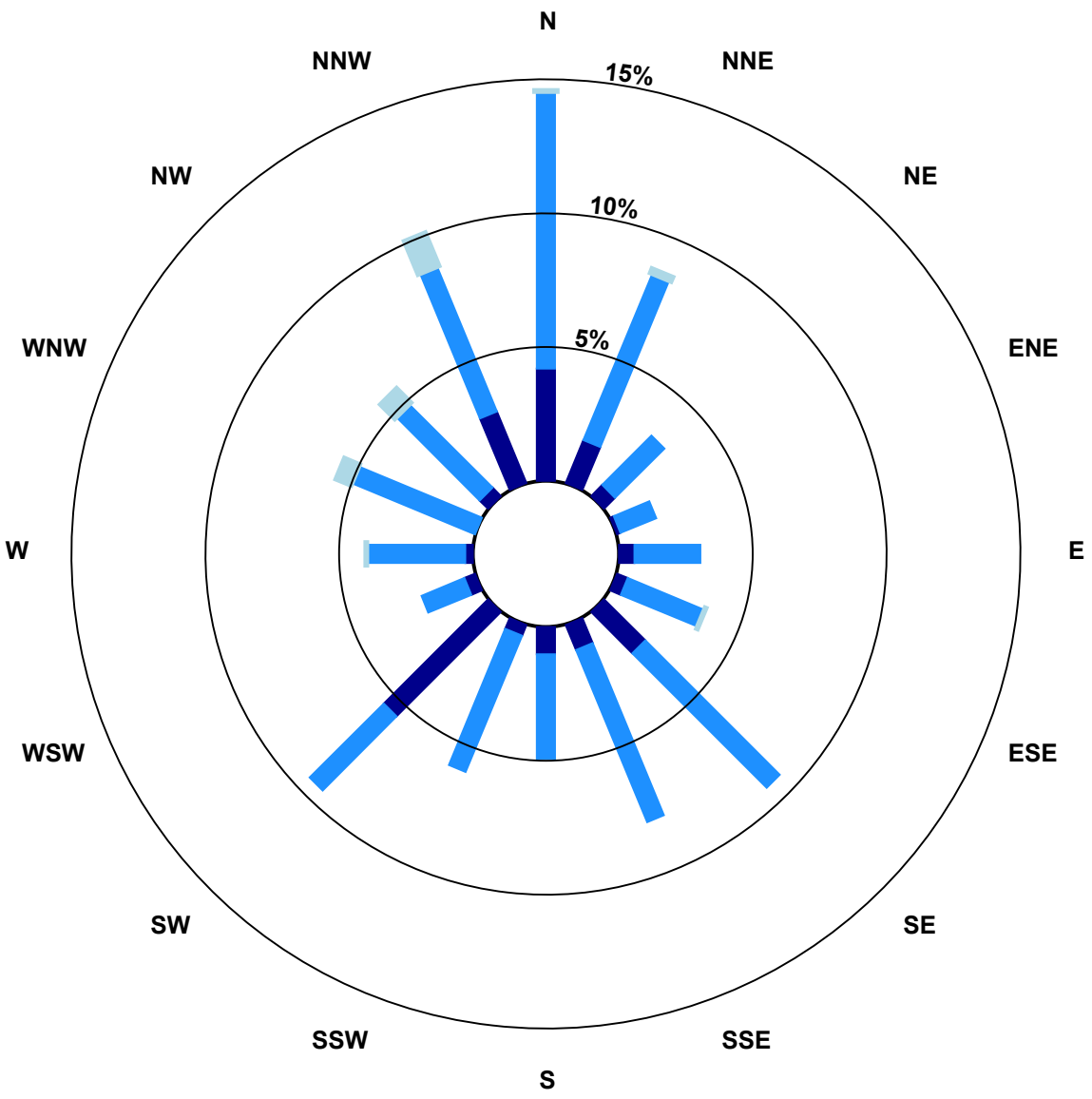
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Total Hydrocarbons (THC) - ppm**

**Pihew Point**




**Classes (ppm)**

- 0 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

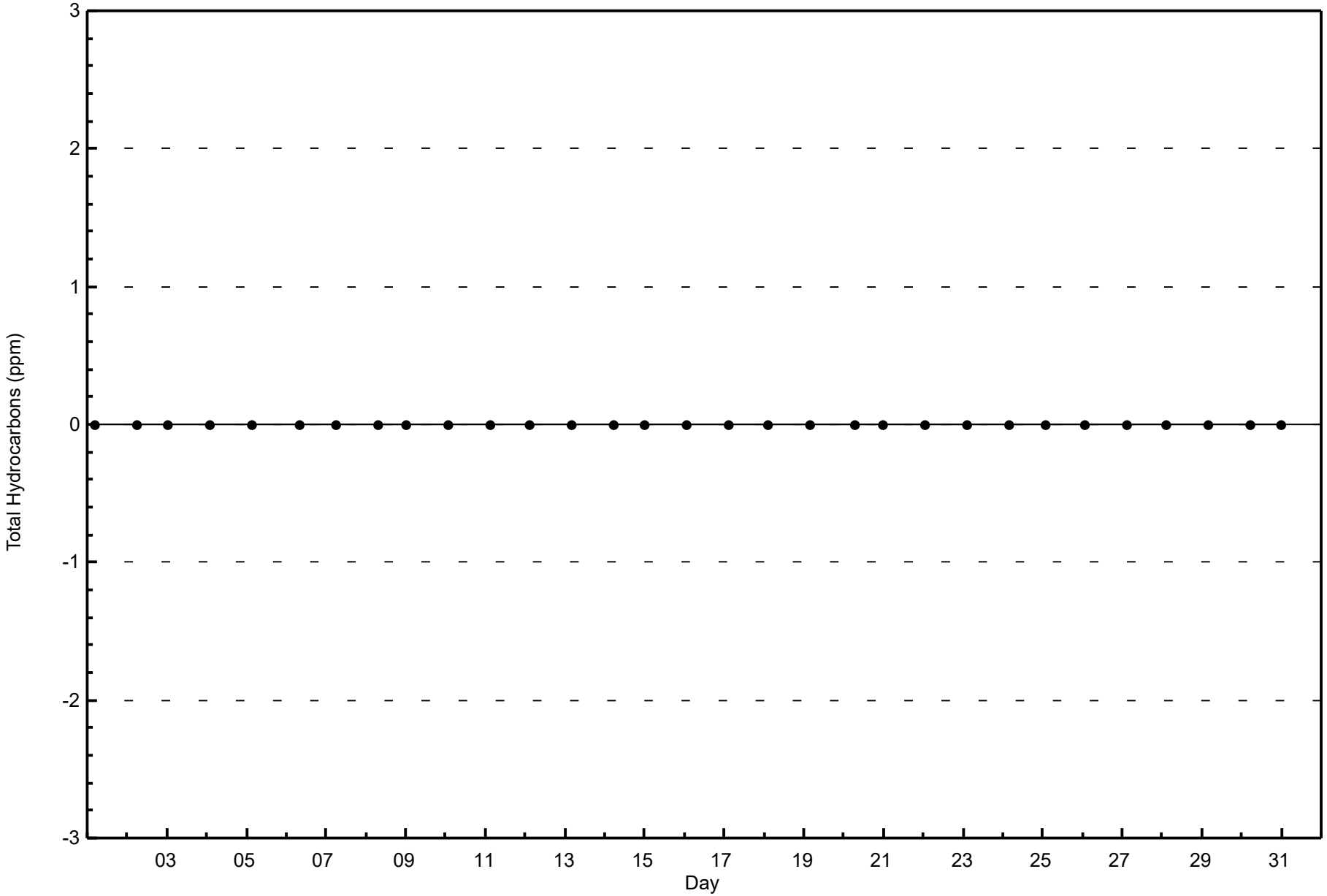
**Total Number of Valid Hours: 690**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Pihew Point - August 2026**

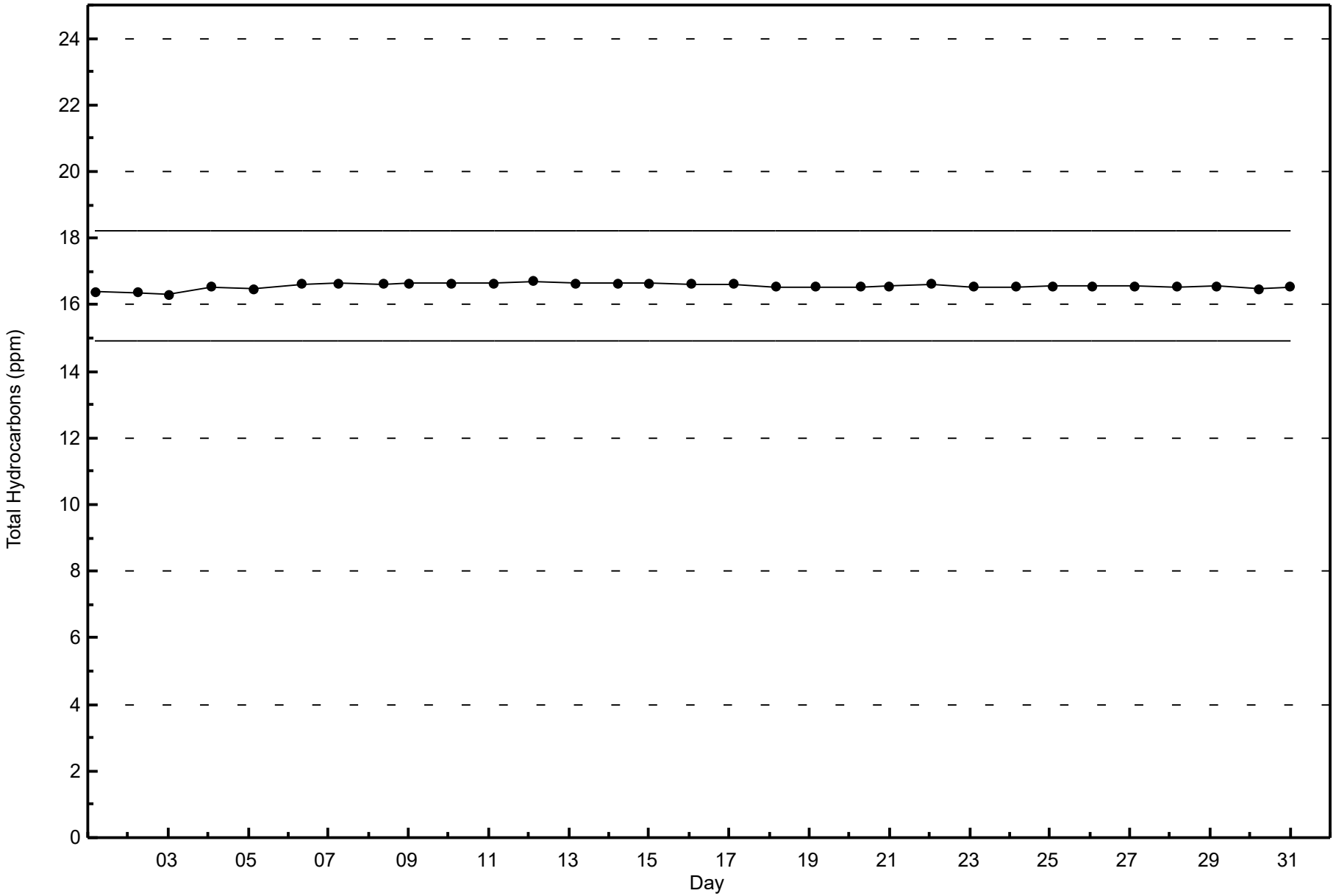


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Pihew Point - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Non Methane Hydrocarbons (NMHC) - ppm

## Pihew Point - August 2026

Maximum Value: 0.238 ppm on Aug 20 02:00

Maximum Daily Average: 0.011 ppm on Aug 20

Minimum Value: 0.000 ppm on Aug 1 01:00

Minimum Daily Average: 0.000 ppm on Aug 1

Maximum Diurnal Average: 0.010 ppm at hour 2

Minimum Diurnal Average: 0.000 ppm at hour 4

Monthly Average: 0.002 ppm

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.0 $P_{90}$ = 0.0 $P_{99}$ = 0.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 693 |
| Hours of Missing Data: | 51 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 98.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 |
| 4-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | C | C | C | C | C | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 |
| 6-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.013 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.013 |
| 7-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.029 | 0.031 | 0.021 | 0.106 | 0.030 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.009 | 0.106 |
| 8-Aug | 0.022 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.022 |
| 9-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 |
| 10-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 11-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 14-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.029 | 0.000 | 0.000 | 0.000 | 0.012 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.029 |
| 16-Aug | 0.106 | Z | 0.085 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.008 | 0.106 |
| 17-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 |
| 18-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.037 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.037 |
| 19-Aug | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20-Aug | 0.000 | 0.238 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 | 0.000 | 0.000 | 0.000 | 0.011 | 0.238 |
| 21-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 22-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 23-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.008 | 0.016 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.016 |
| 24-Aug | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | M | M | M | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 25-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 26-Aug | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27-Aug | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 |
| 28-Aug | 0.000 | 0.000 | 0.000 | Z | 0.021 | 0.009 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 | 0.000 | 0.000 | 0.054 | 0.000 | 0.004 | 0.054 |
| 29-Aug | 0.001 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 30-Aug | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.118 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.118 |
| 31-Aug | Z | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 | 0.000 | 0.000 | 0.021 | 0.000 | 0.000 | 0.002 | 0.021 |
| | 0.005 | 0.010 | 0.003 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.005 | 0.004 | 0.001 | 0.001 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.000 | Diurnal Average | |
| | 0.106 | 0.238 | 0.085 | 0.000 | 0.021 | 0.009 | 0.000 | 0.000 | 0.029 | 0.037 | 0.118 | 0.106 | 0.030 | 0.029 | 0.000 | 0.007 | 0.013 | 0.016 | 0.010 | 0.011 | 0.010 | 0.021 | 0.054 | 0.000 | Diurnal Maximum | |

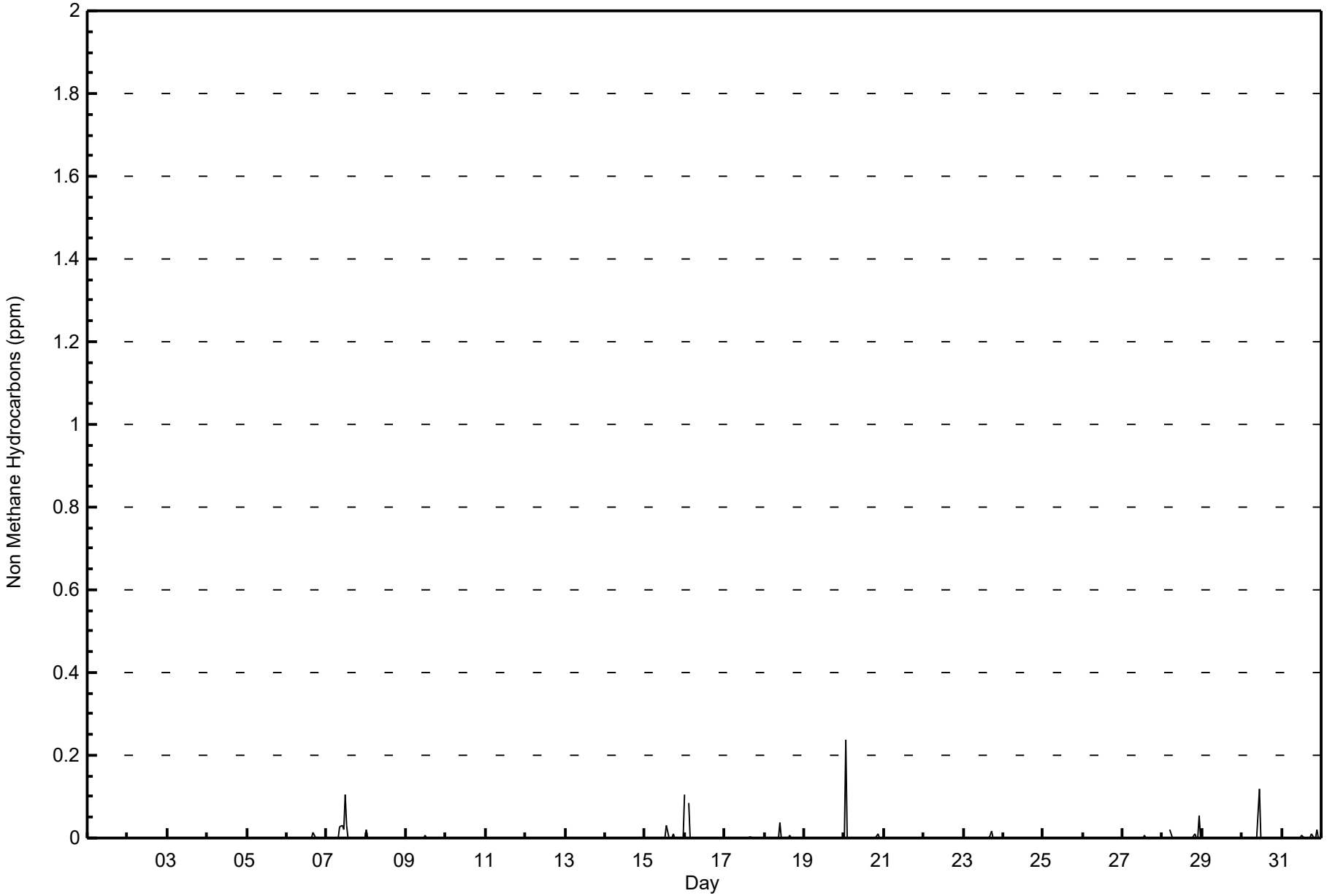
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Pihew Point - August 2026**



# Non Methane Hydrocarbons (NMHC) - ppm
## Pihew Point - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 0.005 | 666 | 96.10 | 96.10 |
| 0.006 - 0.05 | 22 | 3.17 | 99.28 |
| 0.06 - 0.1 | 4 | 0.58 | 99.86 |
| > 0.1 | 1 | 0.14 | 100.00 |

Total Number of Valid Hours: 693

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Pihew Point - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 0.005 | 101 | 59 | 21 | 10 | 21 | 23 | 63 | 55 | 34 | 40 | 62 | 10 | 23 | 34 | 39 | 68 | 663 |
| 0.006 - 0.05 | 0 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 2 | 4 | 5 | 4 | 0 | 2 | 22 |
| 0.06 - 0.1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 4 |
| > 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **Totals** | 101 | 60 | 22 | 11 | 21 | 25 | 64 | 55 | 34 | 41 | 65 | 15 | 28 | 39 | 39 | 70 | 690 |

Total Number of Valid Hours: 690

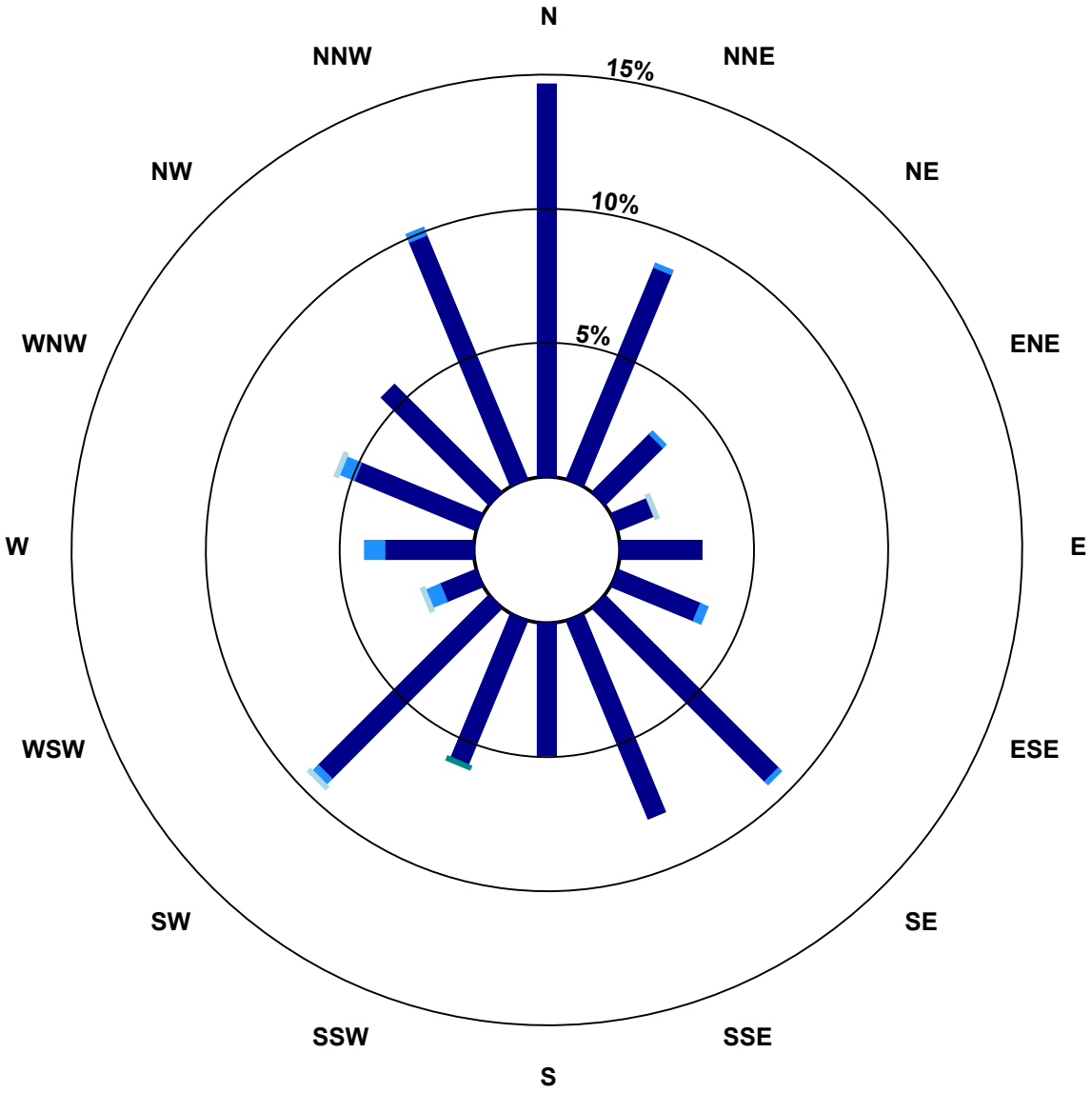
Total Number of Hours: 744

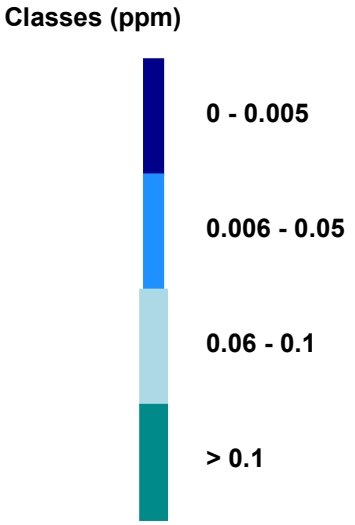
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point



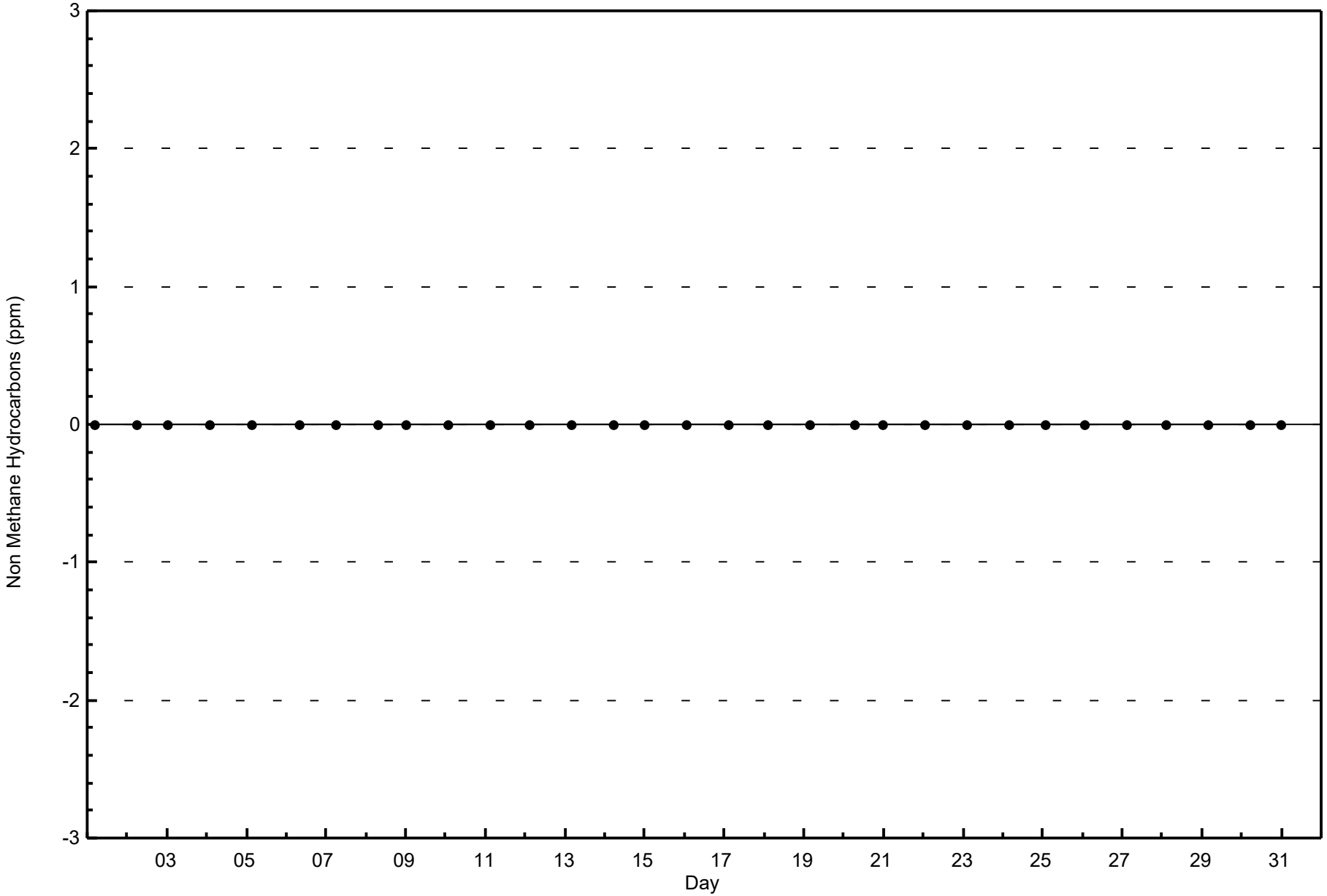

Total Number of Valid Hours: 690

**Wood Buffalo Environmental Association**

**Zero Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Pihew Point - August 2026**

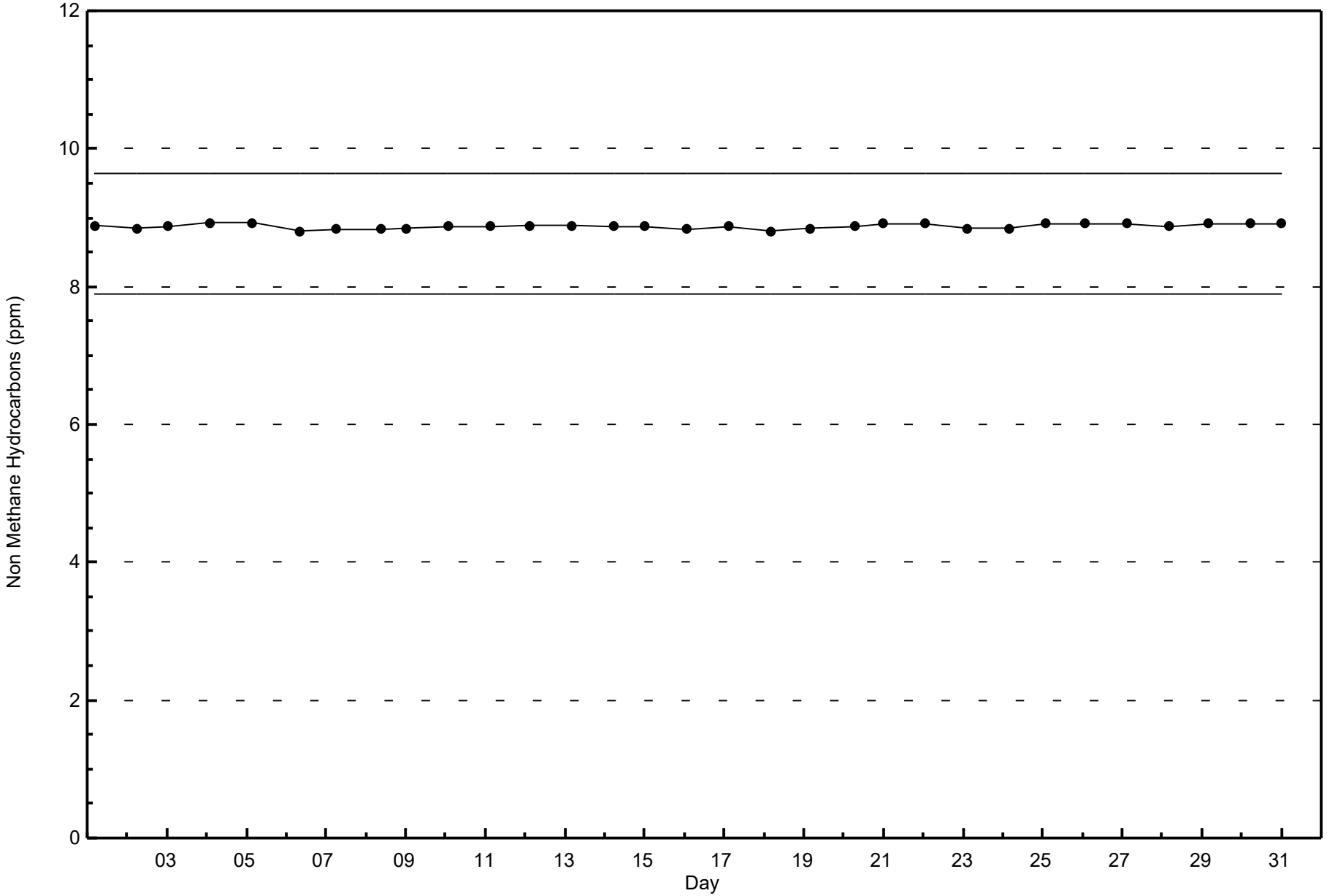


**Wood Buffalo Environmental Association**

**Span Responses**

**Non Methane Hydrocarbons (NMHC) - ppm**

**Pihew Point - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Methane ($CH_4$) - ppm

## Pihew Point - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.5 ppm on Aug 25 05:00
Maximum Daily Average: 2.7 ppm on Aug 25

Minimum Value: 1.9 ppm on Aug 2 19:00
Minimum Daily Average: 2.0 ppm on Aug 2
Maximum Diurnal Average: 2.5 ppm at hour 5
Minimum Diurnal Average: 2.1 ppm at hour 18
Monthly Average: 2.23 ppm
Percentiles: $P_1$ = 1.9 $P_{10}$ = 2.0 $Q_1$ = 2.1 Median = 2.1 $Q_3$ = 2.2 $P_{90}$ = 2.5 $P_{99}$ = 3.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 693 |
| Hours of Missing Data: | 51 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 98.1 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.1 | 2.1 | 2.1 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.4 | 2.6 | 2.6 | 2.5 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 | 2.1 | 2.1 | 2.2 | 2.6 |
| 2-Aug | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.1 |
| 3-Aug | Z | 2.4 | 2.4 | 2.6 | 2.2 | 2.1 | 2.3 | 2.2 | 2.1 | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | UO | 2.0 | 2.0 | 2.1 | 2.1 | -- | 2.6 |
| 4-Aug | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.3 | 2.4 | 2.3 | 2.3 | 2.6 | 2.6 | 2.2 | 2.6 |
| 5-Aug | 2.5 | 2.2 | 2.1 | Z | 2.1 | 2.3 | 2.2 | 2.2 | C | C | C | C | C | C | 2.1 | 2.1 | 2.0 | 2.0 | 2.2 | 2.1 | 2.4 | 2.2 | 2.2 | 2.2 | -- | 2.5 |
| 6-Aug | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | Z | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 | 2.2 | 2.4 | 2.3 | 2.2 | 2.6 |
| 7-Aug | 2.5 | 2.2 | 2.6 | 2.3 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.8 | 2.2 | 2.8 |
| 8-Aug | 3.2 | 2.5 | 3.0 | 3.0 | 3.4 | 3.2 | 3.2 | 2.1 | Z | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 3.4 |
| 9-Aug | Z | 2.2 | 2.1 | 2.2 | 2.2 | 2.4 | 2.6 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.6 |
| 10-Aug | 2.2 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.5 | 2.4 | 2.8 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.9 | 2.3 | 2.9 |
| 11-Aug | 3.3 | 2.9 | 2.7 | Z | 2.7 | 2.8 | 3.0 | 2.9 | 3.6 | 2.2 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 | 3.6 |
| 12-Aug | 2.2 | 3.3 | 3.7 | Z | 2.4 | 2.8 | 3.0 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 3.7 |
| 13-Aug | 2.2 | 2.2 | 2.2 | 2.2 | Z | 2.3 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.5 | 2.2 | 2.5 |
| 14-Aug | 4.1 | 4.6 | 3.1 | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 | 4.6 |
| 15-Aug | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| 16-Aug | 2.2 | Z | 2.7 | 2.7 | 2.7 | 3.3 | 2.8 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 3.3 |
| 17-Aug | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 |
| 18-Aug | 2.1 | 2.1 | 2.1 | Z | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.3 |
| 19-Aug | 2.4 | 2.5 | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.5 | 2.2 | 2.5 |
| 20-Aug | 2.1 | 2.2 | 3.0 | 2.3 | 2.2 | 2.2 | Z | 2.3 | 3.1 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 3.1 |
| 21-Aug | Z | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 |
| 22-Aug | 2.1 | Z | 2.1 | 2.1 | 2.4 | 2.3 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.4 |
| 23-Aug | 2.2 | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 | 2.6 | 2.5 | 2.4 | 2.3 | 2.5 | 2.3 | 2.5 | 3.1 | 2.9 | 3.3 | 2.4 | 3.3 |
| 24-Aug | 2.8 | 2.8 | 3.0 | Z | 2.4 | 2.6 | 2.2 | 3.1 | 2.4 | M | M | M | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.8 | 3.5 | 2.4 | 3.5 |
| 25-Aug | 2.5 | Z | 3.3 | 5.5 | 5.5 | 3.6 | 3.5 | 3.0 | 2.3 | 2.3 | 2.2 | 2.3 | 2.4 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.7 | 5.5 |
| 26-Aug | 2.2 | Z | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.3 |
| 27-Aug | 2.1 | 2.3 | Z | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 |
| 28-Aug | 2.2 | 2.3 | 2.2 | Z | 2.2 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.4 |
| 29-Aug | 2.0 | 2.0 | 2.0 | 2.0 | Z | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 30-Aug | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | Z | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 |
| 31-Aug | Z | 2.2 | 2.2 | 3.2 | 3.8 | 3.8 | 3.1 | 2.9 | 2.8 | 2.6 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.1 | 2.2 | 2.1 | 2.4 | 3.8 |
| | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | Diurnal Average | |
| | 4.1 | 4.6 | 3.7 | 5.5 | 5.5 | 3.8 | 3.5 | 3.1 | 3.6 | 2.8 | 2.6 | 2.5 | 2.4 | 2.5 | 2.6 | 2.5 | 2.4 | 2.3 | 2.5 | 2.4 | 2.6 | 3.1 | 2.9 | 3.5 | Diurnal Maximum | |

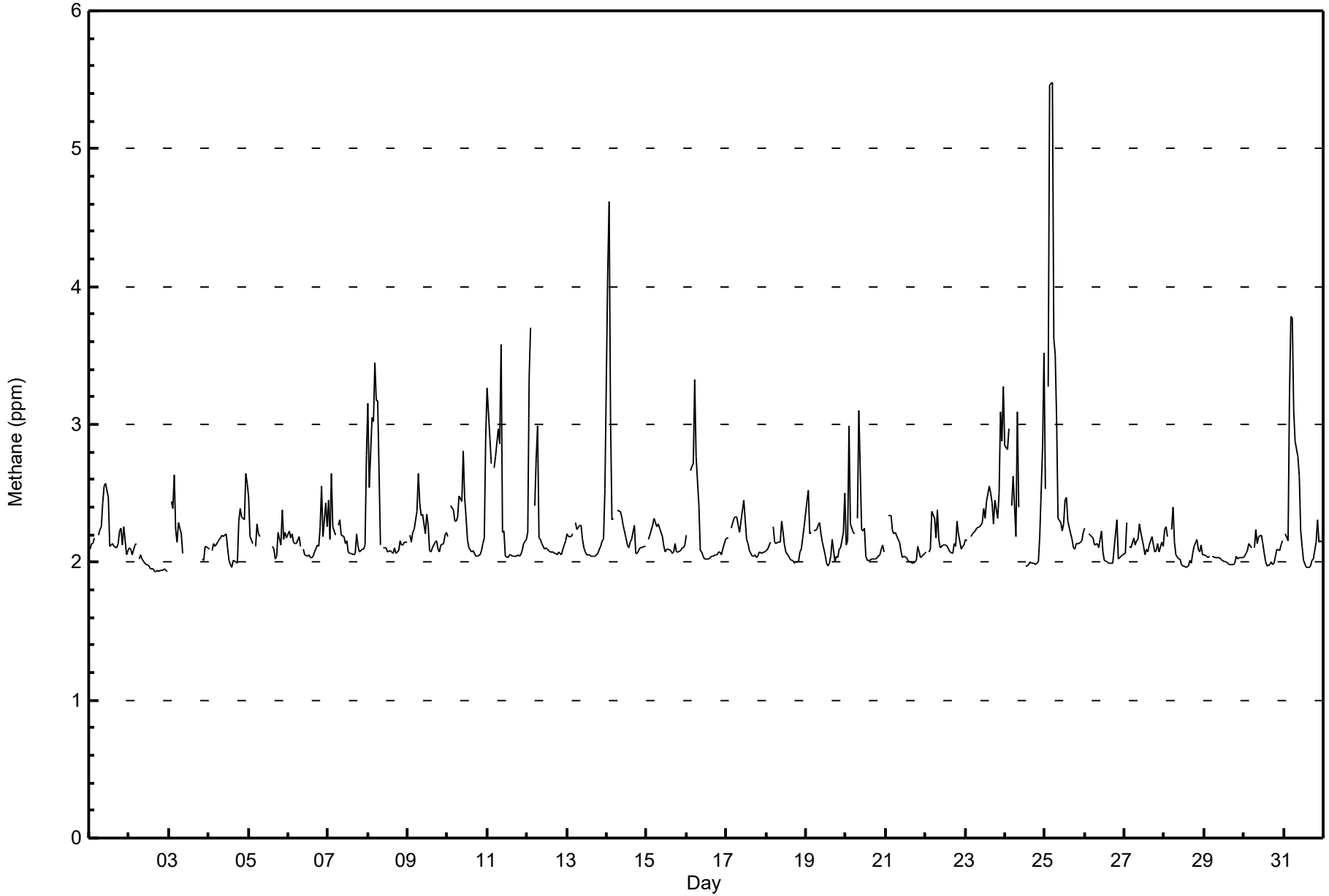
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Methane ($CH_4$) - ppm**

**Pihew Point - August 2026**



# Methane ($CH_4$) - ppm
## Pihew Point - August 2026

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 153 | 22.08 | 22.08 |
| 2.1 - 3.0 | 514 | 74.17 | 96.25 |
| 3.1 - 10.0 | 26 | 3.75 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 693

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Methane ($CH_4$) - ppm**

**Pihew Point - August 2026**

| Concentration Ranges (ppm) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2.0 | 29 | 12 | 4 | 1 | 4 | 3 | 15 | 8 | 7 | 3 | 39 | 3 | 2 | 0 | 3 | 20 | 153 |
| 2.1 - 3.0 | 71 | 46 | 18 | 10 | 17 | 21 | 49 | 47 | 27 | 38 | 26 | 12 | 25 | 34 | 30 | 40 | 511 |
| 3.1 - 10.0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 6 | 10 | 26 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 101 | 60 | 22 | 11 | 21 | 25 | 64 | 55 | 34 | 41 | 65 | 15 | 28 | 39 | 39 | 70 | 690 |

Total Number of Valid Hours: 690

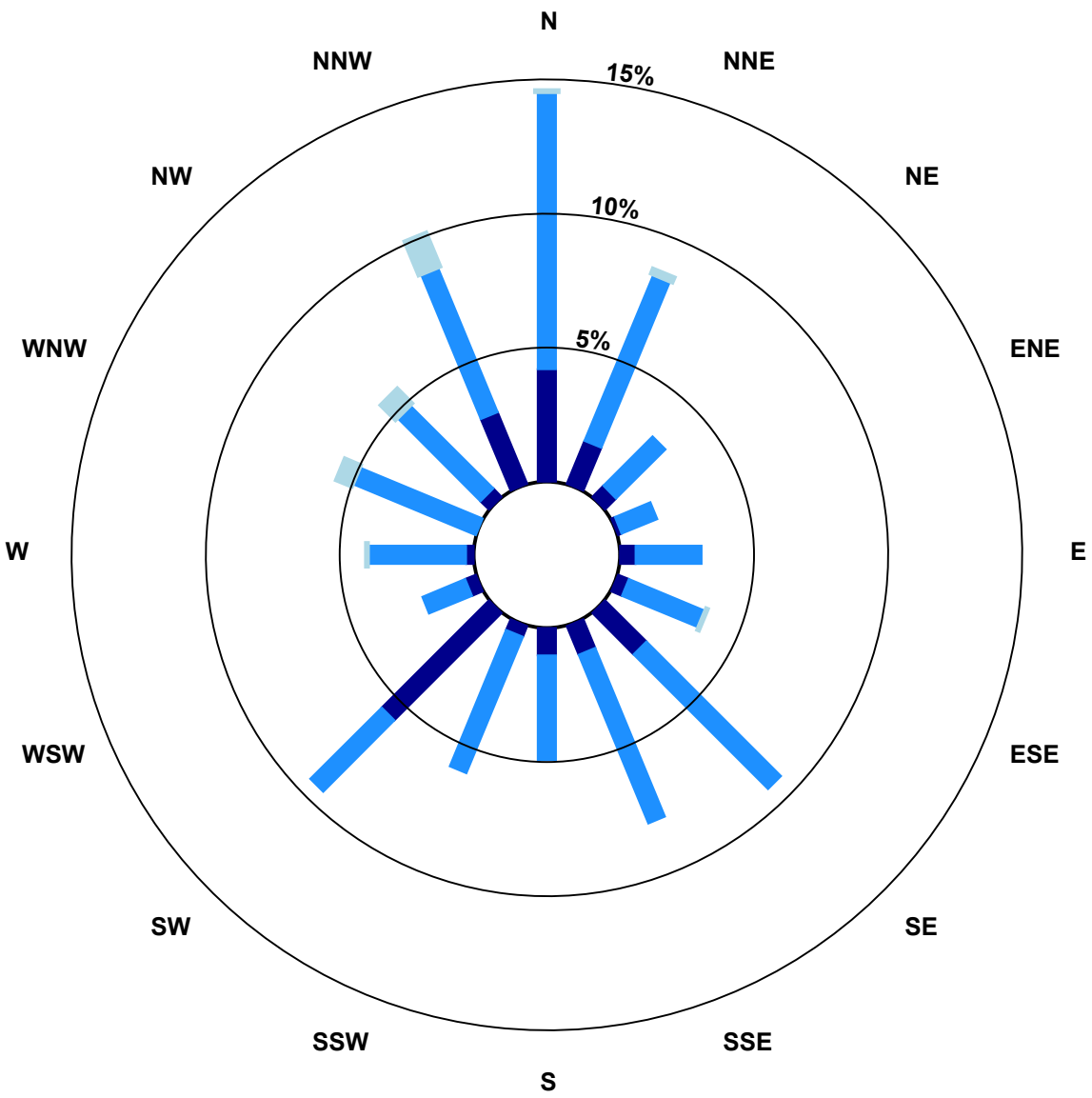
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Methane ($CH_4$) - ppm

Pihew Point




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

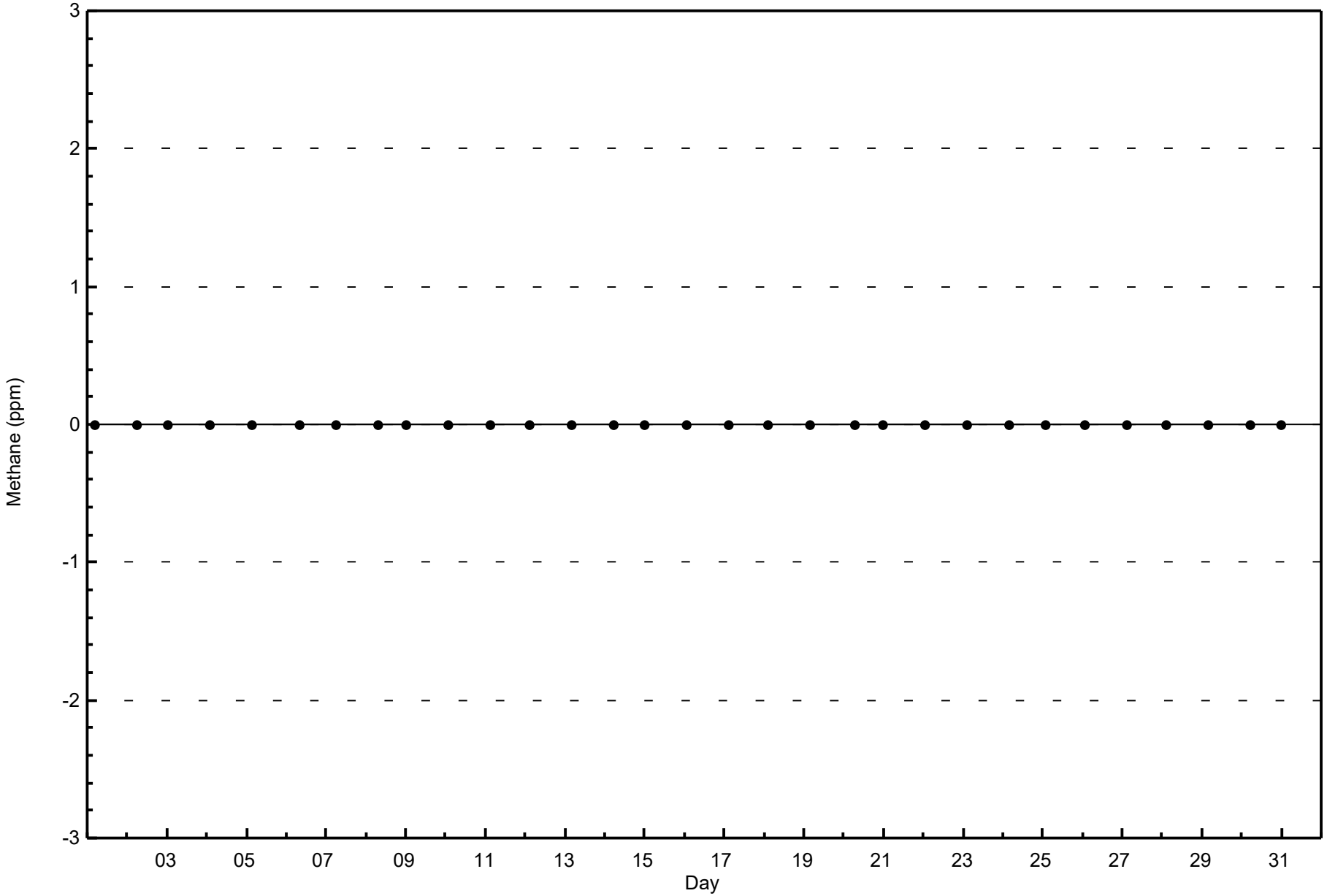
Total Number of Valid Hours: 690

**Wood Buffalo Environmental Association**

**Zero Responses**

**Methane ($CH_4$) - ppm**

**Pihew Point - August 2026**

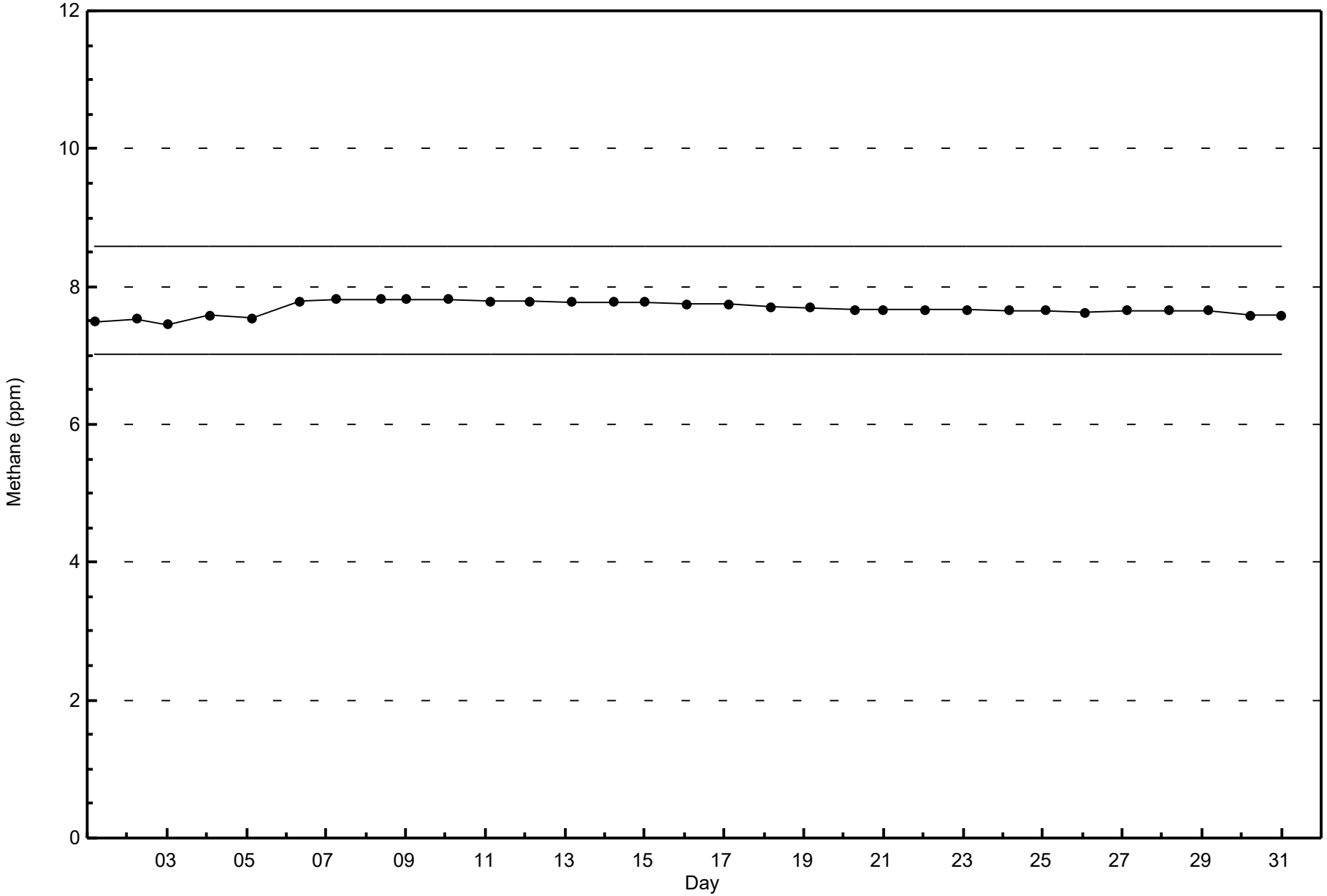


**Wood Buffalo Environmental Association**

**Span Responses**

**Methane ($CH_4$) - ppm**

**Pihew Point - August 2026**



Maximum Value: 29.9 C on Aug 26 16:00
Maximum Daily Average: 21.5 C on Aug 27

Minimum Value: 7.6 C on Aug 17 06:00
Minimum Daily Average: 14.0 C on Aug 3
Maximum Diurnal Average: 22.2 C at hour 15
Minimum Diurnal Average: 12.8 C at hour 6
Monthly Average: 17.35 C
Percentiles: $P_1$ = 8.8 $P_{10}$ = 12.0 $Q_1$ = 14.0 Median = 16.7 $Q_3$ = 20.4 $P_{90}$ = 23.8 $P_{99}$ = 28.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

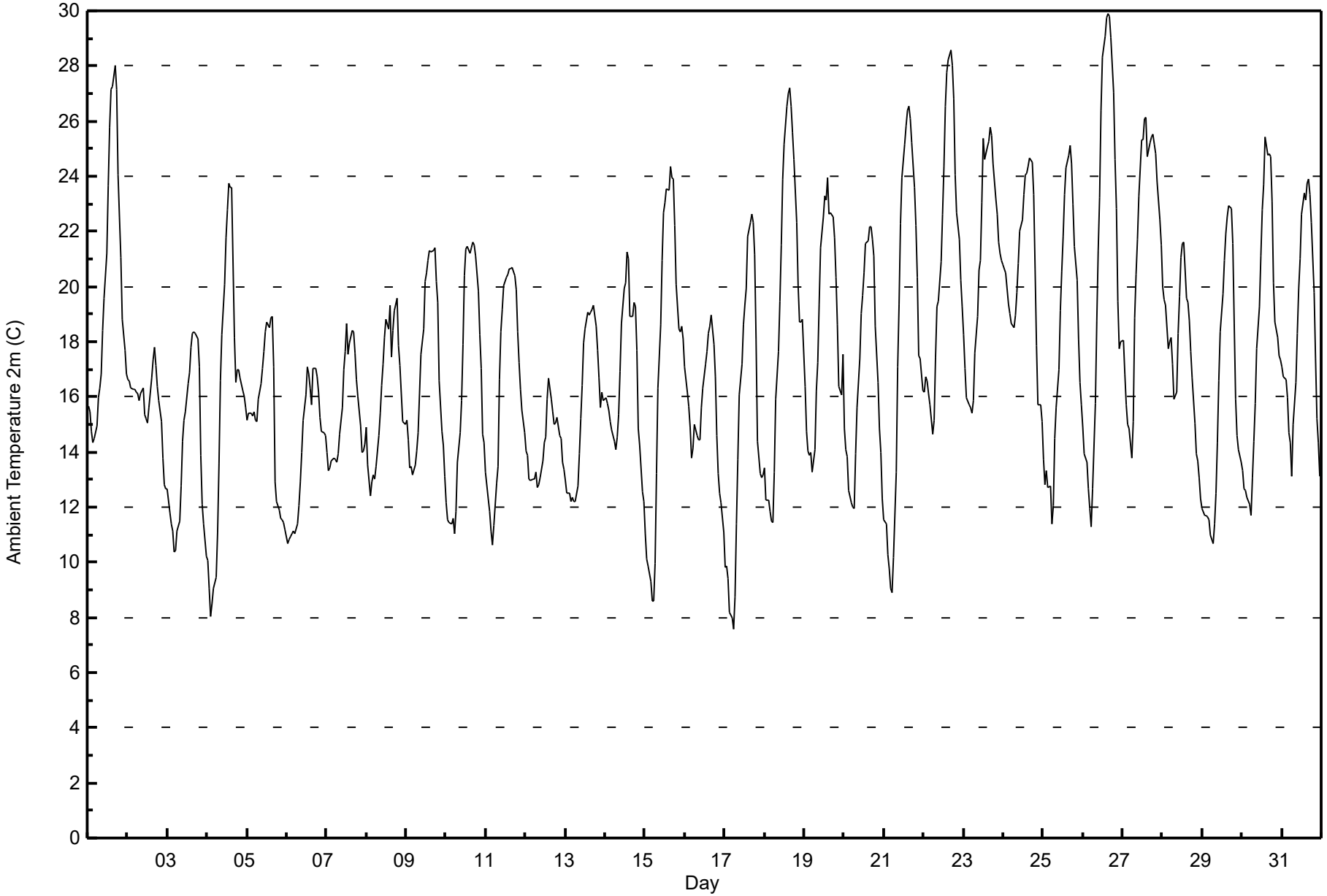
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 15.7 | 15.5 | 14.8 | 14.3 | 14.5 | 14.9 | 16.0 | 16.3 | 16.8 | 18.4 | 19.6 | 21.2 | 23.6 | 25.8 | 27.2 | 27.2 | 28.0 | 27.1 | 24.0 | 22.5 | 21.1 | 18.8 | 17.7 | 16.8 | 19.9 | 28.0 |
| 2-Aug | 16.6 | 16.6 | 16.3 | 16.3 | 16.3 | 16.2 | 16.1 | 15.9 | 16.1 | 16.3 | 15.3 | 15.2 | 15.1 | 15.6 | 16.7 | 17.4 | 17.8 | 17.2 | 16.4 | 15.8 | 15.1 | 13.8 | 12.8 | 12.7 | 15.8 | 17.8 |
| 3-Aug | 12.7 | 11.8 | 11.4 | 11.1 | 10.4 | 10.4 | 11.2 | 11.5 | 12.8 | 14.4 | 15.2 | 15.4 | 16.5 | 16.9 | 17.8 | 18.3 | 18.4 | 18.3 | 18.1 | 17.1 | 13.9 | 12.1 | 11.4 | 10.2 | 14.0 | 18.4 |
| 4-Aug | 10.1 | 9.1 | 8.0 | 8.5 | 9.1 | 9.5 | 11.1 | 13.6 | 16.6 | 18.3 | 20.1 | 21.7 | 22.8 | 23.8 | 23.6 | 23.6 | 18.1 | 16.5 | 17.0 | 17.0 | 16.7 | 16.2 | 16.0 | 15.6 | 15.9 | 23.8 |
| 5-Aug | 15.1 | 15.4 | 15.4 | 15.3 | 15.5 | 15.1 | 15.1 | 15.9 | 16.5 | 17.0 | 17.6 | 18.4 | 18.7 | 18.5 | 18.9 | 18.9 | 17.1 | 12.9 | 12.2 | 11.9 | 11.6 | 11.5 | 11.4 | 11.2 | 15.3 | 18.9 |
| 6-Aug | 10.7 | 10.8 | 10.9 | 11.0 | 11.1 | 11.0 | 11.4 | 12.1 | 12.9 | 14.0 | 15.2 | 16.0 | 17.1 | 16.8 | 16.3 | 15.7 | 17.0 | 17.0 | 16.7 | 16.2 | 15.2 | 14.7 | 14.7 | 14.6 | 14.1 | 17.1 |
| 7-Aug | 14.0 | 13.3 | 13.4 | 13.7 | 13.8 | 13.7 | 13.6 | 13.9 | 14.7 | 15.6 | 17.0 | 17.7 | 18.7 | 17.5 | 18.0 | 18.4 | 18.4 | 17.6 | 16.6 | 16.0 | 14.9 | 14.0 | 14.0 | 14.3 | 15.5 | 18.7 |
| 8-Aug | 14.9 | 13.5 | 12.4 | 12.9 | 13.2 | 13.0 | 13.5 | 14.6 | 15.4 | 16.4 | 17.2 | 18.2 | 18.8 | 18.4 | 19.3 | 17.4 | 18.4 | 19.1 | 19.6 | 17.8 | 17.1 | 16.1 | 15.1 | 15.0 | 16.1 | 19.6 |
| 9-Aug | 15.1 | 14.4 | 13.4 | 13.5 | 13.2 | 13.5 | 14.0 | 14.7 | 16.1 | 17.5 | 18.4 | 20.2 | 20.5 | 21.0 | 21.3 | 21.3 | 21.3 | 21.4 | 20.2 | 19.4 | 16.6 | 14.7 | 14.2 | 13.1 | 17.1 | 21.4 |
| 10-Aug | 12.2 | 11.5 | 11.4 | 11.4 | 11.6 | 11.0 | 11.8 | 13.6 | 14.7 | 15.9 | 17.9 | 20.4 | 21.4 | 21.4 | 21.2 | 21.4 | 21.6 | 21.5 | 21.1 | 19.8 | 18.2 | 17.0 | 14.6 | 14.3 | 16.6 | 21.6 |
| 11-Aug | 13.3 | 12.3 | 11.8 | 11.1 | 10.6 | 11.3 | 12.9 | 13.5 | 16.6 | 18.4 | 19.2 | 20.0 | 20.3 | 20.4 | 20.7 | 20.6 | 20.7 | 20.4 | 19.9 | 18.4 | 17.2 | 16.3 | 15.5 | 14.7 | 16.5 | 20.7 |
| 12-Aug | 14.0 | 13.9 | 13.0 | 13.0 | 13.0 | 13.0 | 13.3 | 12.7 | 12.8 | 13.0 | 13.7 | 14.3 | 14.5 | 15.9 | 16.7 | 15.9 | 15.5 | 15.0 | 15.1 | 15.3 | 14.6 | 14.5 | 13.6 | 13.4 | 14.2 | 16.7 |
| 13-Aug | 13.0 | 12.5 | 12.5 | 12.2 | 12.4 | 12.2 | 12.2 | 12.8 | 13.9 | 15.2 | 16.4 | 18.0 | 18.5 | 19.1 | 19.0 | 19.1 | 19.2 | 19.3 | 18.5 | 17.7 | 16.7 | 15.6 | 16.2 | 15.9 | 15.7 | 19.3 |
| 14-Aug | 16.0 | 15.8 | 15.5 | 15.1 | 14.8 | 14.4 | 14.1 | 14.5 | 15.3 | 16.9 | 18.7 | 19.9 | 20.2 | 21.2 | 21.0 | 18.9 | 18.9 | 19.4 | 19.3 | 17.7 | 14.9 | 14.2 | 12.6 | 12.2 | 16.7 | 21.2 |
| 15-Aug | 11.0 | 10.1 | 9.8 | 9.3 | 8.6 | 8.6 | 10.0 | 13.2 | 16.3 | 18.6 | 21.0 | 22.7 | 23.1 | 23.5 | 23.5 | 24.4 | 23.9 | 23.9 | 22.2 | 20.1 | 18.5 | 18.4 | 18.5 | 18.1 | 17.4 | 24.4 |
| 16-Aug | 17.1 | 16.2 | 15.7 | 14.9 | 13.8 | 14.1 | 15.0 | 14.6 | 14.4 | 14.4 | 15.6 | 16.3 | 17.2 | 17.7 | 18.3 | 18.5 | 19.0 | 17.9 | 16.7 | 14.6 | 13.2 | 12.5 | 12.2 | 11.1 | 15.5 | 19.0 |
| 17-Aug | 9.8 | 9.9 | 9.4 | 8.2 | 8.0 | 7.6 | 8.7 | 11.4 | 13.7 | 16.1 | 17.2 | 18.6 | 19.3 | 20.0 | 21.8 | 22.3 | 22.6 | 22.3 | 21.2 | 18.1 | 14.4 | 13.2 | 13.1 | 13.2 | 15.0 | 22.6 |
| 18-Aug | 13.4 | 12.2 | 12.2 | 11.9 | 11.5 | 11.4 | 13.3 | 15.9 | 17.6 | 19.5 | 21.5 | 23.9 | 25.2 | 26.5 | 27.0 | 27.2 | 26.5 | 25.6 | 24.6 | 22.3 | 20.0 | 18.7 | 18.7 | 18.8 | 19.4 | 27.2 |
| 19-Aug | 16.4 | 14.7 | 14.0 | 13.9 | 14.0 | 13.3 | 14.1 | 16.2 | 17.2 | 19.4 | 21.4 | 22.5 | 23.3 | 23.1 | 23.9 | 22.7 | 22.7 | 22.5 | 21.8 | 20.3 | 18.6 | 16.4 | 16.0 | 17.5 | 18.6 | 23.9 |
| 20-Aug | 14.9 | 14.1 | 13.8 | 12.6 | 12.2 | 12.0 | 12.0 | 13.9 | 15.6 | 17.4 | 19.0 | 19.7 | 20.5 | 21.6 | 21.7 | 22.2 | 22.2 | 21.7 | 21.1 | 18.6 | 16.5 | 14.8 | 14.0 | 12.3 | 16.8 | 22.2 |
| 21-Aug | 11.5 | 11.4 | 10.3 | 9.8 | 9.1 | 8.9 | 10.2 | 13.3 | 17.1 | 19.4 | 22.3 | 24.0 | 25.1 | 25.8 | 26.4 | 26.5 | 26.1 | 25.2 | 23.6 | 22.2 | 20.3 | 17.5 | 17.4 | 16.2 | 18.3 | 26.5 |
| 22-Aug | 16.2 | 16.7 | 16.6 | 16.1 | 15.7 | 14.7 | 15.2 | 17.4 | 19.3 | 19.5 | 20.9 | 22.6 | 24.4 | 26.6 | 27.8 | 28.2 | 28.6 | 28.0 | 26.8 | 24.0 | 22.7 | 21.7 | 20.3 | 19.3 | 21.2 | 28.6 |
| 23-Aug | 18.3 | 17.0 | 16.0 | 15.7 | 15.6 | 15.4 | 15.9 | 17.6 | 18.9 | 20.6 | 20.9 | 23.0 | 25.4 | 24.6 | 25.0 | 25.3 | 25.8 | 25.5 | 24.4 | 23.2 | 22.6 | 21.6 | 21.2 | 21.0 | 20.9 | 25.8 |
| 24-Aug | 20.8 | 20.5 | 19.9 | 19.4 | 19.0 | 18.7 | 18.5 | 18.9 | 19.8 | 20.9 | 22.0 | 22.4 | 23.4 | 24.1 | 24.1 | 24.4 | 24.7 | 24.5 | 23.4 | 20.7 | 17.9 | 15.7 | 15.7 | 15.1 | 20.6 | 24.7 |
| 25-Aug | 13.8 | 12.8 | 13.3 | 12.7 | 12.8 | 11.4 | 12.0 | 14.5 | 15.6 | 17.0 | 19.1 | 20.5 | 21.8 | 23.3 | 24.3 | 24.8 | 25.1 | 24.4 | 23.0 | 21.5 | 20.2 | 18.1 | 16.5 | 15.7 | 18.1 | 25.1 |
| 26-Aug | 14.9 | 13.9 | 13.6 | 12.7 | 12.0 | 11.3 | 12.6 | 15.8 | 18.7 | 21.3 | 23.2 | 26.4 | 28.3 | 29.1 | 29.7 | 29.9 | 29.8 | 29.1 | 27.0 | 24.6 | 22.8 | 19.5 | 17.7 | 18.0 | 20.9 | 29.9 |
| 27-Aug | 18.0 | 16.8 | 15.7 | 15.0 | 14.9 | 13.8 | 15.1 | 18.9 | 20.4 | 21.7 | 23.3 | 25.3 | 25.3 | 26.1 | 26.1 | 24.7 | 25.2 | 25.4 | 25.5 | 25.2 | 24.8 | 23.8 | 22.4 | 21.5 | 21.5 | 26.1 |
| 28-Aug | 20.0 | 19.5 | 19.3 | 17.8 | 18.0 | 18.1 | 17.2 | 15.9 | 16.2 | 18.3 | 19.6 | 21.1 | 21.6 | 21.6 | 19.6 | 19.4 | 18.8 | 17.6 | 16.7 | 15.1 | 13.9 | 13.7 | 13.1 | 12.3 | 17.7 | 21.6 |
| 29-Aug | 12.0 | 11.7 | 11.7 | 11.7 | 11.6 | 11.0 | 10.7 | 11.4 | 12.5 | 14.3 | 16.6 | 18.3 | 19.7 | 21.0 | 21.9 | 22.5 | 22.9 | 22.8 | 21.5 | 18.6 | 15.9 | 14.6 | 14.1 | 13.6 | 15.9 | 22.9 |
| 30-Aug | 13.3 | 12.7 | 12.6 | 12.4 | 12.1 | 11.7 | 13.1 | 14.4 | 15.8 | 17.7 | 19.3 | 21.1 | 22.8 | 23.7 | 25.4 | 24.8 | 24.8 | 24.7 | 23.1 | 20.1 | 18.7 | 18.1 | 17.5 | 17.4 | 18.2 | 25.4 |
| 31-Aug | 17.1 | 16.7 | 16.6 | 16.0 | 14.7 | 14.3 | 13.1 | 15.0 | 16.5 | 18.3 | 20.0 | 21.0 | 22.6 | 23.4 | 23.1 | 23.8 | 23.9 | 23.4 | 22.3 | 19.8 | 17.4 | 15.2 | 14.4 | 13.1 | 18.4 | 23.9 |
| | 14.6 | 14.0 | 13.6 | 13.2 | 13.0 | 12.8 | 13.3 | 14.6 | 16.0 | 17.5 | 18.8 | 20.2 | 21.1 | 21.7 | 22.2 | 22.1 | 22.0 | 21.5 | 20.6 | 19.1 | 17.5 | 16.2 | 15.6 | 15.1 | Diurnal Average | |
| | 20.8 | 20.5 | 19.9 | 19.4 | 19.0 | 18.7 | 18.5 | 18.9 | 20.4 | 21.7 | 23.3 | 26.4 | 28.3 | 29.1 | 29.7 | 29.9 | 29.8 | 29.1 | 27.0 | 25.2 | 24.8 | 23.8 | 22.4 | 21.5 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Pihew Point - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 20 | 2.69 | 2.69 |
| 10 - 20 | 523 | 70.30 | 72.98 |
| > 20 | 201 | 27.02 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 97.0 % on Aug 15 06:00

Maximum Daily Average: 83.6 % on Aug 12

Minimum Value: 32.6 % on Aug 26 15:00

Minimum Daily Average: 50.9 % on Aug 24

Maximum Diurnal Average: 86.5 % at hour 6

Minimum Diurnal Average: 49.1 % at hour 15

Monthly Average: 69.52 %

Percentiles: $P_1$ = 34.3 $P_{10}$ = 46.1 $Q_1$ = 56.0 Median = 72.1 $Q_3$ = 83.7 $P_{90}$ = 91.1 $P_{99}$ = 96.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

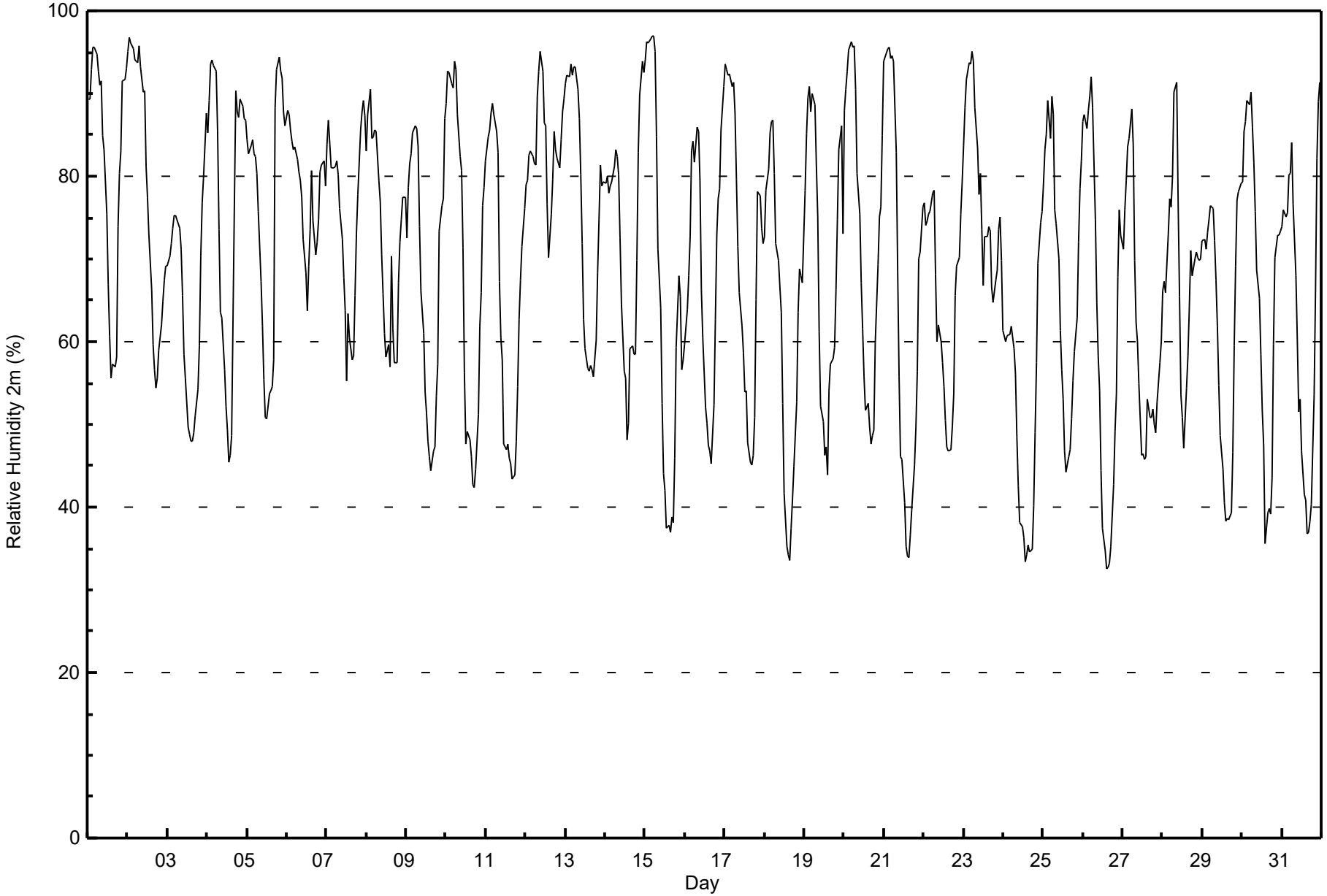
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 89.3 | 89.4 | 92.8 | 95.5 | 95.6 | 94.8 | 92.7 | 91.0 | 91.5 | 84.8 | 83.3 | 75.4 | 67.0 | 60.7 | 55.5 | 57.3 | 57.0 | 58.1 | 74.0 | 80.3 | 83.0 | 91.6 | 91.7 | 93.1 | 81.1 | 95.6 |
| 2-Aug | 95.1 | 96.7 | 96.1 | 95.4 | 94.1 | 93.8 | 93.7 | 95.8 | 93.2 | 90.1 | 90.3 | 81.1 | 77.5 | 73.0 | 66.2 | 59.7 | 56.6 | 54.4 | 55.6 | 59.0 | 62.1 | 65.0 | 67.4 | 69.2 | 78.4 | 96.7 |
| 3-Aug | 69.1 | 70.4 | 71.8 | 73.8 | 75.3 | 75.3 | 74.7 | 73.7 | 71.2 | 65.6 | 58.5 | 55.5 | 49.7 | 48.9 | 47.9 | 47.9 | 49.0 | 51.0 | 54.3 | 59.5 | 70.4 | 76.8 | 80.0 | 87.6 | 64.9 | 87.6 |
| 4-Aug | 85.3 | 89.2 | 93.6 | 94.0 | 93.4 | 92.7 | 85.3 | 73.5 | 63.5 | 63.0 | 56.6 | 52.2 | 49.4 | 45.5 | 46.2 | 48.7 | 77.1 | 90.3 | 87.8 | 87.0 | 89.4 | 88.5 | 86.9 | 86.9 | 76.1 | 94.0 |
| 5-Aug | 84.4 | 82.7 | 83.7 | 84.5 | 82.7 | 82.3 | 80.4 | 75.8 | 67.3 | 61.9 | 55.4 | 50.8 | 50.7 | 53.7 | 54.0 | 54.5 | 57.8 | 88.3 | 92.9 | 94.3 | 92.8 | 91.8 | 87.8 | 86.1 | 74.9 | 94.3 |
| 6-Aug | 87.9 | 87.4 | 85.7 | 84.2 | 83.2 | 83.6 | 82.0 | 80.6 | 79.5 | 77.4 | 72.3 | 68.3 | 63.8 | 69.2 | 73.5 | 80.7 | 74.6 | 70.6 | 72.0 | 74.7 | 80.6 | 81.4 | 81.8 | 78.8 | 78.1 | 87.9 |
| 7-Aug | 83.9 | 86.8 | 83.9 | 81.1 | 81.0 | 81.2 | 81.9 | 80.2 | 76.0 | 72.5 | 67.7 | 63.7 | 55.3 | 63.4 | 60.5 | 57.8 | 58.4 | 65.6 | 73.1 | 77.7 | 85.7 | 87.8 | 89.2 | 87.3 | 75.1 | 89.2 |
| 8-Aug | 83.0 | 87.4 | 90.6 | 84.6 | 84.7 | 85.7 | 85.4 | 79.4 | 76.9 | 70.6 | 65.7 | 60.9 | 58.1 | 59.6 | 57.0 | 70.3 | 61.6 | 57.4 | 57.4 | 67.0 | 72.1 | 74.8 | 77.4 | 77.5 | 72.7 | 90.6 |
| 9-Aug | 72.5 | 78.7 | 81.5 | 82.7 | 85.3 | 86.0 | 85.8 | 83.6 | 73.9 | 66.2 | 60.9 | 53.8 | 51.4 | 48.0 | 46.1 | 44.4 | 46.8 | 47.4 | 53.4 | 57.3 | 73.3 | 76.4 | 77.2 | 87.0 | 67.5 | 87.0 |
| 10-Aug | 88.9 | 92.8 | 92.6 | 91.2 | 90.8 | 93.9 | 92.8 | 87.5 | 82.3 | 80.6 | 71.4 | 56.3 | 47.5 | 49.2 | 48.2 | 46.2 | 42.7 | 42.3 | 44.5 | 51.2 | 61.8 | 66.0 | 76.4 | 78.7 | 69.8 | 93.9 |
| 11-Aug | 81.8 | 84.7 | 85.6 | 87.6 | 88.8 | 87.5 | 85.3 | 82.9 | 67.2 | 60.6 | 57.7 | 47.5 | 47.0 | 47.7 | 45.9 | 45.3 | 43.5 | 43.9 | 47.9 | 54.6 | 62.8 | 67.4 | 71.6 | 76.1 | 65.5 | 88.8 |
| 12-Aug | 78.9 | 79.4 | 82.5 | 83.1 | 82.4 | 81.6 | 81.4 | 89.6 | 92.8 | 95.1 | 92.8 | 86.4 | 86.2 | 76.7 | 70.1 | 75.5 | 79.7 | 85.5 | 83.2 | 82.1 | 81.0 | 84.4 | 87.8 | 89.3 | 83.6 | 95.1 |
| 13-Aug | 91.2 | 92.2 | 92.0 | 93.5 | 92.2 | 93.3 | 93.2 | 90.6 | 86.9 | 80.1 | 71.8 | 62.8 | 59.2 | 56.8 | 56.4 | 57.2 | 56.6 | 55.7 | 60.1 | 68.3 | 74.7 | 81.3 | 78.8 | 79.3 | 76.0 | 93.5 |
| 14-Aug | 79.1 | 80.0 | 78.0 | 78.8 | 79.3 | 81.1 | 83.3 | 82.4 | 80.1 | 72.5 | 64.6 | 56.5 | 55.5 | 48.1 | 50.3 | 59.1 | 59.5 | 58.4 | 58.5 | 69.8 | 82.8 | 89.9 | 93.9 | 92.6 | 72.2 | 93.9 |
| 15-Aug | 94.1 | 96.3 | 96.2 | 96.7 | 96.9 | 97.0 | 95.1 | 84.7 | 71.2 | 64.1 | 52.6 | 44.0 | 42.0 | 37.4 | 37.8 | 36.9 | 38.7 | 38.1 | 45.8 | 59.4 | 67.9 | 65.5 | 56.6 | 57.8 | 65.5 | 97.0 |
| 16-Aug | 59.7 | 64.0 | 67.9 | 72.7 | 83.0 | 84.2 | 81.7 | 85.9 | 85.4 | 79.5 | 66.3 | 60.5 | 52.0 | 50.1 | 47.5 | 46.8 | 45.3 | 52.4 | 62.8 | 72.8 | 77.3 | 78.5 | 85.5 | 90.8 | 68.9 | 90.8 |
| 17-Aug | 93.6 | 92.8 | 92.2 | 92.4 | 90.8 | 91.4 | 87.6 | 79.7 | 71.6 | 65.9 | 61.9 | 58.6 | 54.0 | 54.1 | 47.8 | 45.5 | 45.0 | 46.4 | 50.8 | 65.1 | 78.1 | 77.5 | 73.7 | 71.9 | 70.3 | 93.6 |
| 18-Aug | 72.8 | 78.4 | 80.9 | 85.3 | 86.6 | 86.8 | 80.4 | 71.8 | 69.8 | 66.6 | 63.6 | 52.5 | 41.7 | 35.3 | 34.2 | 33.6 | 37.4 | 41.1 | 44.9 | 52.7 | 63.6 | 68.8 | 67.9 | 67.2 | 61.8 | 86.8 |
| 19-Aug | 78.3 | 85.0 | 89.5 | 90.8 | 87.7 | 90.0 | 88.7 | 81.4 | 75.1 | 61.3 | 52.2 | 50.3 | 46.2 | 47.3 | 43.8 | 54.0 | 57.3 | 58.0 | 59.4 | 66.2 | 74.7 | 83.3 | 86.1 | 73.0 | 70.0 | 90.8 |
| 20-Aug | 88.0 | 90.6 | 92.7 | 95.2 | 96.3 | 95.6 | 95.8 | 90.5 | 80.4 | 75.4 | 67.1 | 61.5 | 55.7 | 51.7 | 52.5 | 49.6 | 47.7 | 48.6 | 49.4 | 59.9 | 69.3 | 75.0 | 76.3 | 84.9 | 72.9 | 96.3 |
| 21-Aug | 93.8 | 95.0 | 95.4 | 95.6 | 94.3 | 94.6 | 93.9 | 82.9 | 68.5 | 55.8 | 46.1 | 45.7 | 40.5 | 35.3 | 34.0 | 33.9 | 36.5 | 39.7 | 45.1 | 49.6 | 56.5 | 70.1 | 70.8 | 76.2 | 64.6 | 95.6 |
| 22-Aug | 76.8 | 74.1 | 74.6 | 75.4 | 75.8 | 78.0 | 78.4 | 68.1 | 60.0 | 62.0 | 60.1 | 57.4 | 54.6 | 50.5 | 47.3 | 46.8 | 46.9 | 49.8 | 53.7 | 65.7 | 69.2 | 70.2 | 75.5 | 79.2 | 64.6 | 79.2 |
| 23-Aug | 83.7 | 88.3 | 91.8 | 93.7 | 93.6 | 95.1 | 94.0 | 88.3 | 83.4 | 77.9 | 80.4 | 73.5 | 66.8 | 72.6 | 72.8 | 73.9 | 73.3 | 66.7 | 64.8 | 67.4 | 68.6 | 73.6 | 75.1 | 69.8 | 78.7 | 95.1 |
| 24-Aug | 61.3 | 59.9 | 60.6 | 60.8 | 60.9 | 61.9 | 59.2 | 56.1 | 48.5 | 42.5 | 38.1 | 37.6 | 36.3 | 33.4 | 34.3 | 35.5 | 34.5 | 34.9 | 40.2 | 48.9 | 57.5 | 69.5 | 74.4 | 75.8 | 50.9 | 75.8 |
| 25-Aug | 79.1 | 83.1 | 85.0 | 89.1 | 84.6 | 89.6 | 87.4 | 75.9 | 74.2 | 69.9 | 61.4 | 56.7 | 53.1 | 46.8 | 44.2 | 46.1 | 47.0 | 50.7 | 55.2 | 58.7 | 62.8 | 72.0 | 78.4 | 81.9 | 68.0 | 89.6 |
| 26-Aug | 86.6 | 87.5 | 85.8 | 88.0 | 89.6 | 92.0 | 88.3 | 74.8 | 64.8 | 58.3 | 54.1 | 44.3 | 37.4 | 34.8 | 32.6 | 32.7 | 33.3 | 35.2 | 42.7 | 49.2 | 53.8 | 67.8 | 75.9 | 72.8 | 61.8 | 92.0 |
| 27-Aug | 71.2 | 76.0 | 79.4 | 83.6 | 84.5 | 88.2 | 83.7 | 69.8 | 62.4 | 60.1 | 54.8 | 46.3 | 46.5 | 45.8 | 46.2 | 53.1 | 50.8 | 50.9 | 51.9 | 50.0 | 49.0 | 52.7 | 57.5 | 60.0 | 61.4 | 88.2 |
| 28-Aug | 66.1 | 67.3 | 65.9 | 73.0 | 77.2 | 76.3 | 80.0 | 90.1 | 91.3 | 77.0 | 65.4 | 53.5 | 50.9 | 47.1 | 54.5 | 58.3 | 64.2 | 71.0 | 68.0 | 70.0 | 70.8 | 70.1 | 69.8 | 69.9 | 68.7 | 91.3 |
| 29-Aug | 72.3 | 72.3 | 71.2 | 73.2 | 74.8 | 76.4 | 76.1 | 72.2 | 67.4 | 61.9 | 54.7 | 48.6 | 44.5 | 40.6 | 38.4 | 38.6 | 38.4 | 39.3 | 46.5 | 59.4 | 69.1 | 77.1 | 78.2 | 79.1 | 61.3 | 79.1 |
| 30-Aug | 79.4 | 85.5 | 86.7 | 89.1 | 88.7 | 90.1 | 85.9 | 81.7 | 75.8 | 68.7 | 65.2 | 58.5 | 51.8 | 47.5 | 35.6 | 39.4 | 39.8 | 39.1 | 43.5 | 59.6 | 70.2 | 72.9 | 72.8 | 73.3 | 66.7 | 90.1 |
| 31-Aug | 73.9 | 75.9 | 75.1 | 75.5 | 80.2 | 80.3 | 84.1 | 76.6 | 68.0 | 60.1 | 51.5 | 53.1 | 46.8 | 41.5 | 40.9 | 36.7 | 36.9 | 38.3 | 40.4 | 53.5 | 66.5 | 82.2 | 89.0 | 91.4 | 63.3 | 91.4 |
| | 80.7 | 82.9 | 83.9 | 85.2 | 85.6 | 86.5 | 85.1 | 80.6 | 74.8 | 69.3 | 63.4 | 57.2 | 52.9 | 50.7 | 49.1 | 50.5 | 51.4 | 53.8 | 57.4 | 64.2 | 70.9 | 75.8 | 77.8 | 78.9 | Diurnal Average | |
| | 95.1 | 96.7 | 96.2 | 96.7 | 96.9 | 97.0 | 95.8 | 95.8 | 93.2 | 95.1 | 92.8 | 86.4 | 86.2 | 76.7 | 73.5 | 80.7 | 79.7 | 90.3 | 92.9 | 94.3 | 92.8 | 91.8 | 93.9 | 93.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Pihew Point - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Pihew Point - August 2026

Maximum Speed: 37 km/h on Aug 2 16:00

Maximum Daily Speed Average: 25.4 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 26 05:00

Minimum Daily Speed Average: 0.9 km/h on Aug 23

Maximum Diurnal Speed Average: 5.9 km/h at hour 13

Minimum Diurnal Speed Average: 2.3 km/h at hour 2

Monthly Average Velocity: 3.4 km/h 321.9 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 3 $Q_1$ = 4 Median = 8 $Q_3$ = 13 $P_{90}$ = 17 $P_{99}$ = 32

Hours in Service: 744

Hours of Data: 741

Hours of Missing Data: 3

Percent Operational Time: 99.6

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSW3 | SSE4 | SSE4 | SSE3 | SE4 | S3 | S2 | WSW2 | ENE5 | E5 | E4 | ENE8 | ENE8 | E9 | E11 | E11 | E9 | ENE4 | N14 | NNW18 | N20 | N13 | N12 | N11 | NE4.1 | N20 |
| 2-Aug | NNW12 | NNW17 | N19 | N19 | N17 | NNW17 | N16 | N15 | N21 | N27 | N35 | N33 | N33 | NNW34 | NNW34 | NNW37 | NNW33 | NNW34 | NNW29 | NNW27 | NNW32 | NNW27 | NW25 | NW25 | NNW25.4 | NNW37 |
| 3-Aug | NW24 | WNW16 | WNW15 | NW15 | WNW11 | WNW12 | NW15 | NW17 | NW17 | NNW16 | NNW18 | NNW19 | NNW16 | NNW13 | N10 | N11 | N13 | NNE11 | NE8 | ENE7 | ESE4 | SE4 | S5 | SSE4 | NNW9.6 | NW24 |
| 4-Aug | SSE4 | SE4 | ESE2 | SSE2 | SSE1 | SE4 | SSE5 | S5 | SSW6 | SSW6 | SW12 | SW14 | SW16 | SW17 | SSW13 | SW14 | NNW16 | NE5 | WNW10 | WNW11 | WNW14 | NW19 | NW11 | WNW11 | WSW5.2 | NW19 |
| 5-Aug | WNW11 | W12 | W13 | W15 | W16 | W14 | WNW15 | NW15 | NW26 | NW23 | NW23 | NW25 | NW26 | NW23 | WNW14 | NW19 | N18 | N16 | NNW14 | NNW19 | WNW12 | W15 | W17 | WNW16 | NW15.8 | NW26 |
| 6-Aug | W15 | W17 | W18 | W18 | WNW19 | WNW16 | W17 | WNW18 | WNW16 | NW20 | NNW17 | NNW14 | NNW14 | N9 | N13 | NNE6 | W7 | WNW14 | WNW13 | NW14 | NW12 | W14 | W11 | W13 | WNW13.0 | NW20 |
| 7-Aug | NW11 | NNW10 | WNW8 | W13 | W12 | WNW9 | WNW10 | WNW11 | W14 | WNW13 | WNW14 | WNW13 | WNW14 | NNE11 | N10 | N12 | NNW11 | NNE10 | NNE8 | NNE9 | NE5 | N2 | N4 | WNW3 | NW7.7 | W14 |
| 8-Aug | NNW6 | N3 | NNW2 | W6 | WNW5 | NW7 | NNW9 | N8 | N9 | N10 | NNE11 | NNE8 | N9 | N10 | NNW8 | NNW12 | NNW7 | NNE3 | NNW3 | NNE6 | NNE6 | NNE4 | NNE4 | NNE6 | N6.1 | NNW12 |
| 9-Aug | NNE6 | NE6 | NNE1 | NE1 | N1 | NNE1 | NE5 | NNE5 | NNE2 | SW1 | NE3 | NNW3 | N6 | NW6 | NNW8 | N8 | NNW7 | N9 | NE9 | NNE7 | NNE5 | NNE5 | NNW1 | ESE1 | N4.0 | NE9 |
| 10-Aug | SSE2 | S4 | S4 | S5 | S5 | SSE3 | SE3 | SE2 | ESE1 | N5 | N6 | N6 | NNW8 | N12 | N15 | N12 | N13 | N13 | N11 | NNE7 | N8 | N6 | N2 | WNW2 | N3.9 | N15 |
| 11-Aug | W3 | SW4 | SSW5 | SSW3 | SSW3 | S1 | SW3 | SSW4 | NNW3 | NNW10 | N13 | N19 | N20 | N21 | N20 | N21 | N19 | NNE16 | NNE16 | NNE16 | NNE11 | NNE9 | N9 | NNW9 | N8.6 | N21 |
| 12-Aug | NNW10 | NNW11 | NNW8 | NW12 | NNW8 | WNW8 | NW11 | NNW11 | NNW11 | NNW14 | NNW15 | N16 | N14 | N15 | N19 | N16 | N15 | NNE9 | N8 | NNW9 | NNW12 | NNW10 | NNW12 | N10 | NNW11.3 | N19 |
| 13-Aug | N10 | N9 | N9 | N7 | N11 | NNE10 | NNE11 | N10 | N10 | N12 | NNE14 | NNE14 | NNE10 | NNE14 | NNE16 | NNE13 | NE9 | NE11 | NE11 | NNE7 | NNE5 | N5 | N4 | NW5 | NNE9.5 | NNE16 |
| 14-Aug | NNW6 | NW8 | NNW6 | NNW6 | NNW6 | N6 | NNE4 | N3 | N5 | N6 | NNE5 | N4 | NW7 | NW4 | NE3 | NW7 | WNW8 | S3 | SSW4 | SSE3 | S4 | SE3 | SE4 | SE3 | NNW2.6 | WNW8 |
| 15-Aug | ESE3 | ESE4 | SE5 | SE4 | SE5 | S5 | SSE4 | SSW6 | SSW6 | SSW6 | SSW8 | SSW11 | WSW8 | SW12 | WSW10 | SSW11 | SW12 | W8 | SSW8 | SSW5 | SW3 | SW6 | WSW7 | SW9 | SSW5.7 | SW12 |
| 16-Aug | SW10 | SW10 | WSW9 | W2 | ENE2 | WNW5 | NNW9 | N14 | N20 | N21 | N21 | N18 | N19 | N16 | NNW14 | NNW10 | NNW12 | NNE12 | NE9 | NE4 | SE2 | S5 | SSW6 | SSW5 | NNW6.9 | N21 |
| 17-Aug | SSW5 | WSW3 | SSE4 | SW5 | SW6 | SSW6 | SSW6 | SSW4 | SW4 | NNW3 | NW6 | N5 | NE4 | E6 | E5 | SSE5 | SE7 | SE5 | SE4 | SE2 | ESE2 | E3 | E3 | SE4 | SSE1.9 | SE7 |
| 18-Aug | SE4 | SSE4 | SE5 | SE5 | SE4 | SE4 | SE4 | SE5 | SSE5 | ESE7 | SSE3 | SSW10 | SW14 | SW14 | SW11 | SW15 | SW19 | SW16 | SW14 | SW11 | SW7 | SW7 | SW7 | SW5 | SSW6.6 | SW19 |
| 19-Aug | S1 | SSW4 | SSW5 | S3 | SSW5 | SSE6 | S4 | SSW8 | SW7 | W12 | WNW11 | NW9 | NW11 | N11 | N10 | NNW9 | NW10 | N15 | NNE13 | NNE11 | NNE7 | S3 | WNW2 | NW15 | NW3.9 | NW15 |
| 20-Aug | SW4 | SSW3 | NNE3 | NNE1 | SSE2 | SSE3 | SSE2 | SSW3 | NW4 | N5 | N11 | N16 | N14 | NNW10 | N11 | N13 | N15 | NNE14 | NNE10 | NE3 | NNE2 | ENE1 | SE0 | S2 | N4.6 | N16 |
| 21-Aug | SSW3 | SSW4 | SSW2 | SSE5 | SE4 | SSE5 | S4 | SSE4 | SSE3 | S5 | SSE3 | SSE5 | S5 | S5 | S5 | SSE7 | SE6 | SE8 | SE7 | SE7 | SE5 | SE3 | S1 | SE3 | SSE4.2 | SE8 |
| 22-Aug | ESE5 | ESE7 | ESE6 | SE6 | SE6 | SE4 | SE4 | SE6 | SE7 | SE5 | SSE5 | SSE6 | SSE5 | SSE6 | SSE7 | SE7 | SE8 | SE8 | ESE9 | SE5 | S2 | W2 | NW2 | SE4 | SE5.0 | ESE9 |
| 23-Aug | SE3 | SE4 | SSE3 | SE4 | SSE4 | SSE3 | SE3 | S4 | SSE4 | SSW6 | SE4 | SSE3 | S5 | ESE7 | E5 | ESE4 | SE3 | W7 | NW10 | NW13 | NNW10 | NW7 | NW12 | NW11 | WSW0.9 | NW13 |
| 24-Aug | WNW9 | NW12 | NW13 | NNW15 | NNW13 | NNW11 | NNW12 | NW11 | WNW11 | WNW14 | NW25 | NW20 | NNW22 | NNW22 | NNW21 | N14 | N13 | NNE13 | NNE10 | N3 | W1 | WSW1 | E1 | NNE2 | NNW10.9 | NW25 |
| 25-Aug | NE1 | N2 | WNW2 | WNW2 | NNW3 | NNE3 | N2 | N6 | N7 | N6 | NW4 | N5 | NNE4 | N3 | NNE3 | ENE5 | NE5 | NE10 | NNE12 | NE9 | NE9 | NE4 | NE3 | NNE2 | NNE4.1 | NNE12 |
| 26-Aug | NNE1 | E1 | SSE2 | SSW4 | WSW0 | SSE3 | SSE3 | SSE4 | SSE6 | SE7 | ESE10 | SSE6 | S8 | SSE7 | S8 | SE8 | SE8 | SE8 | SE8 | SE7 | SE5 | SE3 | SE1 | SW3 | SSE4.3 | ESE10 |
| 27-Aug | S4 | SE3 | SSW3 | SSE4 | SSW2 | SSW4 | SSW3 | SSW3 | SE5 | E9 | E10 | SE8 | SSE8 | ESE8 | SSE5 | SE5 | ESE15 | E16 | E15 | ESE16 | ESE16 | ESE14 | SE9 | SE8 | ESE7.1 | ESE16 |
| 28-Aug | SE7 | ESE7 | SE7 | SSE5 | WSW12 | WNW2 | SSE6 | S6 | S5 | SW15 | SW19 | SW22 | SW23 | SW23 | SW26 | SW22 | SW22 | SW22 | SW20 | WSW18 | SW17 | SW18 | WSW17 | SW16 | SW13.3 | SW26 |
| 29-Aug | SW15 | SW16 | SW16 | SW15 | SW16 | SW16 | SW16 | SW18 | SW16 | SW17 | SW16 | SW17 | SW19 | SW20 | SW19 | SW17 | SW17 | SW13 | SSW7 | SSE4 | SSE3 | SSE2 | ENE2 | E2 | SW12.7 | SW20 |
| 30-Aug | ESE2 | ESE3 | SE3 | SSE3 | SSE3 | S4 | SSW4 | SSE2 | S4 | SE4 | ENE8 | ENE8 | ENE6 | E6 | SW6 | E1 | E3 | ESE4 | SE3 | SSW3 | SSW3 | E2 | S3 | N11 | ESE2.0 | N11 |
| 31-Aug | N10 | N9 | NNW11 | NW11 | WNW8 | NNW6 | ESE1 | S2 | NW4 | WSW3 | N4 | N4 | W5 | SW10 | SW10 | SW10 | SW7 | WSW11 | WSW10 | W2 | UO | NE0 | UO | UO | WNW3.9 | WSW11 |
| | WNW2.8 | WNW2.3 | WNW2.5 | W2.9 | W2.8 | W2.5 | WNW2.3 | WNW2.6 | NW3.7 | NW4.4 | NNW5.8 | NNW5.5 | NW5.9 | NNW4.9 | NNW4.6 | NNW4.3 | NNW4.3 | N4.0 | N3.9 | N3.7 | NNW3.3 | NW2.4 | WNW3.0 | WNW3.6 | Diurnal Average | |
| | NW24 | NNW17 | N19 | N19 | WNW19 | NNW17 | W17 | WNW18 | NW26 | N27 | N35 | N33 | N33 | NNW34 | NNW34 | NNW37 | NNW33 | NNW34 | NNW29 | NNW27 | NNW32 | NNW27 | NW25 | NW25 | Diurnal Maximum | |

UO - Unstable Operation

All monthly, daily, and diurnal averages have been calculated using vector methods

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Pihew Point - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Aug 1 22:00

Minimum Value: 1 km/h on Aug 15 03:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 2 $Q_3$ = 4 $P_{90}$ = 5 $P_{99}$ = 7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 741 |
| Hours of Missing Data: | 3 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 5 | 4 | 9 | 10 | 2 | 5 | 10 |
| 2-Aug | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 5 | 5 | 7 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 7 |
| 3-Aug | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 9 | 2 | 3 | 3 | 5 | 4 | 3 | 3 | 9 |
| 5-Aug | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 8 | 5 | 5 | 6 | 6 | 5 | 5 | 4 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | 8 |
| 6-Aug | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 8 | 3 | 4 | 4 | 4 | 4 | 2 | 4 | 3 | 3 | 8 |
| 7-Aug | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 4 |
| 8-Aug | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 7 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 7 |
| 9-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 4 |
| 10-Aug | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 5 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 1 | 5 |
| 11-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 4 | 4 | 4 | 5 | 6 | 5 | 5 | 4 | 3 | 4 | 4 | 2 | 1 | 2 | 2 | 6 |
| 12-Aug | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 5 |
| 13-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 4 |
| 14-Aug | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 4 | 7 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 6 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 6 |
| 16-Aug | 2 | 3 | 3 | 3 | 1 | 3 | 2 | 4 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 5 |
| 17-Aug | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 18-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 4 | 2 | 2 | 2 | 2 | 5 |
| 19-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 2 | 6 | 7 | 7 |
| 20-Aug | 3 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 4 |
| 21-Aug | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 3 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 3 |
| 23-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 4 | 3 | 4 | 2 | 2 | 4 | 3 | 4 |
| 24-Aug | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 5 | 5 | 5 | 5 | 7 | 6 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 7 |
| 25-Aug | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 3 |
| 26-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 4 |
| 27-Aug | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 3 | 5 | 5 | 4 | 3 | 3 | 5 |
| 28-Aug | 2 | 3 | 3 | 2 | 6 | 4 | 3 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 4 | 5 | 5 | 5 | 7 |
| 29-Aug | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 1 | 1 | 2 | 1 | 1 | 5 |
| 30-Aug | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 4 |
| 31-Aug | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | UO | 1 | UO | UO | 4 |
| | 4 | 5 | 5 | 4 | 6 | 4 | 4 | 5 | 5 | 8 | 7 | 6 | 6 | 7 | 8 | 7 | 9 | 6 | 6 | 6 | 9 | 10 | 6 | 7 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

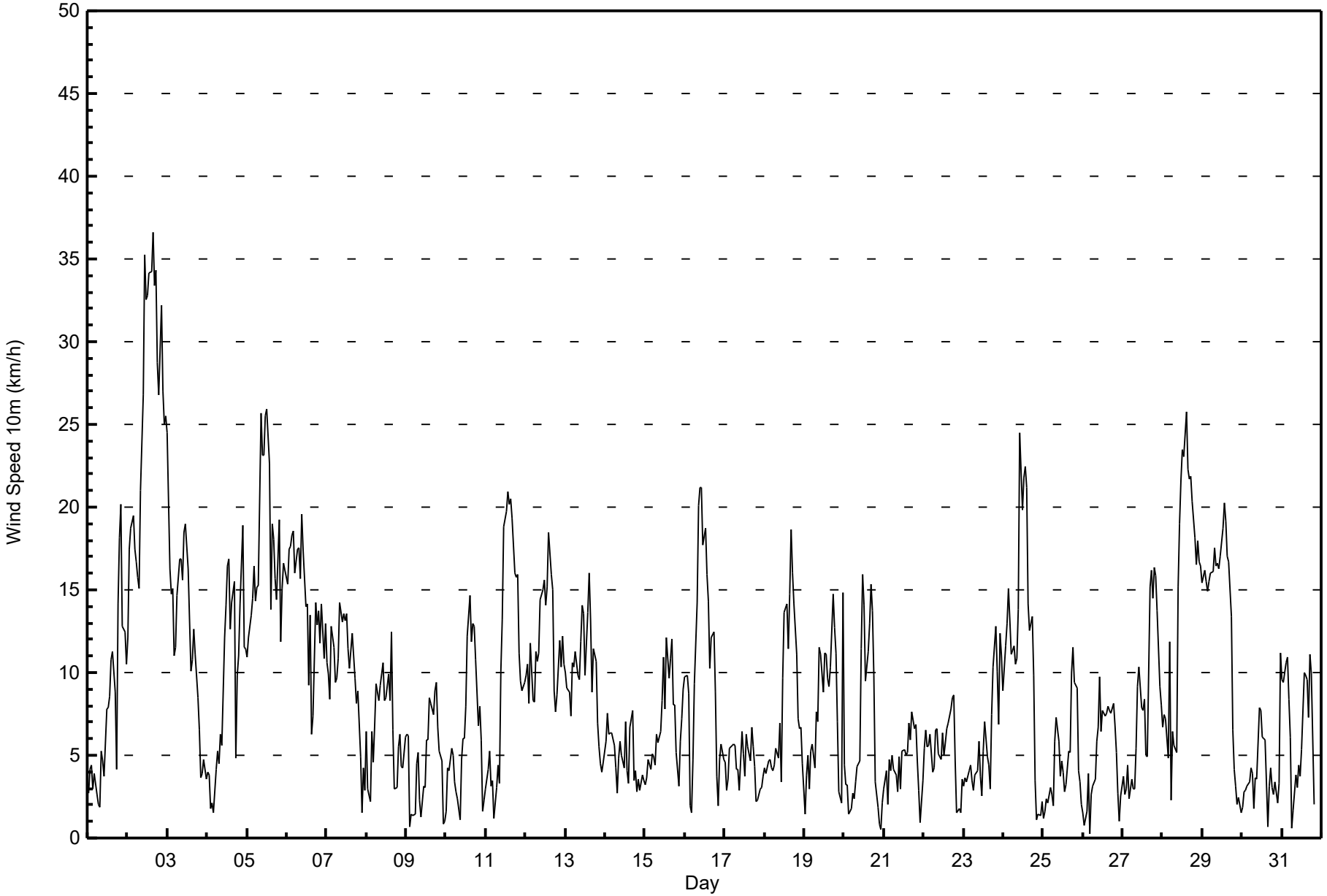
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Pihew Point - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 282 | 38.06 | 38.06 |
| 6 - 11 | 239 | 32.25 | 70.31 |
| 12 - 19 | 174 | 23.48 | 93.79 |
| 20 - 28 | 36 | 4.86 | 98.65 |
| 29 - 38 | 10 | 1.35 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 741

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Pihew Point - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 19 | 22 | 13 | 6 | 12 | 13 | 46 | 49 | 33 | 28 | 8 | 5 | 6 | 8 | 5 | 9 | 282 |
| 6 - 11 | 40 | 25 | 10 | 6 | 8 | 10 | 21 | 10 | 3 | 16 | 16 | 6 | 5 | 15 | 17 | 31 | 239 |
| 12 - 19 | 37 | 15 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 1 | 34 | 4 | 18 | 19 | 15 | 25 | 174 |
| 20 - 28 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 12 | 5 | 36 |
| 29 - 38 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 10 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 109 | 62 | 23 | 12 | 22 | 27 | 67 | 59 | 36 | 45 | 67 | 15 | 29 | 42 | 49 | 77 | 741 |

Total Number of Valid Hours: 741

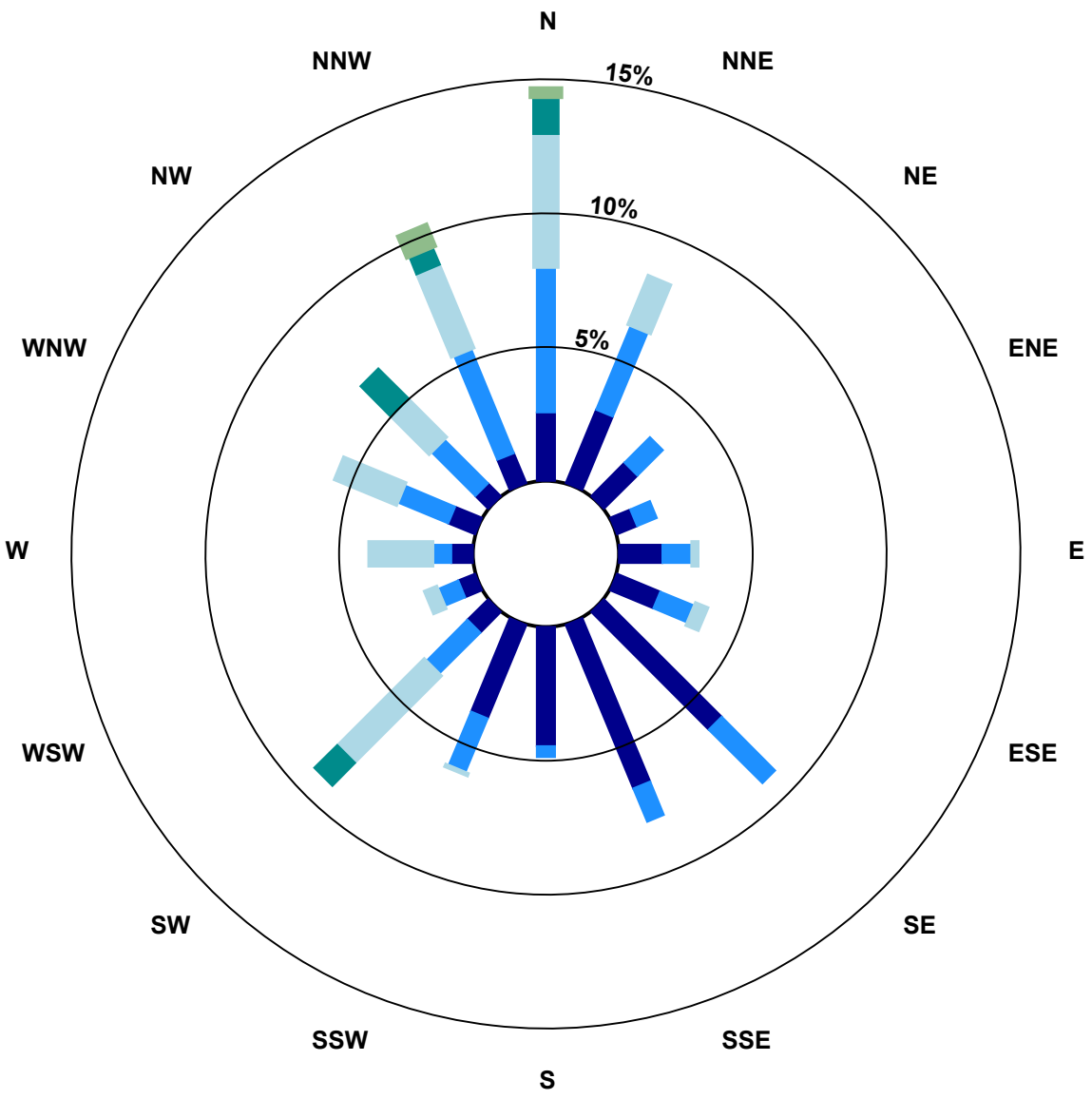
Total Number of Hours: 744

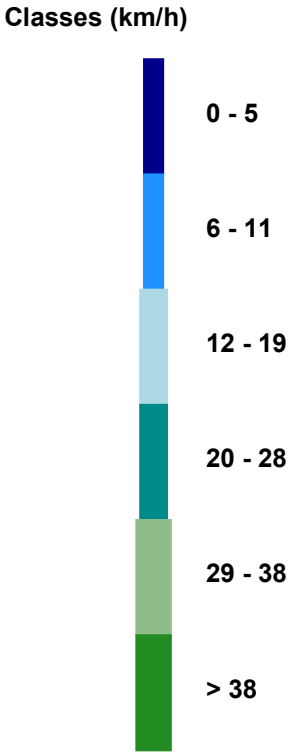
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Pihew Point




Total Number of Valid Hours: 741

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Pihew Point - August 2026

Direction of Maximum Speed: 346 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 344.4 deg on Aug 2

Direction of Minimum Speed: 253 deg on Aug 26 05:00

Direction of Minimum Daily Speed Average: 0.9 deg on Aug 23

Monthly Average Direction: 321.9 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 741 |
| Hours of Missing Data: | 3 |
| Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 206 | 154 | 168 | 148 | 128 | 184 | 187 | 237 | 75 | 89 | 97 | 75 | 62 | 89 | 100 | 88 | 90 | 73 | 1 | 348 | 351 | 5 | 353 | 352 | 42.5 |
| 2-Aug | 339 | 341 | 353 | 357 | 358 | 341 | 353 | 353 | 352 | 355 | 351 | 355 | 352 | 346 | 346 | 346 | 341 | 338 | 346 | 340 | 332 | 329 | 323 | 326 | 344.4 |
| 3-Aug | 321 | 303 | 300 | 308 | 282 | 284 | 305 | 311 | 321 | 343 | 343 | 330 | 334 | 347 | 1 | 360 | 8 | 21 | 42 | 57 | 113 | 138 | 176 | 156 | 330.0 |
| 4-Aug | 149 | 135 | 119 | 167 | 158 | 137 | 164 | 176 | 213 | 196 | 221 | 232 | 230 | 225 | 213 | 219 | 345 | 47 | 289 | 285 | 289 | 318 | 304 | 295 | 250.8 |
| 5-Aug | 285 | 275 | 274 | 280 | 275 | 277 | 286 | 305 | 318 | 314 | 311 | 318 | 316 | 318 | 301 | 323 | 7 | 6 | 331 | 333 | 302 | 277 | 279 | 282 | 307.0 |
| 6-Aug | 278 | 279 | 279 | 280 | 283 | 285 | 279 | 286 | 290 | 319 | 328 | 329 | 327 | 356 | 351 | 19 | 263 | 284 | 299 | 306 | 311 | 277 | 277 | 277 | 297.2 |
| 7-Aug | 323 | 345 | 290 | 275 | 278 | 301 | 300 | 288 | 280 | 282 | 287 | 287 | 295 | 16 | 10 | 351 | 337 | 14 | 21 | 26 | 34 | 7 | 356 | 300 | 317.2 |
| 8-Aug | 328 | 359 | 334 | 274 | 303 | 308 | 334 | 357 | 353 | 356 | 14 | 21 | 354 | 9 | 335 | 339 | 340 | 12 | 348 | 15 | 20 | 26 | 20 | 16 | 351.5 |
| 9-Aug | 31 | 39 | 33 | 37 | 11 | 17 | 43 | 29 | 29 | 227 | 44 | 348 | 353 | 319 | 339 | 351 | 330 | 359 | 35 | 27 | 23 | 31 | 341 | 109 | 10.3 |
| 10-Aug | 168 | 170 | 185 | 172 | 174 | 167 | 140 | 134 | 118 | 3 | 1 | 350 | 346 | 4 | 358 | 351 | 8 | 5 | 9 | 15 | 357 | 10 | 8 | 297 | 5.1 |
| 11-Aug | 262 | 225 | 213 | 205 | 201 | 190 | 214 | 200 | 333 | 343 | 355 | 9 | 360 | 7 | 5 | 10 | 10 | 15 | 13 | 20 | 20 | 18 | 357 | 345 | 2.9 |
| 12-Aug | 332 | 333 | 329 | 318 | 338 | 296 | 321 | 345 | 342 | 343 | 348 | 352 | 2 | 356 | 358 | 11 | 5 | 16 | 349 | 347 | 343 | 346 | 346 | 357 | 346.9 |
| 13-Aug | 355 | 351 | 4 | 3 | 1 | 13 | 14 | 6 | 350 | 357 | 15 | 13 | 14 | 19 | 24 | 17 | 36 | 40 | 39 | 24 | 29 | 8 | 360 | 322 | 12.4 |
| 14-Aug | 330 | 324 | 346 | 348 | 344 | 358 | 26 | 9 | 2 | 358 | 14 | 358 | 323 | 316 | 52 | 315 | 295 | 182 | 210 | 159 | 183 | 132 | 129 | 126 | 343.3 |
| 15-Aug | 120 | 123 | 125 | 140 | 135 | 181 | 164 | 208 | 206 | 197 | 203 | 212 | 250 | 225 | 242 | 212 | 223 | 265 | 212 | 200 | 228 | 235 | 243 | 236 | 212.1 |
| 16-Aug | 231 | 230 | 242 | 259 | 67 | 297 | 330 | 356 | 4 | 7 | 359 | 351 | 360 | 353 | 348 | 335 | 338 | 17 | 41 | 54 | 138 | 189 | 200 | 203 | 347.2 |
| 17-Aug | 203 | 238 | 157 | 214 | 216 | 200 | 200 | 202 | 221 | 336 | 312 | 356 | 45 | 79 | 98 | 148 | 138 | 142 | 140 | 131 | 103 | 89 | 95 | 132 | 158.6 |
| 18-Aug | 146 | 153 | 145 | 136 | 146 | 143 | 145 | 146 | 149 | 113 | 155 | 206 | 226 | 236 | 223 | 232 | 236 | 227 | 229 | 225 | 217 | 219 | 230 | 233 | 209.1 |
| 19-Aug | 182 | 192 | 202 | 181 | 196 | 163 | 169 | 209 | 233 | 280 | 303 | 308 | 314 | 1 | 5 | 329 | 322 | 350 | 19 | 24 | 27 | 169 | 284 | 314 | 319.9 |
| 20-Aug | 218 | 205 | 13 | 24 | 168 | 157 | 158 | 197 | 326 | 1 | 355 | 5 | 11 | 347 | 8 | 359 | 11 | 23 | 30 | 49 | 32 | 78 | 146 | 187 | 8.3 |
| 21-Aug | 203 | 208 | 193 | 160 | 143 | 167 | 178 | 168 | 158 | 181 | 150 | 156 | 189 | 170 | 174 | 160 | 142 | 134 | 138 | 140 | 142 | 138 | 183 | 126 | 159.3 |
| 22-Aug | 120 | 122 | 120 | 125 | 125 | 145 | 143 | 131 | 132 | 145 | 150 | 153 | 157 | 147 | 151 | 131 | 135 | 124 | 123 | 132 | 191 | 266 | 316 | 126 | 135.4 |
| 23-Aug | 145 | 140 | 151 | 135 | 155 | 147 | 142 | 185 | 164 | 205 | 145 | 167 | 170 | 102 | 86 | 122 | 129 | 264 | 313 | 307 | 333 | 309 | 312 | 306 | 249.8 |
| 24-Aug | 299 | 323 | 318 | 330 | 329 | 330 | 331 | 316 | 294 | 298 | 319 | 321 | 337 | 327 | 341 | 4 | 7 | 20 | 29 | 350 | 262 | 238 | 93 | 23 | 331.9 |
| 25-Aug | 38 | 354 | 299 | 286 | 331 | 32 | 352 | 4 | 3 | 353 | 313 | 357 | 12 | 5 | 27 | 68 | 48 | 36 | 33 | 35 | 35 | 38 | 38 | 22 | 19.3 |
| 26-Aug | 13 | 96 | 164 | 205 | 253 | 156 | 157 | 152 | 150 | 124 | 108 | 154 | 188 | 167 | 177 | 145 | 137 | 136 | 129 | 131 | 139 | 136 | 131 | 221 | 147.5 |
| 27-Aug | 170 | 142 | 202 | 164 | 209 | 206 | 203 | 197 | 133 | 99 | 96 | 127 | 152 | 122 | 160 | 126 | 116 | 99 | 92 | 103 | 109 | 121 | 132 | 138 | 122.5 |
| 28-Aug | 131 | 122 | 141 | 164 | 244 | 291 | 148 | 185 | 189 | 218 | 225 | 229 | 222 | 231 | 235 | 235 | 232 | 228 | 235 | 241 | 230 | 235 | 238 | 232 | 224.9 |
| 29-Aug | 232 | 229 | 229 | 224 | 221 | 223 | 223 | 222 | 232 | 224 | 227 | 230 | 227 | 227 | 225 | 224 | 229 | 225 | 207 | 156 | 158 | 163 | 68 | 80 | 223.9 |
| 30-Aug | 115 | 112 | 142 | 167 | 161 | 183 | 211 | 165 | 175 | 130 | 78 | 77 | 69 | 85 | 225 | 85 | 86 | 109 | 140 | 192 | 198 | 92 | 182 | 351 | 122.2 |
| 31-Aug | 351 | 359 | 337 | 308 | 303 | 336 | 104 | 176 | 311 | 252 | 351 | 349 | 274 | 221 | 215 | 225 | 228 | 240 | 252 | 264 | UO | 50 | UO | UO | 282.3 |
| | 297.3 | 294.6 | 283.6 | 281.2 | 276.8 | 277.5 | 289.4 | 292.7 | 312.7 | 324.5 | 334.5 | 329.5 | 322.3 | 332.7 | 333.5 | 336.1 | 343.5 | 360.0 | 359.7 | 354.2 | 343.0 | 317.6 | 303.8 | 303.6 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 109 deg on Aug 21 23:00

Minimum Value: 7 deg on Aug 25 21:00

Percentiles: $P_1$ = 9 $P_{10}$ = 15 $Q_1$ = 18 Median = 25 $Q_3$ = 43 $P_{90}$ = 64 $P_{99}$ = 95

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 741 |
| Hours of Missing Data: | 3 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 19 | 34 | 28 | 56 | 34 | 72 | 64 | 74 | 37 | 30 | 47 | 21 | 20 | 29 | 24 | 23 | 24 | 59 | 17 | 15 | 39 | 50 | 22 | 43 | 74 |
| 2-Aug | 26 | 15 | 17 | 15 | 15 | 14 | 15 | 15 | 15 | 17 | 18 | 16 | 16 | 16 | 16 | 16 | 14 | 15 | 16 | 14 | 10 | 9 | 9 | 9 | 26 |
| 3-Aug | 9 | 18 | 20 | 15 | 21 | 23 | 19 | 14 | 14 | 23 | 19 | 21 | 25 | 25 | 26 | 21 | 19 | 21 | 22 | 18 | 35 | 22 | 22 | 33 | 35 |
| 4-Aug | 37 | 30 | 56 | 59 | 90 | 66 | 53 | 58 | 62 | 41 | 20 | 21 | 20 | 18 | 23 | 21 | 46 | 55 | 24 | 22 | 22 | 11 | 18 | 22 | 90 |
| 5-Aug | 23 | 21 | 21 | 22 | 21 | 20 | 22 | 23 | 13 | 23 | 19 | 16 | 15 | 18 | 20 | 19 | 16 | 18 | 14 | 10 | 23 | 21 | 21 | 22 | 23 |
| 6-Aug | 20 | 22 | 22 | 21 | 23 | 23 | 21 | 22 | 24 | 18 | 18 | 19 | 22 | 24 | 26 | 46 | 52 | 23 | 36 | 18 | 19 | 22 | 20 | 20 | 52 |
| 7-Aug | 31 | 20 | 29 | 22 | 23 | 22 | 22 | 23 | 21 | 22 | 23 | 23 | 26 | 22 | 19 | 17 | 19 | 16 | 12 | 14 | 12 | 73 | 24 | 59 | 73 |
| 8-Aug | 28 | 52 | 55 | 22 | 38 | 34 | 16 | 14 | 19 | 22 | 24 | 30 | 36 | 19 | 22 | 17 | 14 | 67 | 58 | 15 | 13 | 12 | 24 | 17 | 67 |
| 9-Aug | 11 | 10 | 94 | 73 | 81 | 93 | 17 | 18 | 52 | 89 | 42 | 54 | 41 | 35 | 34 | 29 | 36 | 26 | 9 | 11 | 8 | 15 | 76 | 68 | 94 |
| 10-Aug | 68 | 33 | 42 | 19 | 25 | 59 | 43 | 47 | 79 | 24 | 27 | 30 | 35 | 30 | 20 | 20 | 20 | 19 | 16 | 14 | 11 | 11 | 87 | 71 | 87 |
| 11-Aug | 44 | 19 | 12 | 47 | 49 | 90 | 65 | 18 | 34 | 18 | 20 | 16 | 20 | 20 | 20 | 18 | 20 | 19 | 14 | 14 | 13 | 13 | 16 | 14 | 90 |
| 12-Aug | 14 | 13 | 24 | 12 | 15 | 28 | 23 | 15 | 16 | 15 | 15 | 18 | 17 | 18 | 19 | 27 | 17 | 17 | 17 | 16 | 13 | 13 | 13 | 14 | 28 |
| 13-Aug | 15 | 15 | 15 | 15 | 15 | 14 | 14 | 17 | 17 | 16 | 18 | 20 | 26 | 21 | 16 | 18 | 25 | 21 | 17 | 11 | 12 | 14 | 32 | 29 | 32 |
| 14-Aug | 16 | 16 | 15 | 16 | 15 | 26 | 20 | 23 | 22 | 23 | 30 | 51 | 17 | 36 | 66 | 95 | 55 | 60 | 37 | 35 | 50 | 55 | 41 | 40 | 95 |
| 15-Aug | 47 | 24 | 13 | 29 | 21 | 31 | 34 | 28 | 33 | 44 | 39 | 33 | 47 | 25 | 51 | 37 | 32 | 53 | 25 | 57 | 81 | 29 | 18 | 15 | 81 |
| 16-Aug | 15 | 15 | 29 | 99 | 80 | 53 | 17 | 15 | 16 | 17 | 17 | 23 | 21 | 20 | 23 | 25 | 18 | 23 | 18 | 23 | 55 | 29 | 12 | 13 | 99 |
| 17-Aug | 15 | 34 | 55 | 26 | 14 | 24 | 20 | 39 | 56 | 65 | 29 | 30 | 42 | 25 | 66 | 52 | 41 | 46 | 30 | 40 | 22 | 52 | 41 | 40 | 66 |
| 18-Aug | 39 | 27 | 25 | 25 | 28 | 43 | 66 | 50 | 48 | 38 | 80 | 41 | 21 | 23 | 27 | 32 | 18 | 17 | 18 | 26 | 24 | 23 | 25 | 63 | 80 |
| 19-Aug | 83 | 41 | 24 | 37 | 33 | 37 | 52 | 34 | 25 | 26 | 23 | 32 | 32 | 25 | 30 | 30 | 27 | 18 | 12 | 11 | 12 | 61 | 80 | 46 | 83 |
| 20-Aug | 67 | 60 | 32 | 65 | 26 | 41 | 36 | 37 | 44 | 20 | 21 | 22 | 23 | 30 | 23 | 19 | 20 | 15 | 12 | 14 | 14 | 45 | 70 | 59 | 70 |
| 21-Aug | 21 | 19 | 54 | 26 | 30 | 16 | 41 | 40 | 72 | 52 | 83 | 66 | 61 | 65 | 66 | 58 | 57 | 42 | 43 | 42 | 54 | 56 | 109 | 56 | 109 |
| 22-Aug | 27 | 36 | 43 | 38 | 36 | 36 | 34 | 37 | 44 | 52 | 69 | 62 | 67 | 64 | 61 | 54 | 43 | 33 | 30 | 34 | 107 | 101 | 107 | 57 | 107 |
| 23-Aug | 56 | 26 | 40 | 40 | 32 | 47 | 47 | 71 | 67 | 53 | 59 | 76 | 62 | 28 | 40 | 32 | 48 | 32 | 38 | 29 | 24 | 31 | 18 | 16 | 76 |
| 24-Aug | 21 | 11 | 8 | 9 | 11 | 10 | 11 | 12 | 24 | 23 | 14 | 11 | 17 | 16 | 18 | 21 | 19 | 15 | 10 | 34 | 46 | 63 | 70 | 44 | 70 |
| 25-Aug | 56 | 62 | 32 | 31 | 46 | 33 | 62 | 42 | 21 | 25 | 38 | 31 | 32 | 35 | 58 | 21 | 30 | 14 | 11 | 10 | 7 | 23 | 31 | 17 | 62 |
| 26-Aug | 15 | 58 | 60 | 33 | 109 | 38 | 64 | 81 | 47 | 47 | 29 | 68 | 65 | 65 | 66 | 63 | 57 | 46 | 33 | 38 | 44 | 36 | 91 | 68 | 109 |
| 27-Aug | 39 | 72 | 38 | 40 | 57 | 30 | 58 | 50 | 54 | 27 | 24 | 51 | 62 | 39 | 76 | 55 | 24 | 21 | 23 | 22 | 22 | 27 | 37 | 35 | 76 |
| 28-Aug | 30 | 30 | 43 | 73 | 31 | 104 | 66 | 67 | 72 | 21 | 19 | 20 | 18 | 19 | 18 | 19 | 19 | 18 | 18 | 17 | 18 | 17 | 18 | 18 | 104 |
| 29-Aug | 18 | 18 | 18 | 19 | 16 | 17 | 16 | 18 | 19 | 19 | 20 | 21 | 20 | 20 | 19 | 21 | 19 | 19 | 26 | 51 | 31 | 82 | 70 | 80 | 82 |
| 30-Aug | 79 | 52 | 61 | 39 | 40 | 37 | 27 | 75 | 46 | 59 | 18 | 22 | 29 | 34 | 43 | 94 | 51 | 23 | 26 | 20 | 44 | 67 | 42 | 20 | 94 |
| 31-Aug | 15 | 21 | 20 | 24 | 27 | 34 | 84 | 65 | 58 | 73 | 36 | 65 | 63 | 34 | 32 | 22 | 23 | 25 | 23 | 53 | UO | 17 | UO | UO | 84 |
| | 83 | 72 | 94 | 99 | 109 | 104 | 84 | 81 | 79 | 89 | 83 | 76 | 67 | 65 | 76 | 95 | 57 | 67 | 58 | 57 | 107 | 101 | 109 | 80 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

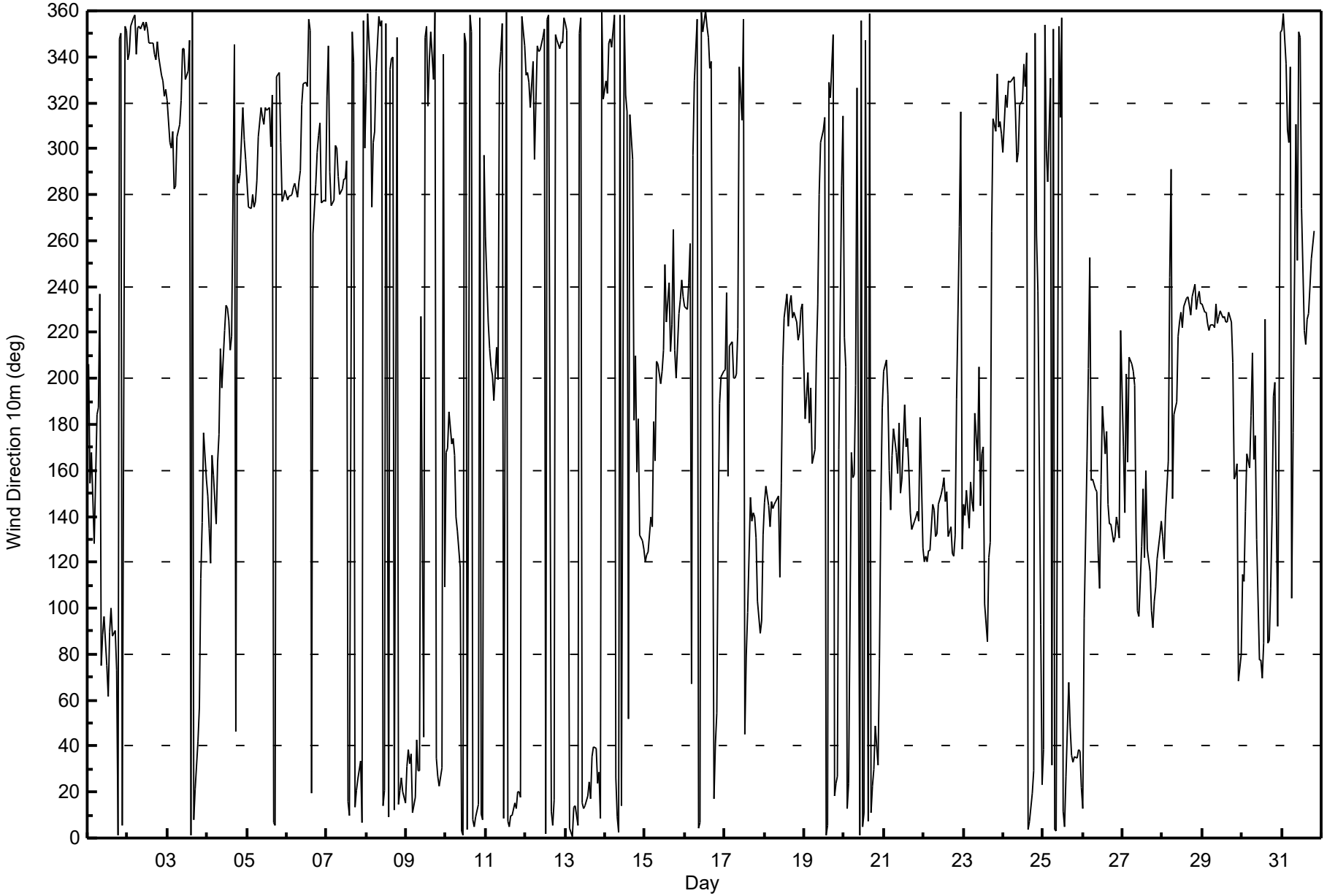
UO - Unstable Operation

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Pihew Point - August 2026**



# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS33
## MONDAY CREEK
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 708 | 35 | 36 | 99.87 | 9 | 0 | 1.5 | 0 |
| H2S (ppb) Average | 708 | 35 | 36 | 99.87 | 1.7 | 0 | 0.3 | 0 |
| NO2 (ppb) Average | 706 | 37 | 38 | 99.87 | 11 | 0 | 2.2 | - |
| NO (ppb) Average | 706 | 37 | 38 | 99.87 | 13.7 | - | 2.1 | - |
| NOX (ppb) Average | 706 | 37 | 38 | 99.87 | 20 | - | 3.7 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 29.3 | - | 22.9 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 100 | - | 92.2 | - |
| Wind Speed 10 m (km/h) Average | 738 | 0 | 6 | 99.19 | 24 | - | 16 | - |
| Wind Direction 10 m (deg) Average | 738 | 0 | 6 | 99.19 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 708 | 0.4 | 0.7 | - | 0 | 0 | 0 | 0.2 | 0.4 | 1 | 9 |
| H2S (ppb) Average | 708 | 0.15 | 0.1 | - | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 1.7 |
| NO2 (ppb) Average | 706 | 1.2 | 1.1 | - | 0 | 0.3 | 0.6 | 0.9 | 1.5 | 2.2 | 11 |
| NO (ppb) Average | 706 | 0.35 | 1 | - | 0 | 0 | 0 | 0 | 0.2 | 0.9 | 13.7 |
| NOX (ppb) Average | 706 | 1.55 | 1.8 | - | 0 | 0.4 | 0.6 | 1.1 | 1.8 | 3.2 | 20 |
| Temperature 2 m (C) Average | 744 | 16.08 | 5.2 | - | 4.5 | 9.3 | 12.4 | 16 | 19.5 | 23.1 | 29.3 |
| Relative Humidity (%) Average | 744 | 71.81 | 20 | - | 29.1 | 43.7 | 55.3 | 73.6 | 91.1 | 96.4 | 100 |
| Wind Speed 10 m (km/h) Average | 738 | 8.4 | 5 | - | 0 | 2 | 4 | 7 | 12 | 16 | 24 |
| Wind Direction 10 m (deg) Average | 738 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| SO2 | 22 Aug 2026 08:00 | 22 Aug 2026 08:00 | 1 | Maintenance - verify daily QA response |
| H2S, NO2 | 26 Aug 2026 14:00 | 26 Aug 2026 14:00 | 1 | Maintenance - sample manifold cleaned |
| Wind Speed, Wind Direction | 09 Aug 2026 01:00 | 09 Aug 2026 01:00 | 1 | Flat line in sensor output signal |
| Wind Speed, Wind Direction | 24 Aug 2026 22:00 | 25 Aug 2026 00:00 | 3 | Flat line in sensor output signal |
| Wind Speed, Wind Direction | 25 Aug 2026 03:00 | 25 Aug 2026 03:00 | 1 | Flat line in sensor output signal |
| Wind Speed, Wind Direction | 26 Aug 2026 07:00 | 26 Aug 2026 07:00 | 1 | Flat line in sensor output signal |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Monday Creek - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 9.0 ppb on Aug 29 00:00

Maximum Daily Average: 1.5 ppb on Aug 28

Minimum Value: 0.0 ppb on Aug 2 22:00

Minimum Daily Average: 0.0 ppb on Aug 31

Maximum Diurnal Average: 0.9 ppb at hour 10

Minimum Diurnal Average: 0.2 ppb at hour 22

Monthly Average: 0.40 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.2 $Q_3$ = 0.4 $P_{90}$ = 1.0 $P_{99}$ = 3.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.4 | Z | 0.6 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 |
| 2-Aug | 0.3 | 0.3 | Z | 0.5 | 0.6 | 0.3 | 0.3 | 0.8 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.8 |
| 3-Aug | 0.0 | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.6 | 0.8 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.8 |
| 4-Aug | 0.1 | 0.2 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 1.0 | 1.6 | 1.2 | 1.2 | 0.6 | 1.6 | 1.6 | 1.3 | 1.6 | 0.4 | 0.0 | 0.4 | 1.0 | 0.2 | 0.1 | 0.0 | 0.6 | 1.6 |
| 5-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 1.5 | 1.4 | 0.6 | 0.2 | 0.3 | 0.4 | 0.2 | 1.5 |
| 6-Aug | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 |
| 7-Aug | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 |
| 8-Aug | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 | 0.4 | 0.9 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 1.1 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 1.7 | 6.5 | 1.2 | 0.6 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.6 | 6.5 |
| 10-Aug | 0.0 | 0.1 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 12-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 13-Aug | 0.0 | Z | 0.2 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 |
| 14-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 15-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 1.1 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 0.9 | 0.7 | 0.0 | 0.3 | 0.5 | 1.2 | 0.3 | 1.2 |
| 16-Aug | 1.4 | 1.3 | 0.9 | 1.6 | Z | 3.3 | 4.4 | 1.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 4.4 |
| 17-Aug | 0.0 | 0.1 | 0.3 | 0.4 | 0.4 | Z | 0.6 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.2 | 0.3 | 0.1 | 0.4 | 0.2 | 0.2 | 0.2 | 0.6 |
| 18-Aug | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 1.5 | 1.4 | 1.2 | 1.2 | 1.4 | 1.1 | 1.0 | 0.7 | 0.7 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.6 | 1.5 |
| 19-Aug | 0.4 | Z | 0.5 | 0.7 | 0.8 | 1.0 | 0.7 | 1.2 | 2.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 2.2 |
| 20-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 1.2 | 1.0 | 0.4 | 0.2 | 0.1 | 0.4 | 0.3 | 0.2 | 0.3 | 0.8 | 1.2 | 1.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.4 | 1.2 |
| 21-Aug | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 2.0 | 4.3 | 2.1 | 2.1 | 1.9 | 1.3 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.9 | 4.3 |
| 22-Aug | 0.3 | 0.4 | 0.6 | 0.7 | Z | 0.8 | 0.8 | M | 0.8 | 1.7 | 1.7 | 1.2 | 0.7 | 0.4 | 0.5 | 0.6 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 1.7 |
| 23-Aug | 0.3 | 0.3 | 0.2 | 0.4 | 0.5 | Z | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.0 | 1.0 | 1.0 | 1.1 | 0.7 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 1.1 |
| 24-Aug | Z | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.8 | 1.5 | 0.8 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 1.5 |
| 25-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.9 | 0.8 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 0.9 |
| 26-Aug | 0.1 | 0.1 | Z | 0.0 | 0.2 | 0.2 | 0.1 | 0.2 | 2.4 | 0.9 | 0.4 | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.3 | 0.3 | 2.4 |
| 27-Aug | 0.4 | 0.4 | 0.3 | Z | 0.4 | 0.3 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 |
| 28-Aug | 0.1 | 0.6 | 0.6 | 0.1 | Z | 0.1 | 0.3 | 2.3 | 2.0 | 0.8 | 0.9 | 1.2 | 2.3 | 1.6 | 0.8 | 1.3 | 1.1 | 1.7 | 0.3 | 1.0 | 0.8 | 0.4 | 4.5 | 9.0 | 1.5 | 9.0 |
| 29-Aug | 0.7 | 0.4 | 0.6 | 0.8 | 0.4 | Z | 0.4 | 2.2 | 3.1 | 1.6 | 2.6 | 1.7 | 1.4 | 1.0 | 0.9 | 1.0 | 1.1 | 0.4 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.9 | 3.1 |
| 30-Aug | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 3.3 | 3.5 | 1.3 | 0.7 | 0.4 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 7.1 |
| 31-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 |
| | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.4 | 0.7 | 0.9 | 0.6 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.5 | Diurnal Average | |
| | 1.4 | 1.3 | 0.9 | 1.6 | 0.8 | 3.3 | 4.4 | 2.3 | 3.1 | 6.5 | 2.6 | 7.1 | 3.3 | 3.5 | 1.6 | 1.3 | 1.6 | 1.7 | 1.5 | 1.4 | 1.0 | 0.4 | 4.5 | 9.0 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

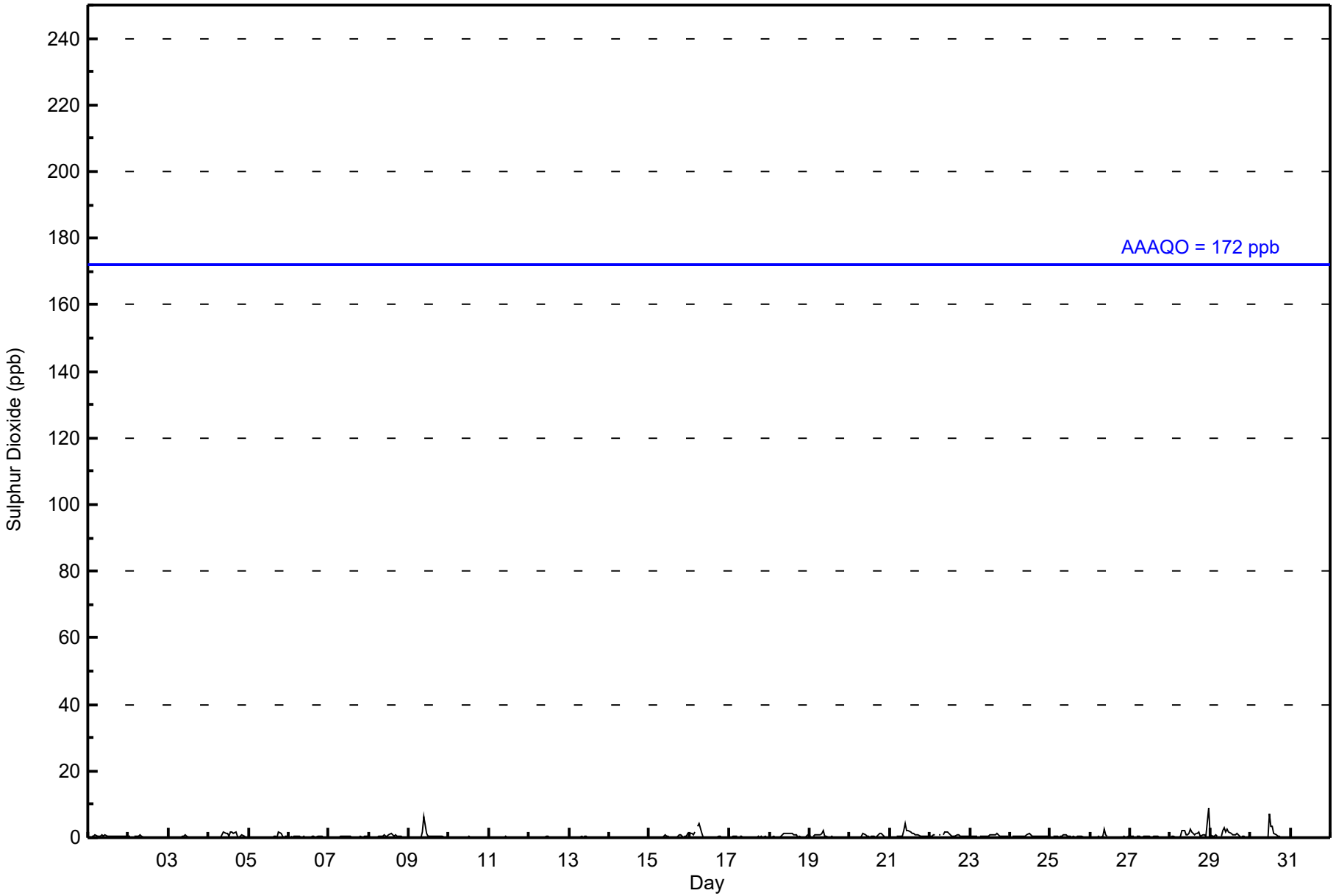
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Monday Creek - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Monday Creek - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 708 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Monday Creek - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 33 | 29 | 25 | 15 | 20 | 15 | 32 | 37 | 45 | 46 | 34 | 49 | 71 | 120 | 87 | 44 | 702 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 33 | 29 | 25 | 15 | 20 | 15 | 32 | 37 | 45 | 46 | 34 | 49 | 71 | 120 | 87 | 44 | 702 |

Total Number of Valid Hours: 702

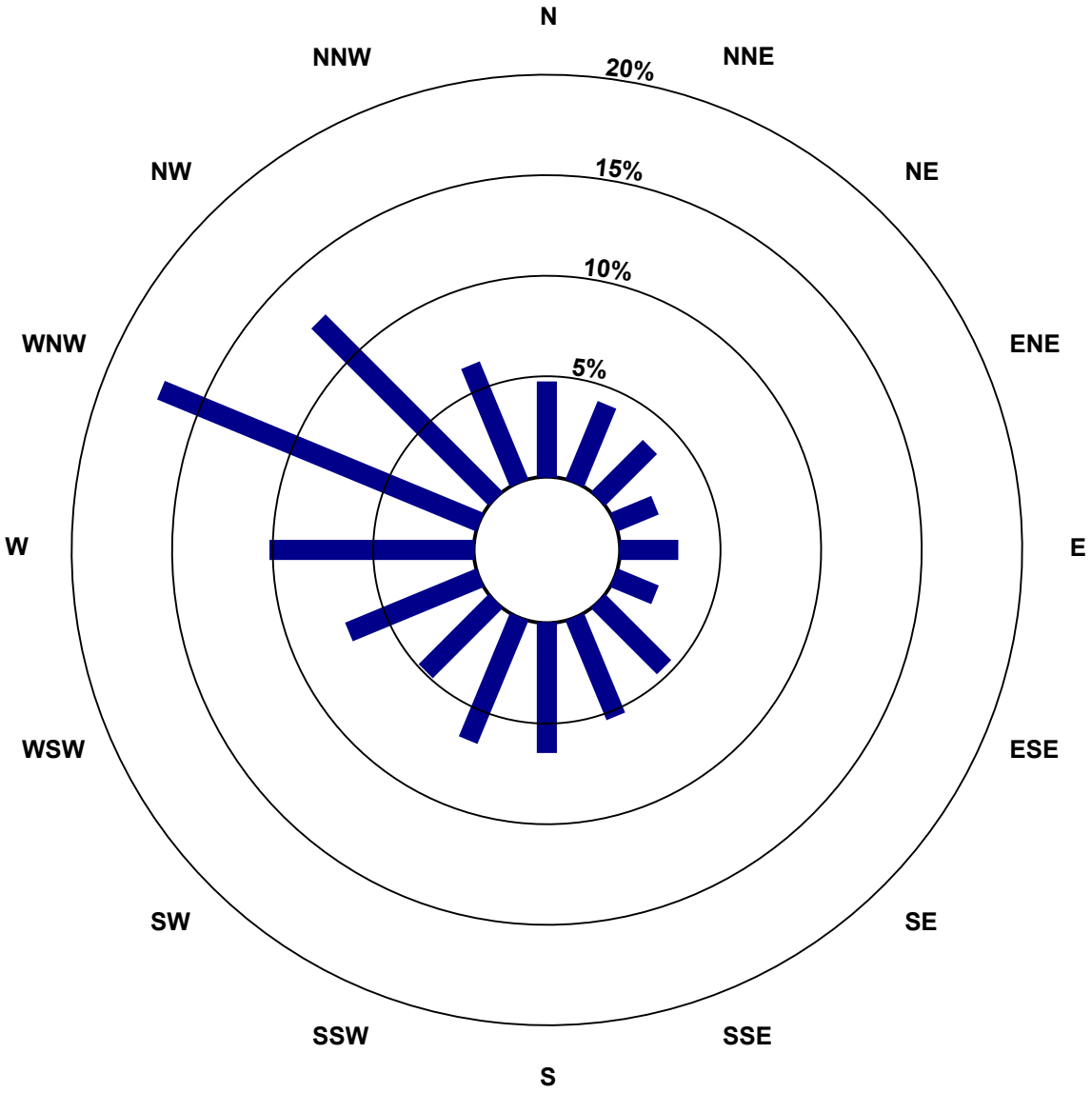
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Monday Creek




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

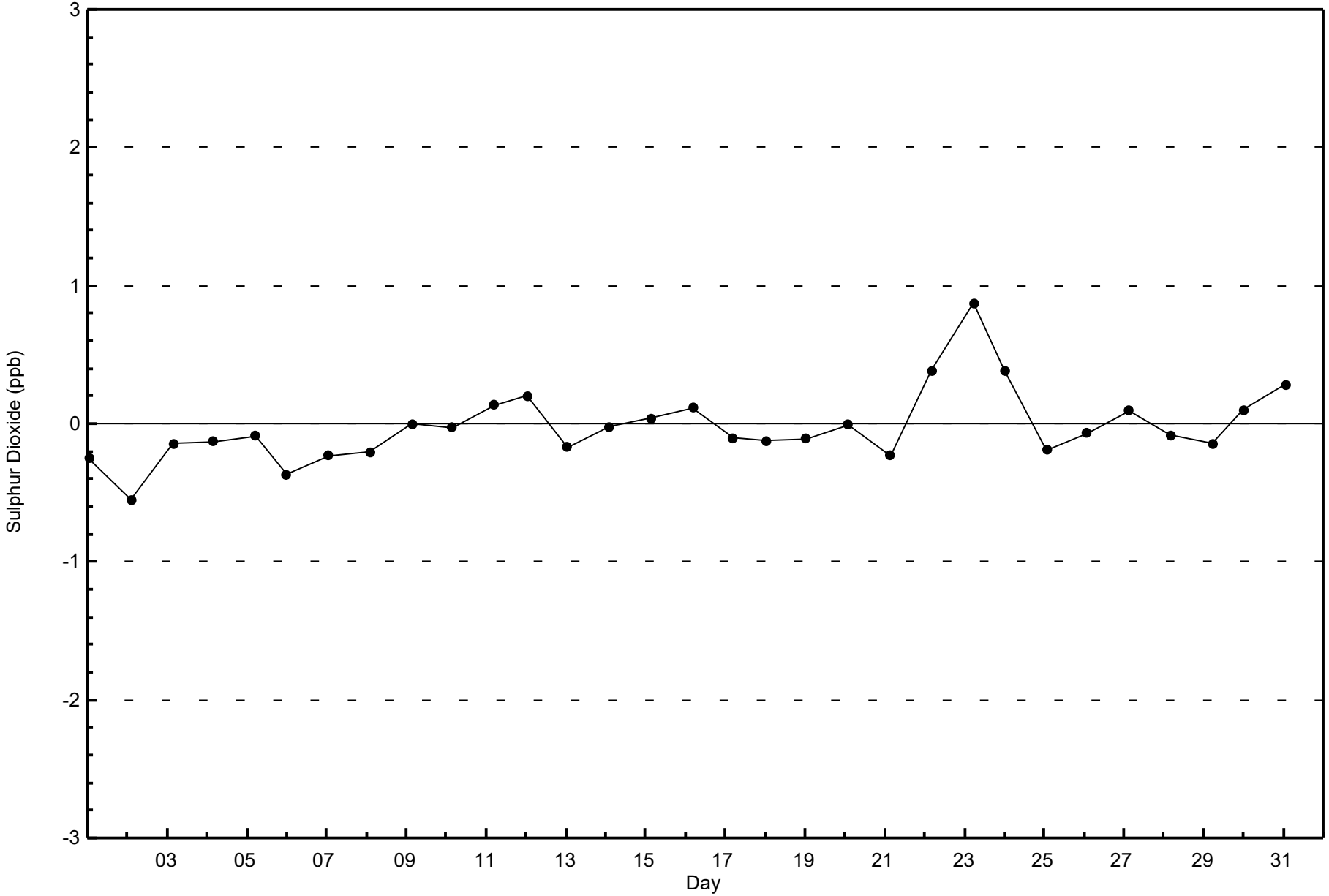
Total Number of Valid Hours: 702

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Monday Creek - August 2026**

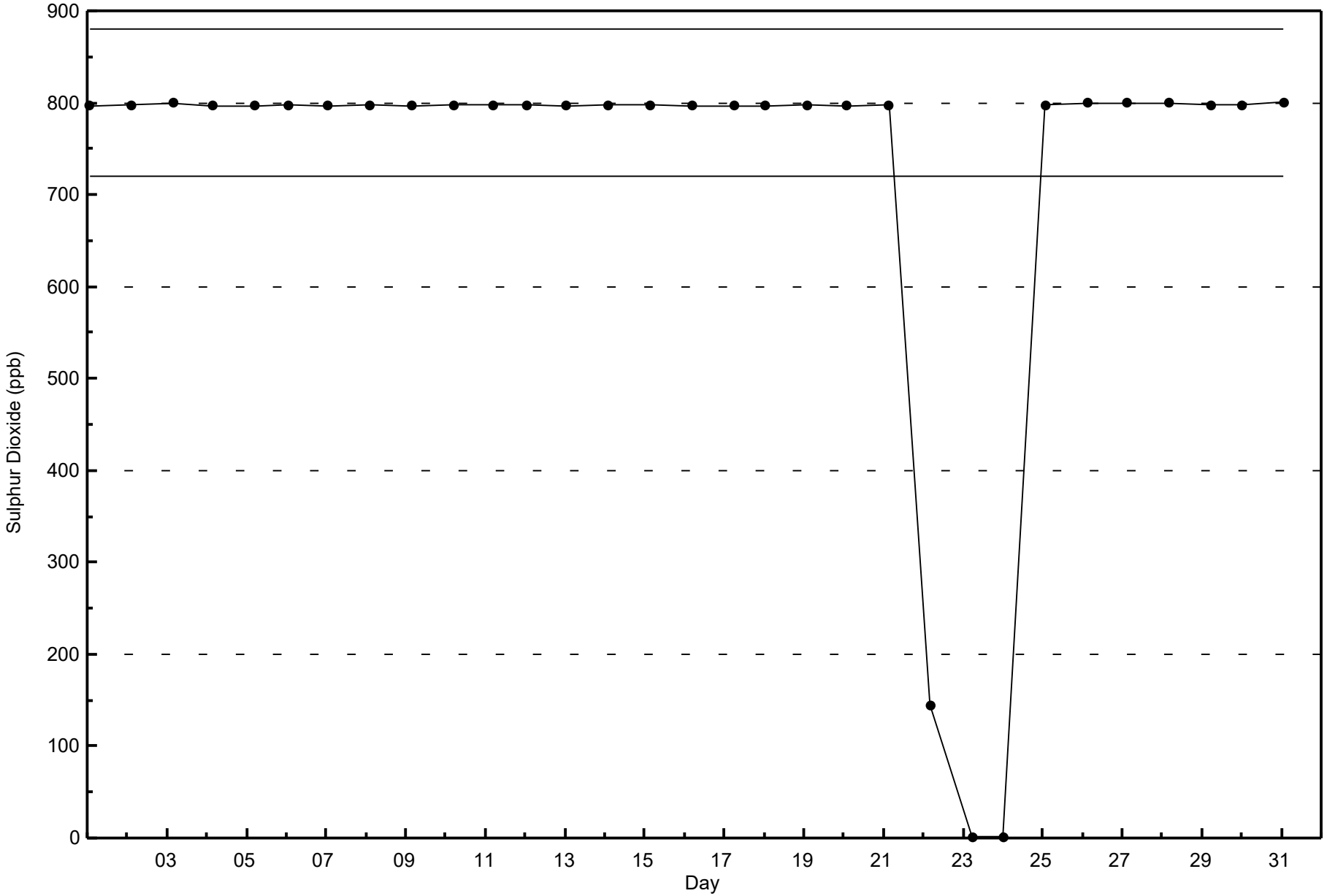


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Monday Creek - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## Monday Creek - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 1.7 ppb on Aug 2 08:00 Maximum Daily Average: 0.3 ppb on Aug 9

Minimum Value: 0.0 ppb on Aug 24 14:00 Minimum Daily Average: 0.1 ppb on Aug 3

Maximum Diurnal Average: 0.3 ppb at hour 8 Minimum Diurnal Average: 0.1 ppb at hour 16

Monthly Average: 0.15 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| 2-Aug | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 1.7 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.7 |
| 3-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 4-Aug | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 5-Aug | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 |
| 7-Aug | 0.5 | 0.5 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.5 |
| 8-Aug | 0.2 | 0.3 | 0.3 | Z | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 9-Aug | 0.4 | 0.3 | 0.5 | 0.5 | Z | 0.6 | 0.9 | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.9 |
| 10-Aug | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | Z | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 |
| 11-Aug | Z | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 |
| 12-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 13-Aug | 0.0 | 0.0 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| 14-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 15-Aug | 0.3 | 0.2 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.4 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 |
| 16-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 | 0.3 |
| 17-Aug | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 |
| 18-Aug | 0.3 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 0.1 | 0.7 |
| 19-Aug | 0.2 | 0.2 | Z | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 20-Aug | 0.1 | 0.2 | 0.2 | Z | 0.4 | 0.6 | 0.4 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.7 |
| 21-Aug | 0.3 | 0.3 | 0.5 | 0.3 | Z | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 23-Aug | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 |
| 24-Aug | 0.0 | Z | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 |
| 25-Aug | 0.2 | 0.3 | Z | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.1 | 0.2 | 0.1 | 0.1 | C | C | C | C | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 26-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | M | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| 28-Aug | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | Z | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.4 |
| 29-Aug | Z | 0.3 | 0.3 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 30-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 31-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Diurnal Average | |
| | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.7 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

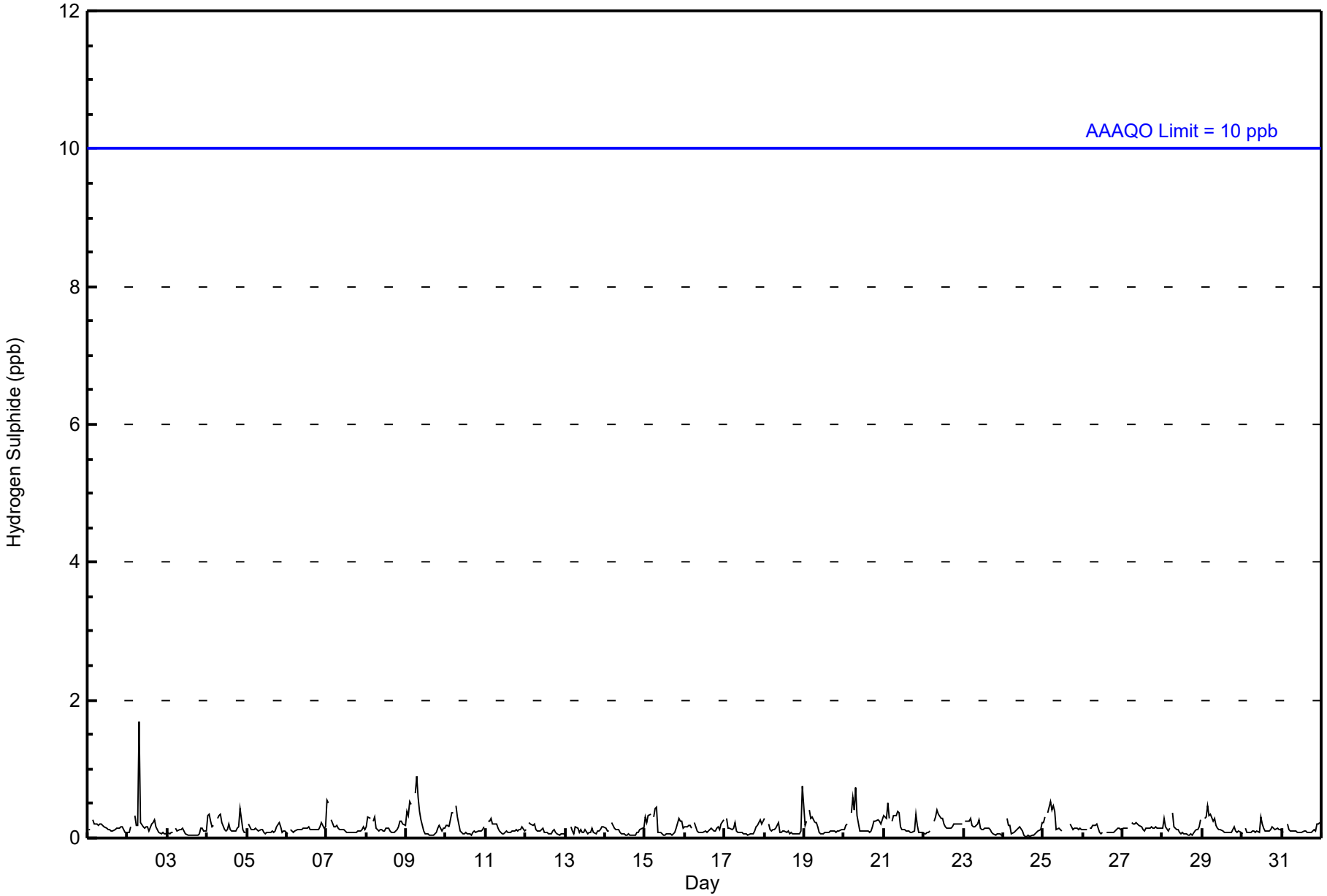
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Monday Creek - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 708 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Monday Creek - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 35 | 29 | 26 | 16 | 19 | 14 | 32 | 37 | 49 | 48 | 33 | 49 | 70 | 118 | 84 | 44 | 703 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 29 | 26 | 16 | 19 | 14 | 32 | 37 | 49 | 48 | 33 | 49 | 70 | 118 | 84 | 44 | 703 |

Total Number of Valid Hours: 703

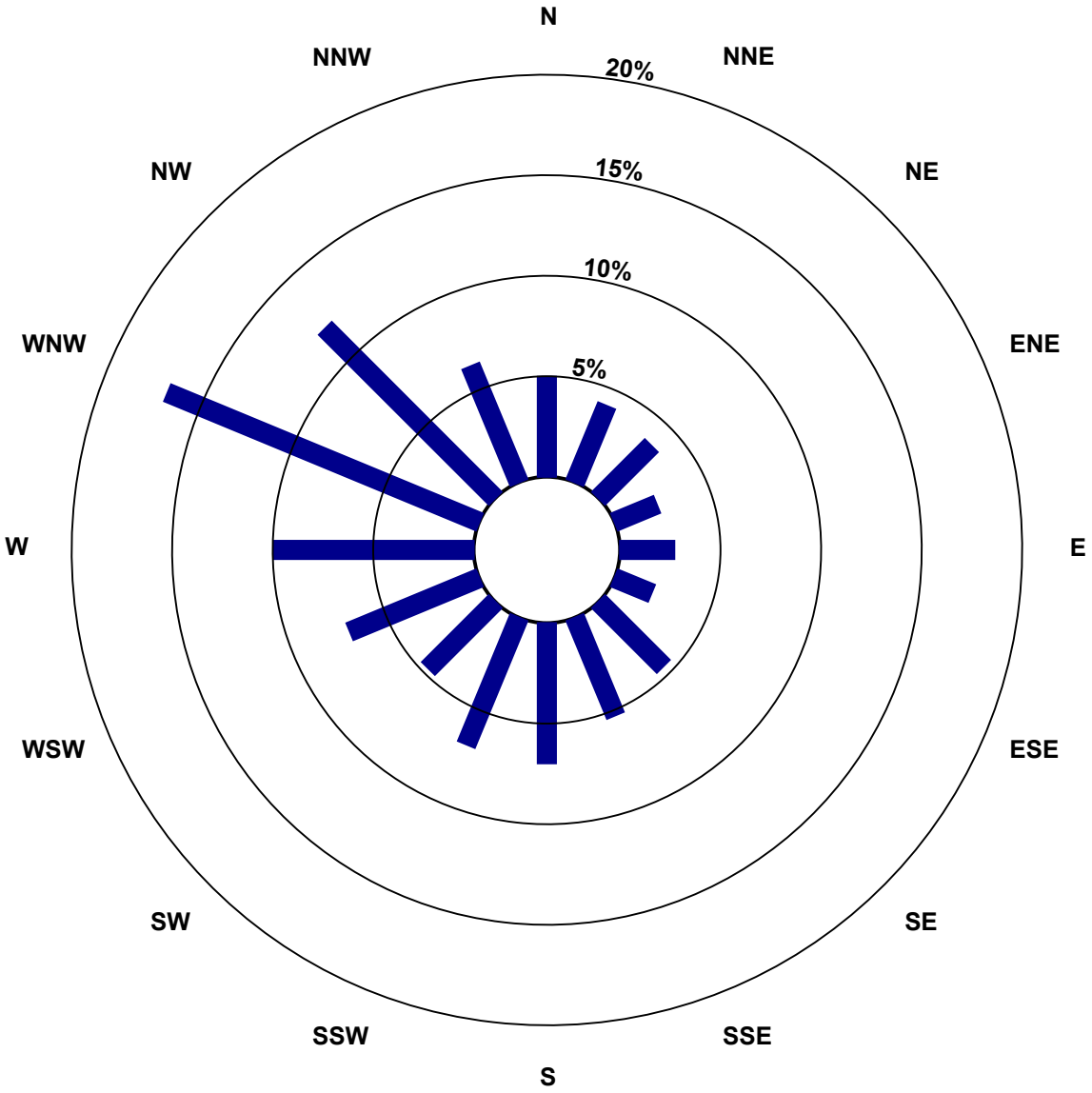
Total Number of Hours: 744

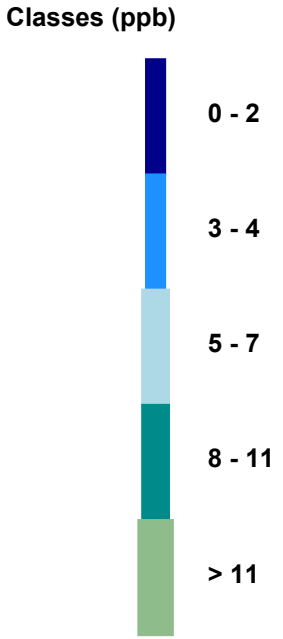
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Hydrogen Sulphide ($H_2S$) - ppb

## Monday Creek



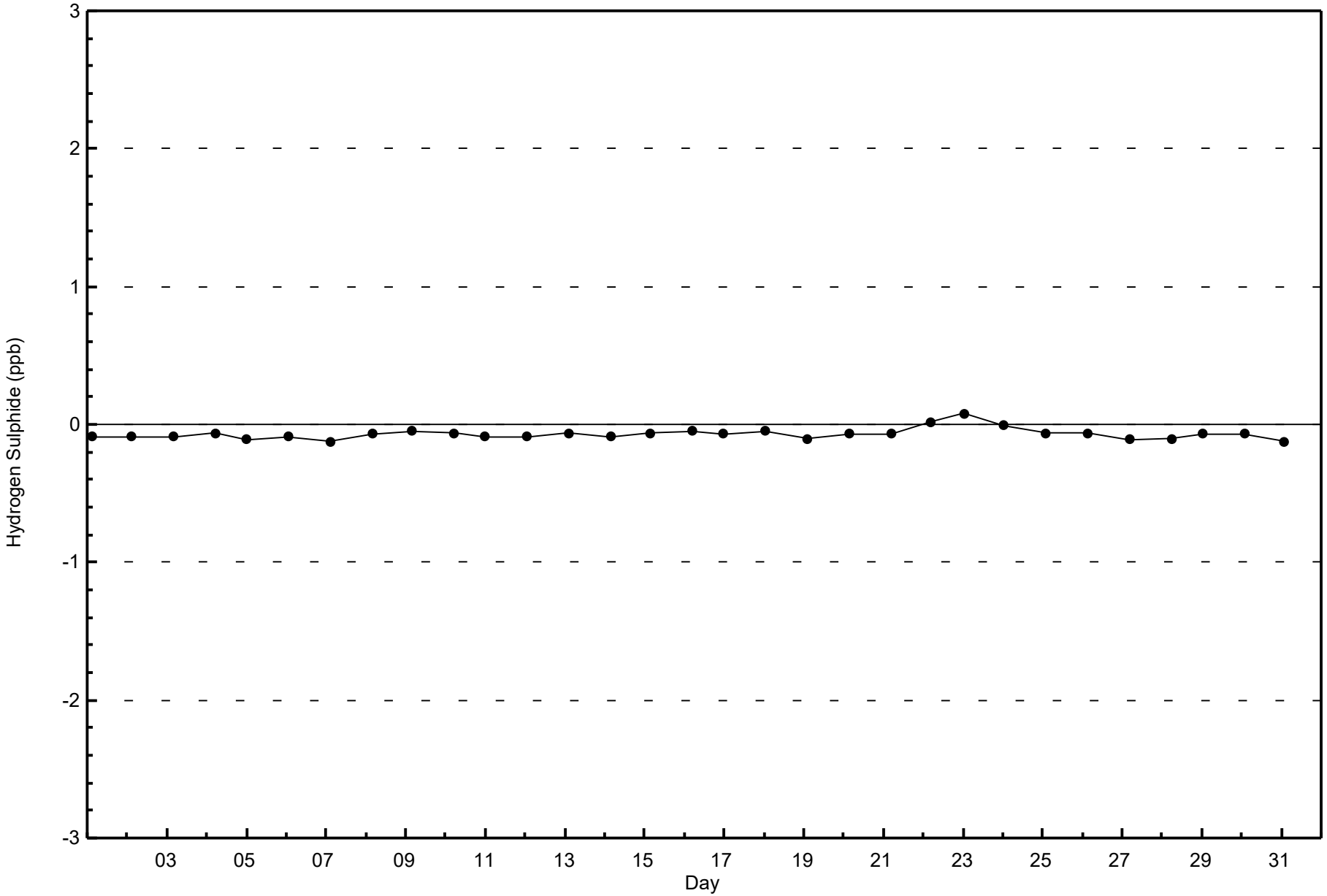

Total Number of Valid Hours: 703

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Monday Creek - August 2026**

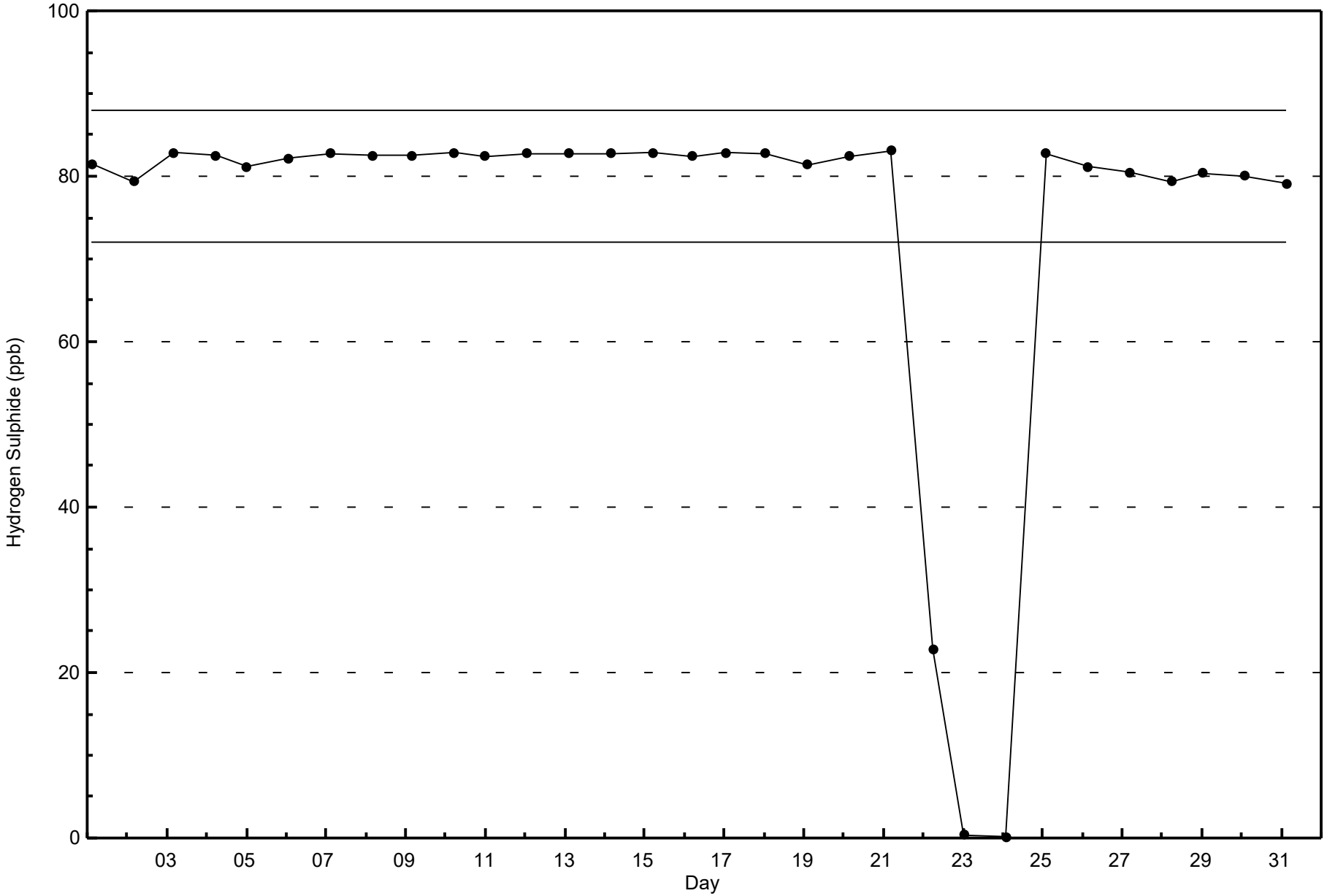


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Monday Creek - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Monday Creek - August 2026

Maximum Value: 13.7 ppb on Aug 13 17:00

Maximum Daily Average: 2.1 ppb on Aug 13

Minimum Value: 0.0 ppb on Aug 2 07:00

Minimum Daily Average: 0.0 ppb on Aug 6

Maximum Diurnal Average: 1.0 ppb at hour 7

Minimum Diurnal Average: 0.0 ppb at hour 20

Monthly Average: 0.35 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.0 $Q_3$ = 0.2 $P_{90}$ = 0.9 $P_{99}$ = 3.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 706 |
| Hours of Missing Data: | 38 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.6 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.6 |
| 2-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 |
| 3-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 1.0 | 0.0 | 0.1 | 0.1 | 1.0 |
| 4-Aug | 0.0 | 0.3 | Z | 0.7 | 0.9 | 0.8 | 1.3 | 0.8 | 2.4 | 1.8 | 0.4 | 0.4 | 0.3 | 0.5 | 0.3 | 0.3 | 0.8 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.5 | 2.4 |
| 5-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 7-Aug | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 |
| 8-Aug | Z | 0.0 | 2.2 | 0.7 | 0.1 | 0.3 | 0.5 | 0.4 | 0.7 | 0.8 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.7 | 0.4 | 2.2 |
| 9-Aug | 0.2 | Z | 0.0 | 0.1 | 0.1 | 1.0 | 1.8 | 1.2 | 3.6 | 4.5 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.6 | 4.5 |
| 10-Aug | 1.0 | 2.1 | Z | 0.4 | 2.2 | 2.9 | 2.3 | 1.3 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 2.9 |
| 11-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.4 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.4 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 13-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 1.8 | 0.7 | 0.4 | 0.6 | 1.0 | 3.6 | 9.7 | 0.7 | 5.6 | 3.7 | 13.7 | 3.4 | 0.0 | 0.0 | 0.0 | 1.6 | 0.6 | 0.3 | 2.1 | 13.7 |
| 14-Aug | Z | 0.0 | 0.0 | 0.0 | 2.3 | 0.7 | 2.1 | 0.8 | 0.5 | 0.5 | 0.5 | 2.3 | 0.6 | 0.4 | 0.1 | 0.4 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 2.3 |
| 15-Aug | 0.0 | Z | 0.0 | 0.2 | 0.6 | 0.9 | 1.3 | 1.8 | 0.5 | 0.3 | 0.1 | 0.1 | 0.3 | 0.9 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.8 |
| 16-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.7 | 1.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 |
| 17-Aug | 0.0 | 0.4 | 0.1 | Z | 0.0 | 0.0 | 0.5 | 0.2 | 0.1 | 0.1 | 4.2 | 0.0 | 0.0 | 0.8 | 0.7 | 1.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 4.2 |
| 18-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.3 | 0.8 | 0.5 | 0.4 | 0.1 | 1.0 | 0.6 | 1.9 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.9 |
| 19-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 3.2 | 0.7 | 0.8 | 0.1 | 0.6 | 0.0 | 0.5 | 0.7 | 0.2 | 0.7 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 3.2 |
| 20-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 2.2 | 3.3 | 1.1 | 0.2 | 1.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 3.3 |
| 21-Aug | 0.0 | Z | 0.0 | 0.3 | 0.2 | 3.3 | 3.8 | 2.2 | 1.0 | 1.9 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 3.8 |
| 22-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.6 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 23-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.4 | 0.4 | 2.6 | 1.7 | 0.6 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 2.6 |
| 24-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.7 | C | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | -- | 0.7 |
| 25-Aug | 1.0 | 0.3 | 1.2 | 1.0 | 0.6 | Z | 3.3 | 2.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.5 | 3.3 |
| 26-Aug | Z | 0.0 | 0.0 | 0.1 | 0.3 | 0.9 | 2.1 | 1.0 | 1.5 | 0.3 | 0.0 | 0.0 | 0.0 | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 2.1 |
| 27-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 28-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 1.9 | 0.4 | 2.2 | 3.3 | 0.6 | 0.5 | 0.8 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.3 | 0.6 | 3.3 |
| 29-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.7 | 1.9 | 1.5 | 0.5 | 0.9 | 0.6 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.9 |
| 30-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 1.9 | 0.5 | 2.0 | 0.8 | 9.0 | 3.5 | 1.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.9 | 9.0 |
| 31-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 2.5 | 1.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 2.5 |
| | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 0.5 | 1.0 | 0.9 | 0.7 | 0.7 | 0.5 | 0.6 | 0.6 | 0.3 | 0.3 | 0.3 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 1.0 | 2.1 | 2.2 | 1.0 | 2.3 | 3.3 | 3.8 | 3.3 | 3.6 | 4.5 | 4.2 | 9.0 | 9.7 | 1.4 | 5.6 | 3.7 | 13.7 | 3.4 | 0.4 | 0.1 | 0.8 | 1.6 | 0.6 | 1.3 | Diurnal Maximum | |

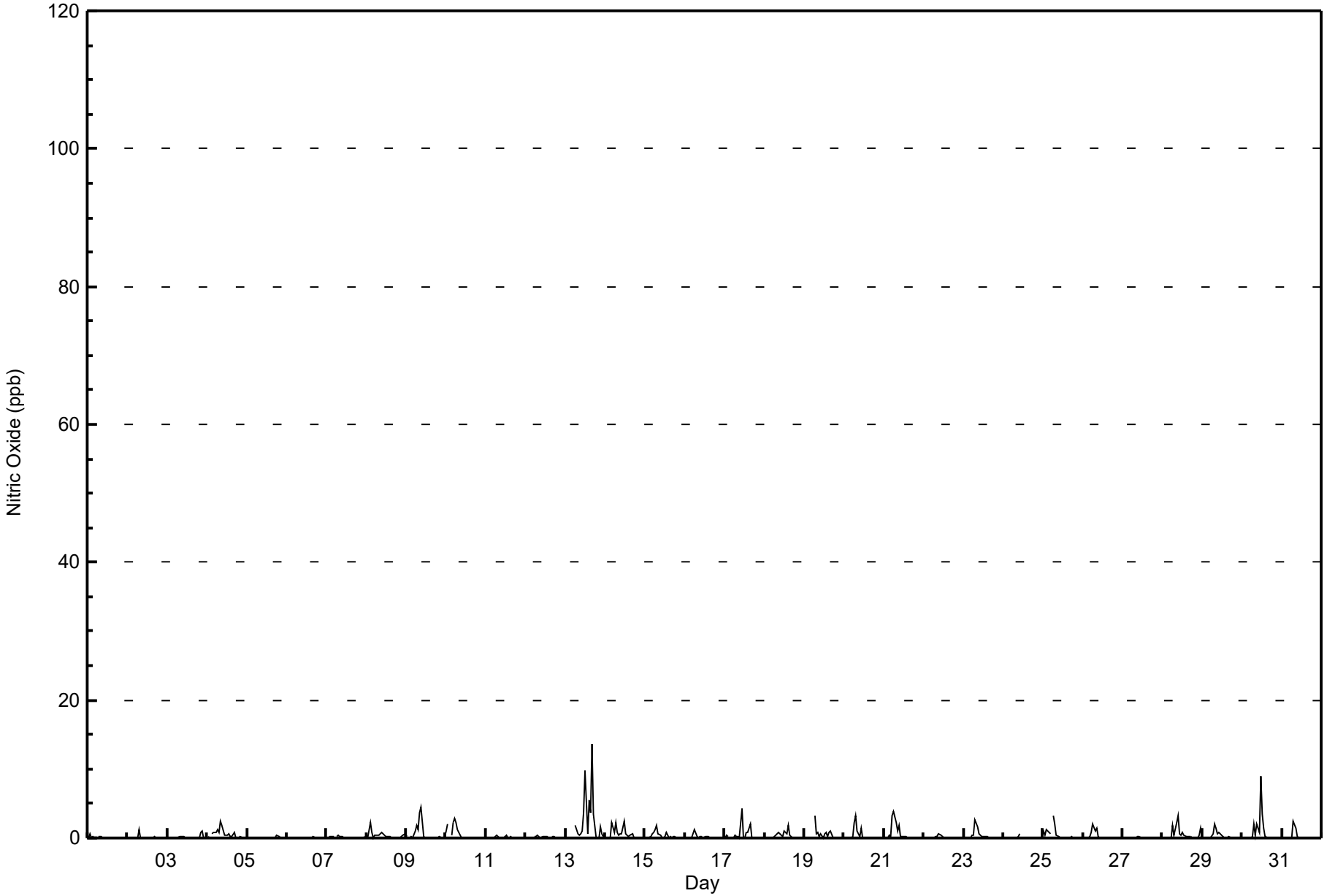
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Monday Creek - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 706 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 706

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Monday Creek - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 35 | 30 | 24 | 16 | 20 | 14 | 31 | 38 | 50 | 47 | 35 | 49 | 69 | 118 | 87 | 37 | 700 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 30 | 24 | 16 | 20 | 14 | 31 | 38 | 50 | 47 | 35 | 49 | 69 | 118 | 87 | 37 | 700 |

Total Number of Valid Hours: 700

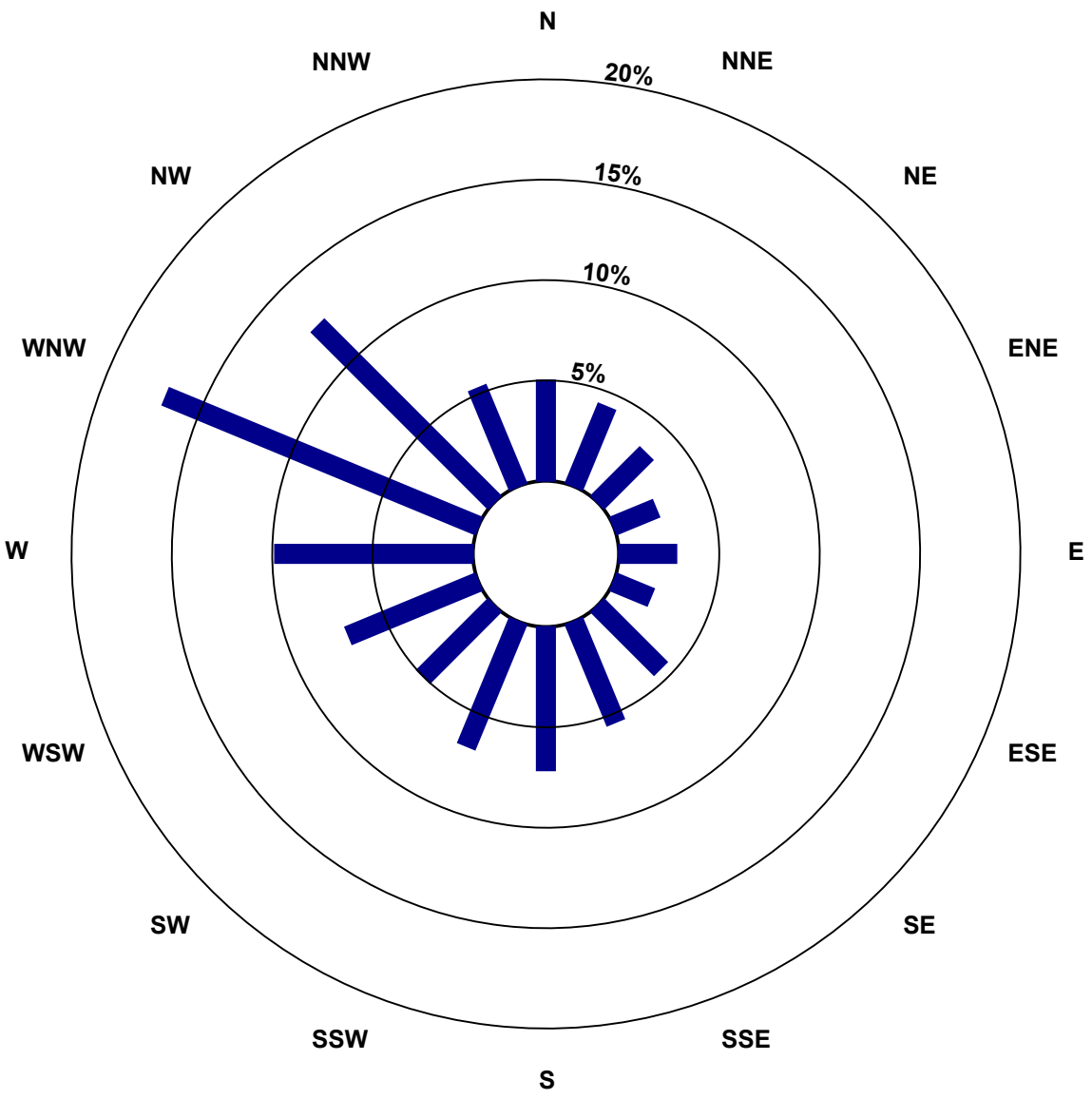
Total Number of Hours: 744

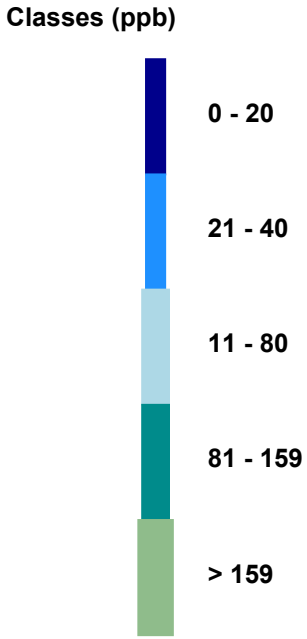
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Monday Creek



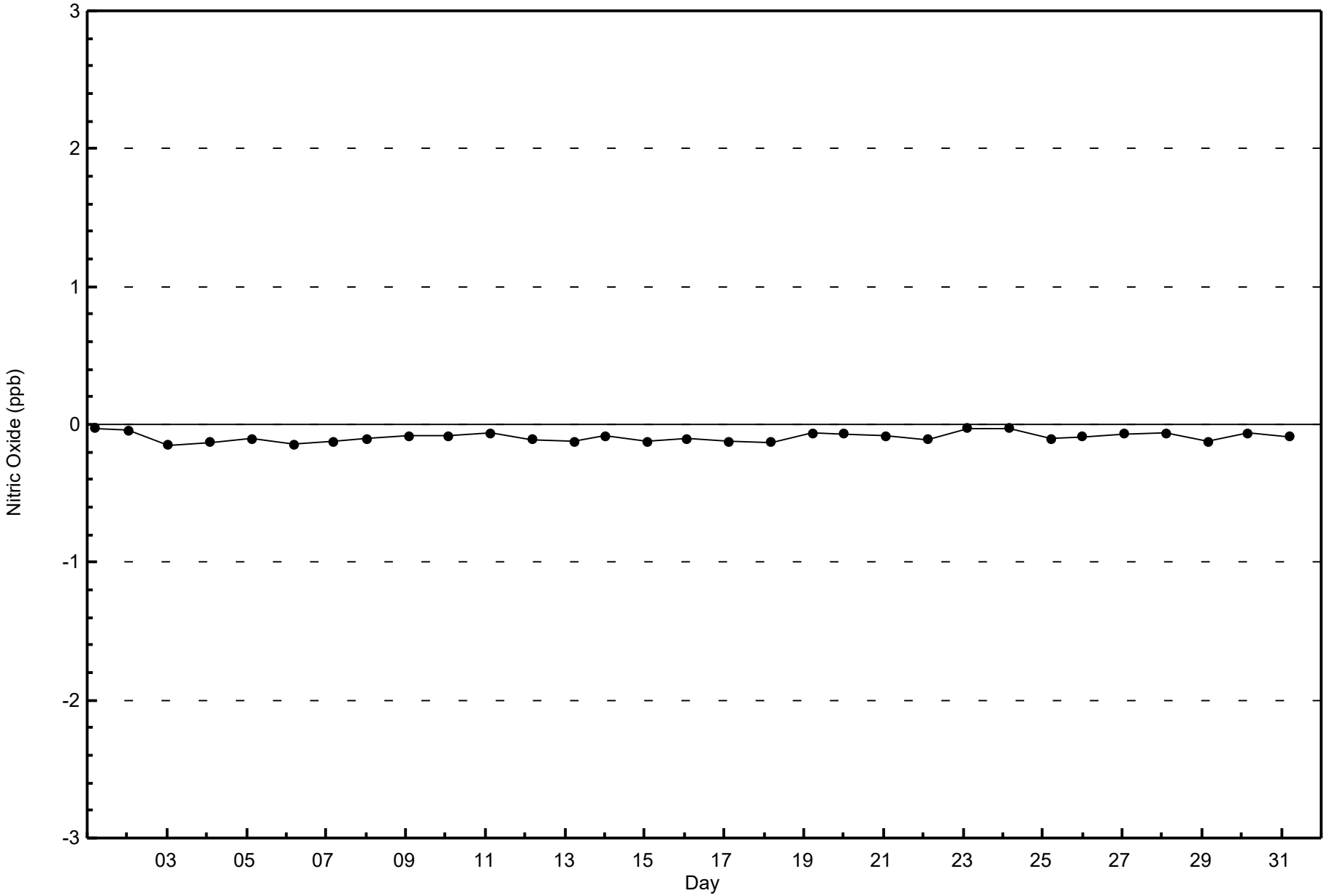

Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Monday Creek - August 2026**

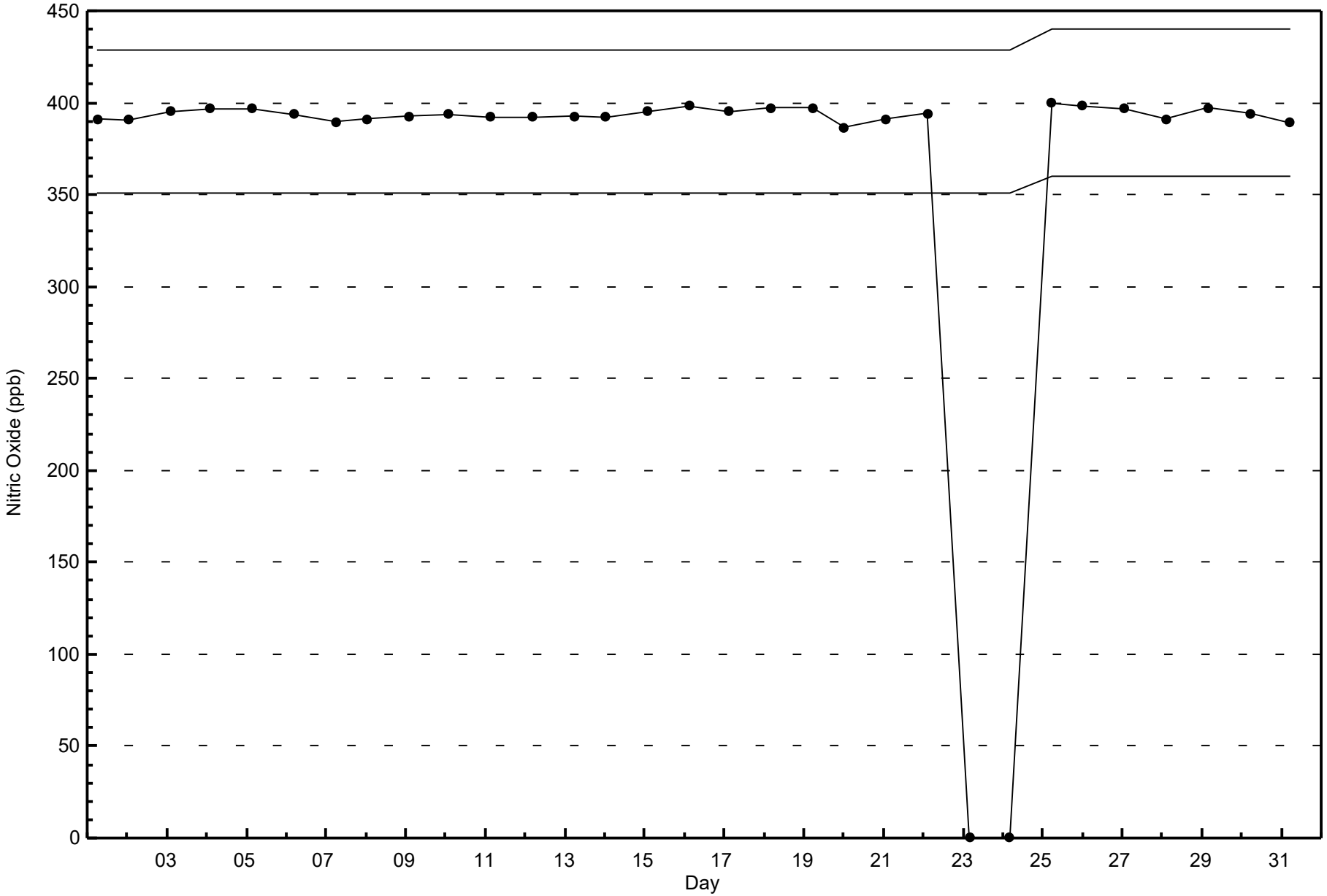


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Monday Creek - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Monday Creek - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.0 ppb on Aug 29 00:00
Maximum Daily Average: 2.2 ppb on Aug 28

Minimum Value: 0.0 ppb on Aug 3 01:00
Minimum Daily Average: 0.2 ppb on Aug 6
Maximum Diurnal Average: 1.9 ppb at hour 8
Minimum Diurnal Average: 0.8 ppb at hour 18
Monthly Average: 1.20 ppb
Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 0.6$ Median = 0.9 $Q_3 = 1.5$ $P_{90} = 2.2$ $P_{99} = 5.8$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 706 |
| Hours of Missing Data: | 38 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.0 | 1.7 | 2.9 | 3.9 | 2.8 | Z | 2.0 | 2.0 | 1.5 | 1.0 | 1.2 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 1.5 | 2.1 | 1.2 | 1.4 | 3.9 |
| 2-Aug | Z | 1.8 | 2.5 | 3.3 | 1.4 | 1.1 | 0.6 | 6.6 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.4 | 0.6 | 1.2 | 0.7 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 1.1 | 6.6 |
| 3-Aug | 0.0 | Z | 0.4 | 0.6 | 0.7 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 2.9 | 4.1 | 1.0 | 1.2 | 0.7 | 4.1 |
| 4-Aug | 0.5 | 0.5 | Z | 0.9 | 0.9 | 0.8 | 1.3 | 1.3 | 3.1 | 3.1 | 1.1 | 1.1 | 0.9 | 1.6 | 0.7 | 0.9 | 1.8 | 1.0 | 2.0 | 3.0 | 6.8 | 0.6 | 0.3 | 0.3 | 1.5 | 6.8 |
| 5-Aug | 0.3 | 0.4 | 0.6 | Z | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 3.1 | 2.1 | 0.6 | 0.5 | 0.6 | 0.8 | 0.6 | 3.1 |
| 6-Aug | 0.2 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.5 | 0.2 | 0.5 |
| 7-Aug | 1.3 | 1.1 | 1.3 | 0.9 | 0.9 | Z | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.8 | 0.9 | 1.5 | 0.7 | 1.5 |
| 8-Aug | Z | 2.2 | 2.9 | 1.7 | 1.4 | 1.8 | 1.3 | 1.0 | 1.4 | 1.8 | 1.5 | 1.6 | 1.8 | 2.0 | 1.2 | 1.1 | 1.0 | 1.2 | 1.3 | 2.7 | 2.2 | 3.4 | 2.3 | 1.6 | 1.8 | 3.4 |
| 9-Aug | 1.2 | Z | 1.6 | 1.5 | 0.9 | 1.3 | 2.3 | 2.1 | 4.9 | 6.0 | 1.4 | 0.6 | 0.7 | 0.8 | 0.6 | 0.4 | 0.6 | 0.8 | 1.1 | 1.4 | 3.6 | 1.0 | 1.0 | 1.7 | 1.6 | 6.0 |
| 10-Aug | 1.7 | 2.2 | Z | 0.8 | 1.1 | 0.7 | 1.3 | 1.7 | 0.9 | 0.5 | 0.8 | 0.8 | 1.0 | 0.6 | 0.4 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 2.2 |
| 11-Aug | 1.0 | 1.1 | 1.6 | Z | 1.2 | 0.9 | 1.5 | 0.8 | 0.6 | 0.5 | 0.6 | 0.5 | 1.3 | 0.6 | 0.9 | 0.8 | 0.7 | 1.0 | 1.2 | 0.9 | 1.0 | 1.1 | 2.0 | 1.0 | 1.0 | 2.0 |
| 12-Aug | 0.8 | 1.1 | 0.8 | 0.7 | Z | 1.5 | 1.4 | 1.0 | 0.8 | 0.6 | 1.4 | 0.9 | 0.7 | 0.9 | 0.5 | 0.6 | 0.9 | 1.3 | 0.8 | 0.6 | 0.3 | 0.5 | 0.5 | 0.5 | 0.8 | 1.5 |
| 13-Aug | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | Z | 2.6 | 1.9 | 0.7 | 1.0 | 0.9 | 2.2 | 4.7 | 0.8 | 2.6 | 1.8 | 6.3 | 1.5 | 0.2 | 0.5 | 0.4 | 1.8 | 2.9 | 2.3 | 1.6 | 6.3 |
| 14-Aug | Z | 1.4 | 1.6 | 1.8 | 2.6 | 2.2 | 2.4 | 1.3 | 1.0 | 1.4 | 1.2 | 2.1 | 1.2 | 0.5 | 0.6 | 0.7 | 0.9 | 0.5 | 0.5 | 0.5 | 1.9 | 1.5 | 0.8 | 0.5 | 1.3 | 2.6 |
| 15-Aug | 0.8 | Z | 0.9 | 1.0 | 0.8 | 1.2 | 1.3 | 1.5 | 1.0 | 0.9 | 0.6 | 0.4 | 0.6 | 1.1 | 0.4 | 1.0 | 0.5 | 1.0 | 1.6 | 1.7 | 1.0 | 1.8 | 1.7 | 1.4 | 1.1 | 1.8 |
| 16-Aug | 1.8 | 1.8 | Z | 4.9 | 2.2 | 7.4 | 5.9 | 1.3 | 0.7 | 1.1 | 1.1 | 0.6 | 0.7 | 0.7 | 1.0 | 0.8 | 0.8 | 1.1 | 1.2 | 1.0 | 1.2 | 0.7 | 1.0 | 1.7 | 1.8 | 7.4 |
| 17-Aug | 1.4 | 4.1 | 4.9 | Z | 2.1 | 1.3 | 1.8 | 0.7 | 0.7 | 0.5 | 1.1 | 0.4 | 0.3 | 0.8 | 0.6 | 2.0 | 0.5 | 0.5 | 0.5 | 1.2 | 0.8 | 1.4 | 0.7 | 0.4 | 1.2 | 4.9 |
| 18-Aug | 0.5 | 0.4 | 0.4 | 0.6 | Z | 1.6 | 1.4 | 1.3 | 2.2 | 1.9 | 1.4 | 1.3 | 1.8 | 1.8 | 2.1 | 1.0 | 0.8 | 0.4 | 0.6 | 0.6 | 1.7 | 0.4 | 0.5 | 1.2 | 1.1 | 2.2 |
| 19-Aug | 1.1 | 1.3 | 1.6 | 2.2 | 2.3 | Z | 2.5 | 2.1 | 2.2 | 0.7 | 1.2 | 0.6 | 0.9 | 1.0 | 0.5 | 0.8 | 1.3 | 0.5 | 0.6 | 0.4 | 0.6 | 0.7 | 1.2 | 0.9 | 1.2 | 2.5 |
| 20-Aug | Z | 1.4 | 1.1 | 0.7 | 0.9 | 1.2 | 1.4 | 3.4 | 2.1 | 1.0 | 1.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 1.1 | 1.9 | 3.0 | 2.0 | 1.3 | 1.2 | 1.2 | 1.3 | 3.4 |
| 21-Aug | 1.1 | Z | 1.4 | 0.8 | 1.0 | 1.3 | 2.5 | 3.2 | 2.7 | 4.9 | 1.4 | 1.4 | 1.3 | 1.2 | 0.9 | 0.8 | 0.7 | 0.8 | 0.6 | 1.0 | 1.1 | 0.8 | 1.2 | 1.0 | 1.4 | 4.9 |
| 22-Aug | 0.8 | 0.6 | Z | 1.8 | 1.5 | 1.4 | 1.3 | 1.3 | 1.3 | 2.2 | 2.1 | 1.6 | 1.1 | 0.9 | 0.8 | 1.2 | 1.5 | 1.2 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 1.1 | 1.2 | 2.2 |
| 23-Aug | 0.8 | 1.3 | 1.5 | Z | 3.5 | 2.8 | 2.4 | 4.0 | 3.6 | 2.4 | 1.7 | 1.5 | 1.6 | 2.4 | 2.3 | 2.4 | 2.0 | 1.2 | 0.9 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 1.8 | 4.0 |
| 24-Aug | 0.3 | 0.7 | 1.0 | 0.7 | Z | 1.9 | 0.9 | 1.2 | 1.1 | 1.6 | 1.8 | C | C | C | C | C | C | 0.0 | 0.2 | 0.5 | 0.3 | 0.8 | 0.5 | 2.6 | -- | 2.6 |
| 25-Aug | 2.0 | 1.0 | 1.1 | 1.3 | 0.8 | Z | 1.8 | 2.2 | 1.3 | 0.9 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.6 | 1.0 | 1.5 | 1.6 | 2.3 | 3.4 | 2.2 | 1.2 | 3.4 |
| 26-Aug | Z | 1.1 | 0.9 | 0.8 | 0.9 | 1.7 | 1.6 | 1.9 | 3.5 | 1.0 | 0.5 | 0.5 | 0.6 | M | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 0.8 | 0.6 | 1.1 | 1.0 | 3.5 |
| 27-Aug | 1.7 | Z | 1.4 | 1.4 | 1.4 | 1.5 | 1.2 | 1.0 | 1.1 | 1.4 | 1.2 | 1.0 | 0.8 | 0.6 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 0.7 | 1.0 | 1.7 |
| 28-Aug | 0.6 | 1.4 | Z | 1.0 | 1.6 | 2.0 | 2.1 | 4.7 | 2.8 | 2.7 | 1.5 | 1.5 | 2.1 | 1.4 | 1.0 | 1.0 | 1.0 | 1.6 | 0.6 | 1.0 | 1.0 | 1.0 | 5.6 | 11.0 | 2.2 | 11.0 |
| 29-Aug | 1.0 | 0.8 | 2.1 | Z | 1.4 | 1.7 | 1.7 | 3.0 | 2.7 | 1.4 | 2.0 | 1.4 | 0.9 | 0.5 | 0.6 | 0.8 | 1.0 | 0.7 | 0.7 | 1.0 | 0.8 | 0.6 | 0.6 | 0.7 | 1.2 | 3.0 |
| 30-Aug | 0.6 | 0.4 | 0.3 | 0.8 | Z | 0.8 | 1.1 | 3.0 | 1.6 | 2.9 | 1.7 | 5.8 | 4.0 | 4.3 | 1.7 | 1.3 | 1.3 | 1.4 | 1.6 | 1.1 | 0.8 | 1.1 | 0.9 | 0.8 | 1.7 | 5.8 |
| 31-Aug | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | Z | 0.8 | 2.2 | 1.4 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.4 | 1.2 | 1.5 | 1.5 | 0.7 | 2.2 |
| | 0.9 | 1.2 | 1.4 | 1.4 | 1.4 | 1.6 | 1.6 | 1.9 | 1.6 | 1.5 | 1.1 | 1.0 | 1.1 | 1.0 | 0.8 | 0.8 | 1.0 | 0.8 | 0.9 | 1.0 | 1.2 | 1.1 | 1.2 | 1.4 | Diurnal Average | |
| | 2.0 | 4.1 | 4.9 | 4.9 | 3.5 | 7.4 | 5.9 | 6.6 | 4.9 | 6.0 | 2.1 | 5.8 | 4.7 | 4.3 | 2.6 | 2.4 | 6.3 | 1.6 | 3.1 | 3.0 | 6.8 | 4.1 | 5.6 | 11.0 | Diurnal Maximum | |

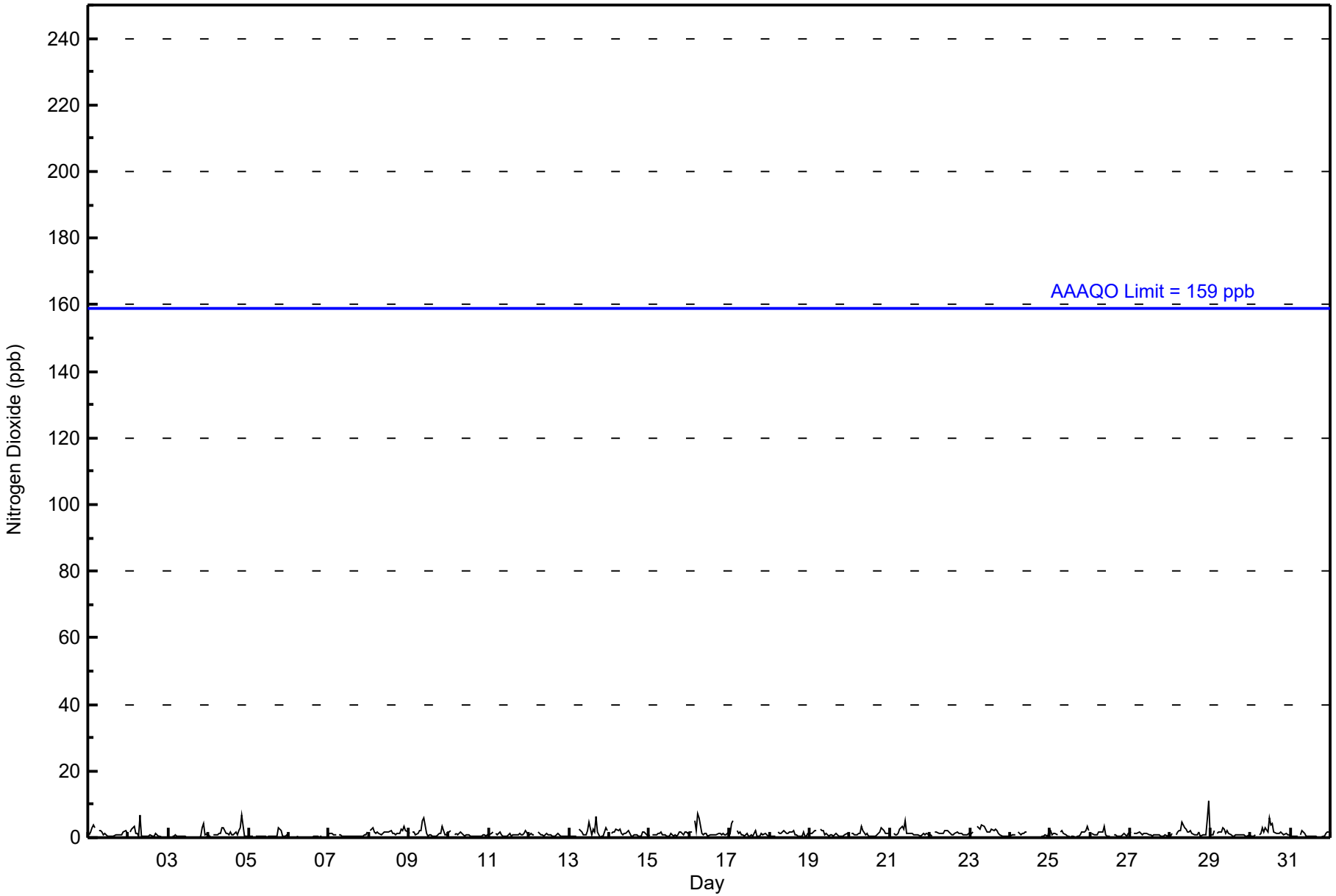
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Monday Creek - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Monday Creek - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 706 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 706

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Monday Creek - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 35 | 30 | 24 | 16 | 20 | 14 | 31 | 38 | 50 | 47 | 35 | 49 | 69 | 118 | 87 | 37 | 700 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 30 | 24 | 16 | 20 | 14 | 31 | 38 | 50 | 47 | 35 | 49 | 69 | 118 | 87 | 37 | 700 |

Total Number of Valid Hours: 700

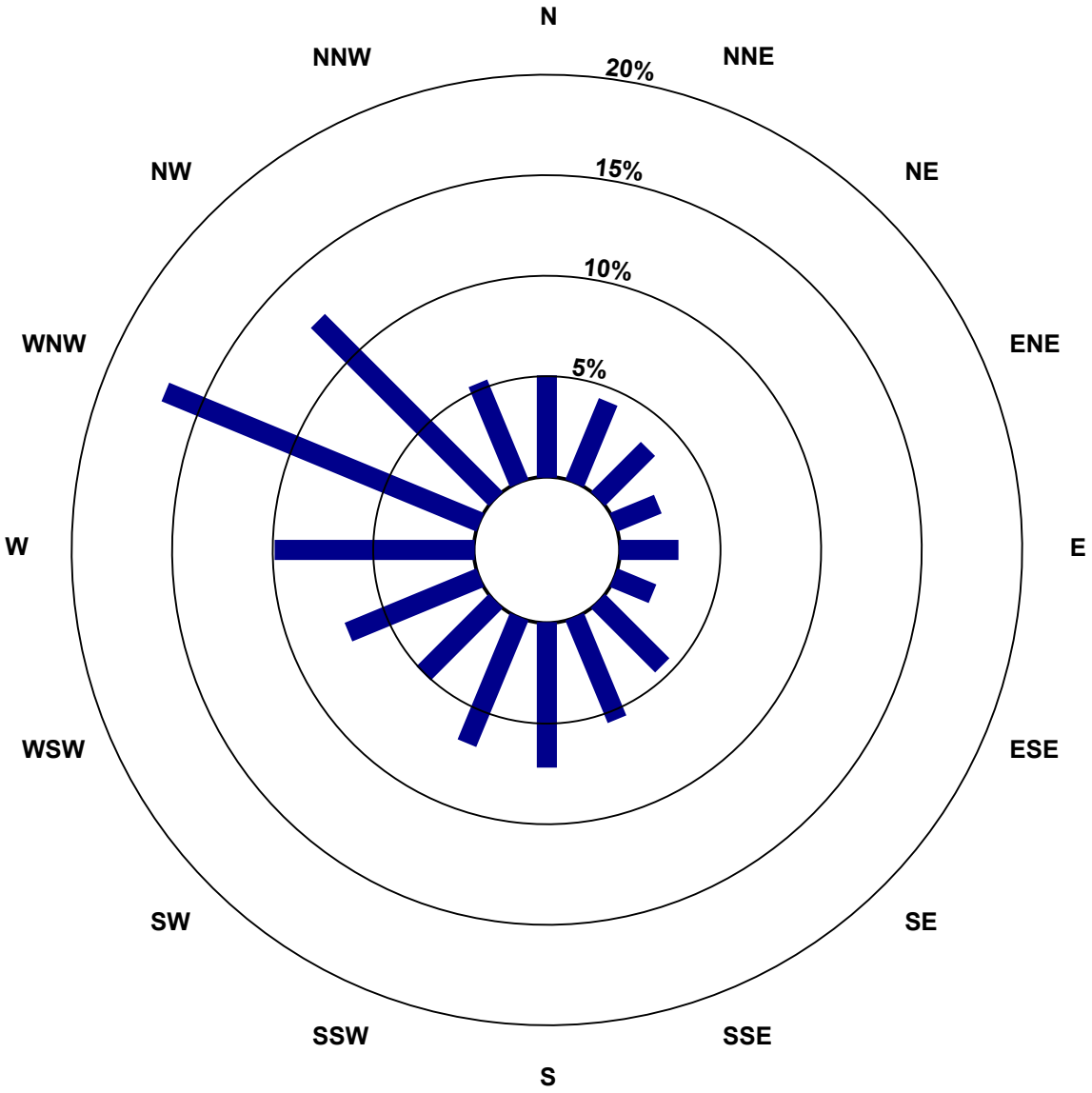
Total Number of Hours: 744

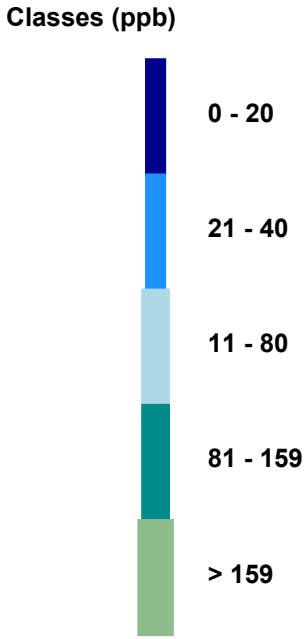
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Monday Creek



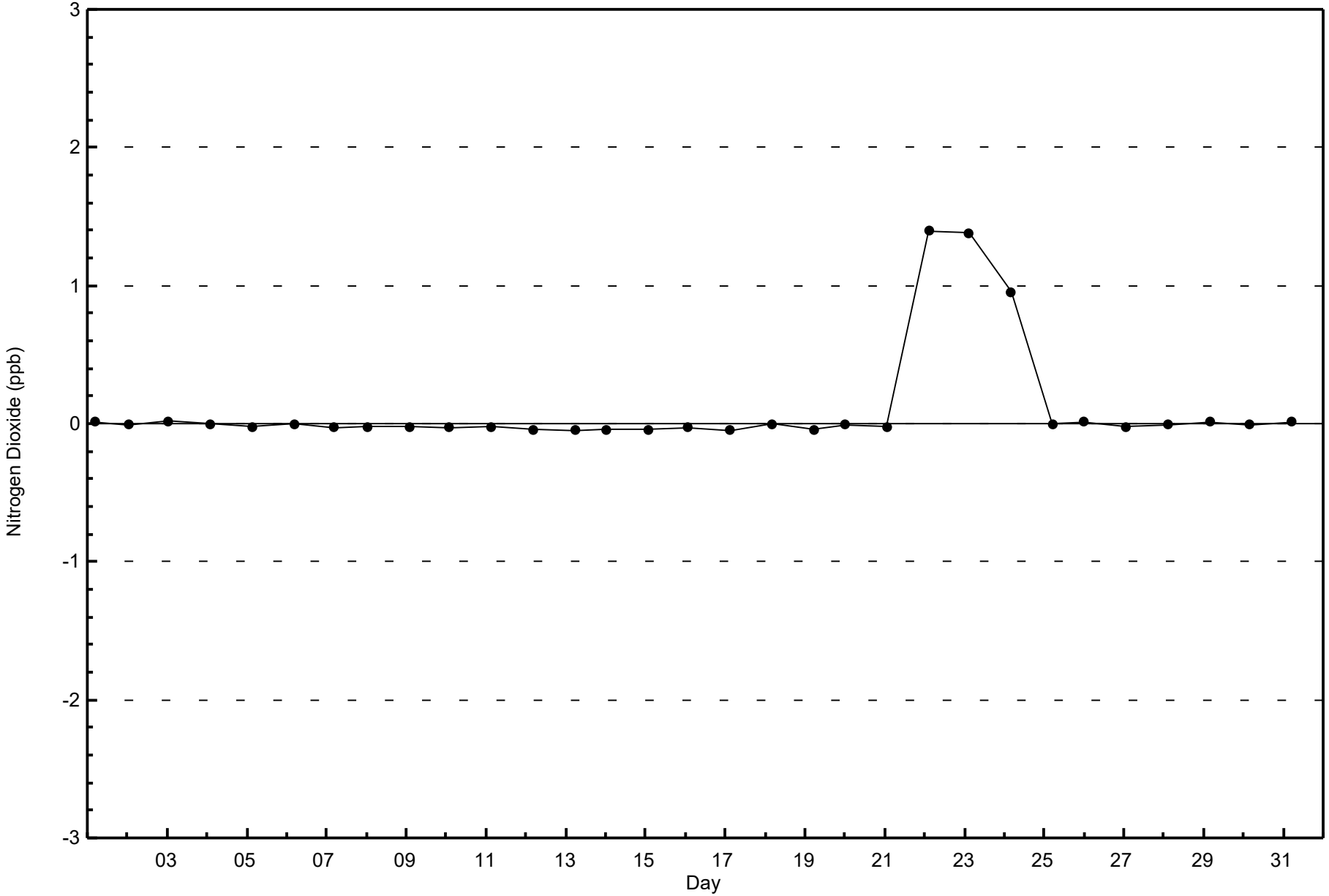

Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Monday Creek - August 2026**

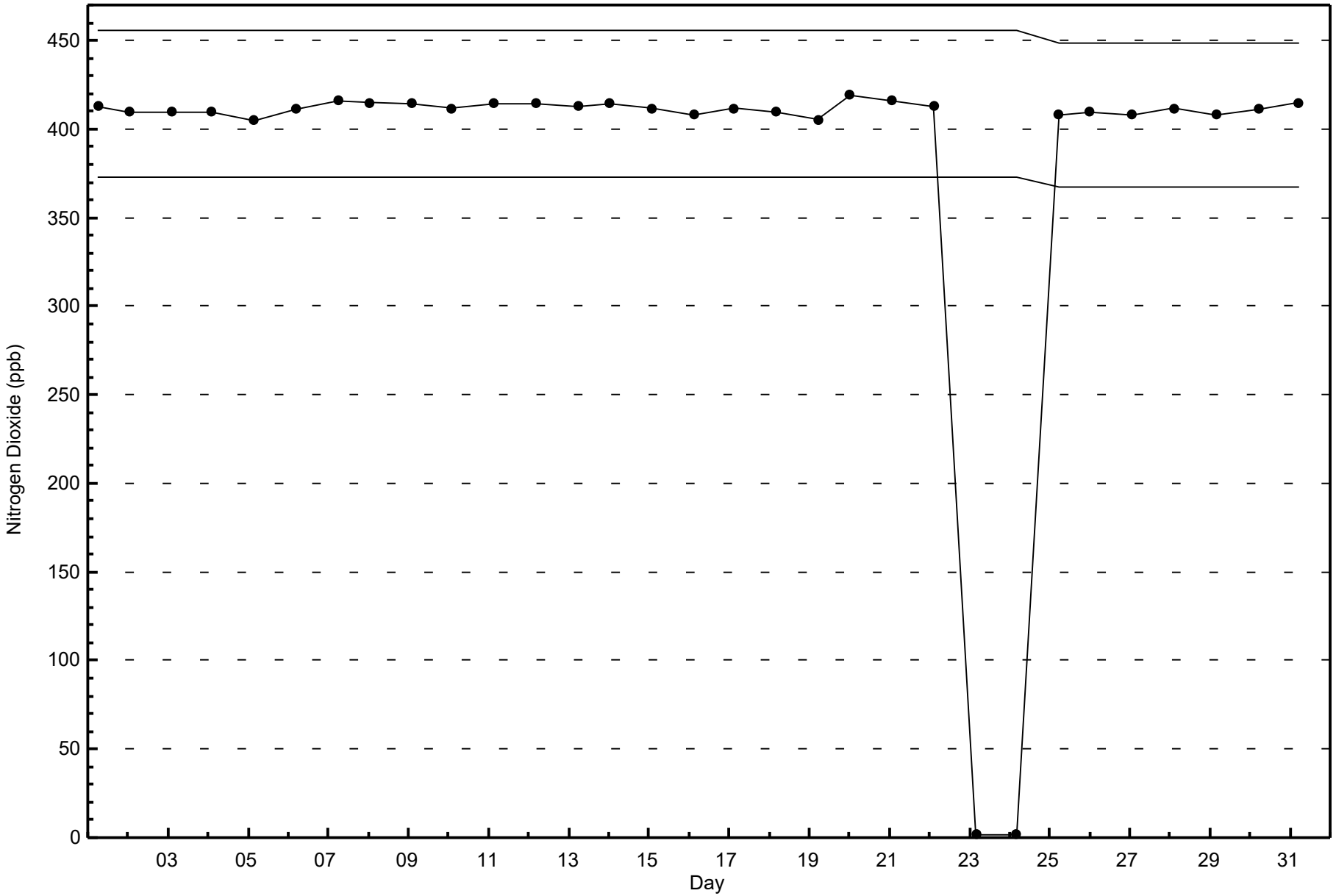


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Monday Creek - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxides ($NO_X$) - ppb

## Monday Creek - August 2026

Maximum Value: 20.0 ppb on Aug 13 17:00

Maximum Daily Average: 3.7 ppb on Aug 13

Minimum Value: 0.0 ppb on Aug 3 01:00

Minimum Daily Average: 0.2 ppb on Aug 6

Maximum Diurnal Average: 2.9 ppb at hour 8

Minimum Diurnal Average: 0.9 ppb at hour 19

Monthly Average: 1.55 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.4$ $Q_1 = 0.6$ Median = 1.1 $Q_3 = 1.8$ $P_{90} = 3.2$ $P_{99} = 8.1$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 706 |
| Hours of Missing Data: | 38 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.1 | 2.3 | 3.0 | 4.0 | 2.9 | Z | 2.1 | 2.3 | 1.7 | 1.1 | 1.3 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 1.6 | 2.1 | 1.2 | 1.5 | 4.0 |
| 2-Aug | Z | 1.8 | 2.5 | 3.3 | 1.4 | 1.2 | 0.6 | 7.9 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.4 | 0.7 | 1.4 | 0.8 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 1.2 | 7.9 |
| 3-Aug | 0.0 | Z | 0.4 | 0.6 | 0.7 | 0.5 | 0.7 | 0.8 | 0.6 | 0.8 | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 3.7 | 5.1 | 1.0 | 1.3 | 0.8 | 5.1 |
| 4-Aug | 0.5 | 0.8 | Z | 1.6 | 1.8 | 1.6 | 2.6 | 2.1 | 5.5 | 4.9 | 1.5 | 1.5 | 1.2 | 2.1 | 1.0 | 1.2 | 2.6 | 1.1 | 2.0 | 3.1 | 7.0 | 0.6 | 0.3 | 0.3 | 2.0 | 7.0 |
| 5-Aug | 0.3 | 0.4 | 0.6 | Z | 0.5 | 0.4 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 3.5 | 2.2 | 0.6 | 0.5 | 0.6 | 0.8 | 0.7 | 3.5 |
| 6-Aug | 0.2 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.5 | 0.2 | 0.5 |
| 7-Aug | 1.3 | 1.1 | 1.5 | 1.0 | 1.1 | Z | 0.8 | 1.1 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.8 | 1.0 | 1.7 | 0.7 | 1.7 |
| 8-Aug | Z | 2.2 | 5.1 | 2.4 | 1.5 | 2.1 | 1.8 | 1.4 | 2.1 | 2.6 | 2.0 | 1.9 | 2.0 | 2.2 | 1.3 | 1.1 | 1.1 | 1.2 | 1.3 | 2.8 | 2.2 | 3.5 | 2.6 | 2.3 | 2.1 | 5.1 |
| 9-Aug | 1.4 | Z | 1.6 | 1.6 | 1.0 | 2.3 | 4.1 | 3.3 | 8.5 | 10.5 | 1.6 | 0.6 | 0.8 | 0.8 | 0.6 | 0.4 | 0.6 | 0.8 | 1.2 | 1.5 | 3.7 | 1.0 | 1.0 | 1.8 | 2.2 | 10.5 |
| 10-Aug | 2.7 | 4.3 | Z | 1.2 | 3.3 | 3.6 | 3.6 | 3.0 | 1.3 | 0.5 | 0.8 | 0.9 | 1.1 | 0.6 | 0.4 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 0.6 | 0.7 | 1.4 | 4.3 |
| 11-Aug | 1.0 | 1.1 | 1.6 | Z | 1.2 | 0.9 | 1.8 | 0.9 | 0.6 | 0.5 | 0.7 | 0.5 | 1.7 | 0.6 | 1.0 | 0.9 | 0.8 | 1.0 | 1.3 | 0.9 | 1.0 | 1.1 | 2.1 | 1.0 | 1.1 | 2.1 |
| 12-Aug | 0.8 | 1.1 | 0.8 | 0.7 | Z | 1.7 | 1.6 | 1.3 | 1.0 | 0.7 | 1.6 | 1.0 | 0.8 | 1.1 | 0.5 | 0.6 | 1.1 | 1.4 | 0.9 | 0.6 | 0.3 | 0.5 | 0.5 | 0.5 | 0.9 | 1.7 |
| 13-Aug | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | Z | 4.4 | 2.6 | 1.1 | 1.6 | 1.9 | 5.8 | 14.4 | 1.5 | 8.2 | 5.5 | 20.0 | 4.9 | 0.2 | 0.5 | 0.4 | 3.4 | 3.5 | 2.6 | 3.7 | 20.0 |
| 14-Aug | Z | 1.4 | 1.6 | 1.8 | 4.9 | 2.9 | 4.5 | 2.1 | 1.5 | 1.9 | 1.7 | 4.4 | 1.8 | 0.9 | 0.7 | 1.1 | 1.5 | 0.5 | 0.5 | 0.5 | 1.9 | 1.5 | 0.8 | 0.5 | 1.8 | 4.9 |
| 15-Aug | 0.8 | Z | 0.9 | 1.2 | 1.4 | 2.1 | 2.6 | 3.3 | 1.5 | 1.2 | 0.7 | 0.5 | 0.9 | 2.0 | 0.5 | 1.2 | 0.6 | 1.1 | 1.8 | 1.8 | 1.0 | 1.8 | 1.7 | 1.4 | 1.4 | 3.3 |
| 16-Aug | 1.8 | 1.8 | Z | 4.9 | 2.2 | 8.1 | 7.2 | 1.6 | 0.8 | 1.2 | 1.2 | 0.6 | 0.9 | 0.8 | 1.2 | 0.9 | 0.9 | 1.1 | 1.2 | 1.0 | 1.2 | 0.7 | 1.0 | 1.7 | 1.9 | 8.1 |
| 17-Aug | 1.4 | 4.5 | 5.0 | Z | 2.1 | 1.3 | 2.3 | 0.9 | 0.8 | 0.6 | 5.3 | 0.4 | 0.3 | 1.6 | 1.3 | 3.9 | 0.6 | 0.5 | 0.5 | 1.2 | 0.8 | 1.4 | 0.7 | 0.4 | 1.6 | 5.3 |
| 18-Aug | 0.5 | 0.4 | 0.4 | 0.6 | Z | 1.6 | 1.6 | 1.6 | 3.0 | 2.4 | 1.8 | 1.4 | 2.8 | 2.4 | 4.0 | 1.3 | 0.9 | 0.5 | 0.7 | 0.6 | 1.7 | 0.4 | 0.5 | 1.2 | 1.4 | 4.0 |
| 19-Aug | 1.1 | 1.3 | 1.6 | 2.2 | 2.3 | Z | 5.7 | 2.8 | 3.0 | 0.8 | 1.8 | 0.6 | 1.4 | 1.7 | 0.7 | 1.5 | 2.4 | 0.5 | 0.6 | 0.4 | 0.6 | 0.7 | 1.2 | 0.9 | 1.5 | 5.7 |
| 20-Aug | Z | 1.4 | 1.1 | 0.7 | 0.9 | 1.3 | 3.6 | 6.7 | 3.2 | 1.2 | 2.8 | 0.4 | 0.4 | 0.5 | 0.3 | 0.4 | 0.8 | 1.1 | 1.9 | 3.0 | 2.0 | 1.3 | 1.2 | 1.2 | 1.6 | 6.7 |
| 21-Aug | 1.1 | Z | 1.4 | 1.1 | 1.2 | 4.6 | 6.3 | 5.4 | 3.7 | 6.8 | 1.5 | 1.7 | 1.5 | 1.3 | 1.0 | 0.9 | 0.7 | 0.8 | 0.6 | 1.0 | 1.1 | 0.8 | 1.2 | 1.0 | 2.0 | 6.8 |
| 22-Aug | 0.8 | 0.6 | Z | 1.8 | 1.5 | 1.4 | 1.3 | 1.5 | 1.5 | 2.8 | 2.6 | 1.8 | 1.2 | 0.9 | 0.8 | 1.2 | 1.5 | 1.2 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 1.1 | 1.3 | 2.8 |
| 23-Aug | 0.8 | 1.3 | 1.5 | Z | 3.5 | 3.2 | 2.8 | 6.6 | 5.3 | 3.0 | 2.1 | 1.7 | 1.8 | 2.6 | 2.5 | 2.4 | 2.0 | 1.2 | 0.9 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 2.1 | 6.6 |
| 24-Aug | 0.3 | 0.7 | 1.0 | 0.7 | Z | 1.9 | 0.9 | 1.2 | 1.2 | 1.8 | 2.5 | C | C | C | C | C | C | 0.0 | 0.2 | 0.5 | 0.3 | 0.8 | 0.5 | 2.9 | -- | 2.9 |
| 25-Aug | 3.0 | 1.3 | 2.3 | 2.3 | 1.4 | Z | 5.1 | 4.2 | 1.8 | 1.1 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 | 1.1 | 1.5 | 1.6 | 2.3 | 3.5 | 2.2 | 1.6 | 5.1 |
| 26-Aug | Z | 1.1 | 0.9 | 0.9 | 1.2 | 2.6 | 3.7 | 2.9 | 5.0 | 1.3 | 0.5 | 0.5 | 0.6 | M | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 0.8 | 0.6 | 1.1 | 1.3 | 5.0 |
| 27-Aug | 1.7 | Z | 1.4 | 1.4 | 1.4 | 1.5 | 1.2 | 1.0 | 1.2 | 1.5 | 1.3 | 1.1 | 0.8 | 0.6 | 0.8 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 0.7 | 1.0 | 1.7 |
| 28-Aug | 0.6 | 1.4 | Z | 1.0 | 1.6 | 2.0 | 4.0 | 5.1 | 5.0 | 6.0 | 2.1 | 2.0 | 2.9 | 1.8 | 1.3 | 1.3 | 1.2 | 1.9 | 0.6 | 1.0 | 1.0 | 1.0 | 6.0 | 12.3 | 2.7 | 12.3 |
| 29-Aug | 1.0 | 0.8 | 2.1 | Z | 1.4 | 1.8 | 2.4 | 4.9 | 4.2 | 1.9 | 2.9 | 2.0 | 1.2 | 0.6 | 0.7 | 0.9 | 1.1 | 0.7 | 0.7 | 1.0 | 0.8 | 0.6 | 0.6 | 0.7 | 1.5 | 4.9 |
| 30-Aug | 0.6 | 0.4 | 0.3 | 0.8 | Z | 0.8 | 1.2 | 4.9 | 2.1 | 4.9 | 2.5 | 14.8 | 7.5 | 5.7 | 1.9 | 1.4 | 1.4 | 1.4 | 1.7 | 1.1 | 0.8 | 1.2 | 0.9 | 0.8 | 2.6 | 14.8 |
| 31-Aug | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | Z | 0.8 | 4.7 | 2.7 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.4 | 1.2 | 1.5 | 1.5 | 0.8 | 4.7 |
| | 1.0 | 1.3 | 1.5 | 1.5 | 1.7 | 2.1 | 2.6 | 2.9 | 2.3 | 2.1 | 1.5 | 1.6 | 1.7 | 1.2 | 1.1 | 1.1 | 1.6 | 0.9 | 0.9 | 1.0 | 1.3 | 1.2 | 1.3 | 1.5 | Diurnal Average | |
| | 3.0 | 4.5 | 5.1 | 4.9 | 4.9 | 8.1 | 7.2 | 7.9 | 8.5 | 10.5 | 5.3 | 14.8 | 14.4 | 5.7 | 8.2 | 5.5 | 20.0 | 4.9 | 3.5 | 3.1 | 7.0 | 5.1 | 6.0 | 12.3 | Diurnal Maximum | |

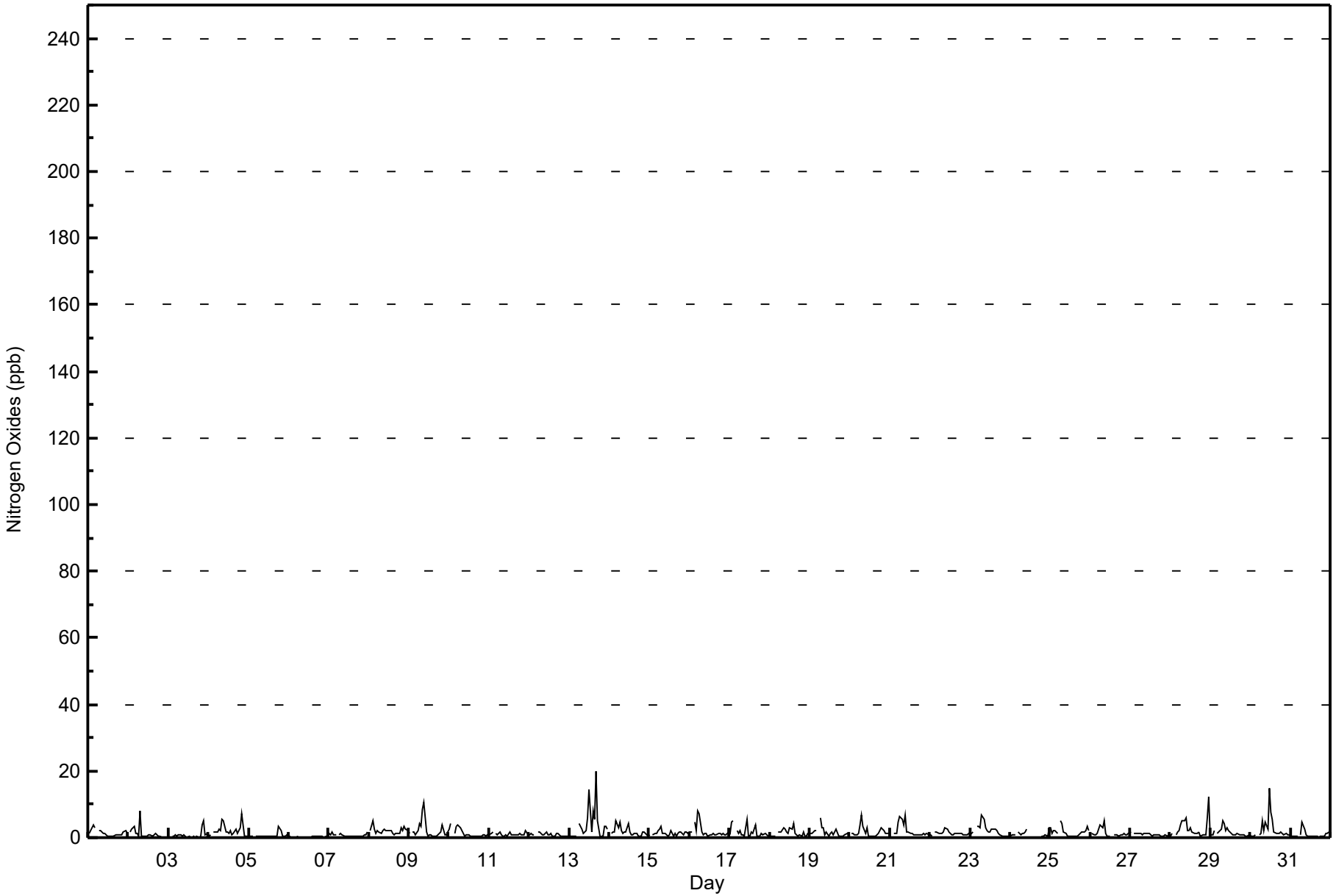
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Monday Creek - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Monday Creek - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 706 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 706

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Monday Creek - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 35 | 30 | 24 | 16 | 20 | 14 | 31 | 38 | 50 | 47 | 35 | 49 | 69 | 118 | 87 | 37 | 700 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 30 | 24 | 16 | 20 | 14 | 31 | 38 | 50 | 47 | 35 | 49 | 69 | 118 | 87 | 37 | 700 |

Total Number of Valid Hours: 700

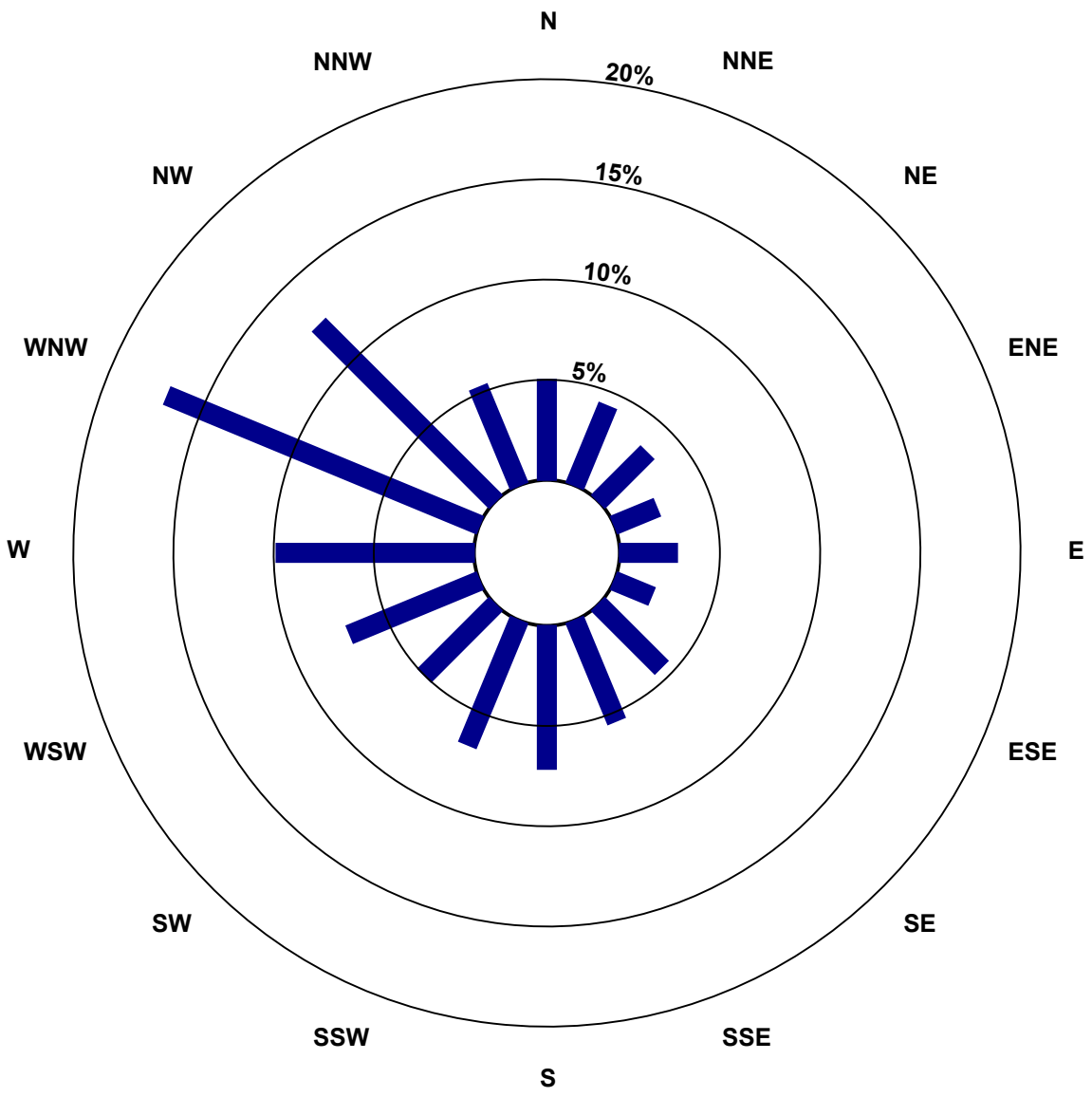
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Nitrogen Oxides ($NO_X$) - ppb**

**Monday Creek**




**Classes (ppb)**

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

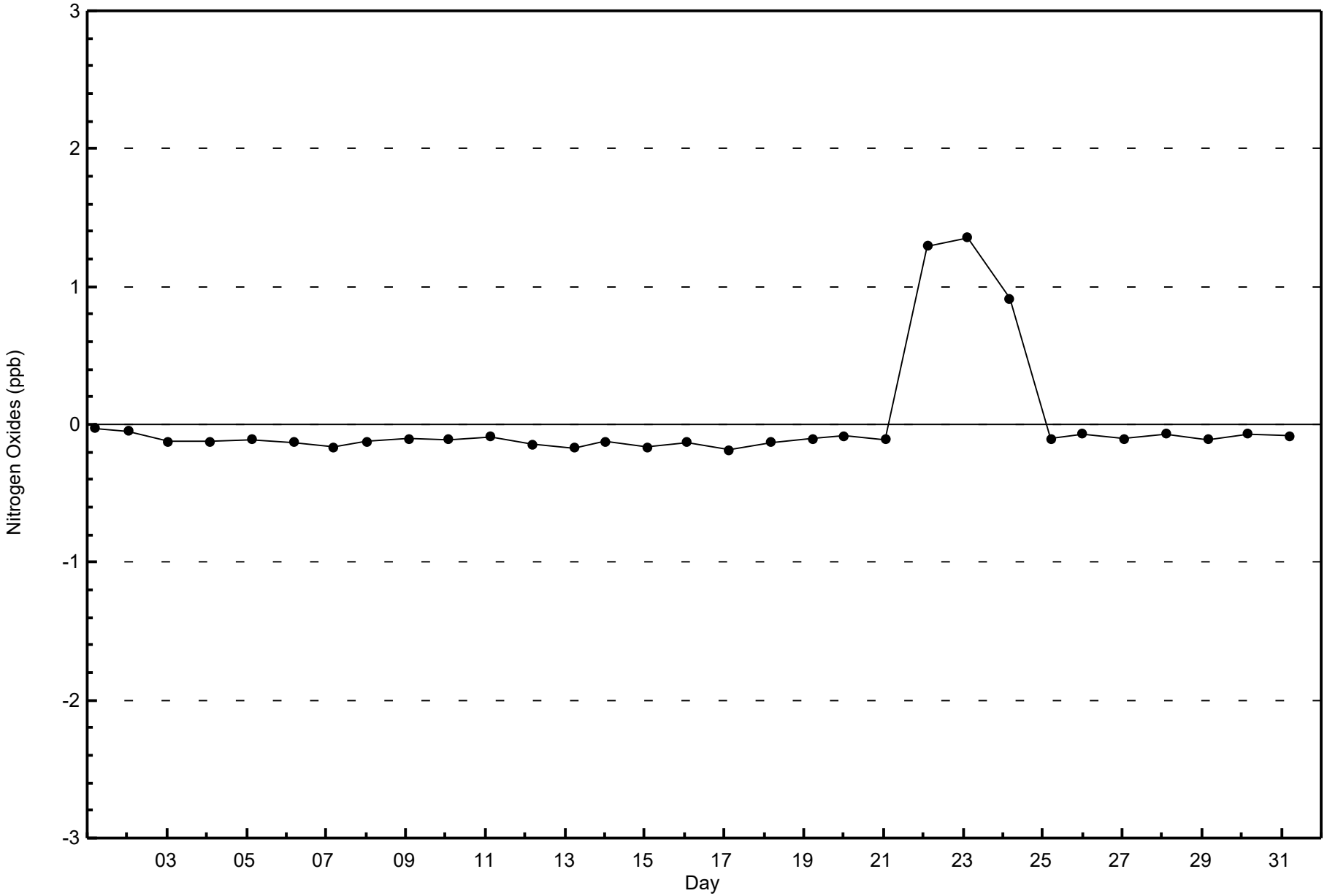
**Total Number of Valid Hours: 700**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Monday Creek - August 2026**

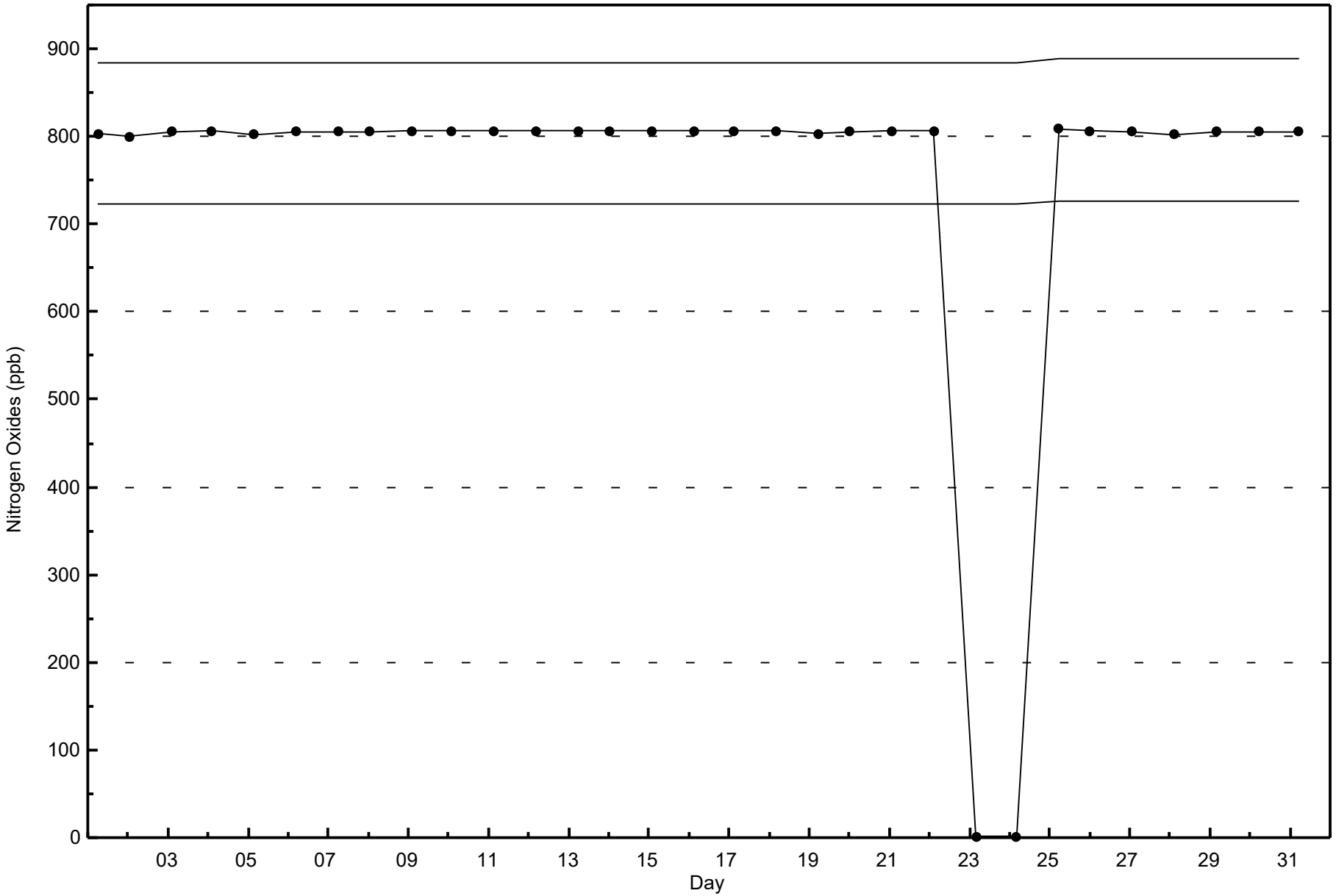


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Monday Creek - August 2026**



Maximum Value: 29.3 C on Aug 27 14:00

Maximum Daily Average: 22.9 C on Aug 1

Minimum Value: 4.5 C on Aug 4 05:00

Minimum Daily Average: 11.9 C on Aug 3

Maximum Diurnal Average: 21.2 C at hour 17

Minimum Diurnal Average: 10.8 C at hour 6

Monthly Average: 16.08 C

Percentiles: $P_1$ = 5.3 $P_{10}$ = 9.3 $Q_1$ = 12.4 Median = 16.0 $Q_3$ = 19.5 $P_{90}$ = 23.1 $P_{99}$ = 28.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

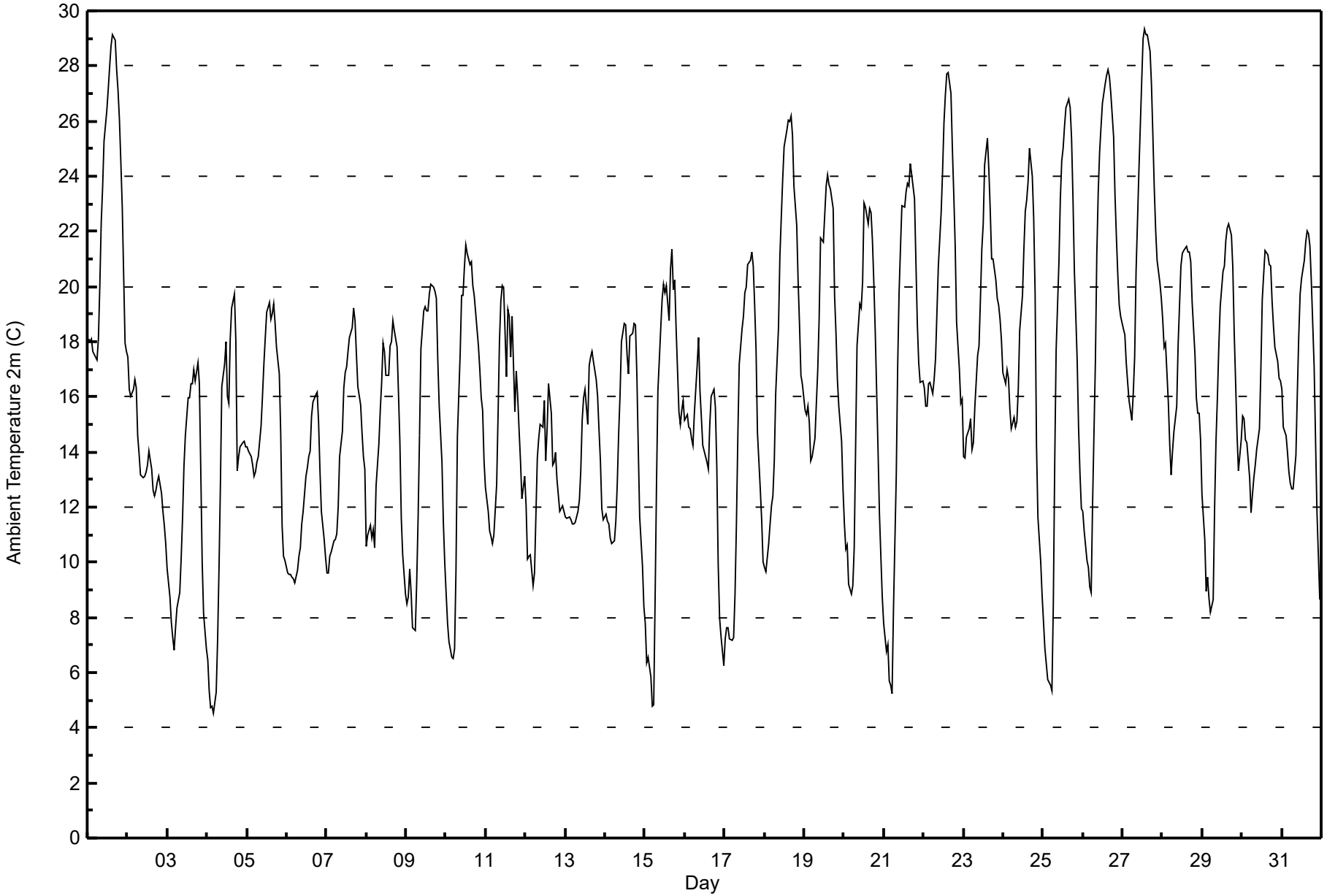
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 18.1 | 18.0 | 18.1 | 17.7 | 17.5 | 17.3 | 18.1 | 20.0 | 22.3 | 23.6 | 25.3 | 26.4 | 27.2 | 28.0 | 28.8 | 29.1 | 28.9 | 27.9 | 27.1 | 26.0 | 24.5 | 22.9 | 18.0 | 17.6 | 22.9 | 29.1 |
| 2-Aug | 17.5 | 16.2 | 16.0 | 16.3 | 16.6 | 16.3 | 14.6 | 13.9 | 13.2 | 13.1 | 13.1 | 13.3 | 13.5 | 14.1 | 13.4 | 12.6 | 12.4 | 12.6 | 12.9 | 13.1 | 12.5 | 11.8 | 11.4 | 10.7 | 13.8 | 17.5 |
| 3-Aug | 9.7 | 8.8 | 7.8 | 7.3 | 6.8 | 7.6 | 8.4 | 8.9 | 10.1 | 11.6 | 13.5 | 14.6 | 15.9 | 16.0 | 16.5 | 16.5 | 17.0 | 16.6 | 17.2 | 16.5 | 13.3 | 10.0 | 8.1 | 6.9 | 11.9 | 17.2 |
| 4-Aug | 6.5 | 5.3 | 4.7 | 4.8 | 4.5 | 5.3 | 7.2 | 9.7 | 12.8 | 16.4 | 17.2 | 18.0 | 16.0 | 15.8 | 18.1 | 19.2 | 19.7 | 18.1 | 13.3 | 13.8 | 14.2 | 14.3 | 14.4 | 14.2 | 12.6 | 19.7 |
| 5-Aug | 14.2 | 14.0 | 13.8 | 13.5 | 13.1 | 13.3 | 13.6 | 13.8 | 15.0 | 16.0 | 17.2 | 18.1 | 19.1 | 19.4 | 18.8 | 19.0 | 19.4 | 18.7 | 17.8 | 16.8 | 14.7 | 11.4 | 10.2 | 10.1 | 15.5 | 19.4 |
| 6-Aug | 9.6 | 9.6 | 9.5 | 9.4 | 9.4 | 9.3 | 9.7 | 10.2 | 10.5 | 11.4 | 11.8 | 13.1 | 13.4 | 13.8 | 14.0 | 15.3 | 15.8 | 16.1 | 16.2 | 15.1 | 13.3 | 11.8 | 10.8 | 10.2 | 12.1 | 16.2 |
| 7-Aug | 9.6 | 9.6 | 10.2 | 10.4 | 10.8 | 10.8 | 11.0 | 12.0 | 13.8 | 14.8 | 16.3 | 16.9 | 17.1 | 17.6 | 18.1 | 18.5 | 19.2 | 18.8 | 17.6 | 16.4 | 15.7 | 14.7 | 13.8 | 13.4 | 14.5 | 19.2 |
| 8-Aug | 10.6 | 11.0 | 11.3 | 10.9 | 11.2 | 10.5 | 12.8 | 14.3 | 15.5 | 16.6 | 17.9 | 17.6 | 16.8 | 16.8 | 17.9 | 18.0 | 18.7 | 18.4 | 17.8 | 16.1 | 14.3 | 11.6 | 10.2 | 8.8 | 14.4 | 18.7 |
| 9-Aug | 8.5 | 8.7 | 9.7 | 8.9 | 7.6 | 7.5 | 9.3 | 11.6 | 14.6 | 17.7 | 19.1 | 19.3 | 19.1 | 19.1 | 19.7 | 20.1 | 20.0 | 19.8 | 19.6 | 17.4 | 15.7 | 13.6 | 11.4 | 10.0 | 14.5 | 20.1 |
| 10-Aug | 8.8 | 7.8 | 7.1 | 6.5 | 6.5 | 6.9 | 9.7 | 14.5 | 17.6 | 19.7 | 19.7 | 20.7 | 21.5 | 21.2 | 20.8 | 20.9 | 20.0 | 19.7 | 19.1 | 17.9 | 17.0 | 16.0 | 15.5 | 13.7 | 15.4 | 21.5 |
| 11-Aug | 12.7 | 11.8 | 11.1 | 10.9 | 10.7 | 11.0 | 12.8 | 15.3 | 18.0 | 19.5 | 20.0 | 19.9 | 16.7 | 19.2 | 18.9 | 17.5 | 18.9 | 15.5 | 16.9 | 16.0 | 14.8 | 13.7 | 12.3 | 13.1 | 15.3 | 20.0 |
| 12-Aug | 12.1 | 10.1 | 10.2 | 10.3 | 9.1 | 9.6 | 11.7 | 13.8 | 14.5 | 15.0 | 14.9 | 15.8 | 13.7 | 14.9 | 16.5 | 15.4 | 13.5 | 13.6 | 14.0 | 13.0 | 11.8 | 11.9 | 12.1 | 11.9 | 12.9 | 16.5 |
| 13-Aug | 11.7 | 11.6 | 11.6 | 11.5 | 11.4 | 11.4 | 11.5 | 11.8 | 12.2 | 13.3 | 15.2 | 16.0 | 16.2 | 15.0 | 17.1 | 17.4 | 17.7 | 17.3 | 16.6 | 16.0 | 14.8 | 13.7 | 12.0 | 11.5 | 13.9 | 17.7 |
| 14-Aug | 11.8 | 11.5 | 11.4 | 10.9 | 10.7 | 10.8 | 11.5 | 12.8 | 14.6 | 16.1 | 18.0 | 18.7 | 18.6 | 17.5 | 16.8 | 18.2 | 18.3 | 18.6 | 18.6 | 16.8 | 14.1 | 11.6 | 9.9 | 8.4 | 14.4 | 18.7 |
| 15-Aug | 7.8 | 6.3 | 6.6 | 5.8 | 4.8 | 4.8 | 8.7 | 12.8 | 16.2 | 18.4 | 19.5 | 20.1 | 19.8 | 20.0 | 18.8 | 20.6 | 21.4 | 19.9 | 20.2 | 18.5 | 15.5 | 15.0 | 15.5 | 15.9 | 14.7 | 21.4 |
| 16-Aug | 15.2 | 15.3 | 14.9 | 14.9 | 14.5 | 14.2 | 15.4 | 17.1 | 18.2 | 16.2 | 15.3 | 14.2 | 13.9 | 13.6 | 13.4 | 15.0 | 16.0 | 16.3 | 15.6 | 13.5 | 9.9 | 8.0 | 7.3 | 6.3 | 13.9 | 18.2 |
| 17-Aug | 7.2 | 7.6 | 7.6 | 7.2 | 7.2 | 7.3 | 8.9 | 11.4 | 14.6 | 17.2 | 18.5 | 18.9 | 19.8 | 20.0 | 20.8 | 20.9 | 21.2 | 20.7 | 19.3 | 17.7 | 14.7 | 12.7 | 11.5 | 10.0 | 14.3 | 21.2 |
| 18-Aug | 9.8 | 9.7 | 10.7 | 11.4 | 12.0 | 12.4 | 13.7 | 16.1 | 18.5 | 21.1 | 22.5 | 23.9 | 25.1 | 25.7 | 26.0 | 26.0 | 26.2 | 25.5 | 23.6 | 22.2 | 20.2 | 18.6 | 16.8 | 16.5 | 18.9 | 26.2 |
| 19-Aug | 15.5 | 15.4 | 15.6 | 15.0 | 13.7 | 13.8 | 14.5 | 15.8 | 17.0 | 18.9 | 21.8 | 21.6 | 22.6 | 23.7 | 24.0 | 23.7 | 23.5 | 22.8 | 19.7 | 18.3 | 16.6 | 15.7 | 14.4 | 12.7 | 18.2 | 24.0 |
| 20-Aug | 11.4 | 10.5 | 10.6 | 9.2 | 8.9 | 9.1 | 10.5 | 14.2 | 17.8 | 19.4 | 19.2 | 20.2 | 23.1 | 22.9 | 22.3 | 22.8 | 22.7 | 21.7 | 20.1 | 18.4 | 14.1 | 11.7 | 10.2 | 8.8 | 15.8 | 23.1 |
| 21-Aug | 7.8 | 6.8 | 7.0 | 5.7 | 5.6 | 5.3 | 8.3 | 13.2 | 17.1 | 19.8 | 21.4 | 23.0 | 22.9 | 23.4 | 23.8 | 23.7 | 24.5 | 24.0 | 23.2 | 20.9 | 18.7 | 17.2 | 16.5 | 16.6 | 16.5 | 24.5 |
| 22-Aug | 16.3 | 15.7 | 15.7 | 16.5 | 16.5 | 16.1 | 16.6 | 17.4 | 19.1 | 20.7 | 22.7 | 24.1 | 25.9 | 27.0 | 27.7 | 27.8 | 27.0 | 25.0 | 23.3 | 21.5 | 18.7 | 17.0 | 15.8 | 15.9 | 20.4 | 27.8 |
| 23-Aug | 13.8 | 13.8 | 14.6 | 14.9 | 15.2 | 14.1 | 14.3 | 15.6 | 17.5 | 17.8 | 19.5 | 21.4 | 22.3 | 24.4 | 25.4 | 24.2 | 22.8 | 21.0 | 21.0 | 20.2 | 19.6 | 19.3 | 18.8 | 18.0 | 18.7 | 25.4 |
| 24-Aug | 16.9 | 16.5 | 17.0 | 16.7 | 15.5 | 14.9 | 15.3 | 14.9 | 15.1 | 16.2 | 18.4 | 19.7 | 21.4 | 22.7 | 23.1 | 23.8 | 25.0 | 24.0 | 22.5 | 19.8 | 14.2 | 11.6 | 10.0 | 8.8 | 17.7 | 25.0 |
| 25-Aug | 7.8 | 6.9 | 6.3 | 5.7 | 5.6 | 5.3 | 8.5 | 13.6 | 17.7 | 20.9 | 23.2 | 24.5 | 25.0 | 25.8 | 26.5 | 26.8 | 26.5 | 25.4 | 23.3 | 20.6 | 17.3 | 14.9 | 13.2 | 12.0 | 16.8 | 26.8 |
| 26-Aug | 11.8 | 11.2 | 10.1 | 9.8 | 9.1 | 8.9 | 12.2 | 17.3 | 21.1 | 23.4 | 24.9 | 25.8 | 26.6 | 27.3 | 27.7 | 27.9 | 27.6 | 27.0 | 25.4 | 23.3 | 21.8 | 20.4 | 19.3 | 18.9 | 19.9 | 27.9 |
| 27-Aug | 18.5 | 18.2 | 17.2 | 16.5 | 15.9 | 15.1 | 16.1 | 17.4 | 20.5 | 22.3 | 24.2 | 27.4 | 29.0 | 29.3 | 29.1 | 29.1 | 28.5 | 27.3 | 25.5 | 23.5 | 22.0 | 20.9 | 20.2 | 19.6 | 22.2 | 29.3 |
| 28-Aug | 18.8 | 17.8 | 17.9 | 15.8 | 14.3 | 13.2 | 14.0 | 14.7 | 15.7 | 17.9 | 19.3 | 20.8 | 21.2 | 21.3 | 21.4 | 21.3 | 21.3 | 20.9 | 19.4 | 17.6 | 16.0 | 15.4 | 15.4 | 14.5 | 17.7 | 21.4 |
| 29-Aug | 12.4 | 10.9 | 9.0 | 9.5 | 8.7 | 8.2 | 8.7 | 12.0 | 14.4 | 16.0 | 17.8 | 19.3 | 20.5 | 20.8 | 21.7 | 22.1 | 22.3 | 21.9 | 20.7 | 18.3 | 16.5 | 14.6 | 13.3 | 14.4 | 15.6 | 22.3 |
| 30-Aug | 15.3 | 15.2 | 14.4 | 14.3 | 13.1 | 11.8 | 12.4 | 13.1 | 13.6 | 14.1 | 14.8 | 17.0 | 19.5 | 20.5 | 21.3 | 21.1 | 20.8 | 20.7 | 19.5 | 18.6 | 17.8 | 17.3 | 16.7 | 16.6 | 16.6 | 21.3 |
| 31-Aug | 16.3 | 14.9 | 14.6 | 14.0 | 13.3 | 12.9 | 12.7 | 12.7 | 13.9 | 16.1 | 18.1 | 19.8 | 20.3 | 21.0 | 21.6 | 22.0 | 21.9 | 21.5 | 20.2 | 17.1 | 14.5 | 11.8 | 10.3 | 8.6 | 16.2 | 22.0 |
| | 12.4 | 11.8 | 11.7 | 11.4 | 11.0 | 10.8 | 12.0 | 13.9 | 15.9 | 17.5 | 18.7 | 19.7 | 20.1 | 20.6 | 21.0 | 21.2 | 21.2 | 20.6 | 19.6 | 18.1 | 16.1 | 14.6 | 13.4 | 12.7 | Diurnal Average | |
| | 18.8 | 18.2 | 18.1 | 17.7 | 17.5 | 17.3 | 18.1 | 20.0 | 22.3 | 23.6 | 25.3 | 27.4 | 29.0 | 29.3 | 29.1 | 29.1 | 28.9 | 27.9 | 27.1 | 26.0 | 24.5 | 22.9 | 20.2 | 19.6 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Monday Creek - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 95 | 12.77 | 12.77 |
| 10 - 20 | 485 | 65.19 | 77.96 |
| > 20 | 164 | 22.04 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 100.0 % on Aug 4 05:00

Maximum Daily Average: 92.2 % on Aug 2

Minimum Value: 29.1 % on Aug 27 14:00

Minimum Daily Average: 51.7 % on Aug 27

Maximum Diurnal Average: 91.8 % at hour 6

Minimum Diurnal Average: 50.7 % at hour 17

Monthly Average: 71.81 %

Percentiles: $P_1$ = 31.9 $P_{10}$ = 43.7 $Q_1$ = 55.3 Median = 73.6 $Q_3$ = 91.1 $P_{90}$ = 96.4 $P_{99}$ = 99.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

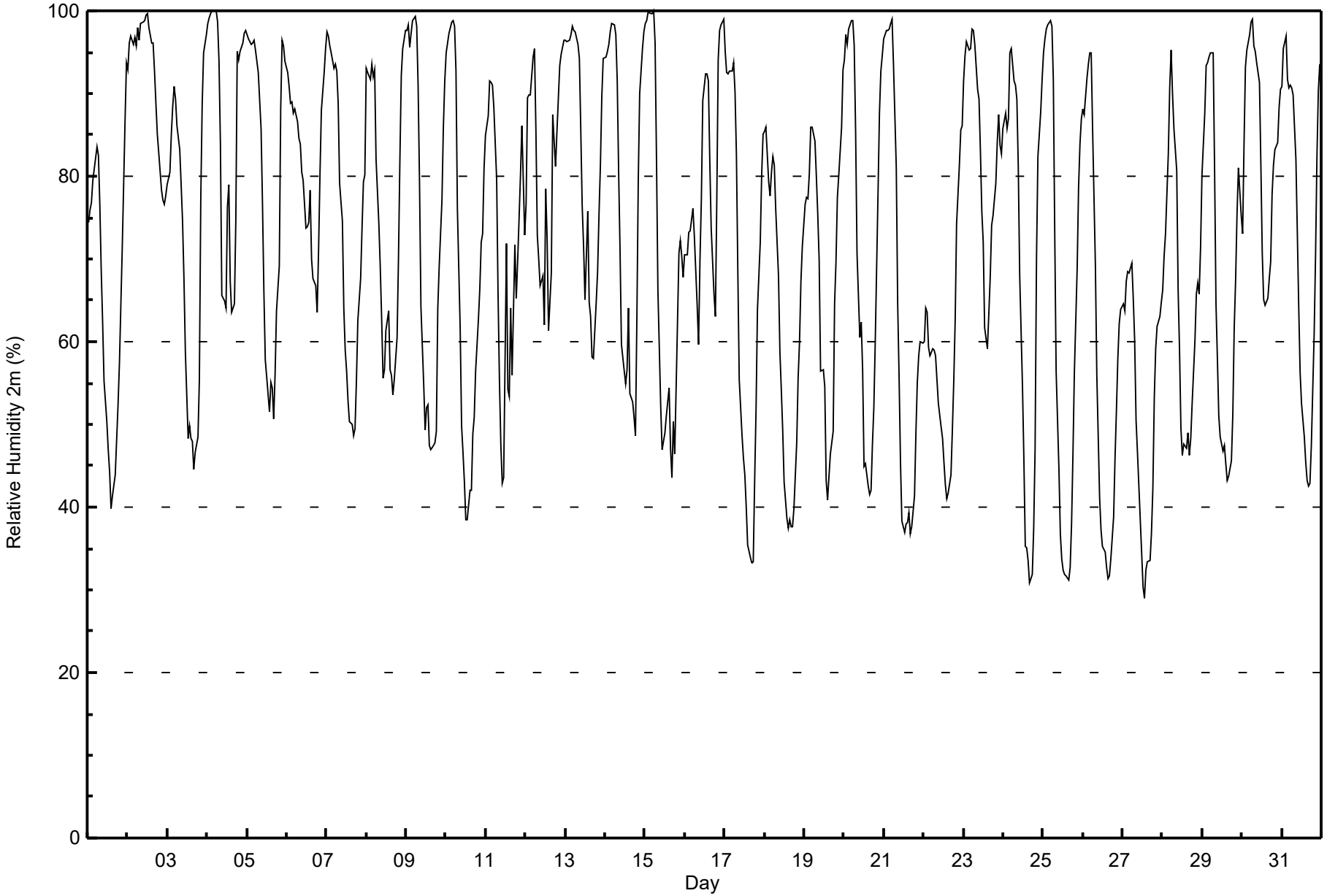
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 74.4 | 76.0 | 76.7 | 79.6 | 80.8 | 83.5 | 82.5 | 76.6 | 68.7 | 62.4 | 55.3 | 50.4 | 47.0 | 44.3 | 39.8 | 41.3 | 43.9 | 48.1 | 52.4 | 57.4 | 64.4 | 71.4 | 86.8 | 93.8 | 64.9 | 93.8 |
| 2-Aug | 92.8 | 96.1 | 97.0 | 96.0 | 96.7 | 95.8 | 98.0 | 96.5 | 98.5 | 98.6 | 98.7 | 99.4 | 99.7 | 98.0 | 96.1 | 96.1 | 92.8 | 88.8 | 85.1 | 83.0 | 78.4 | 77.2 | 76.6 | 77.7 | 92.2 | 99.7 |
| 3-Aug | 78.9 | 80.5 | 85.1 | 88.4 | 90.9 | 89.3 | 86.1 | 83.3 | 79.0 | 74.6 | 67.6 | 58.8 | 48.3 | 49.8 | 48.3 | 47.9 | 44.5 | 46.6 | 48.5 | 55.5 | 77.3 | 88.7 | 95.0 | 97.0 | 71.2 | 97.0 |
| 4-Aug | 98.5 | 99.1 | 99.6 | 100.0 | 100.0 | 100.0 | 98.6 | 93.9 | 83.9 | 65.6 | 65.0 | 64.0 | 76.3 | 78.9 | 67.2 | 63.6 | 64.6 | 74.7 | 95.2 | 94.1 | 95.1 | 96.2 | 97.3 | 97.6 | 86.2 | 100.0 |
| 5-Aug | 97.1 | 96.7 | 95.9 | 96.0 | 96.4 | 95.3 | 93.9 | 92.6 | 85.8 | 76.7 | 66.0 | 57.9 | 55.7 | 51.5 | 55.2 | 54.4 | 50.7 | 56.1 | 63.7 | 69.2 | 88.1 | 96.5 | 95.7 | 93.9 | 78.4 | 97.1 |
| 6-Aug | 92.6 | 90.8 | 88.9 | 89.0 | 87.7 | 88.1 | 86.6 | 84.6 | 83.9 | 80.5 | 79.5 | 73.8 | 73.9 | 74.3 | 78.3 | 70.1 | 67.6 | 66.8 | 63.6 | 71.1 | 80.1 | 87.9 | 92.6 | 95.4 | 81.1 | 95.4 |
| 7-Aug | 97.4 | 97.0 | 95.7 | 94.9 | 93.0 | 93.6 | 92.8 | 88.8 | 79.1 | 74.6 | 64.1 | 59.0 | 56.5 | 52.9 | 50.3 | 50.0 | 48.7 | 49.4 | 55.3 | 62.5 | 67.6 | 73.7 | 79.3 | 80.2 | 73.2 | 97.4 |
| 8-Aug | 93.1 | 92.6 | 91.7 | 93.6 | 92.0 | 92.9 | 82.0 | 74.2 | 69.0 | 62.8 | 55.6 | 56.6 | 61.4 | 63.7 | 56.6 | 56.0 | 53.6 | 55.5 | 60.6 | 70.3 | 82.0 | 92.2 | 95.5 | 97.6 | 75.0 | 97.6 |
| 9-Aug | 97.6 | 98.2 | 95.6 | 97.3 | 98.7 | 99.3 | 98.1 | 90.8 | 79.2 | 64.2 | 54.7 | 49.3 | 52.0 | 52.4 | 47.4 | 47.0 | 47.5 | 47.7 | 49.2 | 64.0 | 68.9 | 77.1 | 86.0 | 91.5 | 73.1 | 99.3 |
| 10-Aug | 94.9 | 96.1 | 97.4 | 98.7 | 98.9 | 98.1 | 92.7 | 76.1 | 61.6 | 49.8 | 46.5 | 43.1 | 38.4 | 38.5 | 42.0 | 41.9 | 48.9 | 50.9 | 56.5 | 62.8 | 66.4 | 72.0 | 73.0 | 80.9 | 67.7 | 98.9 |
| 11-Aug | 84.9 | 87.2 | 91.4 | 91.4 | 91.0 | 88.4 | 79.6 | 65.8 | 55.2 | 47.5 | 42.8 | 43.6 | 71.8 | 54.2 | 53.4 | 64.0 | 56.0 | 71.8 | 65.3 | 69.8 | 74.8 | 80.2 | 86.1 | 72.8 | 70.4 | 91.4 |
| 12-Aug | 76.6 | 89.5 | 89.8 | 89.9 | 94.3 | 95.5 | 85.6 | 72.9 | 70.0 | 66.7 | 67.9 | 62.1 | 78.5 | 72.4 | 61.3 | 68.3 | 87.4 | 84.3 | 81.2 | 85.5 | 93.4 | 94.8 | 95.6 | 96.4 | 81.7 | 96.4 |
| 13-Aug | 96.4 | 96.3 | 96.4 | 97.0 | 98.2 | 97.7 | 97.5 | 95.9 | 94.3 | 85.5 | 76.4 | 71.5 | 65.1 | 75.7 | 64.7 | 63.1 | 58.1 | 58.0 | 64.7 | 68.5 | 75.4 | 81.4 | 89.6 | 94.2 | 81.7 | 98.2 |
| 14-Aug | 94.3 | 95.1 | 96.0 | 97.5 | 98.4 | 98.3 | 97.2 | 91.6 | 80.5 | 71.0 | 59.6 | 56.4 | 55.0 | 56.7 | 64.0 | 53.7 | 52.7 | 50.9 | 48.7 | 62.7 | 79.4 | 90.1 | 95.4 | 97.5 | 76.8 | 98.4 |
| 15-Aug | 98.5 | 98.9 | 99.8 | 99.7 | 99.6 | 99.9 | 96.1 | 82.0 | 66.3 | 52.2 | 47.0 | 48.0 | 48.9 | 51.0 | 54.4 | 47.1 | 43.6 | 50.4 | 46.4 | 54.5 | 70.6 | 72.2 | 70.3 | 67.9 | 69.4 | 99.9 |
| 16-Aug | 70.4 | 70.6 | 73.2 | 73.4 | 74.7 | 76.0 | 72.7 | 64.3 | 59.6 | 69.8 | 77.3 | 89.1 | 92.3 | 92.3 | 91.5 | 81.8 | 73.8 | 65.8 | 63.1 | 77.2 | 94.1 | 97.6 | 98.4 | 99.0 | 79.1 | 99.0 |
| 17-Aug | 95.1 | 92.6 | 92.5 | 92.6 | 92.6 | 93.7 | 90.2 | 82.6 | 68.4 | 55.4 | 48.6 | 46.0 | 44.0 | 40.0 | 35.4 | 34.0 | 33.2 | 33.4 | 43.2 | 51.9 | 63.9 | 72.1 | 80.2 | 85.2 | 65.3 | 95.1 |
| 18-Aug | 85.4 | 85.9 | 79.4 | 77.6 | 80.5 | 82.4 | 81.4 | 76.1 | 67.9 | 58.9 | 54.2 | 49.4 | 43.1 | 38.6 | 37.5 | 38.4 | 37.7 | 37.6 | 39.9 | 47.8 | 55.5 | 60.0 | 67.3 | 71.5 | 60.6 | 85.9 |
| 19-Aug | 76.7 | 77.4 | 77.3 | 80.3 | 85.9 | 86.0 | 84.2 | 80.1 | 75.5 | 69.8 | 56.4 | 56.6 | 54.6 | 43.2 | 40.8 | 43.8 | 46.5 | 49.1 | 64.7 | 69.6 | 77.4 | 80.2 | 85.9 | 92.9 | 68.9 | 92.9 |
| 20-Aug | 94.1 | 97.1 | 95.9 | 97.8 | 98.9 | 98.8 | 95.8 | 85.4 | 70.6 | 60.5 | 62.4 | 56.7 | 44.9 | 45.2 | 42.5 | 41.5 | 42.0 | 47.7 | 52.0 | 60.1 | 78.2 | 87.7 | 92.7 | 94.5 | 72.6 | 98.9 |
| 21-Aug | 96.6 | 97.7 | 97.7 | 97.8 | 98.6 | 98.9 | 93.6 | 80.9 | 64.5 | 55.7 | 45.4 | 38.2 | 37.0 | 38.0 | 38.2 | 39.3 | 36.8 | 37.7 | 41.3 | 49.0 | 55.0 | 58.3 | 60.0 | 59.9 | 63.2 | 98.9 |
| 22-Aug | 60.0 | 64.1 | 63.5 | 59.4 | 58.3 | 59.2 | 59.0 | 58.2 | 55.4 | 52.5 | 49.6 | 48.3 | 45.4 | 42.7 | 41.1 | 41.7 | 43.8 | 49.4 | 55.2 | 62.6 | 74.2 | 81.3 | 85.5 | 86.1 | 58.2 | 86.1 |
| 23-Aug | 91.5 | 94.5 | 96.3 | 95.2 | 95.4 | 97.7 | 97.7 | 95.9 | 90.4 | 89.2 | 83.0 | 75.7 | 72.0 | 61.7 | 59.1 | 63.4 | 67.8 | 74.1 | 75.2 | 79.1 | 84.1 | 87.5 | 83.8 | 82.7 | 83.0 | 97.7 |
| 24-Aug | 85.8 | 87.6 | 85.8 | 86.9 | 94.9 | 95.5 | 91.5 | 91.1 | 89.2 | 81.2 | 68.2 | 54.6 | 45.7 | 35.3 | 35.1 | 33.5 | 30.8 | 31.8 | 37.5 | 47.1 | 70.0 | 82.4 | 87.8 | 91.7 | 68.4 | 95.5 |
| 25-Aug | 94.9 | 96.6 | 97.8 | 98.2 | 98.9 | 98.1 | 91.7 | 73.3 | 56.4 | 44.5 | 36.8 | 33.8 | 32.5 | 31.9 | 31.8 | 31.3 | 32.7 | 38.0 | 46.5 | 56.3 | 68.8 | 78.7 | 83.8 | 87.0 | 64.2 | 98.9 |
| 26-Aug | 88.1 | 87.4 | 91.9 | 93.5 | 95.0 | 95.0 | 85.7 | 69.2 | 56.2 | 48.6 | 41.2 | 37.3 | 35.3 | 34.5 | 32.7 | 31.3 | 31.7 | 33.7 | 38.8 | 46.0 | 51.6 | 58.0 | 62.2 | 63.9 | 58.7 | 95.0 |
| 27-Aug | 64.6 | 63.7 | 67.4 | 68.5 | 68.3 | 69.5 | 65.3 | 60.2 | 50.4 | 46.7 | 42.5 | 34.4 | 30.3 | 29.1 | 32.4 | 33.4 | 33.6 | 36.9 | 42.5 | 53.3 | 59.1 | 61.8 | 63.1 | 64.7 | 51.7 | 69.5 |
| 28-Aug | 66.3 | 70.4 | 73.0 | 82.7 | 90.7 | 95.2 | 90.0 | 85.8 | 80.6 | 66.3 | 58.9 | 49.6 | 46.2 | 47.6 | 47.2 | 48.9 | 46.3 | 48.3 | 52.5 | 60.2 | 65.8 | 67.0 | 65.7 | 71.3 | 65.7 | 95.2 |
| 29-Aug | 80.1 | 87.6 | 93.4 | 93.8 | 94.4 | 95.0 | 94.9 | 80.8 | 64.6 | 58.0 | 51.1 | 48.5 | 46.8 | 47.4 | 45.3 | 43.3 | 43.8 | 45.7 | 51.1 | 61.7 | 67.5 | 75.4 | 81.0 | 75.3 | 67.8 | 95.0 |
| 30-Aug | 73.0 | 83.9 | 93.2 | 95.3 | 97.1 | 98.7 | 99.1 | 95.8 | 95.1 | 93.8 | 91.3 | 81.5 | 70.7 | 65.2 | 64.4 | 65.3 | 67.7 | 69.7 | 77.8 | 81.4 | 83.2 | 84.0 | 88.3 | 90.5 | 83.6 | 99.1 |
| 31-Aug | 90.8 | 95.3 | 96.9 | 91.7 | 90.7 | 91.0 | 90.7 | 89.8 | 82.0 | 73.3 | 64.3 | 56.3 | 52.6 | 48.5 | 45.5 | 43.3 | 42.5 | 42.9 | 47.5 | 60.8 | 70.3 | 82.5 | 90.3 | 93.6 | 72.2 | 96.9 |
| | 86.5 | 88.5 | 89.4 | 90.1 | 91.3 | 91.8 | 88.7 | 81.8 | 73.6 | 66.3 | 60.6 | 56.4 | 55.5 | 53.4 | 51.6 | 50.9 | 50.7 | 53.0 | 56.9 | 64.3 | 73.6 | 79.5 | 83.6 | 85.3 | Diurnal Average | |
| | 98.5 | 99.1 | 99.8 | 100.0 | 100.0 | 100.0 | 99.1 | 96.5 | 98.5 | 98.6 | 98.7 | 99.4 | 99.7 | 98.0 | 96.1 | 96.1 | 92.8 | 88.8 | 95.2 | 94.1 | 95.1 | 97.6 | 98.4 | 99.0 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Monday Creek - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 49 | 6.59 | 6.59 |
| 40 - 60 | 186 | 25.00 | 31.59 |
| 60 - 80 | 198 | 26.61 | 58.20 |
| 80 - 100 | 309 | 41.53 | 99.73 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Monday Creek - August 2026

Maximum Speed: 24 km/h on Aug 28 15:00

Maximum Daily Speed Average: 15.6 km/h on Aug 6

Minimum Speed Value: 0 km/h on Aug 16 21:00

Minimum Daily Speed Average: 1.4 km/h on Aug 14

Maximum Diurnal Speed Average: 7.0 km/h at hour 12

Minimum Diurnal Speed Average: 1.2 km/h at hour 22

Monthly Average Velocity: 3.9 km/h 284.5 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 2 $Q_1$ = 4 Median = 7 $Q_3$ = 12 $P_{90}$ = 16 $P_{99}$ = 21

Hours in Service: 744

Hours of Data: 738

Hours of Missing Data: 6

Percent Operational Time: 99.2

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | S4 | S5 | S6 | S6 | S5 | SSE5 | SSE6 | SE6 | SSE9 | SSE15 | SSE16 | SSE17 | SSE19 | SE18 | SSE20 | SSE20 | S17 | S16 | S11 | S10 | SSE4 | S5 | NW11 | NNW12 | SSE8.8 | SSE20 |
| 2-Aug | NNW13 | E8 | WSW8 | WSW8 | WNW12 | NW11 | W17 | W19 | W18 | WNW17 | WNW16 | WNW12 | NW14 | NNW17 | NNW21 | NNW22 | NW18 | NW17 | NW16 | NW13 | NW13 | NW11 | NW12 | NW12 | NW12.1 | NNW22 |
| 3-Aug | NW10 | NW9 | WNW10 | WNW9 | WNW8 | WNW9 | WNW12 | WNW12 | NW10 | NW14 | NW13 | NNW13 | NNW18 | NNW14 | NNW15 | NNW13 | NW14 | NNW10 | NW6 | NNW4 | ENE3 | ESE1 | S1 | S2 | NW8.6 | NNW18 |
| 4-Aug | SSE1 | SSE1 | S3 | S2 | SSE2 | SSE3 | S3 | SSW3 | WSW5 | WSW9 | W17 | W16 | WSW17 | WSW16 | WSW18 | WSW16 | W15 | W14 | WSW6 | W11 | W10 | WNW8 | NW10 | WNW13 | WSW8.1 | WSW18 |
| 5-Aug | WNW14 | WNW14 | WNW13 | WNW13 | WNW12 | WNW13 | WNW15 | WNW16 | WNW18 | WNW19 | WNW20 | NW20 | NW18 | NW23 | WNW21 | NW19 | WNW16 | WNW12 | W18 | W14 | WNW9 | N17 | NNW11 | NW14 | WNW15.1 | NW23 |
| 6-Aug | NW15 | NW17 | NW16 | NW17 | NW20 | WNW21 | NW20 | NW20 | NW17 | NW17 | NW18 | NW16 | NW18 | NW19 | NW16 | WNW15 | WNW18 | WNW17 | WNW19 | WNW15 | W11 | W9 | W6 | W4 | WNW15.6 | WNW21 |
| 7-Aug | WSW6 | W6 | W7 | W9 | WNW10 | WNW10 | W9 | WNW9 | WNW12 | WNW12 | WNW15 | NW13 | WNW14 | WNW17 | WNW17 | WNW13 | WNW16 | WNW14 | WNW9 | W7 | NW4 | N3 | WNW3 | N5 | WNW9.6 | WNW17 |
| 8-Aug | W2 | W2 | N3 | WNW4 | N6 | NW3 | N5 | NNE5 | NNE5 | NNE5 | N7 | NNE6 | NNE7 | N4 | NW5 | NW7 | NW4 | N4 | ENE4 | E3 | ESE2 | ESE1 | SE2 | SW2 | N2.8 | N7 |
| 9-Aug | UO | SE2 | WNW1 | S2 | S3 | W1 | SSW2 | ESE2 | WNW1 | ENE1 | NE5 | NNE5 | NE9 | NNE4 | NW3 | NW1 | NE5 | NE7 | NE7 | ENE3 | E6 | ENE4 | ESE2 | S2 | NE2.1 | NE9 |
| 10-Aug | NNE2 | SSE2 | ESE2 | SW2 | SE1 | SE2 | SSW2 | E2 | ENE3 | SSE1 | NE3 | E2 | NNE3 | N6 | N6 | N6 | NNE7 | N6 | N6 | NW4 | NNW5 | NW3 | NNW4 | N3 | N2.1 | NNE7 |
| 11-Aug | SW3 | W2 | SW2 | W3 | WNW3 | W4 | WSW2 | NW5 | W2 | NNE6 | N6 | NNW7 | E8 | W6 | N6 | WSW8 | NNW10 | ENE4 | WSW3 | WNW5 | WNW5 | WNW4 | NNW4 | N7 | NW2.7 | NNW10 |
| 12-Aug | N3 | WNW3 | WNW5 | NW4 | W2 | WNW3 | NW6 | NNW6 | NNW7 | N6 | NNW7 | NNW10 | NNE9 | N6 | NW8 | N12 | N8 | N8 | NNW7 | NNW9 | NNW6 | N7 | N8 | N8 | NNW6.0 | N12 |
| 13-Aug | NNE9 | NNE9 | NNE8 | NNE8 | NNE9 | NE9 | NE8 | NE8 | NNE10 | NNE9 | NE8 | ENE8 | E14 | NE11 | ENE11 | ENE15 | E15 | NE12 | NE10 | NE7 | NE7 | NE5 | NNE1 | WNW2 | NE8.2 | ENE15 |
| 14-Aug | WNW2 | W2 | WNW3 | WSW3 | W2 | WNW3 | WSW3 | NW2 | NE1 | ENE3 | E4 | NW7 | WNW4 | NNE15 | NE15 | E9 | SSW3 | SSE2 | E2 | NW6 | WNW4 | ESE3 | S3 | SSW3 | N1.4 | NE15 |
| 15-Aug | S1 | SSW3 | SW4 | S2 | SSW3 | SSW3 | SSW3 | WSW3 | WNW6 | WNW8 | W7 | NW9 | WNW7 | NW10 | NNW6 | SW2 | WNW9 | W11 | W10 | WSW5 | SSW4 | SSW7 | SSW7 | SW11 | W4.4 | W11 |
| 16-Aug | SW10 | SW12 | WSW10 | WSW10 | WSW10 | W8 | W11 | W15 | WNW19 | WNW14 | WNW15 | NW13 | WNW13 | NNW9 | N8 | NW9 | NNW10 | NNW7 | N6 | WNW1 | SW0 | SW3 | SW3 | SW3 | WNW7.2 | WNW19 |
| 17-Aug | SW4 | WNW4 | WNW3 | WSW5 | WSW6 | WSW6 | WSW6 | W6 | WNW8 | WNW13 | WNW14 | WNW13 | NW11 | WNW9 | WNW9 | WNW9 | WNW10 | WNW11 | W7 | W5 | SSW5 | SSW7 | S4 | S4 | W6.5 | WNW14 |
| 18-Aug | S4 | SSW4 | SSW5 | S6 | SSW8 | S6 | S7 | SSW9 | SW11 | SW12 | SW12 | WSW10 | WSW11 | W11 | WSW13 | W12 | W14 | W17 | WNW16 | WNW13 | WNW8 | W8 | W5 | W3 | WSW7.6 | W17 |
| 19-Aug | SW3 | SW3 | WSW5 | WSW7 | WSW6 | W7 | W7 | W7 | W10 | W8 | NW11 | WNW14 | WNW16 | NW17 | NW18 | WNW19 | WNW15 | NW12 | NNW9 | WNW7 | WNW5 | WNW5 | NW3 | SW1 | WNW8.2 | WNW19 |
| 20-Aug | WNW2 | W3 | NW1 | SW2 | S4 | WSW2 | W2 | WSW3 | WNW7 | WNW9 | NW11 | WNW9 | NW11 | NW12 | WNW13 | NW13 | N13 | NNE11 | NE10 | NE5 | SSE1 | S0 | S2 | SSW1 | NW4.4 | WNW13 |
| 21-Aug | WNW1 | SSW4 | ESE2 | NE1 | E2 | ESE1 | S1 | S2 | SSW4 | W7 | WSW8 | W7 | W4 | SSW6 | SW6 | SW7 | SW10 | SW10 | SW7 | S7 | S7 | SSW6 | S7 | SSE6 | SW4.3 | SW10 |
| 22-Aug | SE7 | SE7 | SE7 | SSE10 | SSE10 | SSE8 | S10 | SSW14 | SSW13 | SSW14 | SSW10 | S10 | SSW9 | SSW10 | S10 | S10 | SSW14 | SSW14 | SSW10 | SSW6 | SSW4 | SE5 | SE4 | SSE5 | S8.5 | SSW14 |
| 23-Aug | SSE1 | S5 | S6 | SSW5 | SW1 | SSE4 | SE2 | SE3 | NNW2 | WNW6 | NW7 | NW13 | NNE4 | NNE4 | NNW3 | WNW6 | WNW10 | NNW10 | NNW7 | N5 | N4 | NW7 | NW6 | NW7 | NW2.9 | NW13 |
| 24-Aug | WNW5 | W6 | WSW8 | WSW10 | WSW11 | WNW11 | NW8 | NW7 | WNW8 | NW8 | NW11 | NNW14 | NNW12 | NNW22 | NNW20 | NNW21 | NNW21 | NNW17 | N8 | N5 | WNW2 | UO | UO | UO | NW9.7 | NNW22 |
| 25-Aug | SW1 | SSW1 | UO | SW1 | S2 | E1 | S2 | W5 | WNW7 | WNW8 | NW10 | NW7 | NW10 | NW9 | NW8 | NW8 | NNW7 | NE10 | ENE10 | E6 | E3 | SE2 | SE2 | ESE3 | NW2.4 | NW10 |
| 26-Aug | SE4 | SE3 | E3 | E3 | E2 | ENE2 | UO | SSE3 | SSW7 | S11 | SSW14 | S12 | SSW12 | S12 | SSW13 | S12 | S12 | SSW11 | SSW10 | SSE7 | SE11 | SE11 | SE11 | SSE10 | S7.3 | SSW14 |
| 27-Aug | SE10 | SE10 | SE9 | SE7 | SE7 | SE6 | SE5 | SE8 | SSE9 | SSE10 | SSE11 | SSW11 | S12 | SSE19 | S18 | SSE18 | SSE20 | SSE16 | SE13 | ESE12 | ESE11 | SE12 | SE11 | SE8 | SSE10.8 | SSE20 |
| 28-Aug | SSW2 | WSW5 | WNW9 | NW4 | SW6 | SSW5 | WSW7 | W17 | W17 | W17 | W19 | WSW20 | W23 | WSW23 | W24 | W21 | W21 | WSW18 | WSW14 | SW12 | SW11 | WSW12 | W14 | W10 | WSW13.1 | W24 |
| 29-Aug | WNW7 | WSW5 | SW7 | SW7 | SW7 | SSW5 | SSW6 | WSW8 | W13 | WNW14 | W13 | WSW12 | WSW15 | WSW15 | WSW13 | WSW14 | WSW12 | WSW9 | SSW6 | SSW7 | S5 | SSE5 | ESE2 | SE7 | WSW7.4 | WSW15 |
| 30-Aug | S3 | ESE6 | NNE5 | E7 | NE3 | NE1 | ESE6 | NNE3 | NNE5 | SSE2 | SW3 | W3 | NNE3 | SSE3 | E5 | NNE6 | NE4 | N2 | NE6 | ENE5 | E4 | SE7 | SE5 | ENE1 | ENE2.5 | E7 |
| 31-Aug | N3 | ENE3 | WNW7 | NW7 | WNW10 | WNW8 | WNW6 | WNW9 | NW7 | NW8 | NW13 | NW14 | WNW16 | WNW15 | NW14 | WNW14 | WNW14 | WNW12 | WNW8 | WNW7 | W5 | SW3 | SSE1 | S3 | WNW7.9 | WNW16 |
| | W1.9 | WSW1.8 | W2.8 | WSW2.9 | W3.1 | W2.9 | W3.6 | W4.3 | WNW5.4 | WNW5.9 | WNW7.0 | WNW7.0 | WNW5.7 | WNW6.1 | WNW6.1 | WNW5.9 | WNW6.6 | WNW5.0 | WNW3.4 | WNW2.7 | W1.4 | WSW1.2 | W1.4 | W1.6 | Diurnal Average | |
| | NW15 | NW17 | NW16 | NW17 | NW20 | WNW21 | NW20 | NW20 | WNW19 | WNW19 | WNW20 | WSW20 | W23 | NW23 | W24 | NNW22 | W21 | WSW18 | WNW19 | WNW15 | NW13 | N17 | W14 | NW14 | Diurnal Maximum | |

UO - Unstable Operation

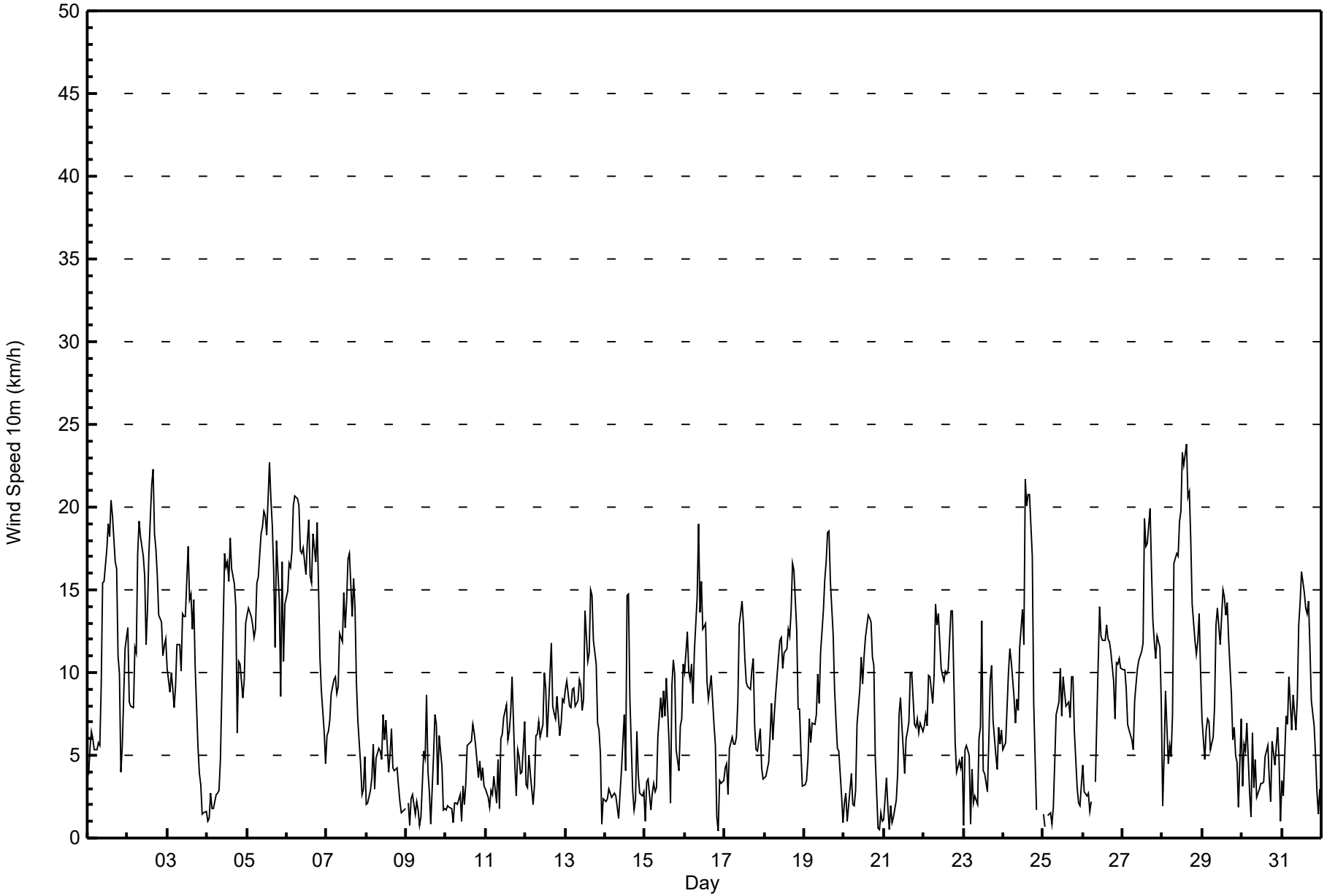
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Monday Creek - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 255 | 34.55 | 34.55 |
| 6 - 11 | 286 | 38.75 | 73.31 |
| 12 - 19 | 174 | 23.58 | 96.88 |
| 20 - 28 | 23 | 3.12 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 738

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Monday Creek - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 13 | 14 | 10 | 12 | 13 | 11 | 14 | 18 | 28 | 23 | 20 | 13 | 20 | 26 | 13 | 7 | 255 |
| 6 - 11 | 19 | 15 | 14 | 3 | 6 | 3 | 17 | 12 | 16 | 20 | 12 | 23 | 29 | 42 | 36 | 19 | 286 |
| 12 - 19 | 3 | 1 | 2 | 1 | 2 | 1 | 3 | 7 | 8 | 8 | 4 | 14 | 20 | 53 | 35 | 12 | 174 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 4 | 3 | 5 | 6 | 23 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 30 | 26 | 16 | 21 | 15 | 34 | 40 | 52 | 51 | 36 | 52 | 73 | 124 | 89 | 44 | 738 |

Total Number of Valid Hours: 738

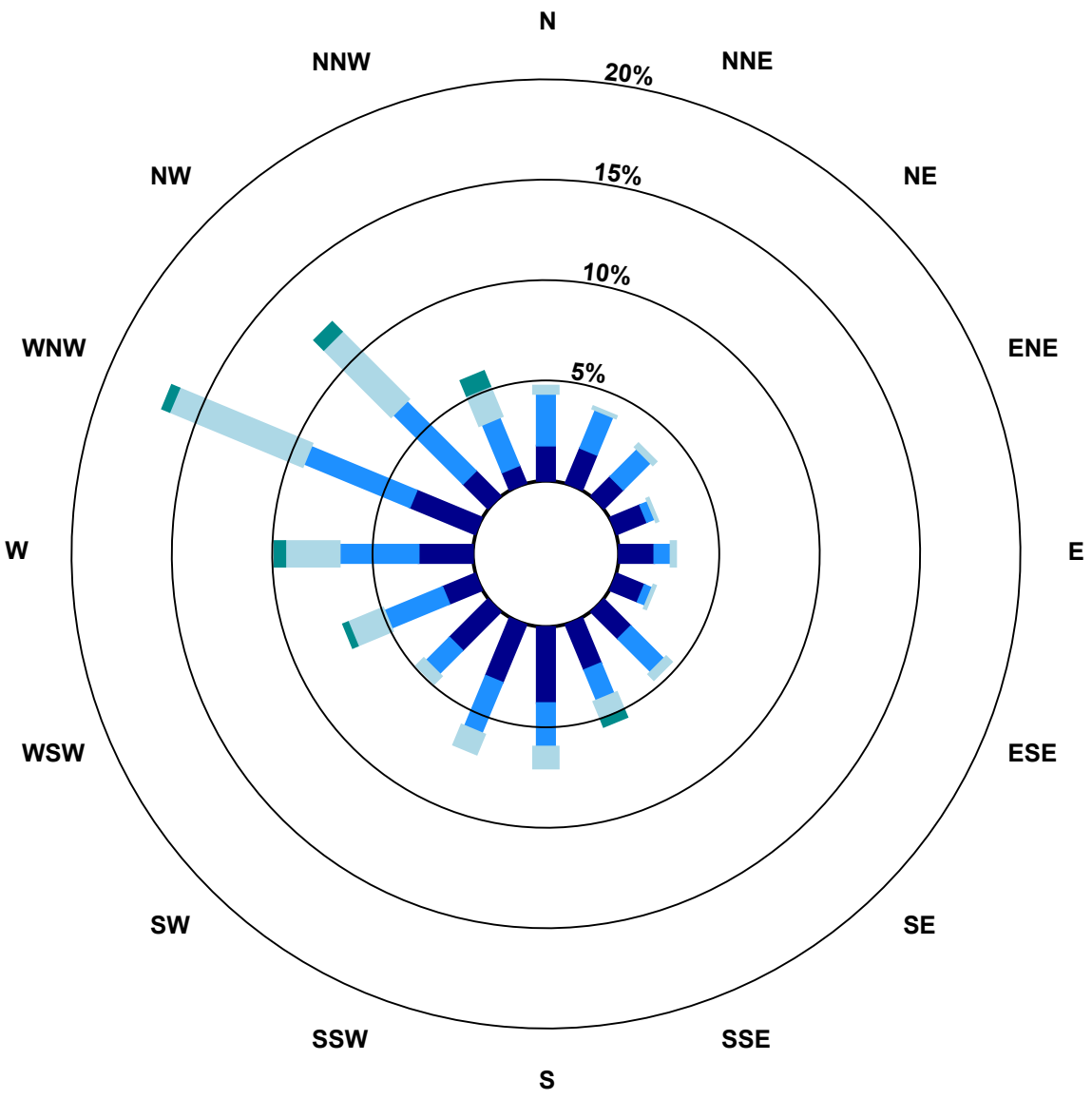
Total Number of Hours: 744

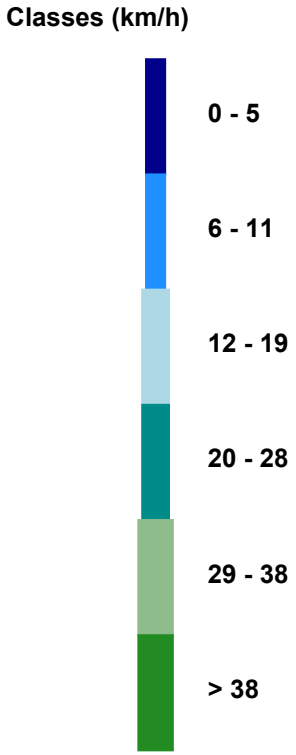
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Monday Creek**




**Total Number of Valid Hours: 738**

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Monday Creek - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Aug 4 18:00

Minimum Value: 0 km/h on Aug 26 04:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 738 |
| Hours of Missing Data: | 6 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 5 | 5 | 5 | 4 | 6 | 6 | 5 | 5 | 4 | 3 | 2 | 7 | 5 | 4 | 7 |
| 2-Aug | 4 | 3 | 4 | 2 | 3 | 5 | 4 | 4 | 3 | 4 | 3 | 2 | 3 | 6 | 5 | 6 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 6 |
| 3-Aug | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 4 | 7 | 5 | 3 | 5 | 4 | 4 | 8 | 4 | 4 | 3 | 2 | 2 | 3 | 8 |
| 5-Aug | 2 | 3 | 3 | 2 | 2 | 2 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 5 | 5 | 4 | 3 | 4 | 4 | 2 | 7 | 4 | 4 | 7 |
| 6-Aug | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 3 | 4 | 3 | 2 | 1 | 1 | 2 | 5 |
| 7-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 3 | 4 |
| 8-Aug | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 3 |
| 9-Aug | UO | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 3 |
| 10-Aug | 1 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 3 |
| 11-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 5 | 3 | 5 | 5 | 4 | 6 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 6 |
| 12-Aug | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 6 | 2 | 3 | 5 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 6 |
| 13-Aug | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 5 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 4 | 3 | 3 | 1 | 2 | 4 | 2 | 1 | 2 | 1 | 4 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 2 | 6 | 3 | 2 | 3 | 1 | 1 | 2 | 2 | 6 |
| 16-Aug | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 5 | 4 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 4 |
| 18-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 4 |
| 19-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 5 | 3 | 5 | 4 | 2 | 1 | 1 | 1 | 1 | 5 |
| 20-Aug | 1 | 3 | 1 | 1 | 3 | 1 | 1 | 1 | 3 | 2 | 4 | 2 | 4 | 3 | 3 | 3 | 5 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 5 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 4 |
| 22-Aug | 1 | 1 | 1 | 3 | 2 | 2 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 2 | 1 | 1 | 1 | 1 | 4 |
| 23-Aug | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 1 | 2 | 1 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 4 |
| 24-Aug | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 6 | 5 | 6 | 5 | 5 | 2 | 1 | 1 | UO | UO | UO | 6 |
| 25-Aug | 1 | 1 | UO | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 26-Aug | 1 | 1 | 1 | 0 | 1 | 1 | UO | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 4 |
| 27-Aug | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 6 | 6 | 6 | 6 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 6 |
| 28-Aug | 2 | 2 | 7 | 5 | 2 | 3 | 2 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 4 | 3 | 7 |
| 29-Aug | 3 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 4 |
| 30-Aug | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 31-Aug | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 4 |
| | 4 | 4 | 7 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 6 | 6 | 6 | 6 | 6 | 8 | 4 | 4 | 3 | 7 | 5 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Monday Creek - August 2026

Direction of Maximum Speed: 260 deg on Aug 28 15:00
Direction of Maximum Daily Speed Average: 302.6 deg on Aug 6

Direction of Minimum Speed: 227 deg on Aug 16 21:00

Direction of Minimum Daily Speed Average: 1.4 deg on Aug 14

Monthly Average Direction: 284.5 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 738 |
| Hours of Missing Data: | 6 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 171 | 184 | 185 | 182 | 172 | 163 | 163 | 146 | 155 | 161 | 161 | 158 | 148 | 142 | 148 | 158 | 185 | 182 | 176 | 169 | 149 | 183 | 326 | 344 | 163.6 |
| 2-Aug | 338 | 94 | 240 | 247 | 290 | 304 | 269 | 263 | 275 | 285 | 291 | 284 | 310 | 347 | 343 | 336 | 326 | 321 | 326 | 322 | 322 | 318 | 318 | 326 | 308.9 |
| 3-Aug | 318 | 304 | 296 | 297 | 288 | 291 | 296 | 303 | 311 | 308 | 317 | 334 | 348 | 334 | 333 | 342 | 325 | 333 | 316 | 327 | 65 | 107 | 181 | 190 | 319.0 |
| 4-Aug | 156 | 164 | 184 | 169 | 154 | 162 | 181 | 203 | 238 | 254 | 274 | 277 | 253 | 245 | 243 | 249 | 266 | 265 | 246 | 265 | 266 | 289 | 304 | 283 | 258.4 |
| 5-Aug | 289 | 293 | 298 | 295 | 290 | 293 | 293 | 292 | 299 | 295 | 303 | 311 | 311 | 307 | 303 | 308 | 303 | 287 | 268 | 270 | 284 | 349 | 328 | 317 | 300.2 |
| 6-Aug | 312 | 310 | 310 | 305 | 304 | 303 | 305 | 312 | 317 | 320 | 308 | 315 | 310 | 308 | 306 | 298 | 291 | 287 | 294 | 288 | 278 | 268 | 267 | 273 | 302.6 |
| 7-Aug | 249 | 266 | 281 | 280 | 294 | 284 | 273 | 286 | 286 | 286 | 296 | 315 | 293 | 294 | 289 | 288 | 292 | 289 | 282 | 280 | 324 | 351 | 303 | 9 | 290.3 |
| 8-Aug | 273 | 264 | 354 | 290 | 1 | 320 | 9 | 32 | 32 | 18 | 358 | 16 | 22 | 351 | 316 | 316 | 326 | 358 | 63 | 90 | 112 | 120 | 125 | 224 | 1.0 |
| 9-Aug | UO | 128 | 291 | 171 | 184 | 278 | 201 | 121 | 284 | 78 | 43 | 31 | 39 | 27 | 312 | 307 | 38 | 39 | 47 | 64 | 81 | 68 | 105 | 180 | 53.7 |
| 10-Aug | 33 | 164 | 111 | 219 | 129 | 142 | 196 | 101 | 61 | 156 | 48 | 88 | 17 | 3 | 0 | 5 | 12 | 354 | 353 | 310 | 332 | 326 | 327 | 349 | 5.3 |
| 11-Aug | 235 | 262 | 227 | 271 | 284 | 267 | 252 | 313 | 280 | 23 | 358 | 336 | 94 | 264 | 358 | 243 | 334 | 68 | 254 | 287 | 298 | 296 | 340 | 358 | 315.6 |
| 12-Aug | 6 | 288 | 287 | 309 | 272 | 302 | 315 | 347 | 344 | 351 | 345 | 331 | 29 | 351 | 309 | 355 | 352 | 11 | 340 | 346 | 343 | 2 | 7 | 8 | 344.9 |
| 13-Aug | 16 | 22 | 32 | 27 | 32 | 38 | 45 | 38 | 32 | 31 | 41 | 59 | 79 | 43 | 66 | 75 | 86 | 51 | 35 | 48 | 38 | 54 | 12 | 293 | 46.7 |
| 14-Aug | 291 | 278 | 286 | 249 | 270 | 290 | 240 | 311 | 49 | 69 | 85 | 310 | 298 | 12 | 37 | 90 | 208 | 150 | 80 | 319 | 296 | 114 | 174 | 197 | 353.3 |
| 15-Aug | 174 | 194 | 230 | 171 | 198 | 195 | 195 | 256 | 294 | 294 | 280 | 308 | 283 | 315 | 339 | 225 | 284 | 280 | 276 | 246 | 200 | 207 | 213 | 231 | 263.3 |
| 16-Aug | 228 | 230 | 241 | 254 | 246 | 260 | 270 | 279 | 301 | 292 | 294 | 305 | 294 | 330 | 4 | 322 | 335 | 347 | 358 | 299 | 227 | 216 | 214 | 232 | 285.3 |
| 17-Aug | 222 | 295 | 296 | 258 | 257 | 250 | 257 | 263 | 282 | 298 | 297 | 296 | 314 | 287 | 284 | 283 | 293 | 287 | 269 | 265 | 211 | 211 | 186 | 178 | 276.2 |
| 18-Aug | 185 | 194 | 196 | 182 | 198 | 188 | 189 | 204 | 214 | 216 | 226 | 243 | 250 | 270 | 257 | 261 | 274 | 280 | 293 | 297 | 288 | 273 | 267 | 259 | 247.5 |
| 19-Aug | 216 | 222 | 238 | 257 | 244 | 275 | 264 | 270 | 272 | 278 | 305 | 298 | 303 | 310 | 307 | 297 | 296 | 310 | 334 | 296 | 283 | 289 | 308 | 224 | 291.0 |
| 20-Aug | 297 | 262 | 323 | 224 | 186 | 256 | 275 | 258 | 293 | 303 | 308 | 302 | 310 | 310 | 300 | 313 | 354 | 17 | 37 | 51 | 150 | 188 | 190 | 192 | 316.9 |
| 21-Aug | 286 | 198 | 108 | 46 | 99 | 104 | 176 | 172 | 201 | 262 | 239 | 264 | 269 | 211 | 214 | 219 | 226 | 230 | 225 | 190 | 190 | 193 | 190 | 166 | 214.4 |
| 22-Aug | 137 | 131 | 141 | 163 | 163 | 162 | 176 | 193 | 201 | 208 | 204 | 191 | 197 | 193 | 185 | 174 | 192 | 195 | 196 | 199 | 193 | 140 | 139 | 156 | 181.5 |
| 23-Aug | 155 | 172 | 182 | 203 | 219 | 152 | 141 | 143 | 329 | 289 | 316 | 326 | 15 | 29 | 345 | 288 | 290 | 344 | 334 | 351 | 352 | 312 | 320 | 311 | 315.0 |
| 24-Aug | 303 | 271 | 257 | 246 | 257 | 283 | 317 | 310 | 300 | 312 | 324 | 335 | 337 | 343 | 333 | 332 | 332 | 338 | 358 | 0 | 298 | UO | UO | UO | 319.2 |
| 25-Aug | 227 | 199 | UO | 217 | 186 | 92 | 191 | 274 | 287 | 302 | 306 | 314 | 304 | 306 | 318 | 309 | 341 | 45 | 71 | 84 | 101 | 134 | 132 | 121 | 325.4 |
| 26-Aug | 128 | 132 | 79 | 80 | 86 | 71 | UO | 161 | 193 | 190 | 197 | 189 | 198 | 174 | 206 | 190 | 184 | 196 | 195 | 166 | 145 | 138 | 141 | 149 | 174.4 |
| 27-Aug | 141 | 146 | 139 | 133 | 131 | 124 | 138 | 134 | 162 | 151 | 161 | 196 | 176 | 153 | 171 | 165 | 167 | 157 | 138 | 119 | 116 | 136 | 137 | 133 | 150.2 |
| 28-Aug | 208 | 240 | 290 | 322 | 219 | 201 | 248 | 275 | 273 | 273 | 267 | 256 | 260 | 258 | 260 | 272 | 267 | 254 | 243 | 234 | 223 | 241 | 261 | 263 | 258.7 |
| 29-Aug | 283 | 251 | 236 | 233 | 219 | 192 | 212 | 247 | 271 | 282 | 279 | 257 | 248 | 242 | 237 | 249 | 247 | 238 | 201 | 196 | 175 | 157 | 119 | 137 | 240.9 |
| 30-Aug | 175 | 113 | 21 | 96 | 56 | 37 | 116 | 19 | 29 | 147 | 232 | 280 | 23 | 147 | 81 | 22 | 49 | 2 | 41 | 59 | 88 | 126 | 124 | 68 | 76.4 |
| 31-Aug | 352 | 78 | 303 | 315 | 298 | 300 | 301 | 301 | 316 | 308 | 309 | 309 | 293 | 290 | 311 | 303 | 296 | 300 | 295 | 283 | 274 | 223 | 153 | 188 | 300.1 |
| | 279.4 | 241.9 | 267.6 | 258.6 | 261.0 | 271.4 | 265.7 | 276.2 | 283.4 | 283.1 | 289.4 | 294.7 | 295.6 | 299.9 | 296.5 | 291.3 | 291.5 | 295.9 | 297.5 | 282.5 | 264.7 | 246.4 | 271.1 | 276.5 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

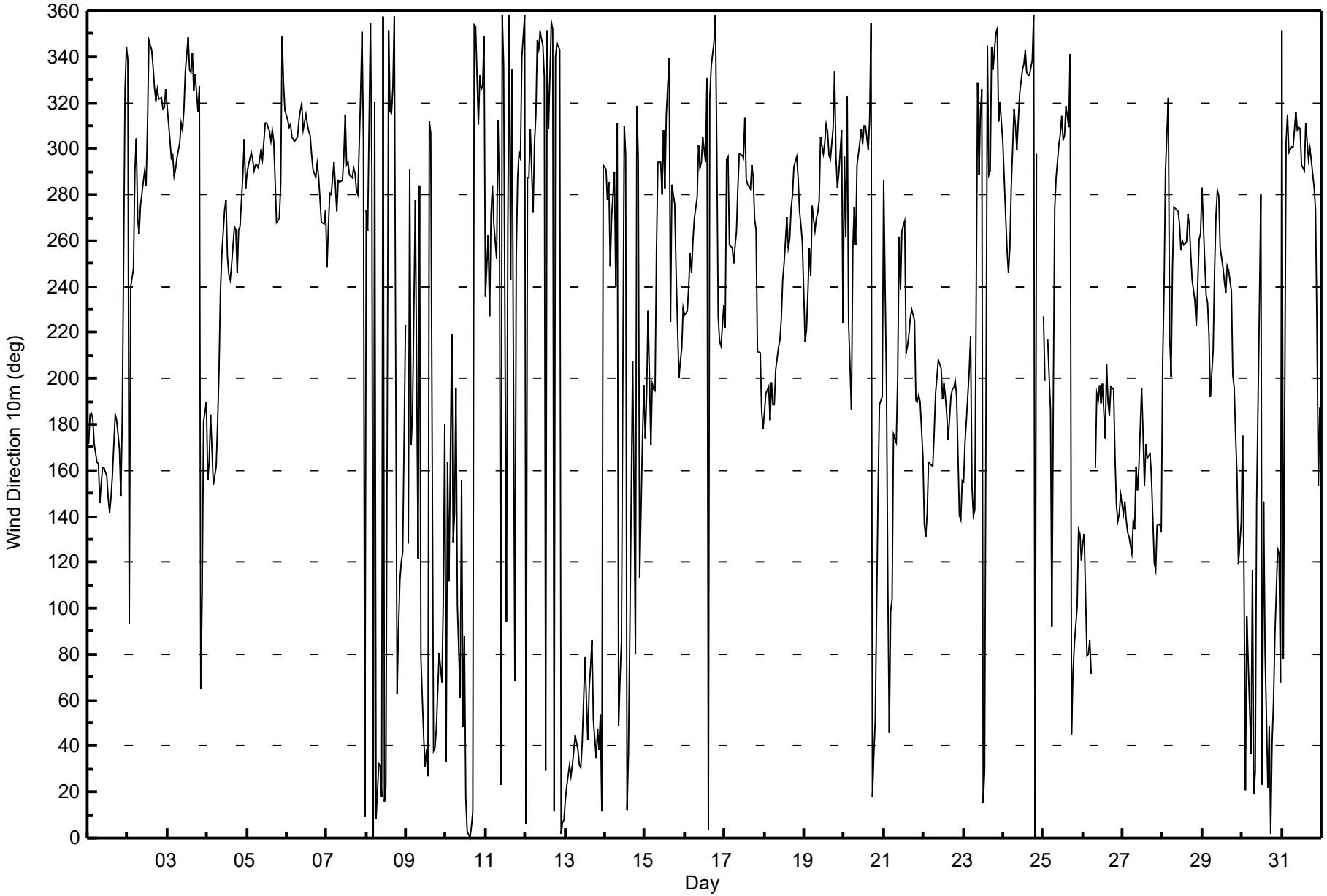
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Monday Creek - August 2026**



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 102 deg on Aug 9 03:00

Minimum Value: 5 deg on Aug 31 20:00

Percentiles: $P_1$ = 9 $P_{10}$ = 12 $Q_1$ = 16 Median = 21 $Q_3$ = 36 $P_{90}$ = 59 $P_{99}$ = 94

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 738 |
| Hours of Missing Data: | 6 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.2 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 17 | 16 | 17 | 17 | 14 | 17 | 18 | 22 | 29 | 19 | 20 | 19 | 17 | 19 | 16 | 21 | 23 | 21 | 22 | 18 | 25 | 53 | 26 | 20 | 53 |
| 2-Aug | 28 | 50 | 26 | 17 | 17 | 39 | 13 | 12 | 11 | 11 | 15 | 12 | 25 | 19 | 18 | 16 | 16 | 16 | 15 | 16 | 16 | 17 | 17 | 18 | 50 |
| 3-Aug | 18 | 16 | 10 | 11 | 12 | 13 | 11 | 15 | 19 | 19 | 21 | 23 | 24 | 22 | 21 | 22 | 19 | 18 | 26 | 57 | 24 | 51 | 32 | 35 | 57 |
| 4-Aug | 65 | 56 | 25 | 39 | 79 | 40 | 24 | 19 | 35 | 24 | 13 | 15 | 19 | 16 | 17 | 20 | 18 | 26 | 45 | 16 | 14 | 21 | 30 | 11 | 79 |
| 5-Aug | 10 | 10 | 11 | 9 | 9 | 11 | 11 | 10 | 14 | 14 | 17 | 19 | 20 | 17 | 16 | 18 | 16 | 14 | 12 | 10 | 18 | 40 | 18 | 17 | 40 |
| 6-Aug | 18 | 16 | 16 | 15 | 15 | 14 | 15 | 16 | 18 | 19 | 18 | 19 | 18 | 17 | 23 | 19 | 15 | 14 | 15 | 11 | 10 | 9 | 8 | 27 | 27 |
| 7-Aug | 11 | 12 | 12 | 11 | 11 | 11 | 12 | 13 | 14 | 15 | 19 | 23 | 20 | 14 | 15 | 18 | 16 | 13 | 10 | 8 | 48 | 66 | 42 | 29 | 66 |
| 8-Aug | 64 | 67 | 62 | 32 | 30 | 59 | 39 | 33 | 41 | 62 | 42 | 47 | 23 | 43 | 39 | 30 | 61 | 48 | 21 | 49 | 49 | 63 | 50 | 58 | 67 |
| 9-Aug | UO | 36 | 102 | 51 | 44 | 89 | 58 | 48 | 94 | 90 | 54 | 61 | 31 | 43 | 62 | 96 | 51 | 14 | 13 | 28 | 12 | 18 | 51 | 74 | 102 |
| 10-Aug | 45 | 57 | 48 | 82 | 95 | 34 | 32 | 50 | 66 | 102 | 85 | 89 | 86 | 61 | 28 | 21 | 18 | 21 | 20 | 35 | 18 | 27 | 17 | 59 | 102 |
| 11-Aug | 51 | 42 | 63 | 27 | 33 | 24 | 84 | 30 | 83 | 48 | 59 | 62 | 38 | 69 | 59 | 38 | 49 | 54 | 61 | 11 | 21 | 22 | 30 | 16 | 84 |
| 12-Aug | 78 | 39 | 22 | 23 | 51 | 29 | 21 | 41 | 32 | 31 | 23 | 26 | 26 | 34 | 35 | 31 | 23 | 21 | 20 | 17 | 19 | 16 | 16 | 16 | 78 |
| 13-Aug | 15 | 16 | 14 | 14 | 12 | 13 | 19 | 19 | 22 | 20 | 33 | 33 | 31 | 23 | 39 | 18 | 19 | 29 | 22 | 13 | 11 | 24 | 57 | 39 | 57 |
| 14-Aug | 56 | 46 | 43 | 24 | 27 | 32 | 22 | 60 | 80 | 45 | 64 | 27 | 69 | 26 | 26 | 34 | 76 | 74 | 58 | 32 | 71 | 37 | 40 | 18 | 80 |
| 15-Aug | 73 | 19 | 32 | 34 | 27 | 10 | 18 | 40 | 24 | 20 | 44 | 30 | 20 | 26 | 47 | 72 | 23 | 14 | 19 | 25 | 15 | 11 | 13 | 11 | 73 |
| 16-Aug | 13 | 12 | 13 | 18 | 13 | 14 | 13 | 12 | 15 | 13 | 11 | 15 | 13 | 49 | 25 | 19 | 19 | 27 | 32 | 49 | 91 | 15 | 12 | 10 | 91 |
| 17-Aug | 26 | 22 | 44 | 9 | 9 | 11 | 13 | 17 | 18 | 17 | 22 | 21 | 24 | 38 | 35 | 31 | 23 | 15 | 20 | 17 | 22 | 10 | 17 | 18 | 44 |
| 18-Aug | 17 | 14 | 14 | 16 | 17 | 18 | 19 | 19 | 19 | 21 | 22 | 31 | 24 | 29 | 23 | 24 | 23 | 14 | 11 | 11 | 8 | 9 | 7 | 30 | 31 |
| 19-Aug | 25 | 25 | 18 | 11 | 14 | 8 | 12 | 14 | 14 | 21 | 20 | 18 | 19 | 21 | 19 | 15 | 15 | 21 | 22 | 23 | 19 | 12 | 72 | 94 | 94 |
| 20-Aug | 37 | 68 | 82 | 56 | 29 | 45 | 49 | 33 | 28 | 20 | 19 | 24 | 28 | 26 | 18 | 22 | 34 | 17 | 11 | 16 | 87 | 93 | 52 | 61 | 93 |
| 21-Aug | 59 | 23 | 27 | 74 | 39 | 65 | 65 | 55 | 36 | 22 | 31 | 52 | 85 | 43 | 47 | 39 | 30 | 20 | 21 | 13 | 15 | 15 | 15 | 21 | 85 |
| 22-Aug | 12 | 11 | 15 | 19 | 17 | 19 | 23 | 20 | 20 | 18 | 29 | 26 | 27 | 27 | 33 | 31 | 22 | 20 | 17 | 13 | 21 | 15 | 24 | 19 | 33 |
| 23-Aug | 91 | 16 | 17 | 24 | 95 | 23 | 73 | 59 | 90 | 42 | 23 | 17 | 73 | 56 | 85 | 39 | 26 | 40 | 42 | 43 | 28 | 20 | 19 | 17 | 95 |
| 24-Aug | 26 | 18 | 16 | 22 | 15 | 15 | 17 | 21 | 12 | 19 | 18 | 16 | 18 | 19 | 19 | 18 | 19 | 19 | 19 | 19 | 39 | UO | UO | UO | 39 |
| 25-Aug | 56 | 59 | UO | 64 | 44 | 73 | 76 | 24 | 17 | 24 | 23 | 45 | 34 | 47 | 43 | 32 | 47 | 25 | 12 | 15 | 24 | 35 | 54 | 19 | 76 |
| 26-Aug | 7 | 15 | 17 | 12 | 41 | 25 | UO | 22 | 24 | 22 | 22 | 30 | 26 | 28 | 29 | 26 | 23 | 19 | 17 | 20 | 11 | 10 | 10 | 13 | 41 |
| 27-Aug | 11 | 14 | 13 | 15 | 11 | 17 | 18 | 12 | 21 | 18 | 22 | 33 | 39 | 18 | 22 | 21 | 20 | 17 | 13 | 12 | 12 | 11 | 11 | 13 | 39 |
| 28-Aug | 72 | 37 | 62 | 75 | 34 | 43 | 19 | 11 | 14 | 17 | 18 | 17 | 17 | 18 | 19 | 15 | 15 | 17 | 14 | 11 | 15 | 13 | 16 | 17 | 75 |
| 29-Aug | 22 | 16 | 18 | 22 | 11 | 16 | 15 | 16 | 19 | 17 | 19 | 30 | 20 | 19 | 24 | 22 | 17 | 21 | 21 | 15 | 25 | 14 | 49 | 18 | 49 |
| 30-Aug | 58 | 50 | 34 | 22 | 56 | 62 | 15 | 62 | 36 | 60 | 36 | 51 | 66 | 60 | 39 | 35 | 37 | 67 | 11 | 20 | 20 | 11 | 47 | 96 | 96 |
| 31-Aug | 59 | 72 | 24 | 20 | 13 | 17 | 19 | 14 | 24 | 25 | 21 | 21 | 18 | 20 | 25 | 23 | 17 | 15 | 10 | 5 | 16 | 11 | 40 | 40 | 72 |
| | 91 | 72 | 102 | 82 | 95 | 89 | 84 | 62 | 94 | 102 | 85 | 89 | 86 | 69 | 85 | 96 | 76 | 74 | 61 | 57 | 91 | 93 | 72 | 96 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS34
## HANGINGSTONE EXPANSION
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 710 | 34 | 34 | 100 | 11.8 | 0 | 3 | 0 |
| H2S (ppb) Average | 709 | 35 | 35 | 100 | 1.1 | 0 | 0.3 | 0 |
| NO2 (ppb) Average | 708 | 36 | 36 | 100 | 19.2 | 0 | 5.4 | - |
| NO (ppb) Average | 708 | 36 | 36 | 100 | 12.5 | - | 1.9 | - |
| NOX (ppb) Average | 708 | 36 | 36 | 100 | 27.7 | - | 7.4 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 27.9 | - | 21.4 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 100 | - | 92 | - |
| Wind Speed 10 m (km/h) Average | 744 | 0 | 0 | 100 | 22 | - | 14 | - |
| Wind Direction 10 m (deg) Average | 744 | 0 | 0 | 100 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 710 | 0.59 | 1.3 | - | 0 | 0 | 0.1 | 0.2 | 0.5 | 1.3 | 11.8 |
| H2S (ppb) Average | 709 | 0.23 | 0.2 | - | 0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 1.1 |
| NO2 (ppb) Average | 708 | 2.19 | 2.5 | - | 0 | 0.3 | 0.6 | 1.4 | 2.7 | 4.9 | 19.2 |
| NO (ppb) Average | 708 | 0.9 | 1.6 | - | 0 | 0 | 0.1 | 0.3 | 1 | 2.5 | 12.5 |
| NOX (ppb) Average | 708 | 3.09 | 3.9 | - | 0 | 0.4 | 0.8 | 1.8 | 3.8 | 6.8 | 27.7 |
| Temperature 2 m (C) Average | 744 | 15.56 | 4.8 | - | 5.9 | 9.2 | 11.7 | 15.6 | 18.9 | 22 | 27.9 |
| Relative Humidity (%) Average | 744 | 72.63 | 18.2 | - | 33.1 | 46.8 | 57.8 | 74.4 | 89.3 | 95.8 | 100 |
| Wind Speed 10 m (km/h) Average | 744 | 8.5 | 4 | - | 0 | 4 | 6 | 8 | 11 | 14 | 22 |
| Wind Direction 10 m (deg) Average | 744 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| | | | | No operational issues to report |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Hangingstone Expansion - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 11.8 ppb on Aug 29 07:00

Maximum Daily Average: 3.0 ppb on Aug 29

Minimum Value: 0.0 ppb on Aug 3 07:00

Minimum Daily Average: 0.0 ppb on Aug 13

Maximum Diurnal Average: 1.1 ppb at hour 14

Minimum Diurnal Average: 0.2 ppb at hour 21

Monthly Average: 0.59 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.5 $P_{90}$ = 1.3 $P_{99}$ = 7.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.3 | 0.3 | 0.3 | 0.2 | Z | 0.2 | 0.5 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.5 |
| 2-Aug | 0.3 | 0.1 | 0.0 | 1.0 | 0.7 | Z | 0.4 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 1.0 | 0.6 | 0.1 | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.4 | 1.0 |
| 3-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.4 | 0.1 | 0.2 | 0.3 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 |
| 4-Aug | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 1.3 | 4.0 | 0.4 | 0.5 | 1.7 | 1.9 | 5.8 | 2.7 | 1.0 | 0.2 | 0.9 | 0.5 | 0.6 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 1.0 | 5.8 |
| 5-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.7 |
| 6-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 |
| 7-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.0 | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.4 | 0.2 | 0.1 | 0.1 | 0.6 |
| 8-Aug | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | Z | 0.5 | 0.9 | 1.2 | 0.7 | 2.7 | 3.1 | 1.5 | 1.7 | 1.9 | 1.2 | 1.0 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.4 | 0.5 | 1.0 | 3.1 |
| 9-Aug | Z | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.8 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 | 0.5 | 0.8 | 1.0 | 1.4 | 1.0 | 0.5 | 0.2 | 0.1 | 0.0 | 0.6 | 1.4 |
| 10-Aug | 0.1 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.9 | 1.5 | 1.7 | 1.4 | 0.6 | 0.8 | 0.5 | 0.2 | 0.5 | 1.7 |
| 11-Aug | 0.3 | 0.2 | Z | 0.2 | 0.1 | 0.3 | 0.3 | 1.2 | 2.2 | 1.1 | 0.6 | 0.3 | 0.6 | 1.3 | 0.8 | 0.3 | 1.1 | 1.1 | 0.9 | 0.6 | 0.2 | 0.2 | 0.2 | 0.0 | 0.6 | 2.2 |
| 12-Aug | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.2 | 0.4 | 1.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.9 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 |
| 13-Aug | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 |
| 14-Aug | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.9 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.9 |
| 15-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 1.8 | 1.5 | 3.0 | 1.3 | 1.9 | 4.9 | 4.8 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.9 | 4.9 |
| 16-Aug | 0.0 | Z | 1.0 | 2.6 | 0.3 | 6.9 | 0.5 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 | 0.4 | 1.1 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.0 | 0.0 | 0.1 | 0.5 | 0.6 | 0.8 | 6.9 |
| 17-Aug | 0.5 | 0.1 | Z | 0.2 | 0.6 | 0.1 | 1.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 2.5 | 0.6 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.5 | 1.4 | 0.4 | 2.5 |
| 18-Aug | 1.6 | 0.5 | 0.1 | Z | 0.4 | 0.7 | 0.5 | 0.6 | 0.3 | 2.4 | 0.5 | 3.0 | 3.5 | 2.3 | 1.7 | 2.0 | 4.4 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 1.1 | 4.4 |
| 19-Aug | 0.9 | 0.2 | 0.3 | 0.0 | Z | 0.1 | 0.0 | 0.7 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.2 | 1.1 |
| 20-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 1.6 | 3.5 | 2.2 | 0.6 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.4 | 3.5 |
| 21-Aug | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 1.7 | 0.7 | 1.6 | 1.1 | 0.7 | 0.5 | 2.2 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 2.2 |
| 22-Aug | 0.1 | Z | 0.2 | 0.1 | 0.3 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.2 | 0.2 | 0.3 | 1.4 | 1.2 | 0.4 | 1.4 |
| 23-Aug | 0.6 | 0.5 | Z | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 1.2 | 0.3 | 1.1 | 3.1 | 2.8 | 0.7 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 3.1 |
| 24-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.8 | 0.1 | 0.3 | 0.3 | 0.1 | 0.2 | 0.5 | 1.7 | 1.0 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 1.7 |
| 25-Aug | 0.2 | 0.3 | 0.3 | 0.5 | Z | 0.4 | 1.2 | 0.6 | 0.3 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.2 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 1.2 |
| 26-Aug | 0.4 | 1.2 | 0.4 | 0.7 | 0.8 | Z | 1.7 | 2.7 | 0.8 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.7 | 0.9 | 0.6 | 2.7 |
| 27-Aug | Z | 1.0 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.0 |
| 28-Aug | 0.3 | Z | 10.0 | 4.8 | 0.2 | 0.8 | 1.1 | 0.6 | 10.9 | 1.3 | 2.2 | 2.3 | 7.8 | 8.8 | 1.8 | 3.4 | 4.9 | 0.3 | 0.4 | 0.3 | 0.2 | 0.0 | 0.1 | 3.7 | 2.9 | 10.9 |
| 29-Aug | 1.4 | 11.1 | Z | 8.4 | 4.0 | 8.1 | 11.8 | 2.0 | 0.5 | 0.6 | 0.4 | 1.9 | 2.6 | 4.6 | 2.6 | 5.1 | 1.2 | 2.5 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 3.0 | 11.8 |
| 30-Aug | 0.1 | 0.0 | 0.2 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.6 | 0.5 | 0.3 | 0.5 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.6 |
| 31-Aug | 0.3 | 0.8 | 0.2 | 0.4 | Z | 0.4 | 0.5 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.8 |
| | 0.3 | 0.7 | 0.6 | 0.8 | 0.4 | 0.8 | 0.8 | 0.6 | 0.8 | 0.5 | 0.5 | 0.7 | 1.1 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | Diurnal Average | |
| | 1.6 | 11.1 | 10.0 | 8.4 | 4.0 | 8.1 | 11.8 | 4.0 | 10.9 | 2.4 | 2.7 | 3.1 | 7.8 | 8.8 | 3.5 | 5.1 | 4.9 | 4.9 | 4.8 | 1.4 | 0.7 | 1.1 | 1.4 | 3.7 | Diurnal Maximum | |

Z - zerospan C - Calibration

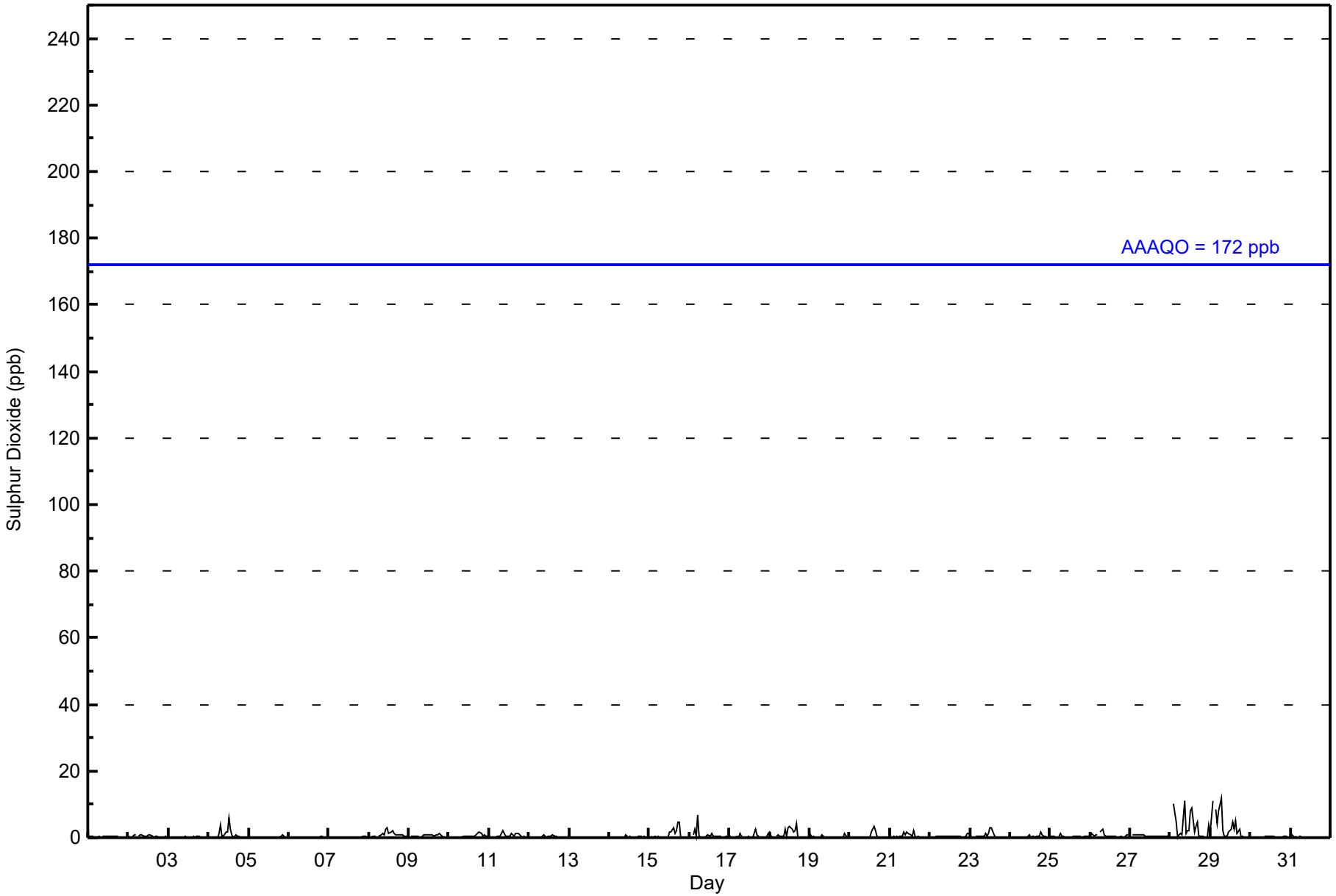
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Hangingstone Expansion - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 707 | 99.58 | 99.58 |
| 11 - 20 | 3 | 0.42 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 44 | 23 | 12 | 7 | 5 | 13 | 31 | 78 | 100 | 71 | 40 | 63 | 38 | 66 | 60 | 56 | 707 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 44 | 23 | 12 | 7 | 5 | 13 | 31 | 78 | 100 | 71 | 42 | 64 | 38 | 66 | 60 | 56 | 710 |

Total Number of Valid Hours: 710

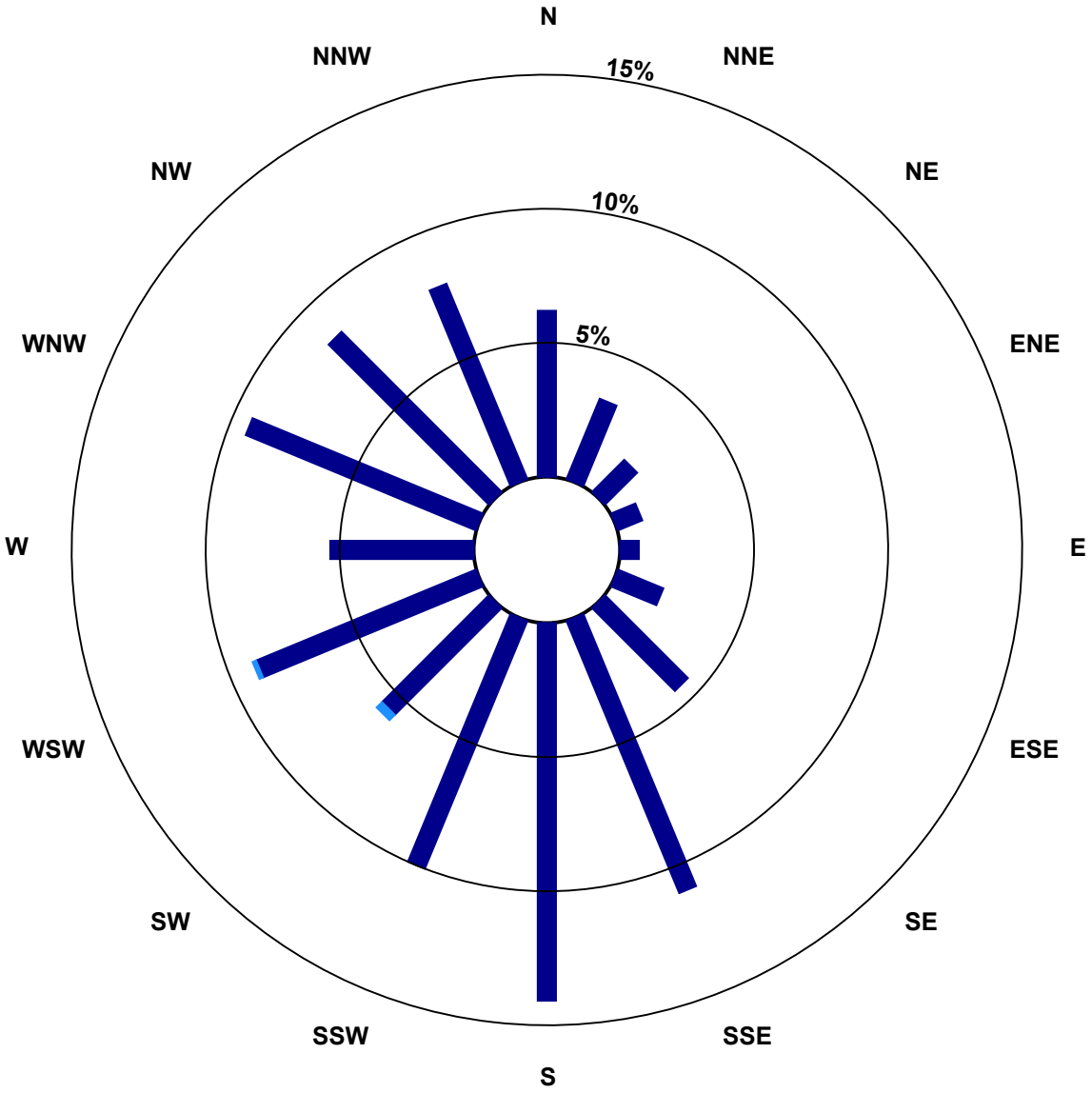
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Hangingstone Expansion




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

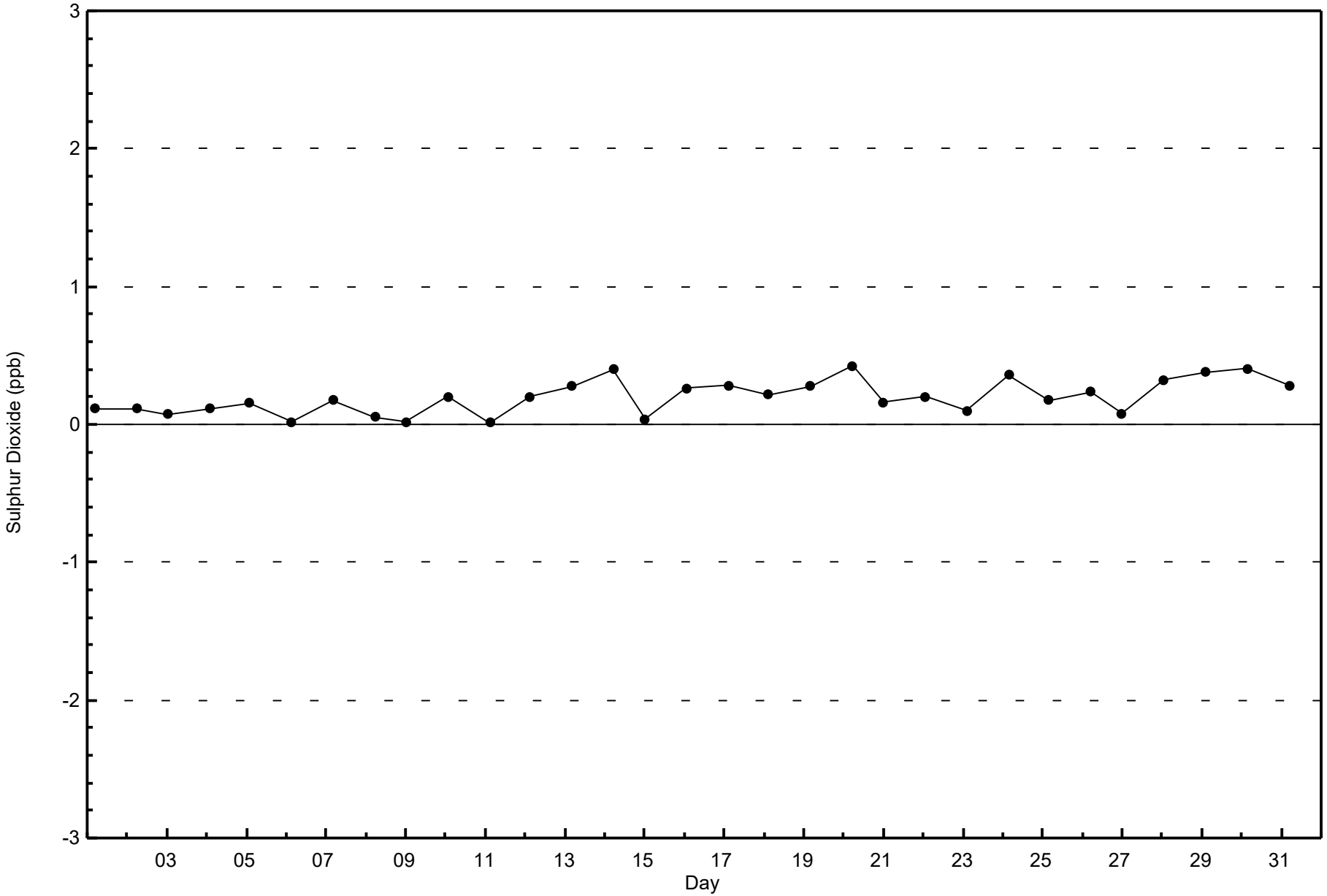
Total Number of Valid Hours: 710

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Hangingstone Expansion - August 2026**

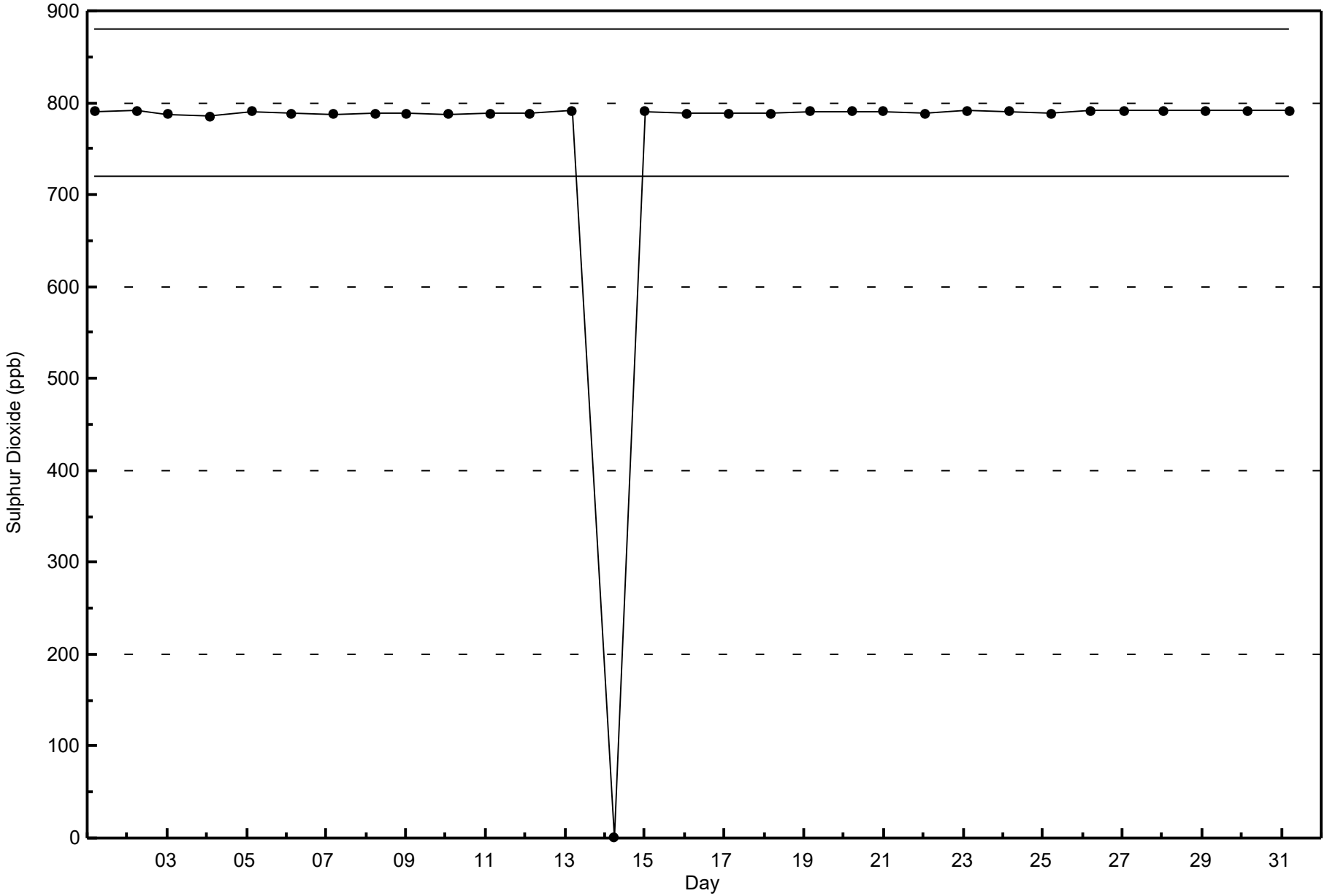


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Hangingstone Expansion - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Hangingstone Expansion - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.1 ppb on Aug 29 07:00 Maximum Daily Average: 0.3 ppb on Aug 29

Minimum Value: 0.0 ppb on Aug 13 14:00 Minimum Daily Average: 0.1 ppb on Aug 24
Maximum Diurnal Average: 0.4 ppb at hour 6 Minimum Diurnal Average: 0.1 ppb at hour 15
Monthly Average: 0.23 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.3 $P_{90}$ = 0.4 $P_{99}$ = 0.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.4 |
| 2-Aug | Z | 0.4 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.6 | 0.6 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.6 |
| 3-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 | 0.3 | 0.2 | 0.1 | 0.1 | 0.7 |
| 4-Aug | 0.1 | 0.2 | Z | 0.1 | 0.2 | 0.2 | 0.3 | 0.7 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 |
| 5-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.5 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.5 |
| 6-Aug | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.1 | 0.4 |
| 7-Aug | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | Z | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.6 | 0.5 | 0.2 | 0.6 |
| 8-Aug | Z | 0.5 | 0.4 | 0.7 | 0.8 | 0.8 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.8 |
| 9-Aug | 0.5 | Z | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.6 |
| 10-Aug | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.3 | 0.4 | 0.4 | 0.6 | 0.4 | 0.5 | 0.6 | 0.3 | 0.6 |
| 11-Aug | 0.4 | 0.4 | 0.3 | Z | 0.5 | 0.7 | 0.5 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.5 | 0.7 | 0.3 | 0.3 | 0.4 | 0.3 | 0.7 |
| 12-Aug | 0.3 | 0.4 | 0.5 | 0.6 | Z | 0.9 | 0.6 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.9 |
| 13-Aug | 0.4 | 0.5 | 0.5 | 0.7 | 0.9 | Z | 0.8 | 0.7 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.3 | 0.9 |
| 14-Aug | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.6 | 0.7 | C | C | C | C | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 1.0 |
| 15-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| 16-Aug | 0.2 | 0.2 | Z | 0.5 | 0.2 | 0.8 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.3 | 0.9 |
| 17-Aug | 0.4 | 0.2 | 0.1 | Z | 0.5 | 0.3 | 0.6 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 18-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.4 |
| 19-Aug | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | Z | 0.2 | 0.5 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.9 | 0.3 | 0.4 | 0.2 | 0.2 | 0.3 | 0.9 |
| 20-Aug | Z | 0.4 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.5 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.5 |
| 21-Aug | 0.2 | Z | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 22-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 23-Aug | 0.3 | 0.3 | 0.6 | Z | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 24-Aug | 0.1 | 0.0 | 0.1 | 0.0 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 0.4 |
| 25-Aug | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | Z | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 26-Aug | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 |
| 28-Aug | 0.1 | 0.2 | Z | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.6 | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.6 |
| 29-Aug | 0.3 | 1.0 | 0.5 | Z | 0.8 | 0.9 | 1.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.1 |
| 30-Aug | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.9 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.9 |
| 31-Aug | 0.4 | 0.7 | 0.3 | 0.4 | 0.2 | Z | 0.6 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 |
| | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.5 | 1.0 | 0.6 | 0.7 | 0.9 | 0.9 | 1.1 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.6 | 0.6 | 0.3 | 0.3 | 0.4 | 0.6 | 0.9 | 1.0 | 0.9 | 0.5 | 0.6 | 0.6 | Diurnal Maximum | |

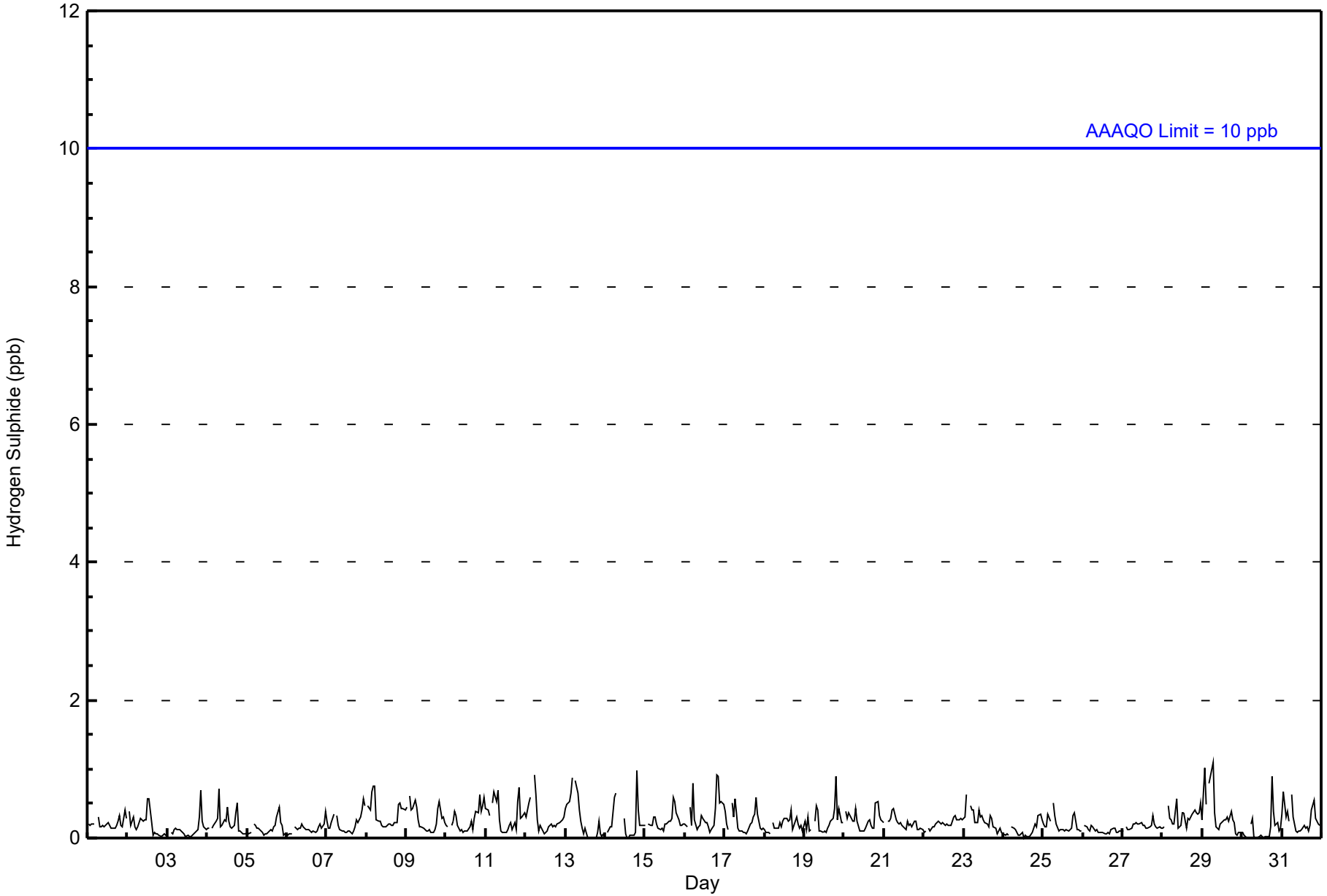
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Hangingstone Expansion - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 709 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 44 | 22 | 12 | 7 | 5 | 13 | 31 | 74 | 103 | 71 | 40 | 67 | 39 | 68 | 59 | 54 | 709 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 44 | 22 | 12 | 7 | 5 | 13 | 31 | 74 | 103 | 71 | 40 | 67 | 39 | 68 | 59 | 54 | 709 |

Total Number of Valid Hours: 709

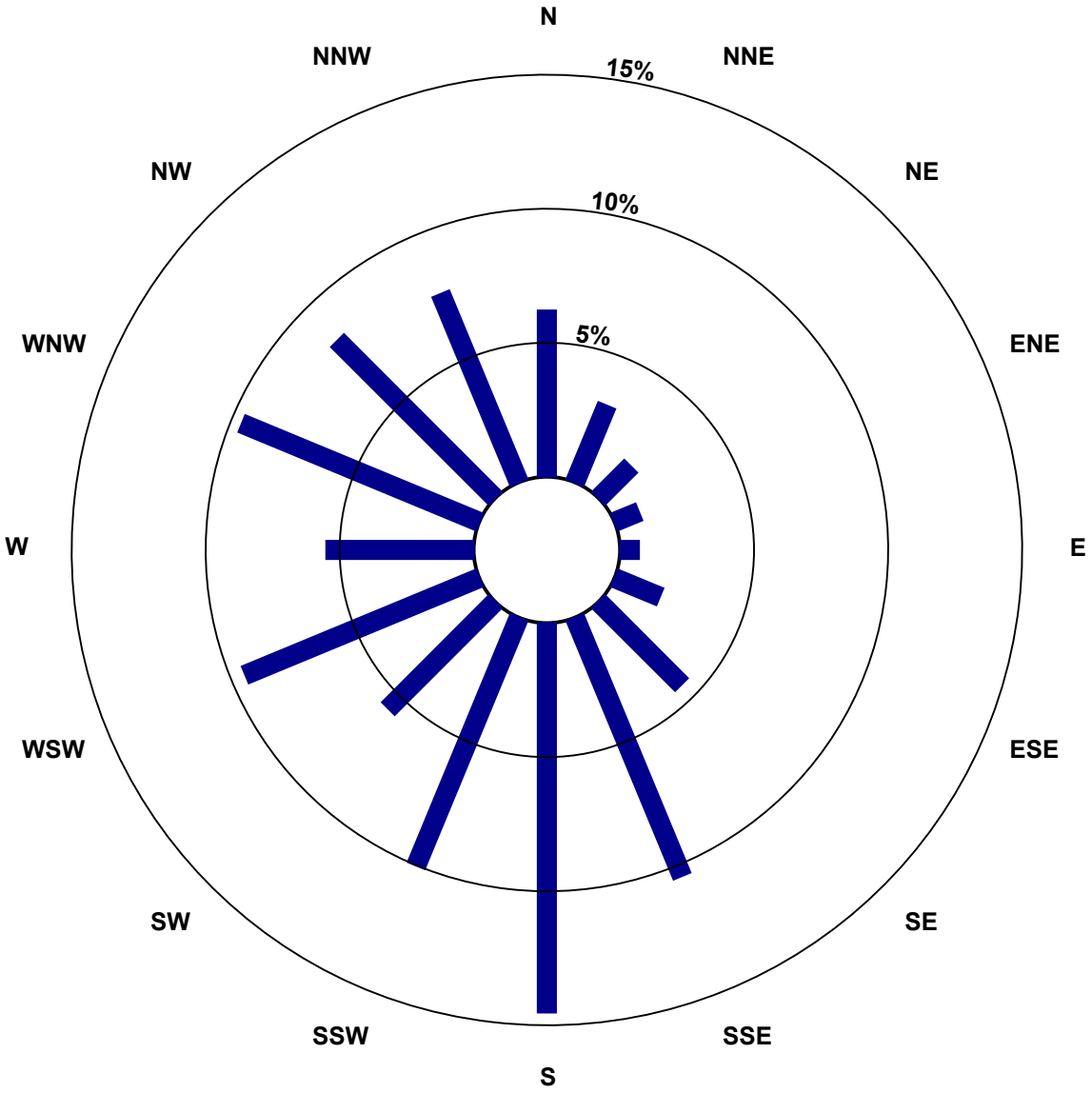
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Hangingstone Expansion




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

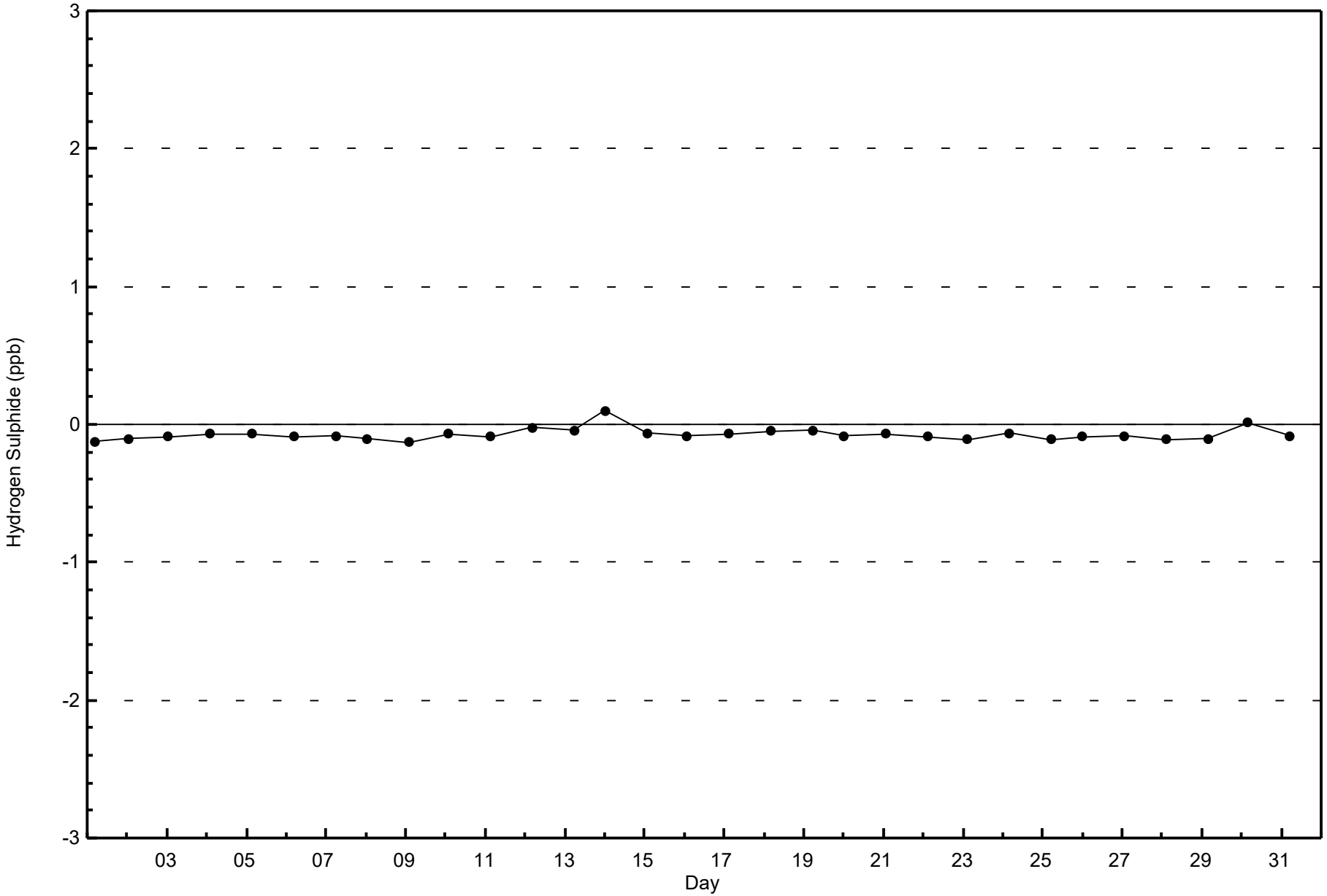
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Hangingstone Expansion - August 2026**

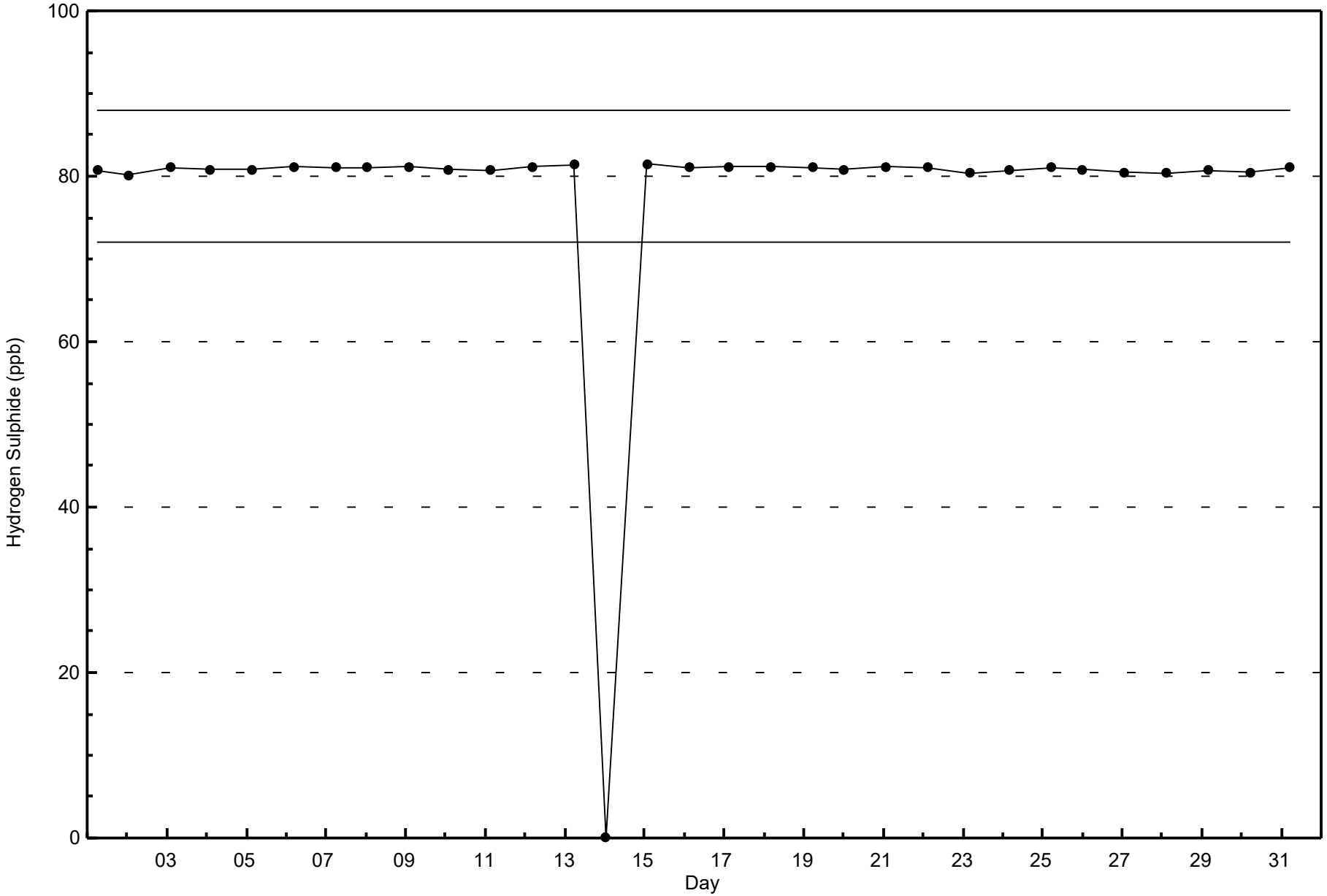


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Hangingstone Expansion - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Hangingstone Expansion - August 2026

Maximum Value: 12.5 ppb on Aug 12 10:00

Maximum Daily Average: 1.9 ppb on Aug 16

Minimum Value: 0.0 ppb on Aug 1 15:00

Minimum Daily Average: 0.1 ppb on Aug 1

Maximum Diurnal Average: 1.8 ppb at hour 6

Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.90 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.3 $Q_3$ = 1.0 $P_{90}$ = 2.5 $P_{99}$ = 8.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 2-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.8 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.8 |
| 3-Aug | 0.0 | 0.0 | 0.8 | 0.3 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.5 | 0.1 | 0.2 | 1.2 |
| 4-Aug | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | Z | 0.4 | 0.4 | 0.2 | 0.1 | 0.4 | 0.3 | 0.6 | 0.3 | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.6 | 0.2 | 0.3 | 0.2 | 0.6 |
| 5-Aug | Z | 0.3 | 0.3 | 0.1 | 0.1 | 1.1 | 0.7 | 0.8 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 0.7 | 0.5 | 1.4 | 1.0 | 0.5 | 0.3 | 2.6 | 0.7 | 0.2 | 0.1 | 0.6 | 2.6 |
| 6-Aug | 0.2 | Z | 0.6 | 0.2 | 0.1 | 0.8 | 2.7 | 3.7 | 2.5 | 7.7 | 3.6 | 0.6 | 0.5 | 1.0 | 0.4 | 0.4 | 1.6 | 0.5 | 2.0 | 3.1 | 1.5 | 0.0 | 0.0 | 0.0 | 1.5 | 7.7 |
| 7-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.2 | 0.0 | 0.2 | 0.2 | 0.6 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 |
| 8-Aug | 1.1 | 0.7 | 0.1 | Z | 0.0 | 0.1 | 0.7 | 2.2 | 3.1 | 2.9 | 2.2 | 2.4 | 1.4 | 1.6 | 1.0 | 1.4 | 3.1 | 0.1 | 0.2 | 0.2 | 0.4 | 1.6 | 0.3 | 0.2 | 1.2 | 3.1 |
| 9-Aug | 0.1 | 0.2 | 0.4 | 0.3 | Z | 1.6 | 0.9 | 1.1 | 0.3 | 0.3 | 2.8 | 0.8 | 0.4 | 1.2 | 0.5 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.5 | 2.8 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 2.0 | 2.4 | 0.7 | 2.1 | 0.5 | 0.1 | 1.3 | 1.3 | 1.5 | 2.2 | 0.7 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.4 | 0.7 | 2.4 |
| 11-Aug | Z | 0.2 | 0.3 | 0.6 | 3.1 | 7.0 | 4.2 | 3.9 | 1.7 | 0.9 | 1.2 | 1.0 | 0.8 | 2.1 | 0.7 | 0.4 | 0.5 | 0.1 | 0.4 | 0.5 | 0.1 | 0.1 | 0.1 | 0.2 | 1.3 | 7.0 |
| 12-Aug | 0.1 | Z | 0.1 | 4.7 | 1.2 | 0.6 | 0.4 | 0.5 | 0.4 | 12.5 | 1.2 | 1.6 | 1.8 | 1.7 | 2.2 | 1.7 | 1.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 12.5 |
| 13-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 2.6 | 4.1 | 4.8 | 3.5 | 3.3 | 3.5 | 0.6 | 3.5 | 1.0 | 0.1 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 3.7 | 1.2 | 1.5 | 3.3 | 1.7 | 4.8 |
| 14-Aug | 1.5 | 1.0 | 0.5 | Z | 1.1 | 2.2 | 10.1 | 10.3 | 6.0 | 2.6 | 0.9 | 1.2 | 1.3 | 0.3 | 0.2 | 0.0 | 0.4 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 1.8 | 10.3 |
| 15-Aug | 0.0 | 0.0 | 0.2 | 4.5 | Z | 1.8 | 5.0 | 7.0 | 1.2 | 0.7 | 1.4 | 0.1 | 0.1 | 0.4 | 0.4 | 0.3 | 0.9 | 0.4 | 1.2 | 3.3 | 0.3 | 0.5 | 4.1 | 2.8 | 1.6 | 7.0 |
| 16-Aug | 3.9 | 1.0 | 0.4 | 1.0 | 3.1 | Z | 0.1 | 0.0 | 0.2 | 0.1 | 1.1 | 1.2 | 2.2 | 1.2 | 1.0 | 1.0 | 2.1 | 2.7 | 1.3 | 0.0 | 2.7 | 9.5 | 6.4 | 2.6 | 1.9 | 9.5 |
| 17-Aug | Z | 8.1 | 2.2 | 4.9 | 5.3 | 4.3 | 1.8 | 2.2 | 0.2 | 1.4 | 0.3 | 0.1 | 0.0 | 1.2 | 4.5 | 0.4 | 0.6 | 1.7 | 0.8 | 0.1 | 0.0 | 0.2 | 0.8 | 0.0 | 1.8 | 8.1 |
| 18-Aug | 0.6 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.8 | 3.1 | 1.1 | 2.0 | 1.0 | 0.3 | 1.2 | 0.1 | 0.3 | 0.6 | 0.0 | 0.0 | 0.0 | 0.4 | 1.9 | 6.8 | 0.3 | 0.9 | 6.8 |
| 19-Aug | 1.4 | 1.6 | Z | 1.6 | 4.0 | 1.6 | 2.9 | 0.4 | 0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 0.4 | 0.4 | 11.6 | 2.2 | 0.2 | 0.5 | 0.2 | 2.5 | 2.1 | 1.8 | 0.2 | 1.6 | 11.6 |
| 20-Aug | 4.2 | 0.7 | 0.1 | Z | 10.1 | 4.9 | 1.5 | 0.2 | 0.2 | 0.2 | 0.8 | 1.1 | 0.5 | 1.1 | 1.2 | 1.5 | 0.8 | 0.3 | 0.5 | 0.3 | 0.4 | 0.8 | 0.3 | 0.5 | 1.4 | 10.1 |
| 21-Aug | 0.2 | 0.1 | 0.1 | 2.9 | Z | 5.0 | 2.9 | 1.7 | 1.3 | 0.7 | 0.5 | 0.3 | 0.1 | 0.1 | 0.5 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.8 | 5.0 |
| 22-Aug | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.8 | 0.5 | 0.0 | 0.0 | 0.2 | 0.8 |
| 23-Aug | Z | 1.9 | 2.6 | 1.5 | 0.1 | 0.3 | 0.3 | 0.1 | 0.5 | 0.6 | 0.6 | 0.6 | 1.7 | 1.0 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 | 0.3 | 0.3 | 0.0 | 0.6 | 2.6 |
| 24-Aug | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.4 | 0.0 | C | C | C | C | C | 0.2 | 1.1 | 0.1 | 0.3 | 0.4 | 0.8 | 0.8 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 | 1.1 |
| 25-Aug | 3.8 | 0.0 | Z | 8.2 | 6.8 | 8.2 | 3.8 | 1.1 | 0.1 | 0.3 | 0.1 | 0.0 | 0.2 | 0.0 | 1.0 | 0.4 | 0.4 | 0.2 | 0.9 | 0.4 | 0.0 | 0.1 | 0.1 | 0.0 | 1.6 | 8.2 |
| 26-Aug | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 0.4 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.6 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.6 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 1.5 | 0.7 | 0.4 | 0.2 | 0.3 | 0.5 | 0.4 | 1.4 | 0.1 | 0.3 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.5 |
| 28-Aug | 0.0 | 0.1 | 0.6 | 0.2 | 0.8 | Z | 0.5 | 1.1 | 1.5 | 0.1 | 0.3 | 0.5 | 1.0 | 1.1 | 0.9 | 0.6 | 0.4 | 0.0 | 0.0 | 1.1 | 1.4 | 0.0 | 0.0 | 0.9 | 0.6 | 1.5 |
| 29-Aug | Z | 2.5 | 0.2 | 2.3 | 0.9 | 2.5 | 5.0 | 0.6 | 0.2 | 0.5 | 0.4 | 4.7 | 1.2 | 0.9 | 1.0 | 1.2 | 0.7 | 0.6 | 0.4 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 1.1 | 5.0 |
| 30-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.4 | 1.1 | 1.1 | 0.1 | 1.0 | 1.9 | 1.9 | 0.3 | 0.9 | 0.7 | 0.8 | 0.4 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | 0.0 | 0.0 | 0.5 | 1.9 |
| 31-Aug | 0.1 | 0.1 | Z | 4.3 | 1.3 | 1.4 | 0.7 | 0.8 | 0.2 | 0.1 | 2.7 | 1.9 | 1.1 | 7.3 | 1.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 1.0 | 7.3 |
| | 0.7 | 0.7 | 0.4 | 1.5 | 1.5 | 1.8 | 1.8 | 1.7 | 1.0 | 1.4 | 1.0 | 0.8 | 0.7 | 1.0 | 0.7 | 0.9 | 0.7 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.4 | Diurnal Average | |
| | 4.2 | 8.1 | 2.6 | 8.2 | 10.1 | 8.2 | 10.1 | 10.3 | 6.0 | 12.5 | 3.6 | 4.7 | 3.5 | 7.3 | 4.5 | 11.6 | 3.1 | 2.7 | 2.0 | 3.3 | 3.7 | 9.5 | 6.8 | 3.3 | Diurnal Maximum | |

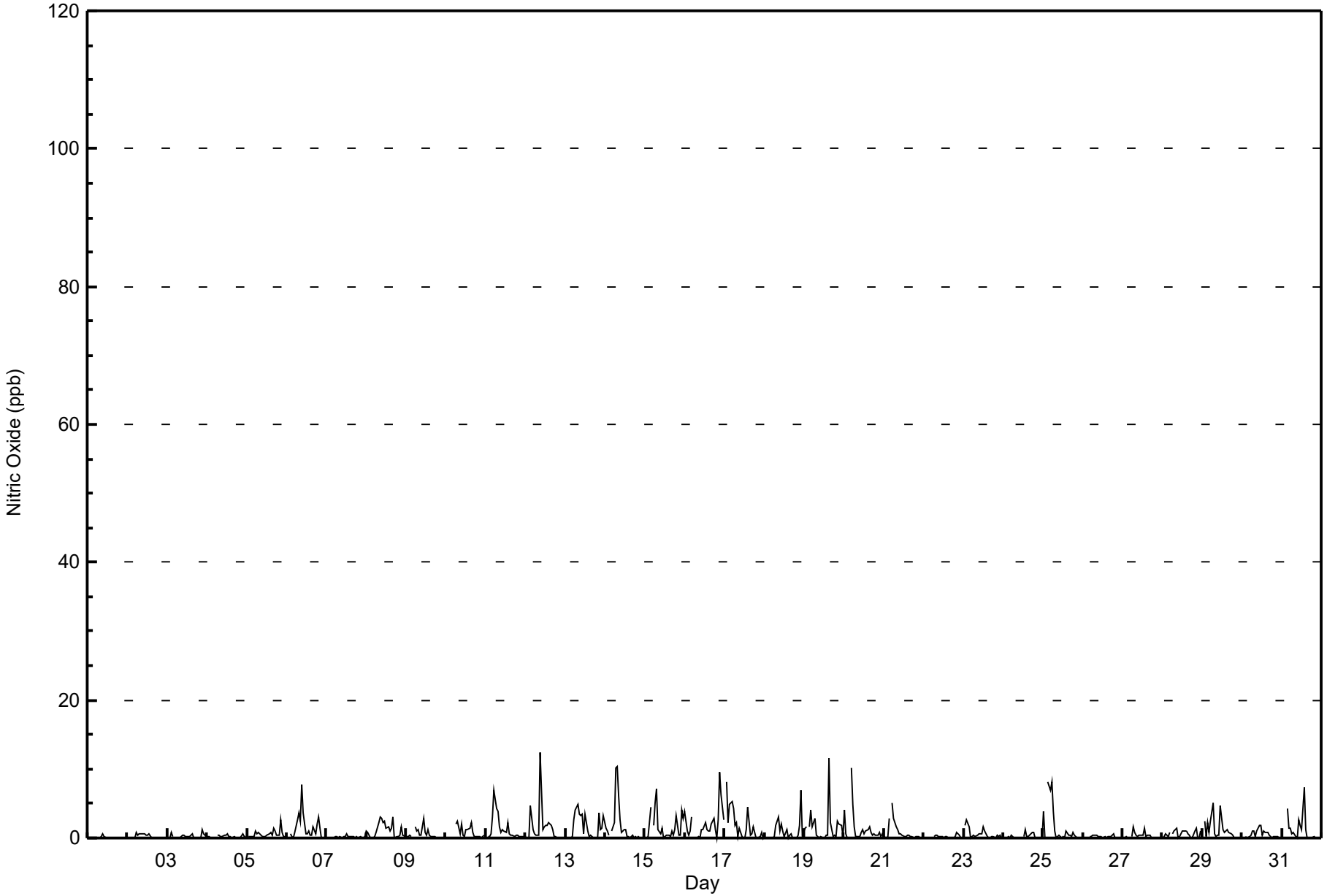
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Hangingstone Expansion - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 44 | 22 | 12 | 6 | 5 | 13 | 30 | 80 | 100 | 70 | 43 | 66 | 39 | 64 | 61 | 53 | 708 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 44 | 22 | 12 | 6 | 5 | 13 | 30 | 80 | 100 | 70 | 43 | 66 | 39 | 64 | 61 | 53 | 708 |

Total Number of Valid Hours: 708

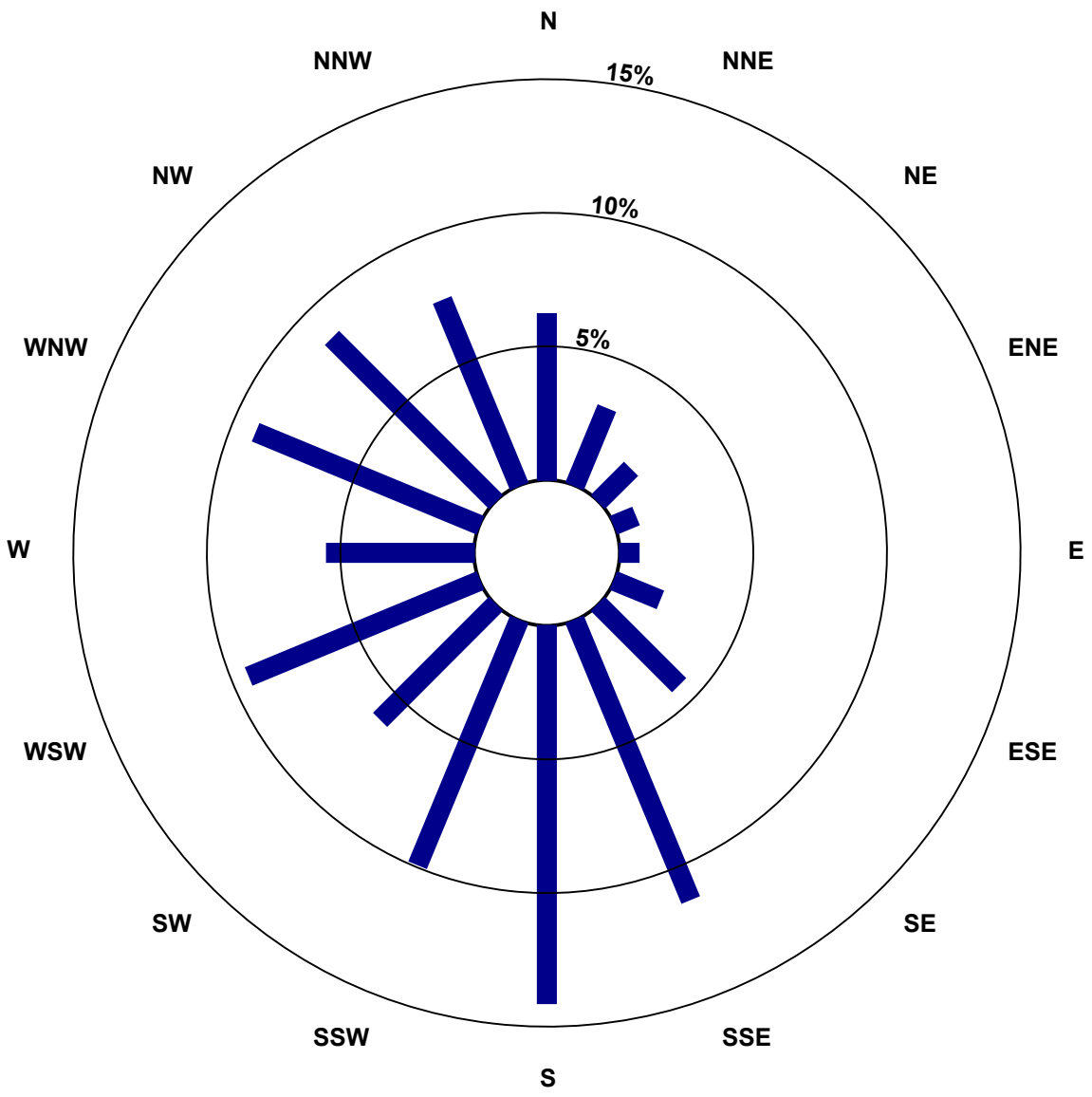
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

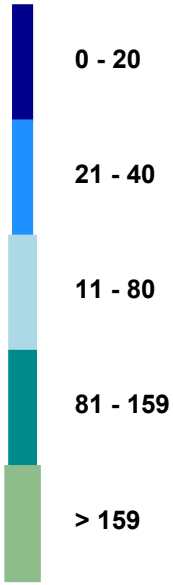
**Wind Rose Aug 2026**

**Nitric Oxide (NO) - ppb**

**Hangingstone Expansion**




**Classes (ppb)**



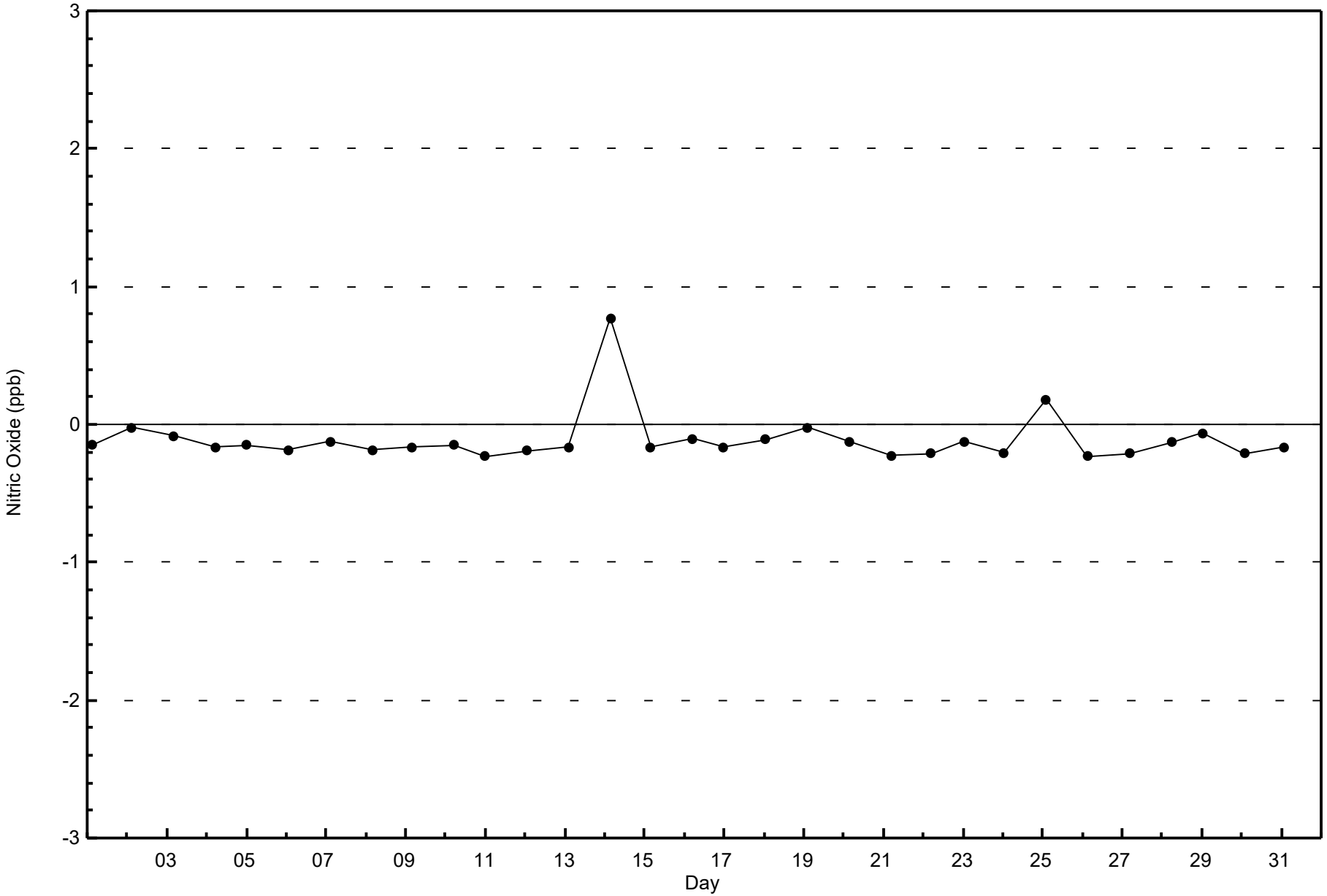

**Total Number of Valid Hours: 708**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Hangingstone Expansion - August 2026**

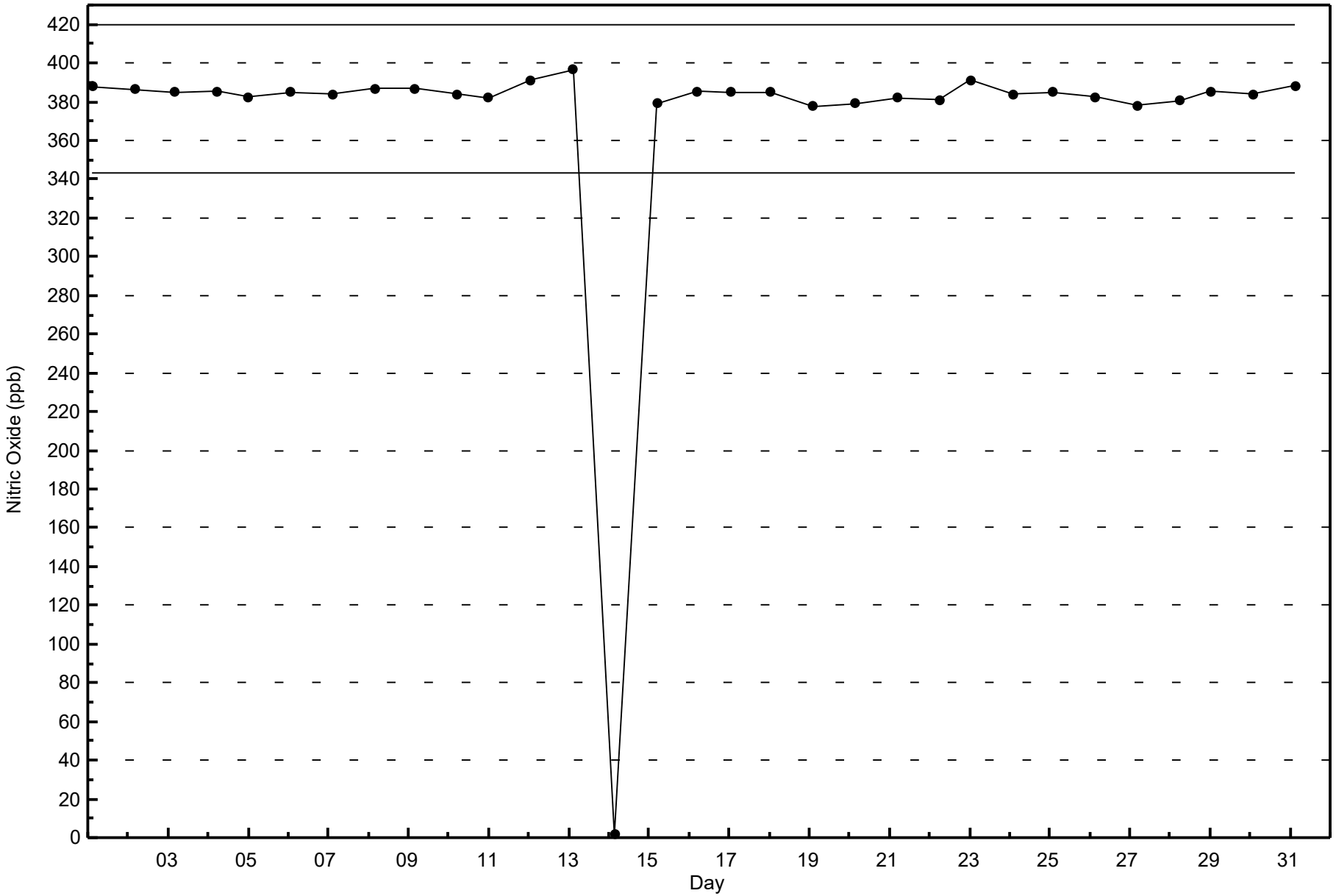


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Hangingstone Expansion - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Hangingstone Expansion - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 19.2 ppb on Aug 25 04:00

Maximum Daily Average: 5.4 ppb on Aug 16

Minimum Value: 0.0 ppb on Aug 2 16:00

Minimum Daily Average: 0.7 ppb on Aug 26

Maximum Diurnal Average: 3.9 ppb at hour 4

Minimum Diurnal Average: 1.0 ppb at hour 18

Monthly Average: 2.19 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.3$ $Q_1 = 0.6$ Median = 1.4 $Q_3 = 2.7$ $P_{90} = 4.9$ $P_{99} = 12.8$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.9 | 0.8 | Z | 1.7 | 1.2 | 1.4 | 1.6 | 0.7 | 1.0 | 1.4 | 0.8 | 0.8 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 1.0 | 0.5 | 1.1 | 1.0 | 1.5 | 1.1 | 1.0 | 1.7 |
| 2-Aug | 1.3 | 1.9 | 1.3 | Z | 2.9 | 2.1 | 3.1 | 4.5 | 4.3 | 3.1 | 2.4 | 2.1 | 2.4 | 2.4 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 1.5 | 4.5 |
| 3-Aug | 0.0 | 0.0 | 3.9 | 2.7 | Z | 0.4 | 0.2 | 0.3 | 0.3 | 0.5 | 0.8 | 0.4 | 0.3 | 0.4 | 0.7 | 1.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 3.3 | 3.8 | 2.6 | 1.0 | 3.9 |
| 4-Aug | 2.3 | 1.9 | 0.6 | 0.4 | 0.9 | Z | 2.6 | 1.7 | 0.6 | 0.4 | 0.7 | 0.6 | 1.2 | 0.7 | 0.3 | 0.2 | 0.4 | 0.6 | 0.4 | 0.7 | 0.1 | 3.4 | 1.4 | 2.0 | 1.0 | 3.4 |
| 5-Aug | Z | 2.2 | 1.8 | 0.6 | 0.6 | 3.9 | 2.1 | 1.9 | 0.7 | 0.5 | 0.2 | 0.6 | 0.5 | 1.0 | 1.6 | 0.8 | 1.7 | 0.9 | 1.0 | 3.1 | 5.5 | 3.2 | 0.6 | 0.3 | 1.5 | 5.5 |
| 6-Aug | 1.5 | Z | 3.2 | 1.2 | 0.4 | 2.1 | 2.1 | 2.1 | 1.9 | 3.9 | 3.1 | 0.6 | 0.5 | 0.6 | 0.3 | 0.5 | 1.3 | 0.6 | 2.3 | 3.7 | 2.0 | 0.7 | 0.1 | 0.2 | 1.5 | 3.9 |
| 7-Aug | 0.0 | 0.1 | Z | 0.4 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.8 | 0.4 | 0.4 | 0.3 | 0.3 | 0.0 | 0.7 | 1.1 | 2.7 | 2.5 | 2.7 | 2.7 | 0.7 | 2.7 |
| 8-Aug | 2.7 | 2.9 | 2.2 | Z | 1.4 | 1.1 | 0.9 | 1.6 | 3.1 | 3.2 | 3.1 | 3.7 | 2.4 | 2.7 | 2.0 | 3.0 | 3.3 | 0.6 | 1.6 | 2.5 | 4.5 | 4.1 | 2.9 | 2.2 | 2.5 | 4.5 |
| 9-Aug | 3.2 | 2.3 | 2.3 | 2.0 | Z | 3.4 | 3.1 | 3.1 | 1.1 | 0.9 | 3.3 | 1.5 | 1.1 | 2.4 | 1.5 | 0.6 | 0.9 | 0.8 | 1.1 | 1.7 | 2.3 | 2.7 | 3.6 | 2.2 | 2.0 | 3.6 |
| 10-Aug | 1.9 | 1.4 | 0.6 | 0.8 | 1.9 | Z | 4.5 | 4.1 | 1.6 | 2.7 | 1.3 | 0.9 | 2.6 | 3.6 | 3.5 | 5.4 | 2.3 | 1.7 | 3.8 | 3.5 | 2.8 | 1.7 | 1.3 | 2.9 | 2.5 | 5.4 |
| 11-Aug | Z | 1.8 | 3.4 | 2.4 | 5.4 | 6.2 | 6.5 | 6.3 | 3.2 | 1.2 | 1.4 | 1.1 | 1.0 | 2.7 | 1.8 | 0.8 | 1.9 | 1.0 | 1.3 | 2.3 | 2.5 | 1.9 | 4.4 | 4.9 | 2.8 | 6.5 |
| 12-Aug | 2.2 | Z | 1.4 | 6.8 | 4.2 | 2.4 | 2.0 | 1.3 | 0.7 | 6.0 | 1.4 | 1.6 | 2.3 | 3.4 | 3.6 | 3.3 | 2.2 | 1.5 | 1.3 | 1.2 | 1.0 | 1.4 | 1.9 | 1.7 | 2.4 | 6.8 |
| 13-Aug | 1.1 | 2.0 | Z | 4.9 | 4.9 | 6.6 | 6.2 | 5.2 | 4.0 | 3.4 | 3.7 | 0.9 | 3.3 | 1.7 | 0.2 | 0.5 | 0.3 | 0.1 | 0.3 | 1.0 | 3.5 | 4.0 | 2.6 | 2.7 | 2.7 | 6.6 |
| 14-Aug | 1.9 | 1.9 | 1.6 | Z | 2.4 | 3.1 | 4.4 | 8.8 | 5.5 | 3.2 | 1.7 | 3.2 | 3.7 | 0.7 | 1.0 | 0.4 | 0.8 | 0.6 | 1.5 | 1.8 | 4.3 | 2.2 | 1.7 | 0.7 | 2.5 | 8.8 |
| 15-Aug | 0.7 | 0.7 | 1.2 | 8.7 | Z | 3.3 | 6.8 | 8.1 | 0.9 | 0.4 | 1.2 | 0.2 | 0.6 | 0.8 | 0.8 | 0.3 | 2.0 | 1.3 | 3.9 | 9.1 | 2.0 | 2.1 | 10.3 | 12.4 | 3.4 | 12.4 |
| 16-Aug | 12.8 | 4.8 | 3.5 | 4.8 | 9.0 | Z | 0.4 | 0.2 | 0.2 | 0.8 | 4.7 | 5.4 | 5.2 | 2.7 | 2.5 | 2.5 | 3.4 | 3.9 | 2.4 | 0.3 | 10.3 | 18.2 | 16.3 | 10.8 | 5.4 | 18.2 |
| 17-Aug | Z | 14.7 | 6.3 | 11.6 | 10.4 | 7.7 | 4.1 | 1.6 | 0.2 | 1.3 | 0.1 | 0.3 | 0.2 | 2.4 | 5.3 | 0.9 | 2.0 | 4.2 | 4.1 | 1.8 | 2.9 | 1.6 | 1.7 | 1.7 | 3.8 | 14.7 |
| 18-Aug | 2.1 | Z | 0.5 | 0.5 | 0.7 | 1.2 | 1.1 | 2.5 | 4.4 | 1.7 | 0.8 | 0.8 | 0.9 | 1.3 | 0.6 | 1.2 | 2.3 | 0.1 | 0.0 | 0.0 | 6.2 | 7.4 | 18.0 | 3.1 | 2.5 | 18.0 |
| 19-Aug | 7.6 | 8.0 | Z | 7.6 | 10.8 | 5.8 | 6.5 | 1.6 | 0.5 | 0.3 | 0.2 | 0.1 | 0.2 | 0.5 | 0.9 | 6.3 | 2.6 | 1.9 | 2.6 | 2.5 | 7.9 | 9.5 | 3.7 | 2.6 | 3.9 | 10.8 |
| 20-Aug | 6.9 | 2.6 | 1.7 | Z | 10.6 | 11.0 | 5.1 | 0.7 | 0.5 | 0.1 | 0.6 | 1.2 | 0.9 | 2.6 | 3.7 | 4.8 | 3.0 | 2.5 | 5.2 | 4.8 | 5.9 | 7.9 | 4.5 | 3.1 | 3.9 | 11.0 |
| 21-Aug | 2.7 | 1.5 | 2.2 | 4.0 | Z | 7.0 | 5.6 | 3.4 | 3.3 | 1.8 | 1.3 | 0.7 | 0.4 | 0.5 | 1.1 | 1.2 | 0.8 | 0.3 | 0.5 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 1.7 | 7.0 |
| 22-Aug | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | Z | 1.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.9 | 0.4 | 0.5 | 1.0 | 0.5 | 0.3 | 0.3 | 0.7 | 4.3 | 7.3 | 4.4 | 1.4 | 1.1 | 1.3 | 7.3 |
| 23-Aug | Z | 6.0 | 8.9 | 5.0 | 1.7 | 2.3 | 1.9 | 1.0 | 1.5 | 2.1 | 2.4 | 2.5 | 3.9 | 3.4 | 1.0 | 0.5 | 0.3 | 0.4 | 1.2 | 0.2 | 1.2 | 0.7 | 1.7 | 0.4 | 2.2 | 8.9 |
| 24-Aug | 0.0 | Z | 1.0 | 1.1 | 0.4 | 1.5 | 0.5 | C | C | C | C | C | 0.6 | 1.3 | 0.7 | 0.7 | 1.0 | 2.0 | 1.5 | 0.4 | 0.4 | 3.0 | 5.3 | 3.9 | 1.4 | 5.3 |
| 25-Aug | 4.9 | 1.1 | Z | 19.2 | 15.1 | 15.2 | 9.0 | 2.7 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 1.4 | 1.1 | 1.0 | 0.9 | 2.7 | 4.5 | 3.1 | 2.2 | 0.8 | 0.4 | 3.8 | 19.2 |
| 26-Aug | 0.4 | 1.1 | 0.5 | Z | 1.6 | 1.6 | 2.0 | 1.7 | 0.8 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.2 | 1.6 | 1.0 | 0.6 | 0.4 | 0.6 | 0.8 | 0.7 | 2.0 |
| 27-Aug | 0.8 | 0.9 | 0.9 | 0.8 | Z | 1.2 | 2.7 | 1.8 | 1.0 | 0.7 | 1.0 | 1.2 | 1.1 | 1.9 | 0.9 | 1.3 | 1.2 | 0.5 | 1.1 | 0.6 | 1.2 | 0.4 | 0.4 | 0.4 | 1.0 | 2.7 |
| 28-Aug | 1.1 | 2.1 | 3.5 | 3.9 | 6.9 | Z | 3.7 | 5.1 | 3.7 | 0.6 | 0.7 | 0.8 | 2.2 | 2.5 | 1.1 | 1.3 | 1.6 | 0.8 | 0.8 | 5.7 | 5.1 | 0.5 | 0.5 | 2.1 | 2.4 | 6.9 |
| 29-Aug | Z | 3.6 | 1.0 | 2.4 | 1.5 | 2.4 | 3.6 | 0.8 | 0.3 | 0.5 | 0.5 | 2.3 | 1.2 | 1.3 | 1.5 | 2.0 | 1.9 | 2.0 | 2.4 | 0.9 | 0.4 | 0.4 | 0.3 | 0.4 | 1.5 | 3.6 |
| 30-Aug | 0.3 | Z | 0.7 | 0.5 | 0.5 | 2.4 | 2.9 | 1.7 | 0.4 | 2.0 | 2.2 | 2.2 | 0.9 | 1.6 | 1.4 | 1.9 | 1.0 | 1.6 | 1.4 | 3.2 | 2.2 | 2.7 | 0.2 | 0.6 | 1.5 | 3.2 |
| 31-Aug | 1.1 | 0.7 | Z | 6.6 | 2.5 | 3.2 | 1.8 | 1.3 | 0.2 | 0.1 | 1.4 | 1.6 | 0.7 | 4.3 | 0.7 | 0.1 | 0.1 | 0.0 | 0.0 | 2.5 | 3.0 | 2.3 | 1.2 | 1.1 | 1.6 | 6.6 |
| | 2.3 | 2.6 | 2.2 | 3.9 | 3.8 | 3.8 | 3.2 | 2.6 | 1.6 | 1.5 | 1.4 | 1.3 | 1.4 | 1.7 | 1.4 | 1.4 | 1.3 | 1.0 | 1.6 | 2.1 | 3.0 | 3.1 | 3.1 | 2.3 | Diurnal Average | |
| | 12.8 | 14.7 | 8.9 | 19.2 | 15.1 | 15.2 | 9.0 | 8.8 | 5.5 | 6.0 | 4.7 | 5.4 | 5.2 | 4.3 | 5.3 | 6.3 | 3.4 | 4.2 | 5.2 | 9.1 | 10.3 | 18.2 | 18.0 | 12.4 | Diurnal Maximum | |

Z - zerospan C - Calibration

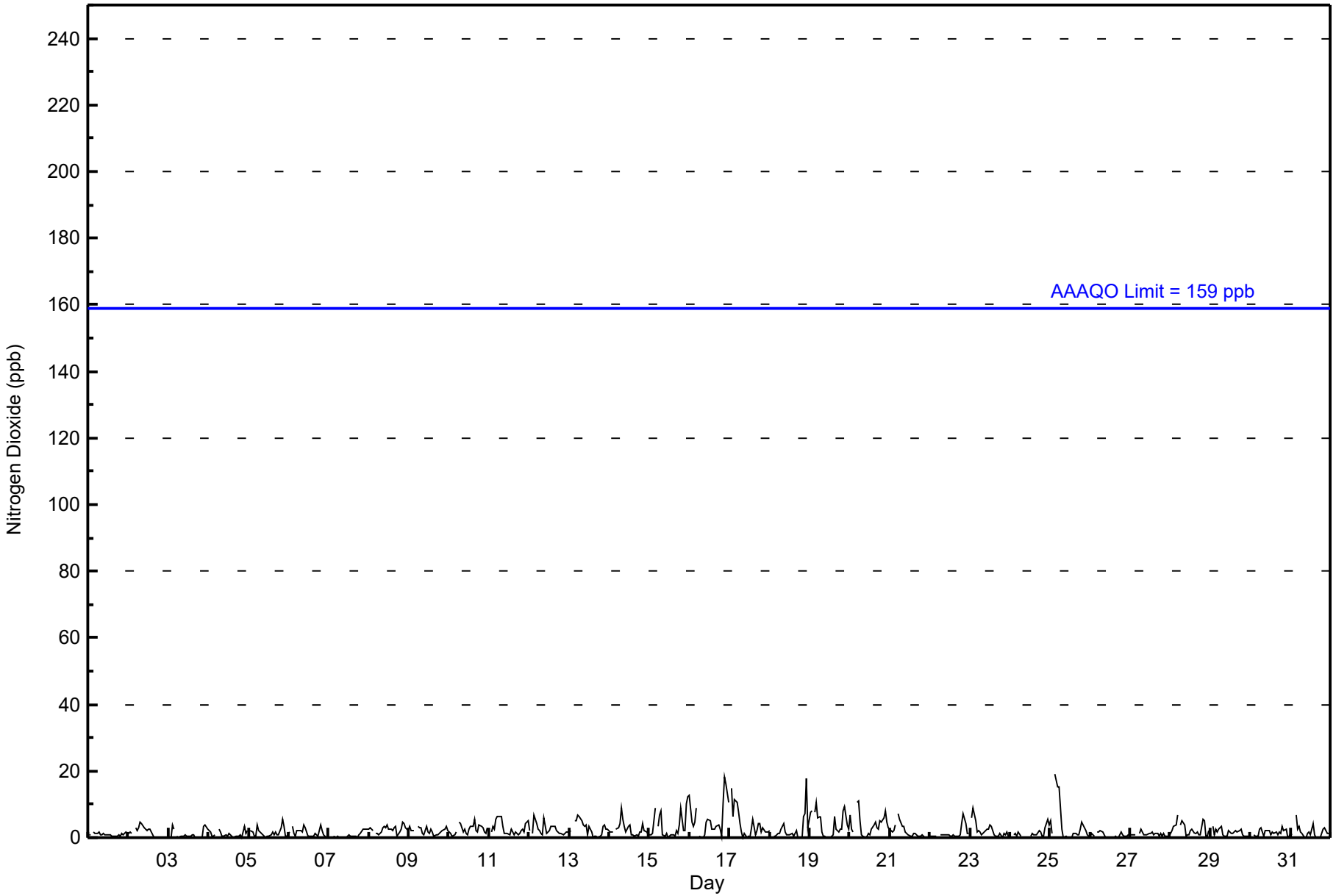
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Hangingstone Expansion - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 708 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 44 | 22 | 12 | 6 | 5 | 13 | 30 | 80 | 100 | 70 | 43 | 66 | 39 | 64 | 61 | 53 | 708 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 44 | 22 | 12 | 6 | 5 | 13 | 30 | 80 | 100 | 70 | 43 | 66 | 39 | 64 | 61 | 53 | 708 |

Total Number of Valid Hours: 708

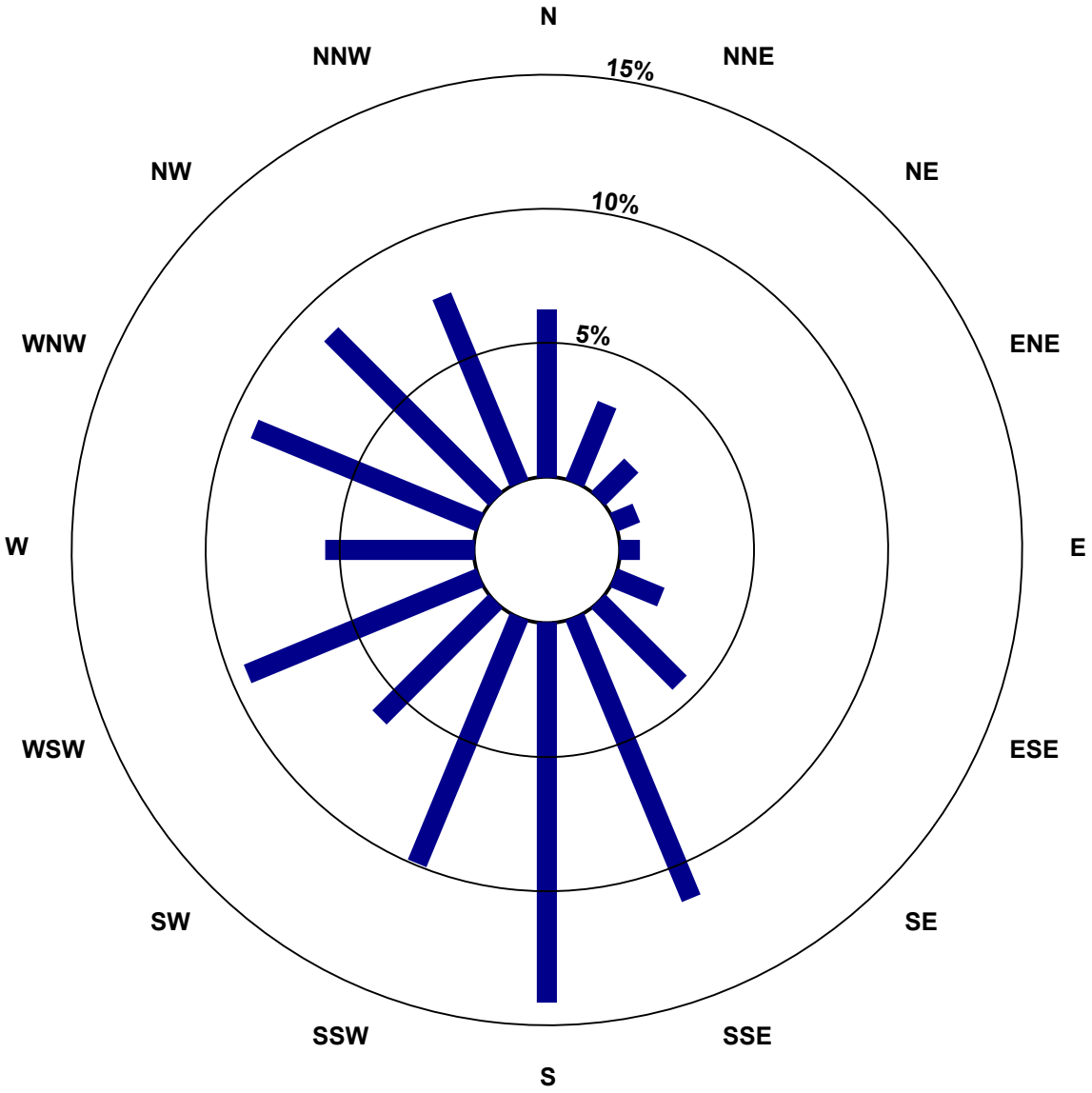
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Hangingstone Expansion




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

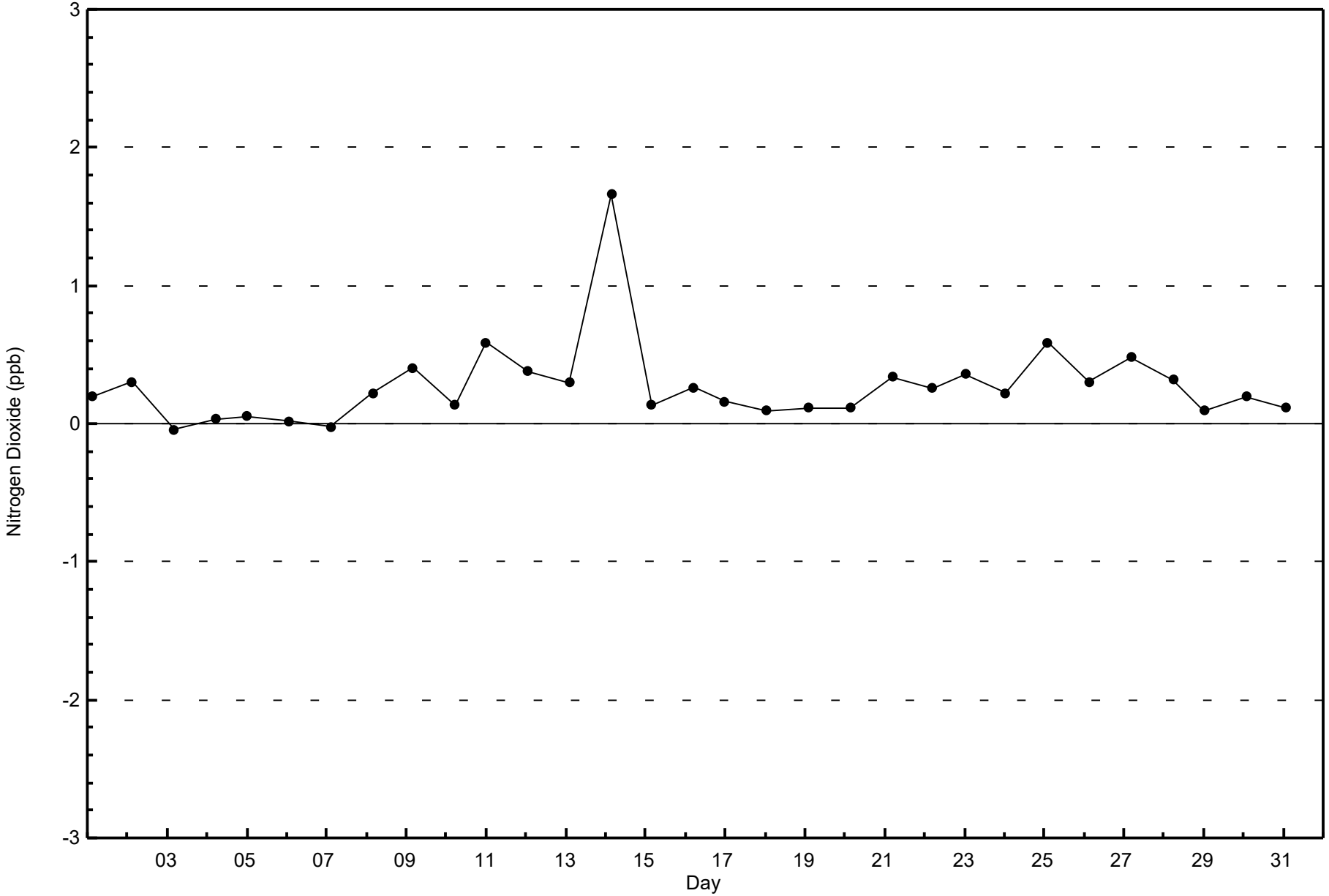
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Hangingstone Expansion - August 2026**

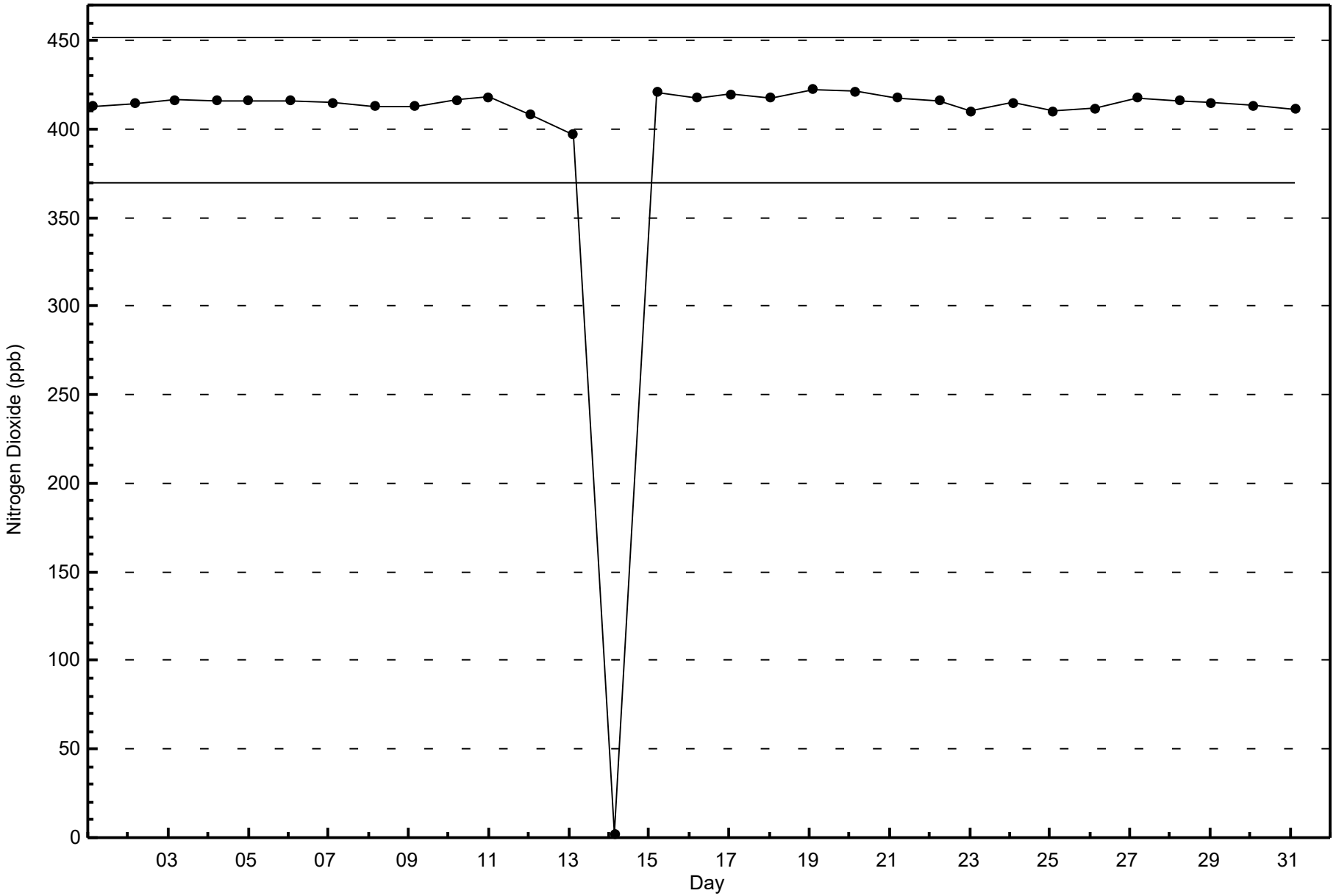


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Hangingstone Expansion - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitrogen Oxides ($NO_X$) - ppb

## Hangingstone Expansion - August 2026

Maximum Value: 27.7 ppb on Aug 16 22:00

Maximum Daily Average: 7.4 ppb on Aug 16

Minimum Value: 0.0 ppb on Aug 2 16:00

Minimum Daily Average: 0.9 ppb on Aug 7

Maximum Diurnal Average: 5.7 ppb at hour 6

Minimum Diurnal Average: 1.4 ppb at hour 18

Monthly Average: 3.09 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.4 $Q_1$ = 0.8 Median = 1.8 $Q_3$ = 3.8 $P_{90}$ = 6.8 $P_{99}$ = 20.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.0 | 0.8 | Z | 1.7 | 1.2 | 1.5 | 1.7 | 0.8 | 1.2 | 2.0 | 0.9 | 0.9 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 1.0 | 0.5 | 1.1 | 1.0 | 1.5 | 1.1 | 1.0 | 2.0 |
| 2-Aug | 1.3 | 1.9 | 1.3 | Z | 2.9 | 2.9 | 3.5 | 5.1 | 4.9 | 3.7 | 2.9 | 2.6 | 2.9 | 3.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 1.8 | 5.1 |
| 3-Aug | 0.0 | 0.0 | 4.7 | 3.0 | Z | 0.5 | 0.2 | 0.3 | 0.4 | 0.8 | 1.2 | 0.5 | 0.4 | 0.5 | 1.0 | 1.7 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 4.5 | 4.3 | 2.7 | 1.2 | 4.7 |
| 4-Aug | 2.5 | 2.1 | 0.6 | 0.4 | 0.9 | Z | 3.0 | 2.1 | 0.8 | 0.5 | 1.1 | 0.9 | 1.8 | 1.0 | 0.5 | 0.2 | 0.6 | 0.6 | 0.4 | 0.8 | 0.1 | 4.0 | 1.6 | 2.3 | 1.3 | 4.0 |
| 5-Aug | Z | 2.5 | 2.1 | 0.7 | 0.7 | 5.0 | 2.8 | 2.7 | 1.0 | 0.7 | 0.4 | 0.8 | 0.8 | 1.6 | 2.3 | 1.3 | 3.1 | 1.9 | 1.5 | 3.4 | 8.1 | 3.9 | 0.8 | 0.4 | 2.1 | 8.1 |
| 6-Aug | 1.7 | Z | 3.8 | 1.4 | 0.5 | 2.9 | 4.8 | 5.8 | 4.4 | 11.6 | 6.7 | 1.2 | 1.0 | 1.6 | 0.7 | 0.9 | 2.9 | 1.1 | 4.3 | 6.8 | 3.5 | 0.7 | 0.1 | 0.2 | 3.0 | 11.6 |
| 7-Aug | 0.0 | 0.1 | Z | 0.4 | 0.2 | 0.7 | 0.3 | 0.1 | 0.3 | 0.1 | 0.4 | 0.6 | 1.4 | 0.6 | 0.5 | 0.5 | 0.6 | 0.1 | 0.9 | 1.2 | 2.8 | 2.6 | 2.8 | 2.8 | 0.9 | 2.8 |
| 8-Aug | 3.8 | 3.6 | 2.3 | Z | 1.4 | 1.2 | 1.6 | 3.8 | 6.2 | 6.1 | 5.3 | 6.1 | 3.8 | 4.3 | 3.0 | 4.4 | 6.4 | 0.7 | 1.8 | 2.7 | 4.9 | 5.7 | 3.2 | 2.4 | 3.7 | 6.4 |
| 9-Aug | 3.3 | 2.5 | 2.7 | 2.3 | Z | 5.0 | 4.0 | 4.2 | 1.4 | 1.2 | 6.1 | 2.3 | 1.5 | 3.6 | 2.0 | 0.9 | 1.2 | 0.9 | 1.2 | 1.7 | 2.4 | 2.7 | 3.7 | 2.3 | 2.6 | 6.1 |
| 10-Aug | 1.9 | 1.4 | 0.6 | 0.8 | 1.9 | Z | 6.5 | 6.5 | 2.3 | 4.8 | 1.8 | 1.0 | 3.9 | 4.9 | 5.0 | 7.6 | 3.0 | 1.8 | 4.0 | 3.6 | 2.9 | 1.7 | 1.4 | 3.3 | 3.2 | 7.6 |
| 11-Aug | Z | 2.0 | 3.7 | 3.0 | 8.5 | 13.2 | 10.7 | 10.2 | 4.9 | 2.1 | 2.6 | 2.1 | 1.8 | 4.8 | 2.5 | 1.2 | 2.4 | 1.1 | 1.7 | 2.8 | 2.6 | 2.0 | 4.5 | 5.1 | 4.1 | 13.2 |
| 12-Aug | 2.3 | Z | 1.5 | 11.5 | 5.4 | 3.0 | 2.4 | 1.8 | 1.1 | 18.5 | 2.6 | 3.2 | 4.1 | 5.1 | 5.8 | 5.0 | 3.4 | 1.8 | 1.4 | 1.2 | 1.0 | 1.4 | 1.9 | 1.7 | 3.8 | 18.5 |
| 13-Aug | 1.2 | 2.1 | Z | 5.0 | 5.0 | 9.2 | 10.3 | 10.0 | 7.5 | 6.7 | 7.2 | 1.5 | 6.8 | 2.7 | 0.3 | 1.0 | 0.5 | 0.2 | 0.4 | 1.1 | 7.2 | 5.2 | 4.1 | 6.0 | 4.4 | 10.3 |
| 14-Aug | 3.4 | 2.9 | 2.1 | Z | 3.5 | 5.3 | 14.5 | 19.1 | 11.5 | 5.8 | 2.6 | 4.4 | 5.0 | 1.0 | 1.2 | 0.4 | 1.2 | 0.6 | 1.6 | 1.9 | 4.4 | 2.2 | 1.8 | 0.8 | 4.2 | 19.1 |
| 15-Aug | 0.7 | 0.7 | 1.4 | 13.2 | Z | 5.1 | 11.8 | 15.1 | 2.1 | 1.1 | 2.6 | 0.3 | 0.7 | 1.2 | 1.2 | 0.6 | 2.9 | 1.7 | 5.1 | 12.4 | 2.3 | 2.6 | 14.4 | 15.2 | 5.0 | 15.2 |
| 16-Aug | 16.7 | 5.8 | 3.9 | 5.8 | 12.1 | Z | 0.5 | 0.2 | 0.4 | 0.9 | 5.8 | 6.6 | 7.4 | 3.9 | 3.5 | 3.5 | 5.5 | 6.6 | 3.7 | 0.3 | 13.0 | 27.7 | 22.7 | 13.4 | 7.4 | 27.7 |
| 17-Aug | Z | 22.8 | 8.5 | 16.5 | 15.7 | 12.0 | 5.9 | 3.8 | 0.4 | 2.7 | 0.4 | 0.4 | 0.2 | 3.6 | 9.8 | 1.3 | 2.6 | 5.9 | 4.9 | 1.9 | 2.9 | 1.8 | 2.5 | 1.7 | 5.6 | 22.8 |
| 18-Aug | 2.7 | Z | 0.5 | 0.5 | 0.7 | 1.2 | 1.2 | 4.3 | 7.5 | 2.8 | 2.8 | 1.8 | 1.2 | 2.5 | 0.7 | 1.5 | 2.9 | 0.1 | 0.0 | 0.0 | 6.6 | 9.3 | 24.8 | 3.4 | 3.4 | 24.8 |
| 19-Aug | 9.0 | 9.6 | Z | 9.2 | 14.8 | 7.4 | 9.4 | 2.0 | 0.7 | 0.3 | 0.4 | 0.1 | 0.3 | 0.9 | 1.3 | 17.9 | 4.8 | 2.1 | 3.1 | 2.7 | 10.4 | 11.6 | 5.5 | 2.8 | 5.5 | 17.9 |
| 20-Aug | 11.1 | 3.3 | 1.8 | Z | 20.7 | 15.9 | 6.6 | 0.9 | 0.7 | 0.3 | 1.4 | 2.3 | 1.4 | 3.7 | 4.9 | 6.3 | 3.8 | 2.8 | 5.7 | 5.1 | 6.3 | 8.7 | 4.8 | 3.6 | 5.3 | 20.7 |
| 21-Aug | 2.9 | 1.6 | 2.3 | 6.9 | Z | 12.0 | 8.5 | 5.1 | 4.6 | 2.5 | 1.8 | 1.0 | 0.5 | 0.6 | 1.6 | 1.6 | 1.1 | 0.4 | 0.6 | 0.8 | 0.5 | 0.3 | 0.2 | 0.2 | 2.5 | 12.0 |
| 22-Aug | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | Z | 1.2 | 1.0 | 1.0 | 0.9 | 0.9 | 1.1 | 0.5 | 0.6 | 1.2 | 0.5 | 0.4 | 0.4 | 0.8 | 4.5 | 8.1 | 4.9 | 1.4 | 1.1 | 1.4 | 8.1 |
| 23-Aug | Z | 7.9 | 11.5 | 6.5 | 1.8 | 2.6 | 2.2 | 1.1 | 2.0 | 2.7 | 3.0 | 3.1 | 5.6 | 4.4 | 1.3 | 0.6 | 0.3 | 0.5 | 1.3 | 0.3 | 1.7 | 1.0 | 2.0 | 0.4 | 2.8 | 11.5 |
| 24-Aug | 0.0 | Z | 1.1 | 1.2 | 0.4 | 1.9 | 0.5 | C | C | C | C | C | 0.8 | 2.4 | 0.8 | 1.0 | 1.4 | 2.8 | 2.3 | 0.4 | 0.4 | 3.1 | 5.4 | 3.9 | 1.7 | 5.4 |
| 25-Aug | 8.7 | 1.1 | Z | 27.4 | 21.9 | 23.4 | 12.8 | 3.8 | 0.3 | 0.6 | 0.3 | 0.1 | 0.4 | 0.2 | 2.4 | 1.5 | 1.4 | 1.1 | 3.6 | 4.9 | 3.1 | 2.3 | 0.9 | 0.4 | 5.3 | 27.4 |
| 26-Aug | 0.4 | 1.2 | 0.6 | Z | 1.7 | 1.8 | 2.4 | 2.2 | 1.2 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 | 0.3 | 0.3 | 2.2 | 1.1 | 0.6 | 0.5 | 0.7 | 0.9 | 0.9 | 2.4 |
| 27-Aug | 0.9 | 1.0 | 1.0 | 0.9 | Z | 1.3 | 4.2 | 2.5 | 1.4 | 0.9 | 1.3 | 1.7 | 1.5 | 3.3 | 1.0 | 1.6 | 1.6 | 0.6 | 1.1 | 0.6 | 1.2 | 0.4 | 0.4 | 0.4 | 1.4 | 4.2 |
| 28-Aug | 1.1 | 2.2 | 4.1 | 4.1 | 7.7 | Z | 4.2 | 6.2 | 5.2 | 0.7 | 1.0 | 1.3 | 3.2 | 3.6 | 2.0 | 1.9 | 2.0 | 0.8 | 0.8 | 6.8 | 6.5 | 0.5 | 0.5 | 3.0 | 3.0 | 7.7 |
| 29-Aug | Z | 6.1 | 1.2 | 4.7 | 2.4 | 4.9 | 8.6 | 1.4 | 0.5 | 1.0 | 0.9 | 7.0 | 2.4 | 2.2 | 2.5 | 3.2 | 2.6 | 2.6 | 2.8 | 1.0 | 0.4 | 0.5 | 0.4 | 0.5 | 2.6 | 8.6 |
| 30-Aug | 0.3 | Z | 0.8 | 0.6 | 0.6 | 2.8 | 4.0 | 2.8 | 0.5 | 3.0 | 4.1 | 4.1 | 1.2 | 2.5 | 2.1 | 2.7 | 1.4 | 1.8 | 1.5 | 3.4 | 2.3 | 3.0 | 0.2 | 0.6 | 2.0 | 4.1 |
| 31-Aug | 1.2 | 0.8 | Z | 10.9 | 3.8 | 4.6 | 2.5 | 2.1 | 0.4 | 0.2 | 4.1 | 3.5 | 1.8 | 11.6 | 2.0 | 0.2 | 0.1 | 0.0 | 0.0 | 2.6 | 3.0 | 2.4 | 1.2 | 1.1 | 2.6 | 11.6 |
| | 3.0 | 3.3 | 2.6 | 5.4 | 5.3 | 5.7 | 4.9 | 4.2 | 2.6 | 2.8 | 2.4 | 2.1 | 2.1 | 2.7 | 2.1 | 2.3 | 2.0 | 1.4 | 1.9 | 2.5 | 3.6 | 3.8 | 3.9 | 2.7 | Diurnal Average | |
| | 16.7 | 22.8 | 11.5 | 27.4 | 21.9 | 23.4 | 14.5 | 19.1 | 11.5 | 18.5 | 7.2 | 7.0 | 7.4 | 11.6 | 9.8 | 17.9 | 6.4 | 6.6 | 5.7 | 12.4 | 13.0 | 27.7 | 24.8 | 15.2 | Diurnal Maximum | |

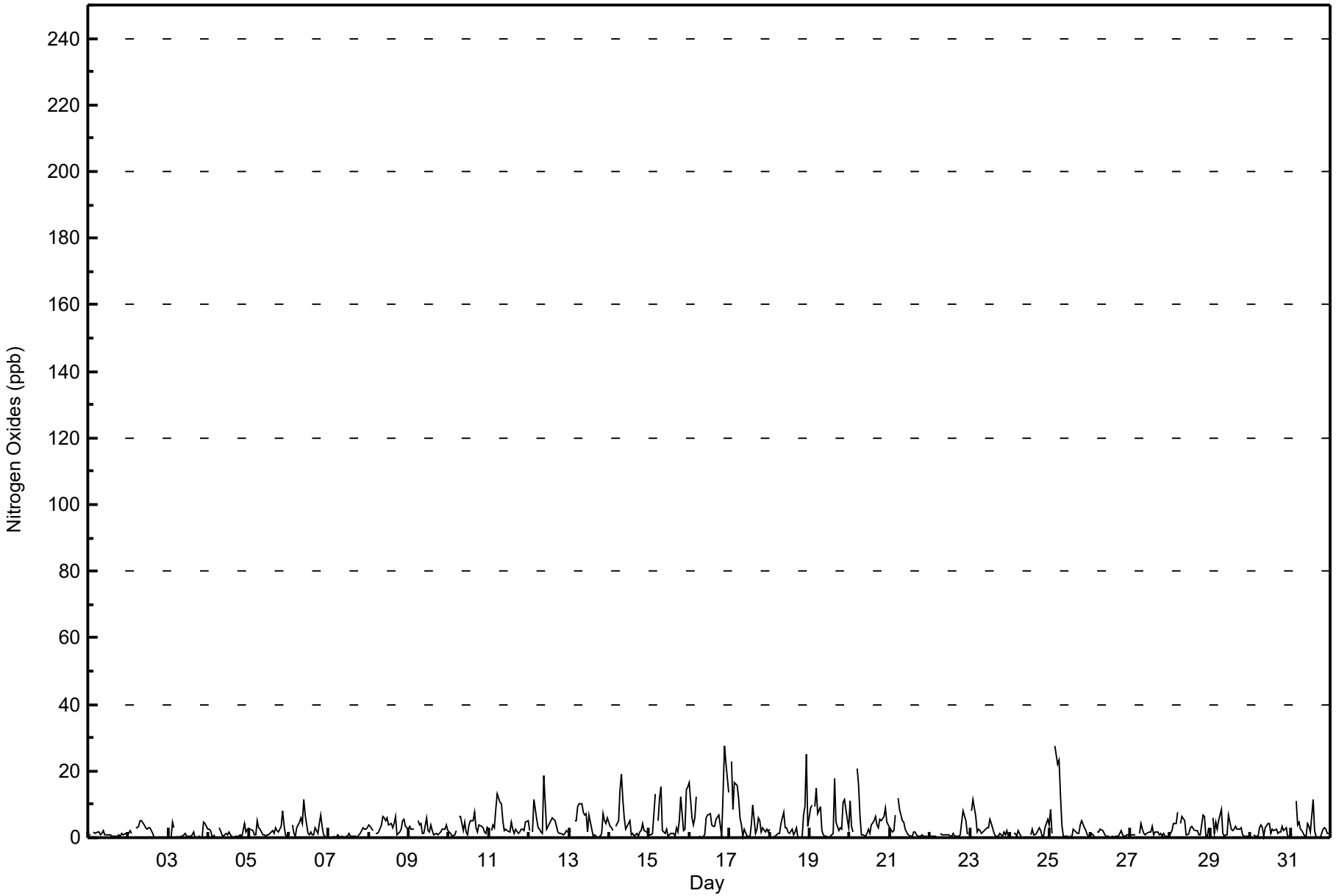
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Hangingstone Expansion - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 700 | 98.87 | 98.87 |
| 21 - 40 | 8 | 1.13 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 44 | 22 | 12 | 6 | 5 | 13 | 30 | 80 | 100 | 62 | 43 | 66 | 39 | 64 | 61 | 53 | 700 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 44 | 22 | 12 | 6 | 5 | 13 | 30 | 80 | 100 | 70 | 43 | 66 | 39 | 64 | 61 | 53 | 708 |

Total Number of Valid Hours: 708

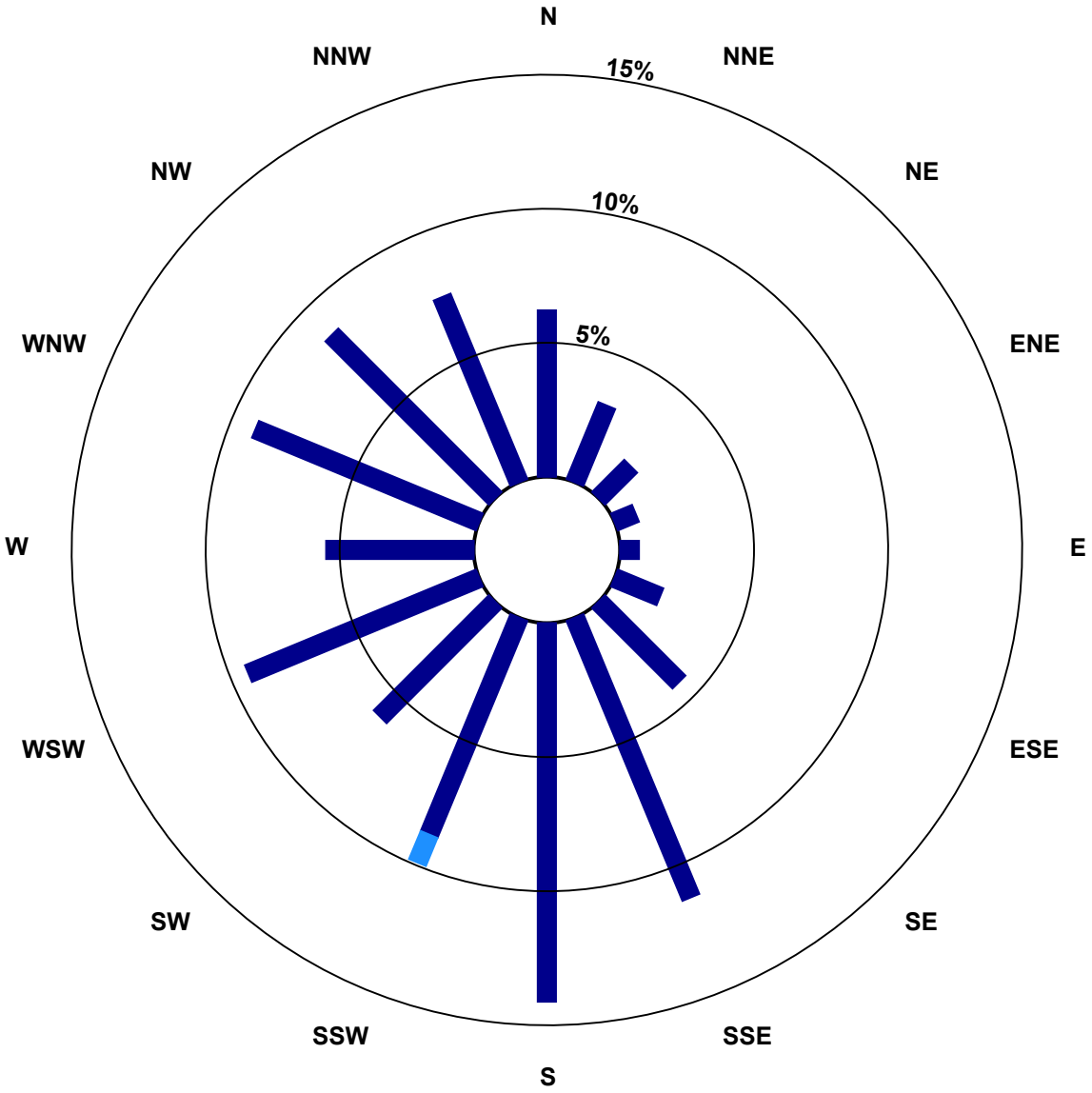
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Hangingstone Expansion




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

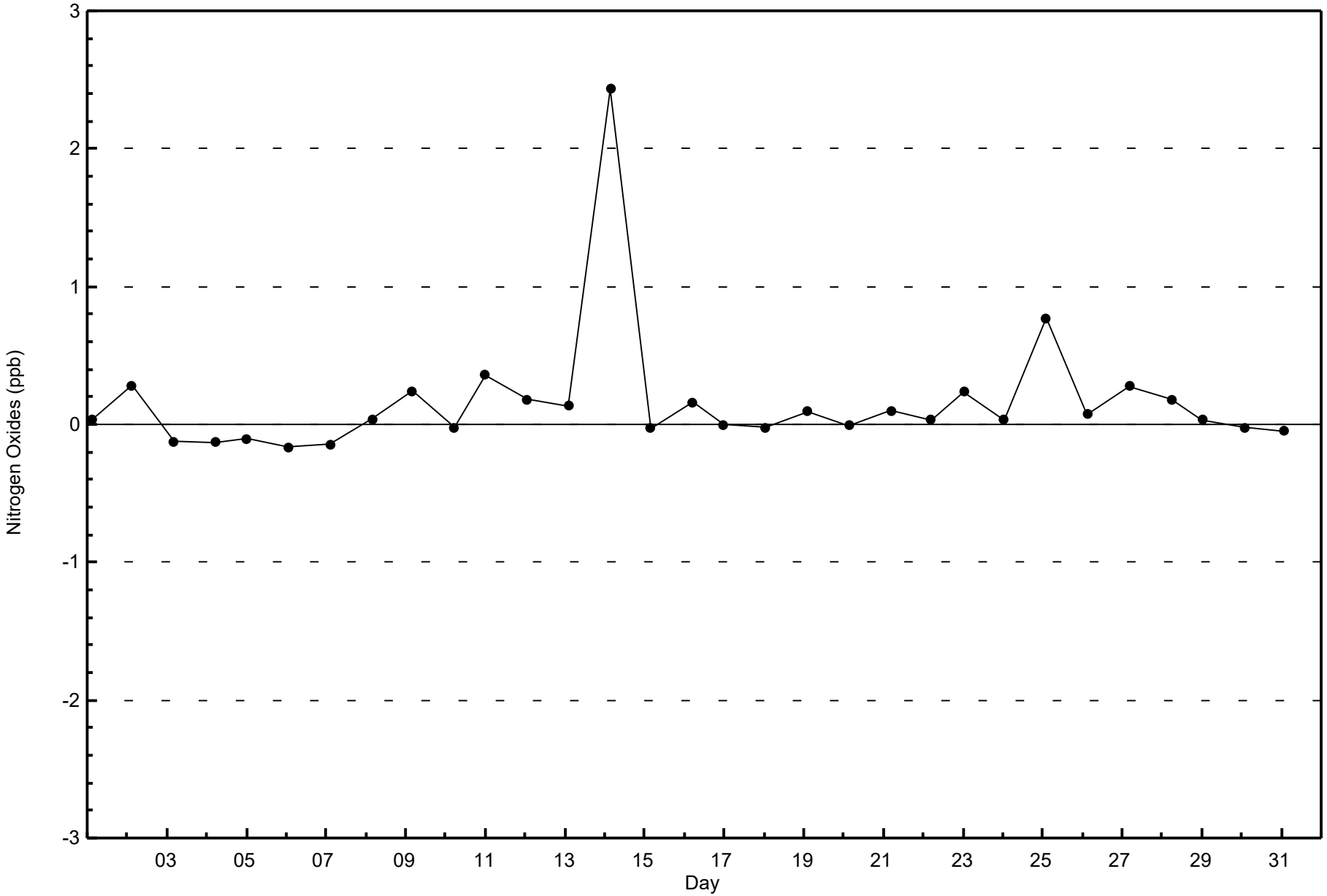
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Hangingstone Expansion - August 2026**

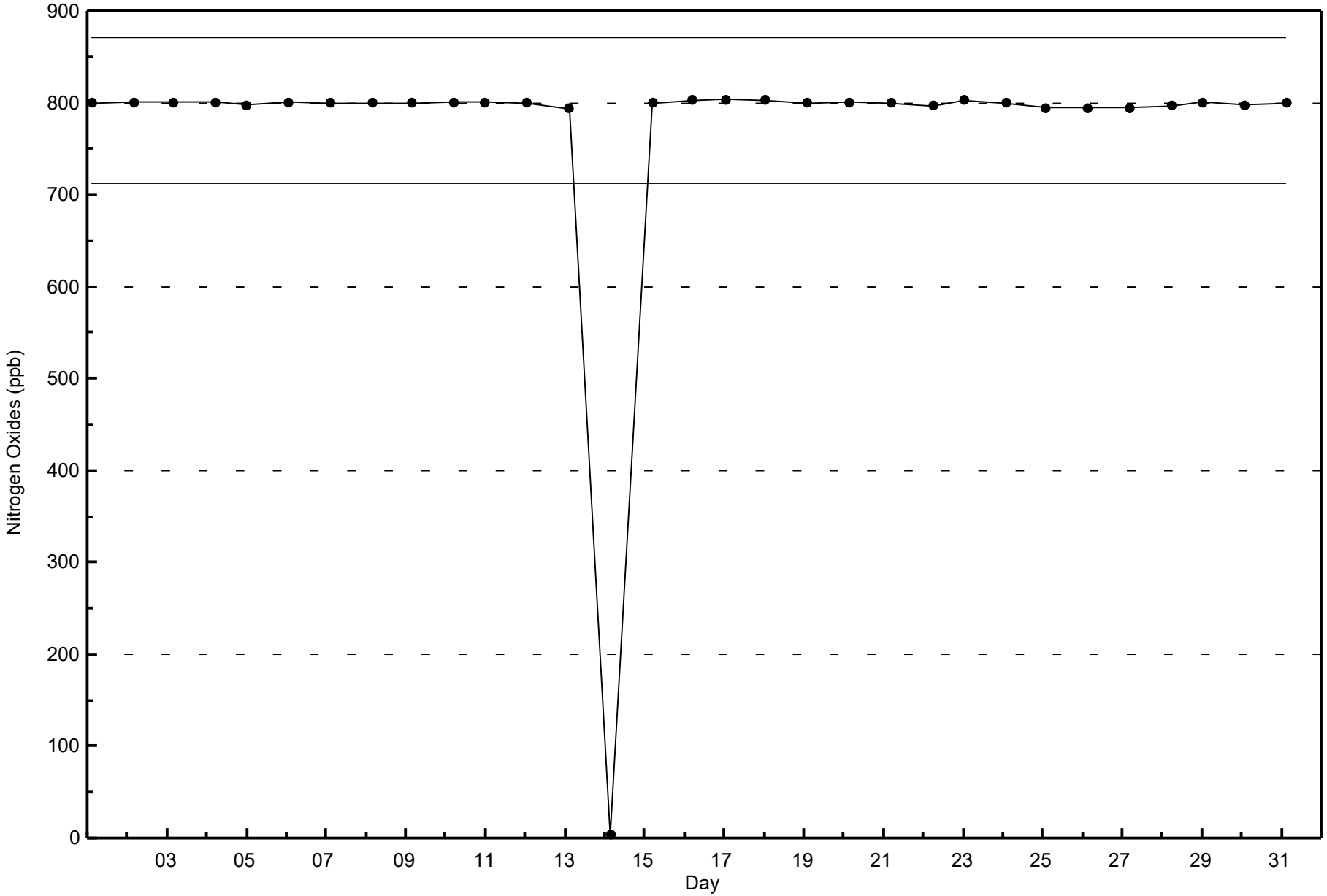


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Hangingstone Expansion - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ambient Temperature 2m (AT2) - C

## Hangingstone Expansion - August 2026

Maximum Value: 27.9 C on Aug 1 16:00

Maximum Daily Average: 21.4 C on Aug 1

Minimum Value: 5.9 C on Aug 4 02:00

Minimum Daily Average: 10.9 C on Aug 12

Maximum Diurnal Average: 20.3 C at hour 17

Minimum Diurnal Average: 11.4 C at hour 6

Monthly Average: 15.56 C

Percentiles: $P_1$ = 7.1 $P_{10}$ = 9.2 $Q_1$ = 11.7 Median = 15.6 $Q_3$ = 18.9 $P_{90}$ = 22.0 $P_{99}$ = 26.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

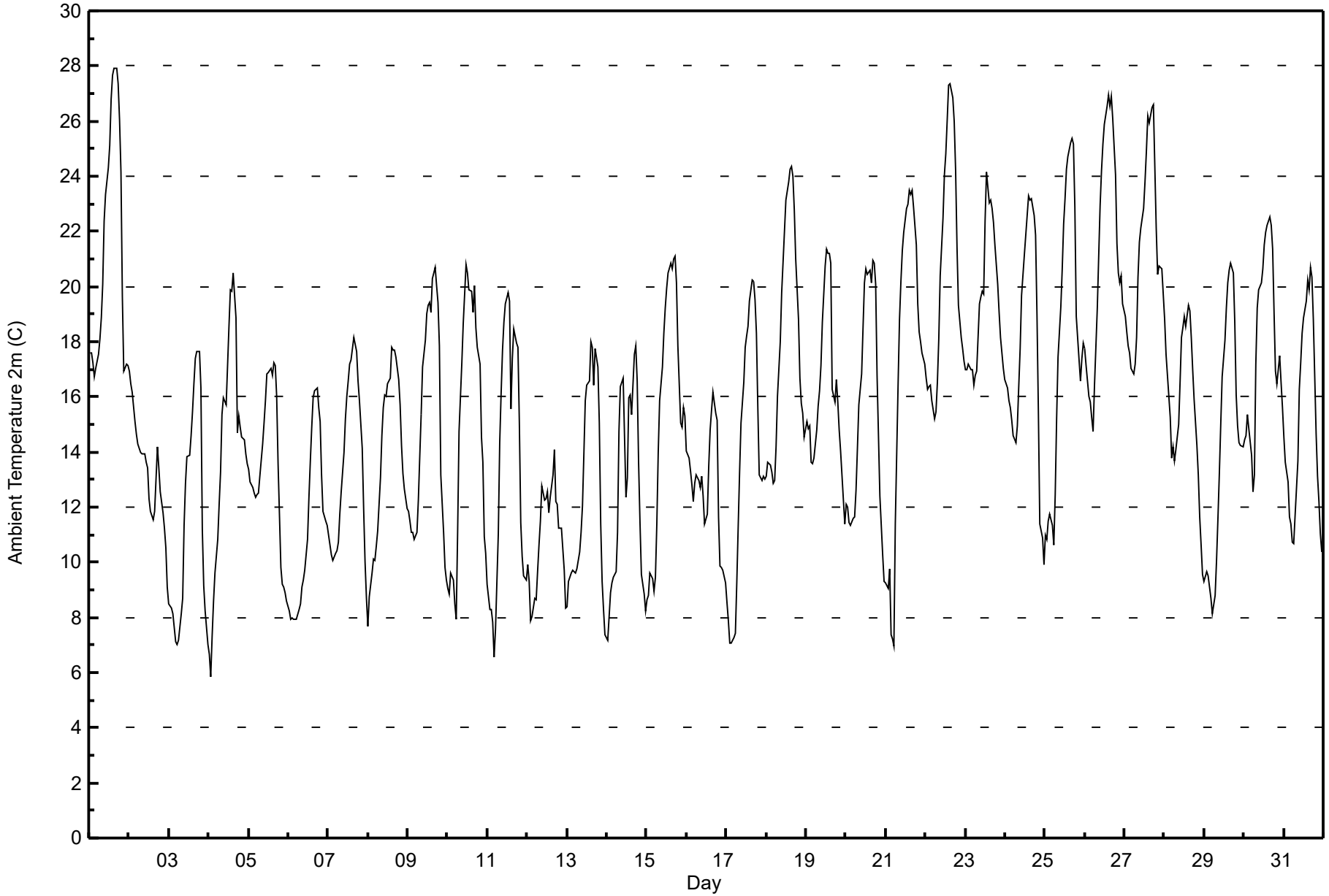
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.6 | 17.6 | 17.2 | 16.7 | 17.0 | 17.5 | 18.1 | 18.9 | 20.1 | 22.4 | 23.4 | 24.3 | 25.1 | 26.8 | 27.7 | 27.9 | 27.9 | 27.3 | 26.0 | 24.1 | 19.6 | 16.9 | 17.2 | 17.1 | 21.4 | 27.9 |
| 2-Aug | 16.9 | 16.5 | 16.2 | 15.1 | 14.7 | 14.3 | 14.1 | 14.0 | 14.0 | 13.9 | 13.6 | 13.4 | 12.3 | 11.9 | 11.5 | 11.8 | 13.0 | 14.2 | 13.4 | 12.6 | 11.8 | 11.3 | 10.5 | 9.1 | 13.3 | 16.9 |
| 3-Aug | 8.5 | 8.3 | 8.1 | 7.6 | 7.1 | 7.0 | 7.2 | 8.1 | 8.7 | 11.3 | 12.9 | 13.8 | 13.9 | 14.6 | 15.5 | 16.5 | 17.4 | 17.6 | 17.7 | 16.3 | 11.2 | 9.2 | 8.2 | 7.0 | 11.4 | 17.7 |
| 4-Aug | 6.6 | 5.9 | 7.3 | 8.6 | 9.6 | 10.9 | 12.1 | 13.3 | 15.4 | 15.9 | 15.7 | 17.1 | 18.5 | 19.9 | 19.8 | 20.5 | 18.8 | 14.7 | 15.3 | 14.9 | 14.6 | 14.4 | 13.9 | 13.6 | 14.1 | 20.5 |
| 5-Aug | 13.4 | 12.9 | 12.7 | 12.5 | 12.3 | 12.4 | 12.5 | 13.1 | 14.3 | 15.1 | 15.9 | 16.8 | 16.9 | 17.0 | 16.8 | 17.2 | 17.1 | 16.0 | 13.6 | 9.8 | 9.2 | 9.1 | 8.9 | 8.6 | 13.5 | 17.2 |
| 6-Aug | 8.2 | 7.9 | 8.0 | 7.9 | 7.9 | 7.9 | 8.3 | 8.5 | 9.1 | 9.4 | 9.7 | 10.8 | 12.3 | 13.7 | 14.9 | 16.0 | 16.2 | 16.3 | 15.6 | 15.1 | 13.2 | 11.9 | 11.5 | 11.3 | 11.3 | 16.3 |
| 7-Aug | 11.0 | 10.6 | 10.3 | 10.1 | 10.3 | 10.4 | 10.7 | 11.7 | 12.6 | 14.0 | 15.2 | 16.0 | 16.6 | 17.2 | 17.3 | 18.1 | 17.9 | 17.6 | 16.6 | 15.9 | 14.1 | 11.9 | 10.0 | 8.7 | 13.5 | 18.1 |
| 8-Aug | 7.7 | 8.8 | 9.6 | 10.1 | 10.1 | 10.6 | 11.2 | 13.0 | 14.6 | 15.6 | 16.1 | 16.0 | 16.5 | 16.7 | 17.8 | 17.7 | 17.7 | 17.5 | 16.7 | 15.7 | 14.3 | 13.2 | 12.7 | 11.9 | 13.8 | 17.8 |
| 9-Aug | 11.8 | 11.5 | 11.1 | 11.1 | 10.8 | 11.1 | 12.2 | 13.8 | 15.3 | 17.1 | 18.1 | 19.0 | 19.3 | 19.4 | 19.1 | 20.3 | 20.7 | 20.0 | 19.4 | 17.9 | 13.2 | 11.1 | 9.8 | 9.4 | 15.1 | 20.7 |
| 10-Aug | 9.1 | 8.8 | 9.6 | 9.4 | 8.5 | 7.9 | 11.1 | 14.7 | 17.2 | 18.6 | 19.7 | 20.8 | 20.5 | 19.9 | 19.8 | 19.1 | 20.0 | 18.5 | 17.8 | 17.2 | 14.5 | 13.6 | 10.9 | 10.3 | 14.9 | 20.8 |
| 11-Aug | 9.2 | 8.3 | 8.3 | 7.8 | 6.6 | 7.6 | 11.0 | 14.3 | 16.1 | 17.7 | 18.7 | 19.4 | 19.8 | 19.5 | 15.6 | 17.4 | 18.5 | 18.0 | 17.8 | 15.0 | 11.4 | 10.2 | 9.5 | 9.3 | 13.6 | 19.8 |
| 12-Aug | 9.9 | 9.3 | 7.9 | 8.0 | 8.7 | 8.6 | 9.7 | 10.6 | 11.5 | 12.8 | 12.3 | 12.3 | 12.6 | 11.8 | 12.3 | 13.2 | 14.1 | 12.2 | 12.1 | 11.3 | 11.3 | 10.5 | 9.7 | 8.3 | 10.9 | 14.1 |
| 13-Aug | 8.4 | 9.3 | 9.6 | 9.7 | 9.6 | 9.6 | 9.8 | 10.4 | 11.1 | 12.1 | 13.9 | 15.9 | 16.4 | 16.6 | 18.0 | 17.8 | 16.4 | 17.7 | 17.1 | 15.1 | 11.4 | 9.3 | 8.3 | 7.4 | 12.5 | 18.0 |
| 14-Aug | 7.2 | 8.1 | 8.9 | 9.3 | 9.4 | 9.7 | 11.1 | 14.8 | 16.4 | 16.5 | 16.7 | 12.4 | 13.0 | 16.0 | 16.0 | 15.3 | 17.6 | 17.8 | 16.6 | 13.6 | 11.4 | 9.6 | 8.9 | 8.2 | 12.7 | 17.8 |
| 15-Aug | 8.6 | 8.8 | 9.6 | 9.4 | 8.9 | 9.5 | 11.4 | 14.0 | 15.9 | 17.1 | 18.3 | 19.2 | 19.9 | 20.5 | 20.9 | 20.6 | 21.0 | 21.1 | 20.1 | 17.9 | 15.0 | 14.9 | 15.6 | 15.3 | 15.6 | 21.1 |
| 16-Aug | 14.0 | 13.8 | 13.3 | 12.8 | 12.2 | 12.9 | 13.2 | 12.9 | 12.7 | 13.1 | 12.4 | 11.4 | 11.7 | 13.5 | 14.8 | 15.5 | 16.2 | 15.4 | 15.1 | 11.6 | 9.9 | 9.8 | 9.7 | 9.2 | 12.8 | 16.2 |
| 17-Aug | 8.6 | 7.9 | 7.1 | 7.1 | 7.3 | 7.4 | 9.2 | 11.3 | 13.3 | 15.0 | 16.5 | 17.8 | 18.2 | 18.6 | 19.5 | 20.2 | 20.2 | 19.5 | 18.3 | 15.6 | 13.2 | 13.0 | 13.1 | 13.0 | 13.8 | 20.2 |
| 18-Aug | 13.1 | 13.6 | 13.5 | 13.3 | 12.9 | 13.0 | 14.2 | 16.0 | 18.0 | 19.8 | 20.9 | 22.0 | 23.1 | 23.8 | 24.3 | 24.4 | 24.0 | 22.8 | 21.0 | 18.8 | 16.7 | 15.7 | 15.4 | 14.5 | 18.1 | 24.4 |
| 19-Aug | 15.1 | 14.9 | 14.9 | 13.6 | 13.6 | 13.8 | 14.8 | 15.7 | 16.2 | 17.2 | 18.7 | 20.8 | 21.3 | 21.2 | 21.2 | 20.8 | 16.3 | 15.8 | 16.6 | 15.8 | 14.8 | 14.0 | 12.3 | 11.4 | 16.3 | 21.3 |
| 20-Aug | 12.1 | 12.0 | 11.5 | 11.4 | 11.6 | 11.6 | 12.6 | 14.2 | 15.7 | 16.8 | 18.5 | 20.1 | 20.7 | 20.4 | 20.6 | 20.1 | 21.0 | 20.8 | 20.1 | 16.8 | 12.4 | 11.3 | 10.3 | 9.3 | 15.5 | 21.0 |
| 21-Aug | 9.3 | 9.0 | 9.8 | 7.4 | 7.2 | 6.9 | 11.4 | 16.5 | 18.8 | 20.2 | 21.3 | 21.9 | 22.8 | 23.0 | 23.5 | 23.3 | 23.5 | 22.9 | 21.5 | 19.4 | 18.4 | 18.0 | 17.6 | 17.2 | 17.1 | 23.5 |
| 22-Aug | 16.7 | 16.3 | 16.4 | 16.4 | 15.9 | 15.2 | 15.4 | 16.5 | 18.1 | 20.4 | 22.5 | 24.1 | 24.8 | 26.0 | 27.3 | 27.3 | 26.8 | 26.0 | 24.2 | 21.4 | 19.3 | 18.1 | 17.7 | 17.3 | 20.4 | 27.3 |
| 23-Aug | 17.0 | 17.0 | 17.2 | 17.0 | 17.0 | 16.4 | 16.8 | 17.0 | 19.4 | 19.7 | 19.8 | 19.8 | 22.4 | 24.2 | 23.0 | 23.1 | 22.8 | 22.3 | 21.5 | 20.1 | 19.0 | 18.2 | 17.6 | 17.0 | 19.4 | 24.2 |
| 24-Aug | 16.6 | 16.3 | 15.9 | 15.6 | 15.1 | 14.6 | 14.4 | 14.9 | 16.4 | 17.7 | 19.7 | 21.2 | 21.9 | 22.6 | 23.3 | 23.1 | 23.2 | 22.6 | 21.9 | 19.0 | 15.4 | 11.4 | 10.9 | 9.9 | 17.6 | 23.3 |
| 25-Aug | 11.0 | 10.8 | 11.5 | 11.8 | 11.3 | 10.6 | 12.5 | 15.2 | 17.4 | 19.3 | 20.6 | 22.3 | 23.2 | 24.3 | 24.7 | 25.2 | 25.4 | 25.2 | 22.9 | 18.9 | 17.3 | 16.6 | 17.4 | 18.0 | 18.1 | 25.4 |
| 26-Aug | 17.7 | 17.1 | 16.0 | 15.8 | 15.2 | 14.7 | 16.4 | 19.2 | 21.1 | 22.9 | 24.2 | 25.2 | 25.9 | 26.5 | 27.0 | 26.5 | 26.9 | 26.1 | 24.1 | 21.5 | 20.5 | 20.1 | 20.4 | 19.4 | 21.3 | 27.0 |
| 27-Aug | 18.9 | 18.3 | 17.8 | 17.6 | 17.0 | 16.9 | 17.2 | 18.2 | 20.3 | 21.6 | 22.1 | 22.8 | 23.8 | 24.9 | 26.2 | 25.9 | 26.5 | 26.6 | 24.4 | 22.1 | 20.4 | 20.7 | 20.6 | 19.7 | 21.3 | 26.6 |
| 28-Aug | 18.8 | 17.6 | 16.8 | 15.3 | 13.8 | 14.2 | 13.7 | 14.1 | 15.0 | 16.5 | 18.2 | 18.5 | 18.9 | 18.6 | 19.3 | 19.1 | 18.2 | 17.0 | 15.9 | 14.2 | 13.2 | 11.7 | 10.6 | 9.6 | 15.8 | 19.3 |
| 29-Aug | 9.3 | 9.7 | 9.5 | 9.1 | 8.7 | 8.1 | 8.8 | 10.1 | 11.6 | 13.2 | 15.0 | 16.7 | 18.1 | 19.2 | 20.1 | 20.6 | 20.8 | 20.5 | 18.7 | 16.1 | 15.0 | 14.4 | 14.2 | 14.2 | 14.2 | 20.8 |
| 30-Aug | 14.4 | 14.6 | 15.4 | 14.8 | 13.9 | 12.6 | 13.2 | 17.2 | 19.2 | 19.9 | 20.1 | 20.7 | 21.5 | 22.0 | 22.2 | 22.5 | 22.2 | 21.3 | 19.1 | 16.9 | 16.5 | 17.5 | 16.5 | 15.6 | 17.9 | 22.5 |
| 31-Aug | 14.6 | 13.6 | 12.9 | 11.7 | 11.4 | 10.7 | 10.7 | 11.7 | 13.7 | 16.2 | 17.2 | 18.3 | 18.9 | 19.5 | 20.2 | 19.9 | 20.7 | 20.3 | 18.8 | 14.6 | 13.1 | 12.2 | 11.0 | 10.4 | 15.1 | 20.7 |
| | 12.3 | 12.1 | 12.1 | 11.7 | 11.5 | 11.4 | 12.4 | 14.0 | 15.5 | 16.7 | 17.7 | 18.4 | 19.1 | 19.7 | 20.0 | 20.2 | 20.3 | 19.7 | 18.7 | 16.6 | 14.6 | 13.5 | 12.9 | 12.3 | Diurnal Average | |
| | 18.9 | 18.3 | 17.8 | 17.6 | 17.0 | 17.5 | 18.1 | 19.2 | 21.1 | 22.9 | 24.2 | 25.2 | 25.9 | 26.8 | 27.7 | 27.9 | 27.9 | 27.3 | 26.0 | 24.1 | 20.5 | 20.7 | 20.6 | 19.7 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Hangingstone Expansion - August 2026**






**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Ambient Temperature 2m (AT2) - C**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 115 | 15.46 | 15.46 |
| 10 - 20 | 489 | 65.73 | 81.18 |
| > 20 | 140 | 18.82 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Hangingstone Expansion - August 2026

Maximum Value: 100.0 % on Aug 13 03:00

Maximum Daily Average: 92.0 % on Aug 12

Minimum Value: 33.1 % on Aug 24 15:00

Minimum Daily Average: 53.5 % on Aug 26

Maximum Diurnal Average: 88.1 % at hour 6

Minimum Diurnal Average: 52.8 % at hour 16

Monthly Average: 72.63 %

Percentiles: $P_1$ = 35.9 $P_{10}$ = 46.8 $Q_1$ = 57.8 Median = 74.4 $Q_3$ = 89.3 $P_{90}$ = 95.8 $P_{99}$ = 99.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

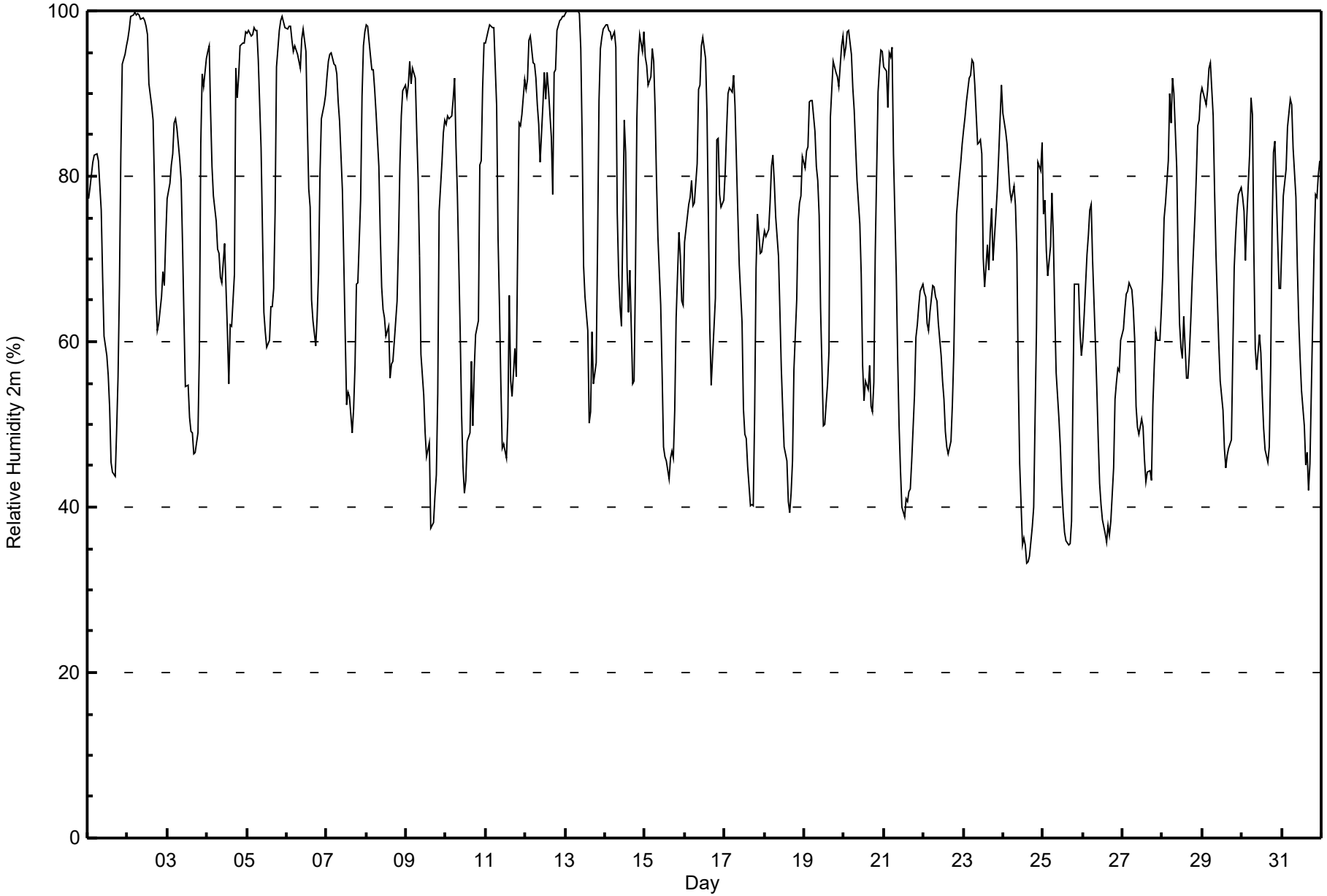
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 77.4 | 78.6 | 80.2 | 81.7 | 82.6 | 82.8 | 81.9 | 78.7 | 76.0 | 67.8 | 60.7 | 58.3 | 55.9 | 52.0 | 45.5 | 44.2 | 43.8 | 49.3 | 55.8 | 66.8 | 82.6 | 93.5 | 94.8 | 95.7 | 70.3 | 95.7 |
| 2-Aug | 96.6 | 97.8 | 99.3 | 99.6 | 99.8 | 99.6 | 99.7 | 99.5 | 99.0 | 99.1 | 98.8 | 98.1 | 97.1 | 91.1 | 88.5 | 86.8 | 78.6 | 65.8 | 61.4 | 62.2 | 65.4 | 68.5 | 66.9 | 72.6 | 87.2 | 99.8 |
| 3-Aug | 77.2 | 79.2 | 81.4 | 82.8 | 86.4 | 87.0 | 85.8 | 82.1 | 79.5 | 71.7 | 62.9 | 54.7 | 54.8 | 50.8 | 49.1 | 48.9 | 46.4 | 46.6 | 48.9 | 58.8 | 83.8 | 92.4 | 90.9 | 94.2 | 70.7 | 94.2 |
| 4-Aug | 95.1 | 95.7 | 87.9 | 81.2 | 77.7 | 74.5 | 71.2 | 70.7 | 67.9 | 67.2 | 71.8 | 66.5 | 61.2 | 54.9 | 62.1 | 61.8 | 68.1 | 93.0 | 89.6 | 92.1 | 95.7 | 96.2 | 96.1 | 97.5 | 79.0 | 97.5 |
| 5-Aug | 97.2 | 97.6 | 97.0 | 97.1 | 97.9 | 97.7 | 97.7 | 94.1 | 83.3 | 73.4 | 63.6 | 61.1 | 59.2 | 60.1 | 64.2 | 64.3 | 66.5 | 75.6 | 93.3 | 97.7 | 98.7 | 99.3 | 98.7 | 98.0 | 84.7 | 99.3 |
| 6-Aug | 97.9 | 98.1 | 98.2 | 96.5 | 95.1 | 95.8 | 94.7 | 94.0 | 93.0 | 96.6 | 97.7 | 95.1 | 86.2 | 78.5 | 76.3 | 65.1 | 62.6 | 59.6 | 63.0 | 68.4 | 80.3 | 87.0 | 88.7 | 89.9 | 85.8 | 98.2 |
| 7-Aug | 92.0 | 93.9 | 94.7 | 94.9 | 93.6 | 93.3 | 92.4 | 89.0 | 86.6 | 78.3 | 69.6 | 60.8 | 52.4 | 53.9 | 53.4 | 49.0 | 51.8 | 57.1 | 67.0 | 67.1 | 77.1 | 89.7 | 95.8 | 97.4 | 77.1 | 97.4 |
| 8-Aug | 98.2 | 98.2 | 94.6 | 92.9 | 92.9 | 90.5 | 87.6 | 81.1 | 73.1 | 66.6 | 63.9 | 63.0 | 60.7 | 61.8 | 55.7 | 57.2 | 57.6 | 59.9 | 64.8 | 72.1 | 81.3 | 87.3 | 90.4 | 91.1 | 76.8 | 98.2 |
| 9-Aug | 89.7 | 91.1 | 93.8 | 91.2 | 93.0 | 91.8 | 85.5 | 79.7 | 70.3 | 58.5 | 53.5 | 49.0 | 46.0 | 46.9 | 47.7 | 37.5 | 38.2 | 41.4 | 43.8 | 53.8 | 75.7 | 81.8 | 85.2 | 86.9 | 68.0 | 93.8 |
| 10-Aug | 86.2 | 87.2 | 86.9 | 87.2 | 89.3 | 91.8 | 83.7 | 77.8 | 61.2 | 51.2 | 44.8 | 41.8 | 43.3 | 47.9 | 49.0 | 57.7 | 49.7 | 56.6 | 60.9 | 62.6 | 81.3 | 81.9 | 90.7 | 96.1 | 69.5 | 96.1 |
| 11-Aug | 96.2 | 97.6 | 98.3 | 98.2 | 98.0 | 98.0 | 88.5 | 72.6 | 64.3 | 54.9 | 47.0 | 47.7 | 45.9 | 50.8 | 65.5 | 55.3 | 53.4 | 59.1 | 55.8 | 71.4 | 86.5 | 86.1 | 87.4 | 91.8 | 73.8 | 98.3 |
| 12-Aug | 90.5 | 91.7 | 96.4 | 97.0 | 93.8 | 93.6 | 91.9 | 88.7 | 86.3 | 81.8 | 88.7 | 92.6 | 89.4 | 92.6 | 90.4 | 84.7 | 77.9 | 92.5 | 92.9 | 97.6 | 98.7 | 99.0 | 99.2 | 99.4 | 92.0 | 99.4 |
| 13-Aug | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.6 | 95.4 | 84.4 | 69.1 | 65.4 | 61.3 | 50.2 | 51.5 | 61.2 | 55.0 | 57.5 | 72.0 | 89.1 | 95.4 | 96.8 | 97.9 | 83.4 | 100.0 |
| 14-Aug | 98.4 | 98.3 | 97.7 | 97.4 | 96.7 | 97.4 | 95.6 | 75.6 | 68.2 | 64.2 | 61.8 | 86.8 | 82.8 | 69.0 | 63.6 | 68.7 | 54.8 | 55.3 | 68.1 | 87.0 | 94.3 | 97.1 | 95.1 | 97.5 | 82.1 | 98.4 |
| 15-Aug | 94.3 | 93.3 | 91.1 | 92.0 | 95.4 | 93.9 | 88.2 | 79.5 | 72.8 | 64.3 | 56.3 | 47.4 | 46.0 | 45.7 | 43.4 | 45.9 | 46.7 | 46.0 | 51.7 | 62.9 | 73.2 | 70.3 | 64.9 | 64.4 | 67.9 | 95.4 |
| 16-Aug | 72.0 | 75.0 | 76.6 | 77.5 | 79.6 | 76.4 | 76.9 | 81.6 | 90.6 | 91.0 | 95.8 | 96.8 | 94.3 | 87.6 | 75.0 | 61.7 | 54.7 | 61.6 | 65.3 | 84.4 | 84.6 | 77.8 | 76.2 | 77.2 | 78.7 | 96.8 |
| 17-Aug | 80.6 | 85.6 | 90.0 | 90.7 | 90.2 | 92.2 | 88.5 | 81.9 | 75.4 | 69.3 | 62.3 | 51.9 | 48.7 | 48.2 | 45.0 | 40.2 | 40.3 | 40.2 | 51.3 | 68.8 | 75.4 | 70.7 | 70.9 | 72.2 | 67.9 | 92.2 |
| 18-Aug | 73.4 | 72.7 | 73.5 | 76.8 | 81.2 | 82.6 | 79.3 | 75.1 | 70.3 | 63.7 | 56.8 | 51.8 | 47.3 | 45.5 | 40.7 | 39.3 | 41.8 | 45.7 | 56.5 | 65.1 | 74.6 | 76.8 | 77.6 | 82.3 | 64.6 | 82.6 |
| 19-Aug | 81.1 | 83.1 | 83.5 | 89.0 | 89.1 | 89.2 | 85.4 | 81.2 | 79.4 | 75.3 | 64.1 | 49.8 | 50.1 | 52.6 | 55.0 | 58.7 | 87.2 | 93.9 | 93.3 | 92.5 | 92.0 | 90.9 | 95.8 | 97.0 | 79.5 | 97.0 |
| 20-Aug | 94.6 | 95.6 | 97.5 | 97.6 | 94.7 | 90.7 | 88.1 | 83.5 | 79.4 | 74.2 | 68.2 | 57.1 | 52.9 | 55.3 | 54.3 | 57.1 | 52.2 | 51.5 | 55.1 | 70.9 | 90.2 | 93.1 | 95.3 | 95.1 | 76.8 | 97.6 |
| 21-Aug | 93.2 | 92.7 | 88.2 | 94.9 | 94.4 | 95.7 | 82.8 | 68.0 | 58.0 | 49.8 | 44.5 | 40.0 | 38.8 | 41.0 | 40.7 | 41.9 | 42.3 | 45.6 | 53.6 | 60.5 | 62.0 | 64.2 | 66.2 | 66.9 | 63.6 | 95.7 |
| 22-Aug | 65.9 | 65.4 | 62.2 | 61.4 | 63.6 | 66.9 | 66.7 | 65.5 | 64.8 | 62.2 | 58.3 | 55.3 | 53.0 | 49.2 | 47.2 | 46.4 | 48.0 | 52.4 | 58.5 | 68.1 | 75.5 | 79.8 | 81.7 | 83.9 | 62.6 | 83.9 |
| 23-Aug | 85.6 | 87.1 | 89.0 | 91.9 | 92.2 | 94.1 | 93.7 | 91.0 | 84.0 | 84.0 | 84.4 | 82.7 | 70.2 | 66.7 | 71.8 | 68.7 | 73.3 | 76.0 | 69.9 | 75.2 | 78.3 | 82.3 | 86.7 | 91.0 | 82.1 | 94.1 |
| 24-Aug | 87.7 | 85.4 | 83.9 | 81.0 | 78.3 | 77.1 | 78.9 | 76.4 | 70.6 | 55.7 | 45.2 | 35.5 | 36.3 | 35.4 | 33.1 | 33.4 | 34.1 | 37.7 | 39.9 | 51.1 | 61.6 | 81.8 | 80.7 | 84.0 | 61.0 | 87.7 |
| 25-Aug | 75.5 | 77.1 | 71.1 | 67.9 | 71.5 | 77.9 | 72.8 | 63.8 | 56.2 | 50.6 | 47.3 | 42.5 | 39.2 | 37.0 | 36.0 | 35.5 | 35.6 | 38.3 | 53.5 | 66.9 | 66.9 | 66.9 | 61.4 | 58.2 | 57.1 | 77.9 |
| 26-Aug | 60.0 | 63.1 | 70.6 | 72.9 | 75.9 | 76.6 | 69.9 | 59.8 | 54.3 | 48.2 | 42.9 | 40.3 | 38.5 | 36.8 | 35.8 | 37.8 | 36.6 | 38.2 | 44.8 | 53.0 | 55.1 | 56.8 | 56.5 | 60.1 | 53.5 | 76.6 |
| 27-Aug | 61.6 | 63.9 | 65.7 | 66.1 | 67.1 | 66.3 | 64.1 | 60.4 | 52.2 | 49.6 | 48.8 | 50.7 | 49.7 | 45.8 | 43.0 | 44.2 | 44.4 | 43.2 | 52.4 | 57.3 | 61.2 | 60.2 | 60.2 | 63.7 | 55.9 | 67.1 |
| 28-Aug | 67.9 | 74.9 | 76.8 | 81.9 | 90.0 | 86.5 | 91.9 | 90.1 | 81.0 | 69.8 | 62.2 | 59.3 | 57.9 | 63.1 | 55.6 | 55.6 | 58.5 | 62.5 | 67.3 | 75.2 | 80.3 | 86.0 | 86.8 | 89.9 | 73.8 | 91.9 |
| 29-Aug | 90.6 | 89.2 | 88.7 | 90.3 | 93.0 | 93.7 | 87.3 | 78.1 | 70.5 | 65.1 | 59.7 | 55.3 | 51.7 | 47.1 | 44.7 | 46.2 | 47.1 | 48.2 | 58.7 | 69.1 | 72.9 | 75.9 | 77.8 | 78.7 | 70.0 | 93.7 |
| 30-Aug | 77.4 | 75.8 | 69.8 | 75.0 | 82.8 | 89.5 | 87.4 | 71.1 | 59.2 | 56.7 | 60.8 | 58.6 | 53.6 | 49.6 | 47.0 | 45.5 | 47.3 | 57.2 | 73.6 | 82.9 | 84.3 | 72.2 | 66.4 | 66.5 | 67.1 | 89.5 |
| 31-Aug | 72.0 | 77.6 | 80.9 | 86.0 | 87.6 | 89.4 | 88.7 | 83.3 | 77.4 | 69.2 | 62.6 | 57.9 | 54.1 | 49.8 | 45.2 | 46.7 | 42.1 | 45.2 | 54.0 | 71.5 | 77.8 | 77.4 | 80.1 | 81.8 | 69.1 | 89.4 |
| | 84.7 | 85.9 | 86.0 | 86.8 | 87.8 | 88.1 | 85.4 | 79.8 | 74.3 | 68.6 | 64.2 | 60.6 | 57.5 | 55.7 | 54.0 | 52.8 | 53.0 | 56.5 | 62.0 | 71.1 | 79.2 | 81.9 | 82.6 | 84.5 | Diurnal Average | |
| | 99.7 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.6 | 99.1 | 98.8 | 98.1 | 97.1 | 92.6 | 90.4 | 86.8 | 87.2 | 93.9 | 93.3 | 97.7 | 98.7 | 99.3 | 99.2 | 99.4 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Hangingstone Expansion - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Relative Humidity 2m (RH2) - %**

**Hangingstone Expansion - August 2026**

| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 24 | 3.23 | 3.23 |
| 40 - 60 | 183 | 24.60 | 27.82 |
| 60 - 80 | 235 | 31.59 | 59.41 |
| 80 - 100 | 296 | 39.78 | 99.19 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Hangingstone Expansion - August 2026

Maximum Speed: 22 km/h on Aug 2 13:00

Maximum Daily Speed Average: 13.7 km/h on Aug 2

Minimum Speed Value: 0 km/h on Aug 12 01:00

Minimum Daily Speed Average: 0.7 km/h on Aug 30

Maximum Diurnal Speed Average: 5.5 km/h at hour 11

Minimum Diurnal Speed Average: 0.5 km/h at hour 20

Monthly Average Velocity: 3.0 km/h 243.4 deg

Percentiles: $P_1 = 2$ $P_{10} = 4$ $Q_1 = 6$ Median = 8 $Q_3 = 11$ $P_{90} = 14$ $P_{99} = 19$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | S8 | S7 | S8 | SSE7 | SSE8 | SSE8 | SSE8 | SSE9 | SE6 | ESE6 | SSE9 | SE12 | SE15 | SE15 | SE15 | SSE16 | SSE15 | S13 | S10 | S6 | WSW4 | S6 | SW7 | SSW8 | SSE8.4 | SSE16 |
| 2-Aug | SW4 | NW7 | WNW9 | NNW10 | NW11 | NW12 | NNW10 | NNW13 | NNW14 | NNW16 | N19 | N21 | N22 | NNW18 | NNW13 | NW14 | NW17 | NNW20 | NW20 | NW17 | NW14 | NW16 | NNW14 | NW9 | NNW13.7 | N22 |
| 3-Aug | NW10 | NW9 | WNW8 | WNW8 | W5 | W6 | W6 | W6 | WNW8 | NW11 | NNW13 | NW17 | NW14 | NW15 | NW14 | NNW13 | NW15 | NW12 | NNW8 | NNW4 | NNW1 | SSE6 | SSE7 | S7 | NW7.2 | NW17 |
| 4-Aug | S7 | S7 | S8 | S7 | S7 | SSW7 | SSW8 | SW9 | SW8 | WSW12 | WSW13 | WSW14 | SW11 | WSW12 | WSW13 | WSW11 | WSW13 | SW7 | WSW8 | WNW9 | NW5 | WNW10 | WNW12 | WNW12 | WSW7.5 | WSW14 |
| 5-Aug | WNW11 | WNW10 | WNW10 | W9 | W9 | WNW10 | WNW12 | WNW14 | WNW18 | NW17 | NW20 | WNW18 | NW19 | WNW18 | WNW16 | WNW14 | W11 | W10 | NW7 | N15 | NNW12 | WNW6 | NW17 | WNW16 | WNW12.5 | NW20 |
| 6-Aug | WNW17 | WNW15 | WNW15 | WNW17 | WNW16 | WNW15 | WNW16 | WNW16 | WNW13 | WNW12 | WNW12 | WNW13 | WNW14 | WNW11 | W11 | WNW14 | NW12 | NW12 | NW10 | NW7 | NW5 | WSW6 | WSW6 | WSW7 | WNW11.8 | WNW17 |
| 7-Aug | WSW8 | W7 | WSW5 | WSW7 | SW7 | SW8 | WSW9 | WSW8 | W8 | W10 | WNW12 | WNW12 | NW13 | WNW12 | WNW13 | NW14 | WNW11 | NW8 | NNE4 | NNE6 | NNE4 | N2 | S3 | S4 | WNW6.2 | NW14 |
| 8-Aug | SSE4 | S6 | SSW4 | S4 | SW4 | WSW4 | NW4 | NNE6 | NNW7 | N9 | NNE9 | N9 | NNW6 | NNW7 | N5 | N6 | NNW6 | NNW5 | N5 | NE4 | ESE4 | SSE3 | ESE5 | SSE5 | N2.1 | NNE9 |
| 9-Aug | SE5 | SSE4 | SSE4 | ESE4 | SE5 | SE5 | SSE4 | SE3 | SE4 | NE5 | N4 | NNE5 | N6 | N8 | N6 | NNW5 | NNE7 | NE11 | NE7 | NE5 | ESE5 | SSE7 | ESE7 | SE7 | E2.7 | NE11 |
| 10-Aug | SE7 | SE7 | SSE7 | SSE8 | SSE7 | SSE8 | SE7 | SE4 | SW2 | NNW4 | NNE6 | ENE4 | N8 | N7 | NNW4 | N4 | N7 | NNE6 | NNE5 | NNE5 | ENE1 | W5 | WSW3 | W2 | ENE1.2 | SSE8 |
| 11-Aug | ENE2 | SSE4 | SSE6 | SSE6 | S5 | S6 | S5 | WSW3 | NW5 | NW9 | NW8 | NNW8 | NNW9 | N8 | WNW12 | W5 | NNW7 | NNW5 | N7 | N3 | N2 | N3 | SE4 | S4 | NW2.1 | WNW12 |
| 12-Aug | NNW0 | NNE2 | SW3 | SW4 | SW4 | SW4 | SW4 | W4 | NW6 | WNW7 | NNW11 | NNW7 | N8 | NNW7 | NNW7 | N10 | N11 | NNE7 | NNE8 | NNE6 | N3 | N2 | N3 | NNW2 | NNW3.8 | N11 |
| 13-Aug | WNW3 | N2 | N4 | N4 | N4 | NNE4 | NNE6 | NNE6 | NNE6 | N7 | N7 | NE10 | NNE13 | NNE12 | NE13 | ENE10 | NE13 | NE9 | NE6 | NE5 | ESE4 | SE5 | SSE6 | SSE5 | NE5.2 | NE13 |
| 14-Aug | SE7 | SE6 | SSE6 | SE6 | SSE4 | S4 | SE2 | N4 | NNW5 | NNW4 | NW6 | ENE5 | ESE5 | E5 | NW2 | W6 | WNW3 | NNW4 | N6 | SSE3 | SSE4 | SSE6 | S6 | S6 | SE1.4 | SE7 |
| 15-Aug | S6 | S6 | S6 | SSW6 | S6 | SSW6 | SSW6 | SSW6 | W6 | W7 | W7 | W9 | WSW8 | WSW7 | WSW9 | WSW7 | SSW9 | SW9 | SSW10 | SSW7 | SSW6 | S7 | SSW7 | SSW8 | SW6.0 | SSW10 |
| 16-Aug | SSW7 | SSW9 | SSW9 | SSW9 | SSW9 | SW10 | WSW10 | W9 | WNW7 | NW8 | NNW8 | N12 | NNE6 | NW6 | NNW7 | NNW9 | NNW11 | NNW5 | NW4 | SW4 | SSW6 | SSW6 | SSW6 | SSW6 | W3.5 | N12 |
| 17-Aug | SSW7 | SSW7 | S6 | SSW6 | SSW7 | SSW7 | SSW6 | WSW9 | W9 | W9 | W9 | W9 | W7 | NNW6 | NNW4 | SW7 | SW9 | SSW7 | S6 | S6 | S7 | S9 | S10 | S10 | SW5.5 | S10 |
| 18-Aug | S11 | S11 | S12 | S13 | S12 | S12 | S12 | SSW10 | SSW9 | SW8 | WSW10 | WSW8 | WSW10 | WSW10 | SW10 | SW11 | SW12 | WSW12 | W7 | WSW5 | SSW6 | SSW7 | SSW6 | S7 | SSW8.2 | S13 |
| 19-Aug | SSW7 | SSW7 | SSW7 | SSW6 | SSW7 | SSW8 | SSW8 | SW8 | WSW9 | W10 | W10 | WNW14 | WNW15 | WNW14 | NW10 | NW10 | W8 | SSE5 | S4 | SW3 | SSW7 | SSW6 | S6 | S6 | WSW5.5 | WNW15 |
| 20-Aug | S6 | ESE4 | SSE7 | SSW7 | SSW7 | SSW8 | SSW5 | SW5 | WSW5 | W6 | WNW6 | NW10 | NW11 | NNW13 | N11 | NNW10 | NNW8 | N9 | N6 | ENE4 | E4 | SSE6 | SSE7 | SSE8 | WNW1.5 | NNW13 |
| 21-Aug | SSE7 | SSE8 | S7 | E5 | SE7 | SSE6 | S6 | SSE4 | SSW5 | SSW7 | SSW6 | SSW7 | S8 | S8 | SSW9 | SSW9 | SSW10 | S10 | S8 | SSE8 | SSE10 | S11 | S12 | S13 | S7.3 | S13 |
| 22-Aug | S14 | S15 | S16 | SSE16 | SSE17 | S16 | S17 | S15 | S14 | S10 | S9 | S9 | S8 | S9 | S9 | S12 | S12 | SSE10 | S8 | SSW6 | SSW8 | SSW10 | S11 | S9 | S11.5 | S17 |
| 23-Aug | S8 | SSW7 | SW6 | SSW7 | S7 | S6 | SSE7 | S7 | S4 | SW6 | S8 | SSW8 | SSW3 | NNW5 | WNW7 | WNW7 | WSW4 | W8 | WNW10 | W7 | WNW7 | WSW4 | NW8 | WNW8 | WSW4.1 | WNW10 |
| 24-Aug | NW7 | WNW7 | WNW6 | WNW6 | NW6 | WNW6 | W5 | WNW5 | WNW7 | NW11 | NW13 | NNW16 | NW19 | NW19 | NW22 | NW18 | NW17 | NNW11 | NNW10 | NW6 | NW4 | S3 | SSE7 | S7 | NW8.3 | NW22 |
| 25-Aug | SSW7 | S6 | SSW7 | SSW7 | SSW7 | SSW7 | SSW6 | SW4 | WSW5 | NW6 | WNW5 | W3 | WNW5 | W4 | N3 | NNE5 | N5 | NE1 | E4 | ESE6 | SE7 | SE8 | SSE10 | SSE12 | SSW2.6 | SSE12 |
| 26-Aug | SSE11 | S11 | S9 | S10 | S9 | S8 | S9 | S9 | S9 | S11 | S13 | S13 | S14 | S14 | S13 | S11 | S12 | S10 | SSE9 | SSE7 | SSE9 | SSE12 | SSE14 | SSE15 | S10.9 | SSE15 |
| 27-Aug | SSE15 | SSE15 | SSE14 | SSE15 | SSE15 | SSE13 | SSE11 | SSE8 | SE6 | SSE9 | SSE10 | S10 | SE9 | ESE8 | SE9 | ESE12 | ESE11 | SE9 | SSE6 | SSE6 | SE6 | SE10 | SE11 | SE11 | SSE9.9 | SSE15 |
| 28-Aug | S9 | SSW10 | SW16 | WSW7 | SSW6 | SW11 | S9 | SSW11 | WSW13 | WSW15 | WSW15 | WSW15 | SW13 | WSW17 | WSW18 | WSW13 | WSW16 | WSW15 | WSW12 | SW6 | WSW7 | WSW9 | WSW10 | SW8 | SW11.0 | WSW18 |
| 29-Aug | SSW10 | SW10 | WSW14 | WSW11 | WSW13 | SW12 | SW12 | WSW13 | WSW12 | WSW13 | WSW13 | WSW12 | WSW13 | WSW15 | WSW13 | SW10 | SSW11 | SW8 | S7 | SSE8 | S8 | S8 | SSE8 | SSE8 | SW9.6 | WSW15 |
| 30-Aug | SSE8 | SSE9 | SSE12 | SSE9 | SE4 | SSE7 | SSE7 | SE6 | SSW2 | NNW7 | NNW9 | NNW9 | NNW5 | NW8 | NNW7 | N6 | N5 | ENE4 | E1 | SSE5 | SSE5 | WSW5 | W4 | SW7 | S0.7 | SSE12 |
| 31-Aug | SW8 | SW8 | WSW7 | SW6 | WSW8 | SW7 | WSW9 | WSW9 | W10 | WNW12 | NW13 | WNW11 | WNW10 | WNW9 | W9 | WNW8 | NW9 | WNW7 | WSW5 | SW4 | S6 | S6 | S6 | SSE7 | W6.1 | NW13 |
| | SSW4.9 | SSW4.7 | SSW5.4 | SSW4.6 | SSW4.9 | SSW5.2 | SSW4.8 | SW4.0 | W4.5 | WNW5.3 | WNW5.5 | WNW5.1 | WNW4.8 | WNW5.0 | WNW5.1 | WNW4.2 | WNW4.0 | WNW2.7 | WNW2.0 | W0.5 | S1.7 | SSW3.6 | S3.8 | S4.9 | Diurnal Average | |
| | WNW17 | S15 | SSE16 | WNW17 | SSE17 | S16 | S17 | WNW16 | WNW18 | NW17 | NW20 | N21 | N22 | NW19 | NW22 | NW18 | NW17 | NNW20 | NW20 | NW17 | NW14 | NW16 | NW17 | WNW16 | Diurnal Maximum | |

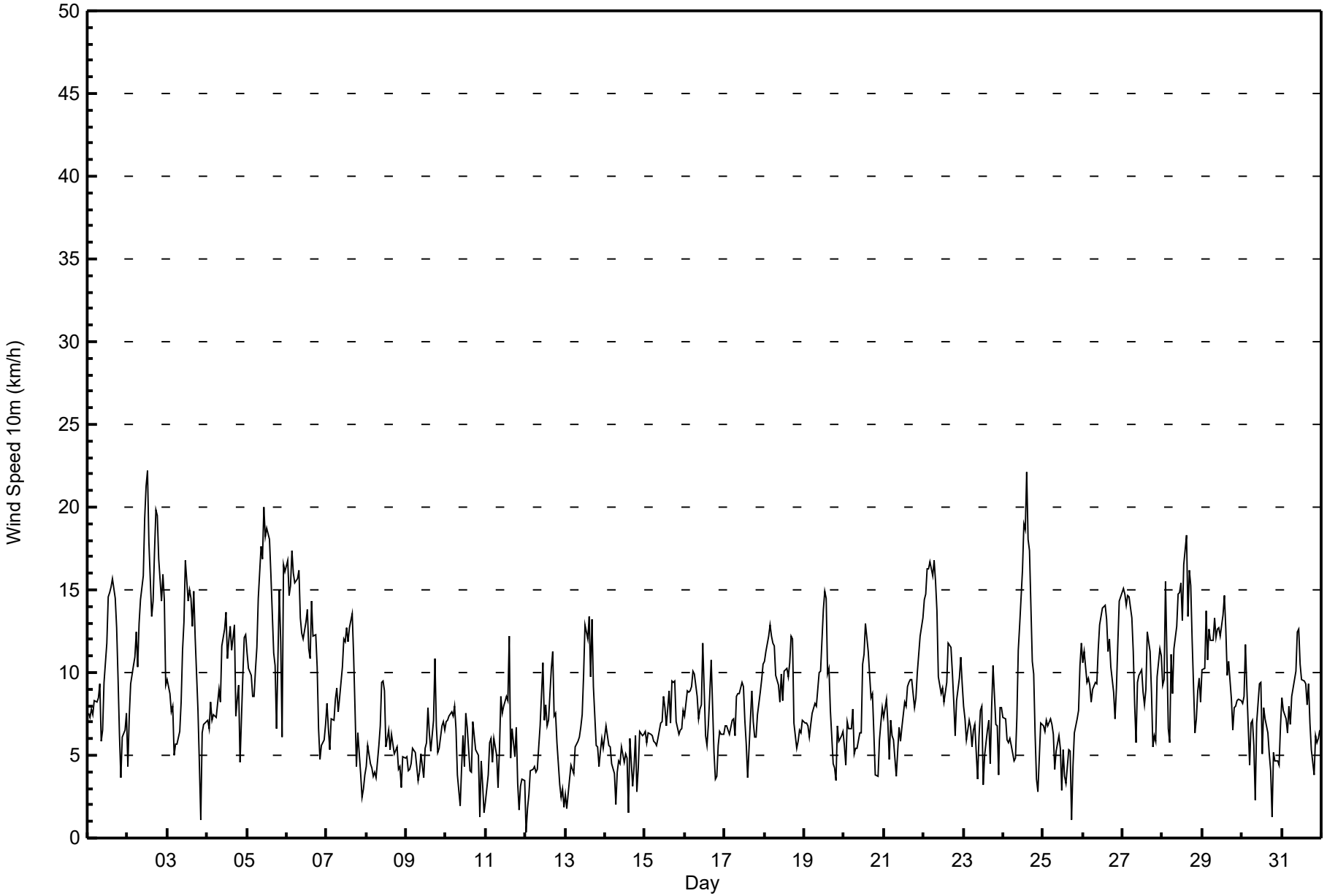
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Hangingstone Expansion - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Hangingstone Expansion - August 2026**

| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 152 | 20.43 | 20.43 |
| 6 - 11 | 435 | 58.47 | 78.90 |
| 12 - 19 | 151 | 20.30 | 99.19 |
| 20 - 28 | 6 | 0.81 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Hangingstone Expansion - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 19 | 8 | 5 | 6 | 5 | 7 | 10 | 15 | 10 | 5 | 13 | 12 | 9 | 5 | 7 | 16 | 152 |
| 6 - 11 | 21 | 13 | 5 | 1 | 0 | 5 | 19 | 52 | 75 | 71 | 27 | 29 | 31 | 31 | 28 | 27 | 435 |
| 12 - 19 | 3 | 2 | 2 | 0 | 0 | 1 | 4 | 16 | 22 | 0 | 5 | 27 | 0 | 33 | 24 | 12 | 151 |
| 20 - 28 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 6 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 45 | 23 | 12 | 7 | 5 | 13 | 33 | 83 | 107 | 76 | 45 | 68 | 40 | 69 | 62 | 56 | 744 |

Total Number of Valid Hours: 744

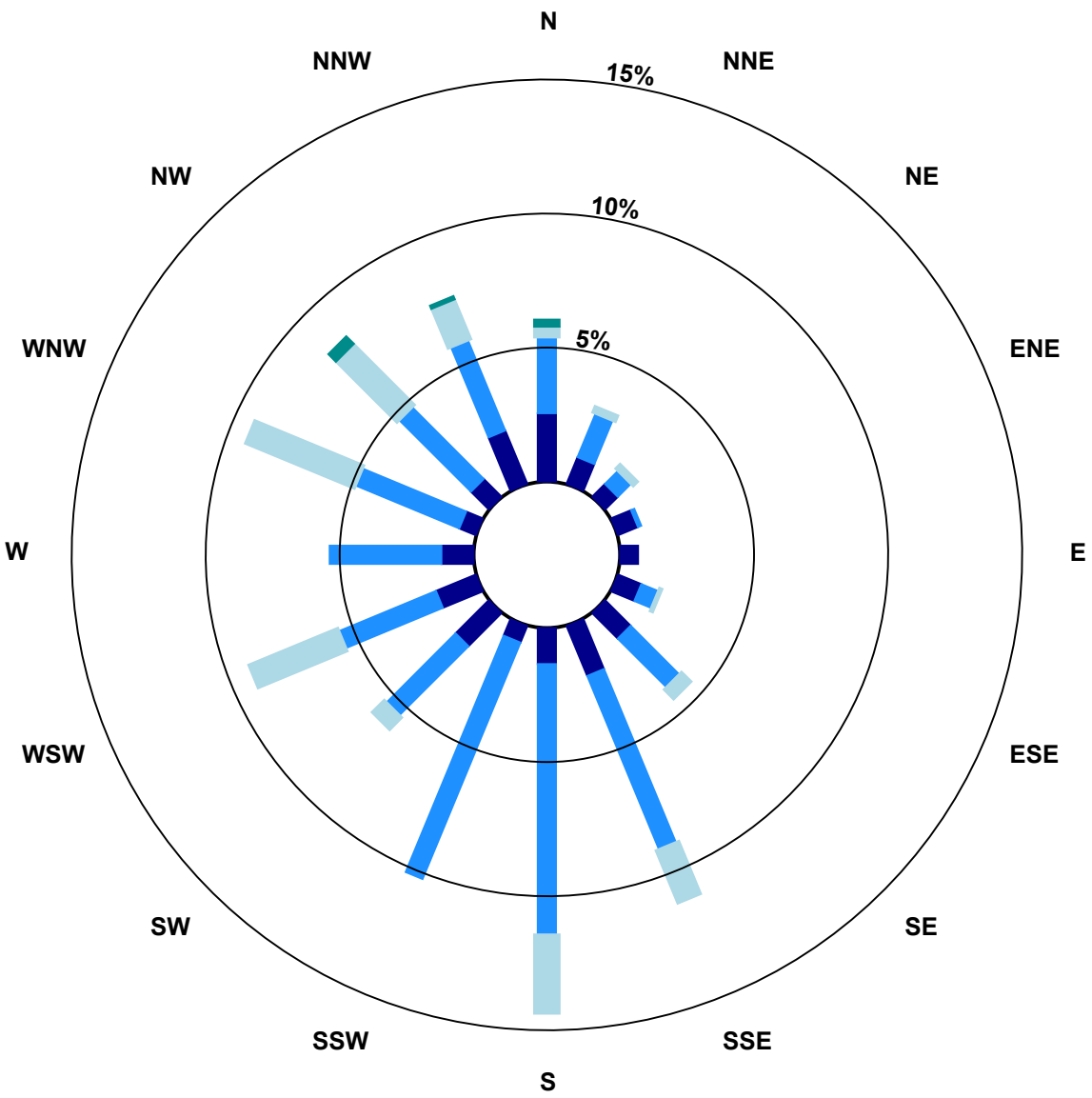
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Hangingstone Expansion




Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Hangingstone Expansion - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Aug 1 21:00

Minimum Value: 0 km/h on Aug 10 02:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 3 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 1 | 9 | 4 | 2 | 3 | 9 |
| 2-Aug | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 6 | 6 | 5 | 3 | 3 | 5 | 5 | 5 | 4 | 3 | 4 | 4 | 2 | 6 |
| 3-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 5 |
| 5-Aug | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 6 | 4 | 4 | 3 | 5 | 4 | 6 |
| 6-Aug | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 4 |
| 7-Aug | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 4 |
| 8-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 9-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 11-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 12-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 4 |
| 13-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 3 | 3 | 5 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 5 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 5 | 4 | 4 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 5 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 3 |
| 16-Aug | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 17-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 18-Aug | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 2 | 2 | 1 | 1 | 2 | 1 | 5 |
| 19-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 20-Aug | 1 | 3 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 4 |
| 22-Aug | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 4 |
| 23-Aug | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 2 | 2 | 1 | 3 | 3 | 4 |
| 24-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 3 | 4 | 6 | 5 | 6 | 5 | 5 | 4 | 3 | 1 | 2 | 1 | 1 | 1 | 6 |
| 25-Aug | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 26-Aug | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 3 | 3 | 4 |
| 27-Aug | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 3 | 4 | 3 | 4 |
| 28-Aug | 3 | 3 | 5 | 5 | 2 | 4 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 6 | 6 | 4 | 3 | 2 | 3 | 3 | 3 | 6 |
| 29-Aug | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 5 |
| 30-Aug | 1 | 1 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 3 |
| 31-Aug | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 4 | 9 | 4 | 5 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Hangingstone Expansion - August 2026

Direction of Maximum Speed: 182 deg on Aug 1 00:00
Direction of Maximum Daily Speed Average: 0.0 deg on Jan 1

Direction of Minimum Speed: 182 deg on Aug 1 00:00
Direction of Minimum Daily Speed Average: 0.0 deg on Jan 1

Monthly Average Direction: -- deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 182 | 179 | 171 | 162 | 161 | 161 | 167 | 165 | 134 | 105 | 147 | 135 | 133 | 131 | 144 | 150 | 166 | 174 | 186 | 174 | 252 | 188 | 231 | 213 | -- |
| 2-Aug | 217 | 313 | 294 | 328 | 317 | 325 | 336 | 338 | 342 | 344 | 351 | 355 | 352 | 348 | 327 | 318 | 322 | 328 | 326 | 322 | 316 | 324 | 329 | 321 | -- |
| 3-Aug | 310 | 305 | 290 | 292 | 262 | 267 | 260 | 270 | 285 | 321 | 330 | 318 | 309 | 316 | 323 | 332 | 311 | 326 | 338 | 345 | 330 | 157 | 160 | 169 | -- |
| 4-Aug | 174 | 176 | 170 | 181 | 184 | 192 | 203 | 218 | 225 | 247 | 245 | 238 | 222 | 241 | 251 | 257 | 253 | 222 | 257 | 295 | 318 | 293 | 299 | 298 | -- |
| 5-Aug | 300 | 300 | 296 | 278 | 281 | 292 | 291 | 299 | 300 | 306 | 304 | 302 | 304 | 299 | 289 | 284 | 273 | 273 | 309 | 4 | 341 | 297 | 308 | 302 | -- |
| 6-Aug | 296 | 293 | 294 | 300 | 299 | 293 | 293 | 300 | 298 | 293 | 295 | 298 | 299 | 299 | 272 | 302 | 310 | 308 | 316 | 325 | 317 | 258 | 249 | 240 | -- |
| 7-Aug | 244 | 260 | 248 | 242 | 236 | 229 | 237 | 258 | 267 | 273 | 291 | 294 | 304 | 289 | 299 | 312 | 302 | 322 | 22 | 32 | 14 | 1 | 183 | 187 | -- |
| 8-Aug | 155 | 187 | 203 | 186 | 222 | 246 | 305 | 12 | 348 | 358 | 17 | 355 | 338 | 335 | 351 | 4 | 347 | 328 | 10 | 54 | 104 | 147 | 112 | 151 | -- |
| 9-Aug | 134 | 167 | 147 | 120 | 146 | 129 | 160 | 129 | 132 | 51 | 3 | 18 | 351 | 352 | 9 | 344 | 19 | 52 | 37 | 43 | 119 | 151 | 121 | 143 | -- |
| 10-Aug | 138 | 141 | 153 | 150 | 150 | 149 | 144 | 137 | 216 | 330 | 27 | 59 | 359 | 358 | 338 | 352 | 359 | 15 | 16 | 17 | 64 | 261 | 248 | 269 | -- |
| 11-Aug | 59 | 149 | 164 | 150 | 190 | 183 | 189 | 257 | 305 | 317 | 313 | 345 | 333 | 352 | 289 | 276 | 342 | 335 | 349 | 359 | 357 | 356 | 126 | 179 | -- |
| 12-Aug | 340 | 16 | 230 | 224 | 234 | 228 | 236 | 268 | 313 | 300 | 345 | 332 | 2 | 348 | 343 | 2 | 360 | 25 | 17 | 14 | 352 | 3 | 355 | 343 | -- |
| 13-Aug | 301 | 4 | 357 | 4 | 2 | 13 | 22 | 17 | 25 | 5 | 360 | 37 | 18 | 22 | 41 | 76 | 35 | 45 | 48 | 49 | 106 | 143 | 155 | 158 | -- |
| 14-Aug | 142 | 142 | 147 | 139 | 151 | 172 | 127 | 6 | 348 | 332 | 321 | 77 | 114 | 94 | 314 | 269 | 302 | 333 | 4 | 149 | 149 | 165 | 169 | 169 | -- |
| 15-Aug | 175 | 181 | 188 | 192 | 190 | 193 | 195 | 209 | 260 | 270 | 276 | 274 | 256 | 258 | 241 | 254 | 205 | 222 | 211 | 202 | 195 | 191 | 198 | 202 | -- |
| 16-Aug | 200 | 206 | 207 | 210 | 206 | 221 | 252 | 278 | 287 | 313 | 347 | 7 | 15 | 319 | 329 | 335 | 347 | 328 | 310 | 234 | 195 | 194 | 199 | 198 | -- |
| 17-Aug | 198 | 196 | 188 | 198 | 201 | 198 | 211 | 243 | 269 | 269 | 281 | 277 | 269 | 331 | 329 | 230 | 221 | 212 | 184 | 175 | 173 | 173 | 173 | 175 | -- |
| 18-Aug | 175 | 178 | 171 | 171 | 170 | 172 | 180 | 192 | 206 | 219 | 256 | 254 | 241 | 245 | 233 | 216 | 228 | 250 | 261 | 245 | 192 | 193 | 198 | 187 | -- |
| 19-Aug | 204 | 195 | 210 | 201 | 207 | 203 | 203 | 227 | 244 | 260 | 273 | 300 | 295 | 296 | 305 | 309 | 274 | 163 | 184 | 225 | 197 | 197 | 170 | 174 | -- |
| 20-Aug | 182 | 107 | 148 | 204 | 196 | 197 | 203 | 236 | 246 | 260 | 298 | 318 | 323 | 347 | 357 | 341 | 341 | 352 | 8 | 57 | 88 | 159 | 164 | 160 | -- |
| 21-Aug | 166 | 158 | 174 | 89 | 133 | 155 | 171 | 159 | 213 | 211 | 201 | 212 | 187 | 187 | 213 | 200 | 194 | 182 | 178 | 166 | 165 | 171 | 172 | 170 | -- |
| 22-Aug | 169 | 170 | 169 | 165 | 164 | 171 | 169 | 174 | 175 | 177 | 180 | 176 | 170 | 172 | 177 | 174 | 170 | 166 | 176 | 198 | 201 | 195 | 183 | 186 | -- |
| 23-Aug | 188 | 196 | 216 | 192 | 189 | 170 | 163 | 175 | 184 | 235 | 191 | 212 | 200 | 347 | 295 | 283 | 251 | 271 | 300 | 259 | 295 | 249 | 313 | 292 | -- |
| 24-Aug | 306 | 297 | 293 | 287 | 305 | 286 | 272 | 287 | 302 | 318 | 326 | 337 | 324 | 319 | 324 | 324 | 326 | 334 | 334 | 318 | 310 | 182 | 157 | 173 | -- |
| 25-Aug | 193 | 188 | 197 | 203 | 207 | 201 | 208 | 230 | 258 | 305 | 283 | 273 | 291 | 261 | 354 | 19 | 359 | 43 | 94 | 117 | 137 | 131 | 154 | 160 | -- |
| 26-Aug | 167 | 173 | 169 | 170 | 171 | 171 | 170 | 172 | 175 | 172 | 176 | 177 | 179 | 170 | 182 | 175 | 172 | 173 | 158 | 168 | 161 | 157 | 158 | 154 | -- |
| 27-Aug | 159 | 160 | 161 | 160 | 159 | 157 | 161 | 166 | 146 | 152 | 162 | 174 | 132 | 122 | 127 | 111 | 108 | 138 | 154 | 152 | 131 | 131 | 125 | 132 | -- |
| 28-Aug | 170 | 201 | 221 | 238 | 194 | 236 | 187 | 213 | 237 | 247 | 245 | 239 | 230 | 237 | 247 | 242 | 249 | 248 | 250 | 235 | 246 | 256 | 248 | 221 | -- |
| 29-Aug | 210 | 226 | 245 | 238 | 240 | 220 | 229 | 246 | 252 | 253 | 254 | 249 | 248 | 244 | 237 | 227 | 207 | 216 | 180 | 168 | 171 | 171 | 167 | 165 | -- |
| 30-Aug | 166 | 163 | 157 | 150 | 141 | 147 | 152 | 133 | 213 | 340 | 345 | 331 | 340 | 325 | 334 | 356 | 1 | 61 | 90 | 148 | 162 | 249 | 260 | 236 | -- |
| 31-Aug | 233 | 228 | 238 | 214 | 239 | 221 | 244 | 250 | 278 | 292 | 308 | 302 | 296 | 292 | 275 | 303 | 309 | 301 | 257 | 224 | 184 | 184 | 177 | 168 | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

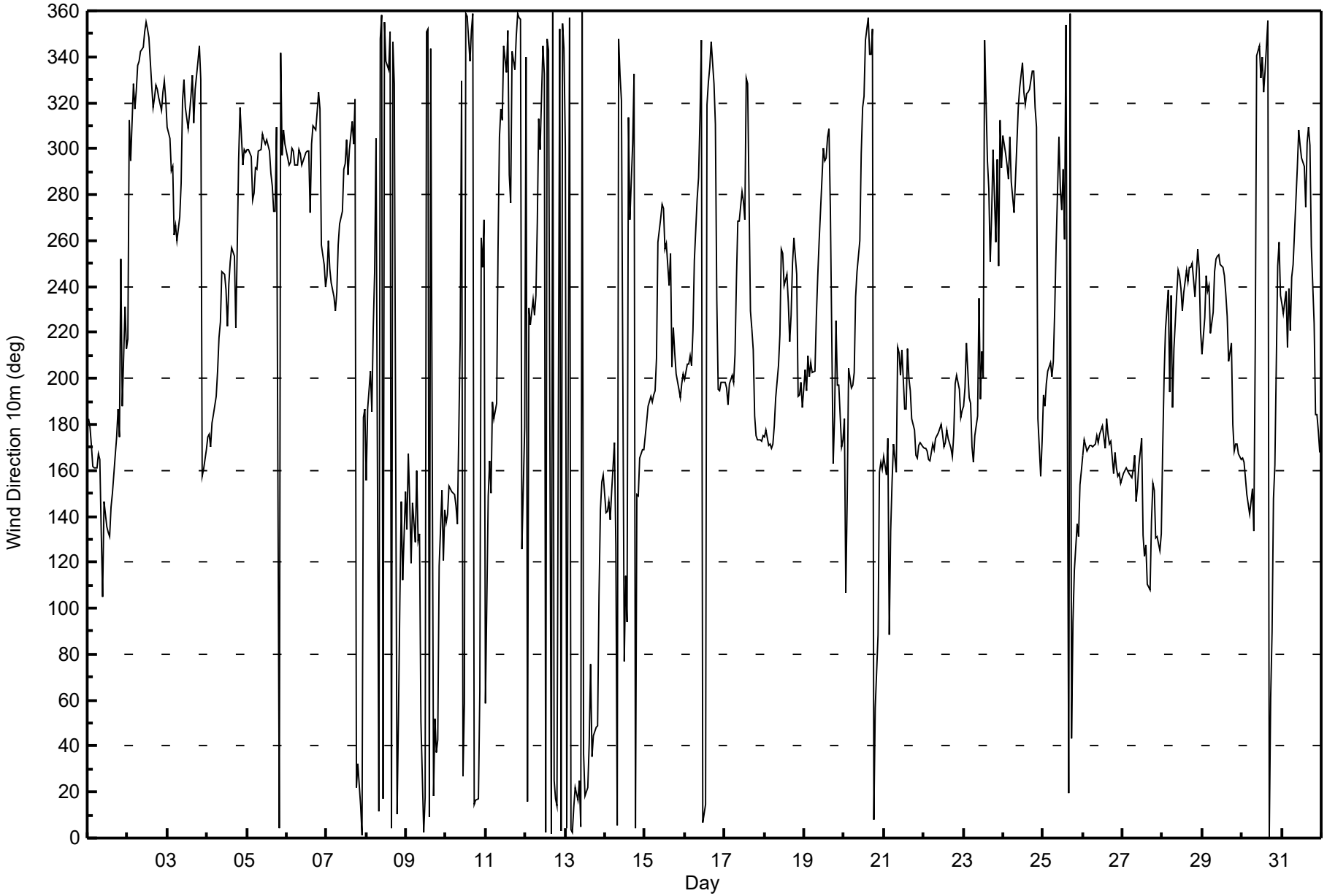
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Hangingstone Expansion - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Hangingstone Expansion - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 92 deg on Aug 14 15:00

Minimum Value: 5 deg on Aug 3 23:00

Percentiles: $P_1$ = 6 $P_{10}$ = 13 $Q_1$ = 17 Median = 22 $Q_3$ = 29 $P_{90}$ = 38 $P_{99}$ = 74

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 14 | 15 | 13 | 10 | 12 | 14 | 16 | 19 | 30 | 25 | 21 | 25 | 24 | 24 | 24 | 21 | 21 | 25 | 23 | 16 | 79 | 60 | 35 | 35 | 79 |
| 2-Aug | 38 | 31 | 27 | 17 | 14 | 14 | 16 | 16 | 15 | 17 | 16 | 18 | 18 | 17 | 17 | 14 | 17 | 15 | 15 | 15 | 13 | 15 | 16 | 16 | 38 |
| 3-Aug | 13 | 13 | 17 | 16 | 26 | 25 | 27 | 26 | 23 | 22 | 20 | 18 | 20 | 19 | 21 | 22 | 17 | 19 | 19 | 21 | 65 | 8 | 5 | 7 | 65 |
| 4-Aug | 7 | 8 | 9 | 13 | 15 | 20 | 26 | 32 | 40 | 27 | 28 | 32 | 30 | 35 | 30 | 30 | 27 | 29 | 28 | 22 | 20 | 15 | 14 | 14 | 40 |
| 5-Aug | 14 | 14 | 16 | 20 | 21 | 16 | 17 | 15 | 15 | 17 | 17 | 20 | 18 | 16 | 19 | 21 | 23 | 23 | 55 | 21 | 18 | 27 | 14 | 14 | 55 |
| 6-Aug | 15 | 16 | 16 | 15 | 15 | 17 | 17 | 15 | 16 | 17 | 16 | 14 | 16 | 21 | 32 | 20 | 18 | 16 | 15 | 19 | 24 | 18 | 23 | 25 | 32 |
| 7-Aug | 26 | 25 | 24 | 26 | 28 | 28 | 27 | 28 | 28 | 24 | 26 | 21 | 18 | 22 | 20 | 19 | 22 | 26 | 27 | 20 | 21 | 27 | 19 | 19 | 28 |
| 8-Aug | 14 | 14 | 21 | 22 | 19 | 24 | 24 | 27 | 26 | 25 | 28 | 24 | 38 | 26 | 47 | 23 | 27 | 30 | 15 | 19 | 19 | 31 | 14 | 19 | 47 |
| 9-Aug | 23 | 21 | 28 | 20 | 13 | 13 | 18 | 22 | 28 | 25 | 56 | 46 | 52 | 32 | 46 | 47 | 24 | 17 | 17 | 12 | 28 | 9 | 7 | 16 | 56 |
| 10-Aug | 7 | 5 | 9 | 7 | 6 | 6 | 10 | 21 | 70 | 48 | 59 | 66 | 28 | 18 | 27 | 18 | 19 | 19 | 15 | 13 | 56 | 13 | 23 | 58 | 70 |
| 11-Aug | 35 | 29 | 8 | 6 | 9 | 8 | 10 | 40 | 28 | 27 | 30 | 28 | 36 | 50 | 30 | 37 | 29 | 27 | 15 | 28 | 48 | 40 | 29 | 8 | 50 |
| 12-Aug | 88 | 61 | 30 | 19 | 17 | 17 | 25 | 30 | 18 | 29 | 23 | 22 | 22 | 19 | 22 | 22 | 19 | 21 | 29 | 18 | 28 | 26 | 18 | 75 | 88 |
| 13-Aug | 17 | 59 | 14 | 23 | 23 | 26 | 19 | 22 | 26 | 23 | 25 | 20 | 28 | 23 | 23 | 39 | 16 | 23 | 34 | 13 | 27 | 13 | 10 | 7 | 59 |
| 14-Aug | 6 | 10 | 6 | 10 | 32 | 9 | 74 | 25 | 57 | 53 | 55 | 61 | 43 | 51 | 92 | 26 | 60 | 27 | 18 | 45 | 40 | 9 | 9 | 9 | 92 |
| 15-Aug | 13 | 12 | 12 | 16 | 15 | 15 | 19 | 28 | 30 | 32 | 36 | 33 | 40 | 52 | 41 | 42 | 31 | 30 | 30 | 25 | 21 | 21 | 21 | 22 | 52 |
| 16-Aug | 22 | 25 | 24 | 27 | 26 | 31 | 27 | 27 | 25 | 14 | 22 | 18 | 25 | 30 | 29 | 22 | 20 | 24 | 30 | 23 | 10 | 13 | 17 | 19 | 31 |
| 17-Aug | 20 | 21 | 19 | 20 | 23 | 21 | 29 | 27 | 26 | 29 | 25 | 33 | 42 | 34 | 59 | 44 | 37 | 34 | 18 | 12 | 12 | 11 | 13 | 15 | 59 |
| 18-Aug | 15 | 17 | 17 | 16 | 15 | 17 | 20 | 25 | 31 | 33 | 30 | 33 | 34 | 39 | 38 | 33 | 34 | 29 | 23 | 25 | 17 | 19 | 21 | 16 | 39 |
| 19-Aug | 25 | 22 | 25 | 19 | 21 | 22 | 26 | 31 | 29 | 28 | 26 | 21 | 21 | 19 | 16 | 16 | 36 | 34 | 38 | 57 | 8 | 14 | 19 | 13 | 57 |
| 20-Aug | 45 | 47 | 14 | 21 | 18 | 22 | 32 | 30 | 40 | 33 | 34 | 26 | 24 | 23 | 24 | 20 | 30 | 16 | 16 | 25 | 22 | 22 | 6 | 6 | 47 |
| 21-Aug | 5 | 6 | 10 | 19 | 8 | 9 | 11 | 30 | 34 | 36 | 48 | 41 | 38 | 38 | 40 | 33 | 29 | 21 | 18 | 14 | 15 | 17 | 17 | 18 | 48 |
| 22-Aug | 17 | 19 | 18 | 18 | 19 | 24 | 19 | 19 | 20 | 22 | 28 | 26 | 23 | 23 | 28 | 21 | 21 | 19 | 22 | 26 | 23 | 23 | 19 | 19 | 28 |
| 23-Aug | 20 | 23 | 35 | 18 | 16 | 16 | 16 | 19 | 54 | 38 | 37 | 43 | 80 | 40 | 27 | 26 | 25 | 28 | 14 | 28 | 23 | 44 | 23 | 26 | 80 |
| 24-Aug | 14 | 14 | 19 | 20 | 12 | 20 | 20 | 16 | 17 | 18 | 18 | 17 | 18 | 19 | 18 | 18 | 16 | 16 | 15 | 11 | 60 | 52 | 14 | 18 | 60 |
| 25-Aug | 14 | 14 | 11 | 11 | 17 | 17 | 18 | 30 | 32 | 29 | 41 | 83 | 54 | 70 | 83 | 43 | 42 | 84 | 19 | 11 | 9 | 13 | 13 | 15 | 84 |
| 26-Aug | 16 | 17 | 13 | 13 | 13 | 12 | 13 | 17 | 19 | 22 | 23 | 25 | 24 | 22 | 24 | 23 | 21 | 20 | 14 | 14 | 13 | 16 | 17 | 17 | 25 |
| 27-Aug | 17 | 18 | 17 | 17 | 17 | 18 | 18 | 25 | 45 | 26 | 32 | 30 | 25 | 58 | 23 | 20 | 20 | 22 | 19 | 20 | 21 | 19 | 18 | 19 | 58 |
| 28-Aug | 26 | 30 | 27 | 65 | 21 | 32 | 30 | 28 | 32 | 28 | 30 | 32 | 33 | 31 | 28 | 31 | 29 | 28 | 28 | 29 | 30 | 26 | 28 | 29 | 65 |
| 29-Aug | 28 | 28 | 28 | 30 | 28 | 29 | 30 | 27 | 29 | 28 | 29 | 33 | 29 | 29 | 35 | 38 | 30 | 30 | 18 | 12 | 12 | 13 | 13 | 12 | 38 |
| 30-Aug | 13 | 13 | 16 | 18 | 54 | 7 | 16 | 18 | 62 | 25 | 26 | 24 | 53 | 30 | 27 | 37 | 37 | 30 | 26 | 30 | 34 | 39 | 24 | 27 | 62 |
| 31-Aug | 28 | 28 | 25 | 29 | 27 | 26 | 27 | 26 | 22 | 25 | 18 | 26 | 28 | 33 | 30 | 19 | 21 | 25 | 21 | 32 | 11 | 12 | 12 | 9 | 33 |
| | 88 | 61 | 35 | 65 | 54 | 32 | 74 | 40 | 70 | 53 | 59 | 83 | 80 | 70 | 92 | 47 | 60 | 84 | 55 | 57 | 79 | 60 | 35 | 75 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS505
## SAWBONES BAY
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
AUGUST 2026

MONTHLY SUMMARY for
AMD SECTION III.B.1(c)

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 709 | 35 | 35 | 100 | 32.4 | 0 | 7.1 | 0 |
| H2S (ppb) Average | 706 | 38 | 38 | 100 | 2.7 | 0 | 0.8 | 0 |
| NO2 (ppb) Average | 707 | 37 | 37 | 100 | 15 | 0 | 5.8 | - |
| NO (ppb) Average | 707 | 37 | 37 | 100 | 25.4 | - | 3.7 | - |
| NOX (ppb) Average | 707 | 37 | 37 | 100 | 39.7 | - | 8.6 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 29.8 | - | 22.5 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 98.7 | - | 93 | - |
| Wind Speed 10 m (km/h) Average | 742 | 0 | 2 | 99.73 | 26 | - | 19 | - |
| Wind Direction 10 m (deg) Average | 742 | 0 | 2 | 99.73 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 709 | 1.27 | 3.3 | - | 0 | 0 | 0.1 | 0.3 | 0.7 | 3.6 | 32.4 |
| H2S (ppb) Average | 706 | 0.29 | 0.4 | - | 0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.6 | 2.7 |
| NO2 (ppb) Average | 707 | 2.16 | 2.4 | - | 0 | 0.2 | 0.5 | 1.2 | 2.9 | 5.4 | 15 |
| NO (ppb) Average | 707 | 1.12 | 2.4 | - | 0 | 0 | 0.1 | 0.2 | 1.1 | 3.4 | 25.4 |
| NOX (ppb) Average | 707 | 3.28 | 4.5 | - | 0 | 0.3 | 0.6 | 1.4 | 4.2 | 8.8 | 39.7 |
| Temperature 2 m (C) Average | 744 | 15.91 | 5.1 | - | 3.8 | 9.7 | 12.1 | 15.4 | 19.3 | 22.8 | 29.8 |
| Relative Humidity (%) Average | 744 | 71.75 | 18.9 | - | 30.8 | 44.2 | 56.1 | 74.6 | 88.2 | 95.5 | 98.7 |
| Wind Speed 10 m (km/h) Average | 742 | 9.8 | 5 | - | 0 | 3 | 5 | 9 | 13 | 17 | 26 |
| Wind Direction 10 m (deg) Average | 742 | 268.4 | 0 | - | 0 | - | - | - | - | - | 0 |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| Wind Speed, Wind Direction | 14 Aug 2026 01:00 | 14 Aug 2026 01:00 | 1 | Flat line in sensor output signal |
| Wind Speed, Wind Direction | 14 Aug 2026 04:00 | 14 Aug 2026 04:00 | 1 | Flat line in sensor output signal |

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Sulphur Dioxide ($SO_2$) - ppb

## Sawbones Bay - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 32.4 ppb on Aug 17 03:00

Maximum Daily Average: 7.1 ppb on Aug 17

Minimum Value: 0.0 ppb on Aug 2 15:00

Minimum Daily Average: 0.0 ppb on Aug 13

Maximum Diurnal Average: 2.4 ppb at hour 8

Minimum Diurnal Average: 0.3 ppb at hour 1

Monthly Average: 1.27 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.3 $Q_3 = 0.7$ $P_{90} = 3.6$ $P_{99} = 17.3$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.2 | Z | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.6 | 0.2 | 0.4 | 0.9 |
| 2-Aug | 0.1 | 0.2 | 1.3 | Z | 0.6 | 0.2 | 0.2 | 2.3 | 1.0 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 2.3 |
| 3-Aug | 0.0 | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.0 | 0.2 | 0.6 | 0.7 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.7 |
| 4-Aug | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.6 | 0.4 | 5.1 | 6.8 | 6.2 | 9.4 | 2.1 | 2.2 | 4.4 | 2.0 | 6.1 | 1.0 | 6.8 | 0.8 | 1.1 | 5.8 | 2.7 | 9.4 |
| 5-Aug | Z | 0.4 | 0.3 | 0.3 | 0.7 | 0.8 | 0.9 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 0.2 | 7.7 | 11.9 | 1.8 | 0.5 | 0.3 | 0.1 | 1.2 | 11.9 |
| 6-Aug | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 3.5 | 0.1 | 0.1 | 4.6 | 8.5 | 2.8 | 0.4 | 0.9 | 8.5 |
| 7-Aug | 4.6 | 25.0 | Z | 0.2 | 0.1 | 8.3 | 21.5 | 10.2 | 2.0 | 5.0 | 0.8 | 0.0 | 0.1 | 0.3 | 0.3 | 0.3 | 0.4 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 3.5 | 25.0 |
| 8-Aug | 0.2 | 0.4 | 0.6 | Z | 0.6 | 0.4 | 0.4 | 0.3 | 0.6 | 0.9 | 1.1 | 1.4 | 1.0 | 1.0 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.6 | 1.4 |
| 9-Aug | 0.1 | 0.1 | 0.2 | 0.4 | Z | 0.2 | 2.1 | 0.5 | 0.8 | 1.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.4 | 2.1 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 |
| 11-Aug | Z | 0.5 | 0.4 | 0.2 | 0.4 | 0.5 | 0.7 | 0.3 | 0.2 | 0.2 | 1.9 | 1.1 | 0.8 | 0.9 | 2.1 | 3.7 | 0.6 | 0.5 | 0.6 | 0.6 | 0.4 | 0.2 | 0.2 | 0.3 | 0.8 | 3.7 |
| 12-Aug | 0.3 | Z | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 1.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.3 |
| 13-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 |
| 14-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 15-Aug | 0.0 | 0.0 | 0.7 | 0.4 | Z | 3.2 | 0.8 | 2.0 | 3.1 | 3.6 | 2.5 | 0.7 | 0.8 | 4.7 | 4.7 | 0.2 | 0.3 | 5.8 | 8.7 | 0.3 | 0.4 | 0.4 | 1.5 | 1.2 | 2.0 | 8.7 |
| 16-Aug | 0.6 | 1.0 | 1.1 | 2.6 | 0.7 | Z | 0.5 | 12.2 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 0.5 | 0.5 | 0.4 | 0.9 | 12.2 |
| 17-Aug | Z | 14.0 | 32.4 | 32.1 | 17.0 | 15.3 | 19.6 | 8.0 | 8.7 | 5.6 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 1.7 | 1.3 | 5.2 | 0.8 | 0.1 | 0.0 | 0.3 | 0.8 | 0.5 | 7.1 | 32.4 |
| 18-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.6 | 2.5 | 3.5 | 5.5 | 5.5 | 2.1 | 7.0 | 4.8 | 0.1 | 0.0 | 0.0 | 5.4 | 0.9 | 0.7 | 1.8 | 7.0 |
| 19-Aug | 0.2 | 0.4 | Z | 4.5 | 4.0 | 19.2 | 10.9 | 6.5 | 11.0 | 8.3 | 6.0 | 6.9 | 1.9 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 3.5 | 19.2 |
| 20-Aug | 0.3 | 1.4 | 0.3 | Z | 0.3 | 0.2 | 0.3 | 2.3 | 2.1 | 1.0 | 0.4 | 1.0 | 0.7 | 2.0 | 0.2 | 0.3 | 0.6 | 1.2 | 1.7 | 1.5 | 1.0 | 0.6 | 0.5 | 0.3 | 0.9 | 2.3 |
| 21-Aug | 0.2 | 0.1 | 0.2 | 0.0 | Z | 0.2 | 0.2 | 0.4 | 2.4 | 6.9 | 2.6 | 2.6 | 2.1 | 0.7 | 1.1 | 1.2 | 0.9 | 0.7 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 1.0 | 6.9 |
| 22-Aug | 0.5 | 0.7 | 0.3 | 0.5 | 0.5 | Z | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.6 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.7 |
| 23-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.7 | 2.5 | 0.5 | 0.7 | 0.5 | 0.3 | 0.6 | 1.2 | 6.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.7 | 6.1 |
| 24-Aug | 0.3 | Z | 1.0 | 9.3 | 7.6 | 2.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.5 | 1.1 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.6 | 0.3 | 0.4 | 0.3 | 1.2 | 9.3 |
| 25-Aug | 0.2 | 0.8 | Z | 4.4 | 1.1 | 0.3 | 0.4 | 5.9 | 1.2 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.8 | 0.3 | 0.4 | 0.6 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.8 | 5.9 |
| 26-Aug | 0.2 | 0.2 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 |
| 27-Aug | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 |
| 28-Aug | 0.2 | 0.8 | 3.8 | 0.4 | 0.2 | Z | 4.6 | 19.3 | 13.6 | 8.3 | C | C | C | C | 6.8 | 8.6 | 4.9 | 4.1 | 17.3 | 0.7 | 0.6 | 1.1 | 3.9 | 13.4 | 5.9 | 19.3 |
| 29-Aug | Z | 3.6 | 4.9 | 4.5 | 0.8 | 0.6 | 0.7 | 0.8 | 2.8 | 1.0 | 1.3 | 1.2 | 2.8 | 2.4 | 5.7 | 6.6 | 7.2 | 1.5 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 2.1 | 7.2 |
| 30-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 1.5 | 1.0 | 0.5 | 0.5 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 1.8 |
| 31-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 | 0.1 | 0.1 | 0.3 |
| | 0.3 | 1.9 | 1.9 | 2.4 | 1.4 | 2.0 | 2.2 | 2.4 | 1.7 | 1.5 | 1.0 | 1.1 | 0.8 | 1.0 | 1.1 | 1.0 | 1.1 | 1.3 | 1.5 | 0.7 | 0.6 | 0.7 | 0.5 | 0.8 | Diurnal Average | |
| | 4.6 | 25.0 | 32.4 | 32.1 | 17.0 | 19.2 | 21.5 | 19.3 | 13.6 | 8.3 | 6.0 | 6.9 | 6.2 | 9.4 | 6.8 | 8.6 | 7.2 | 6.1 | 17.3 | 11.9 | 6.8 | 8.5 | 3.9 | 13.4 | Diurnal Maximum | |

Z - zerospan C - Calibration

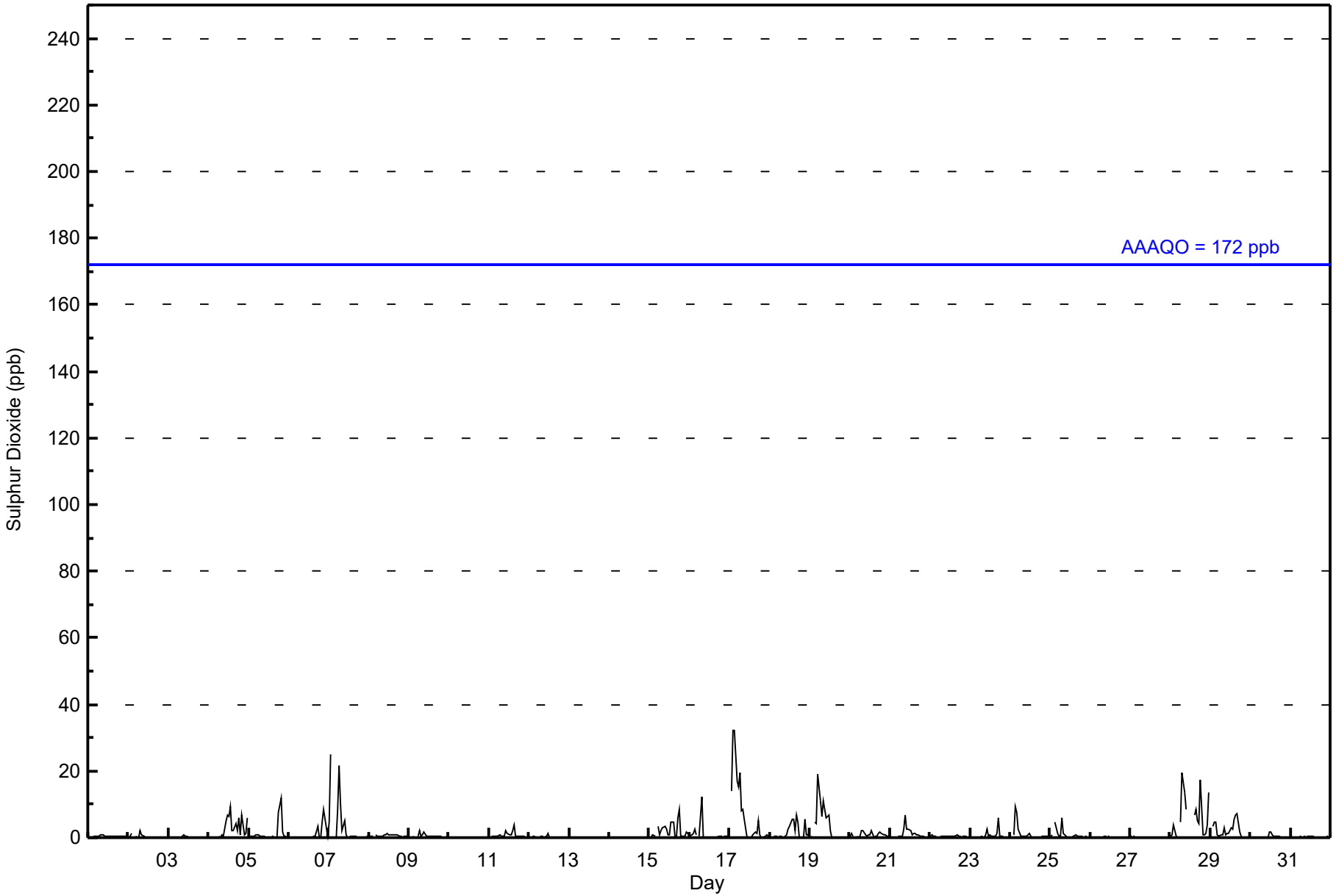
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Sawbones Bay - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Sawbones Bay - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 692 | 97.60 | 97.60 |
| 11 - 20 | 13 | 1.83 | 99.44 |
| 21 - 60 | 4 | 0.56 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Sawbones Bay - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 40 | 26 | 22 | 18 | 15 | 11 | 20 | 65 | 64 | 36 | 46 | 31 | 33 | 116 | 83 | 65 | 691 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 | 0 | 0 | 0 | 13 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 40 | 26 | 22 | 18 | 15 | 11 | 20 | 65 | 64 | 36 | 46 | 36 | 45 | 116 | 83 | 65 | 708 |

Total Number of Valid Hours: 708

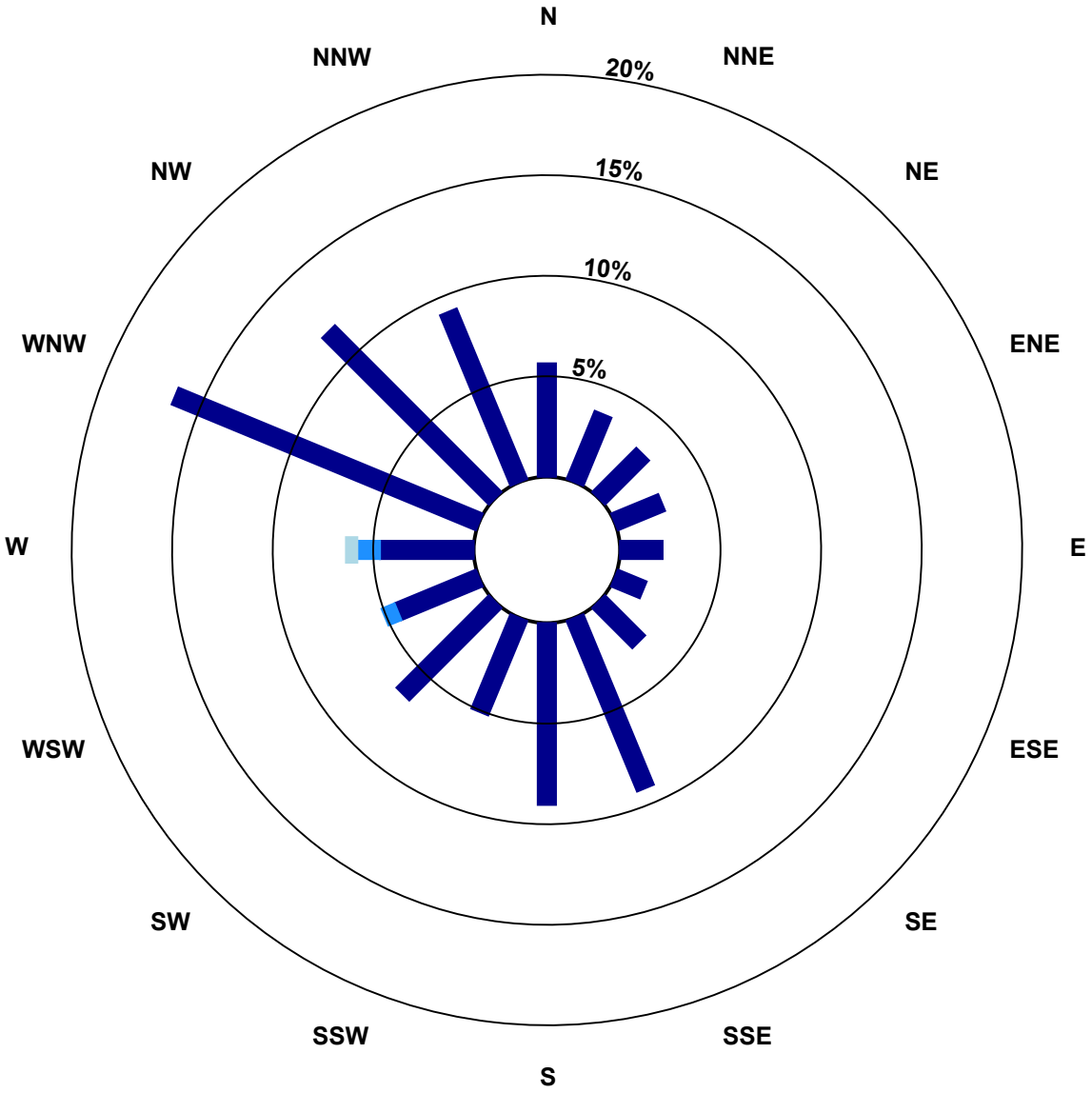
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Sawbones Bay




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

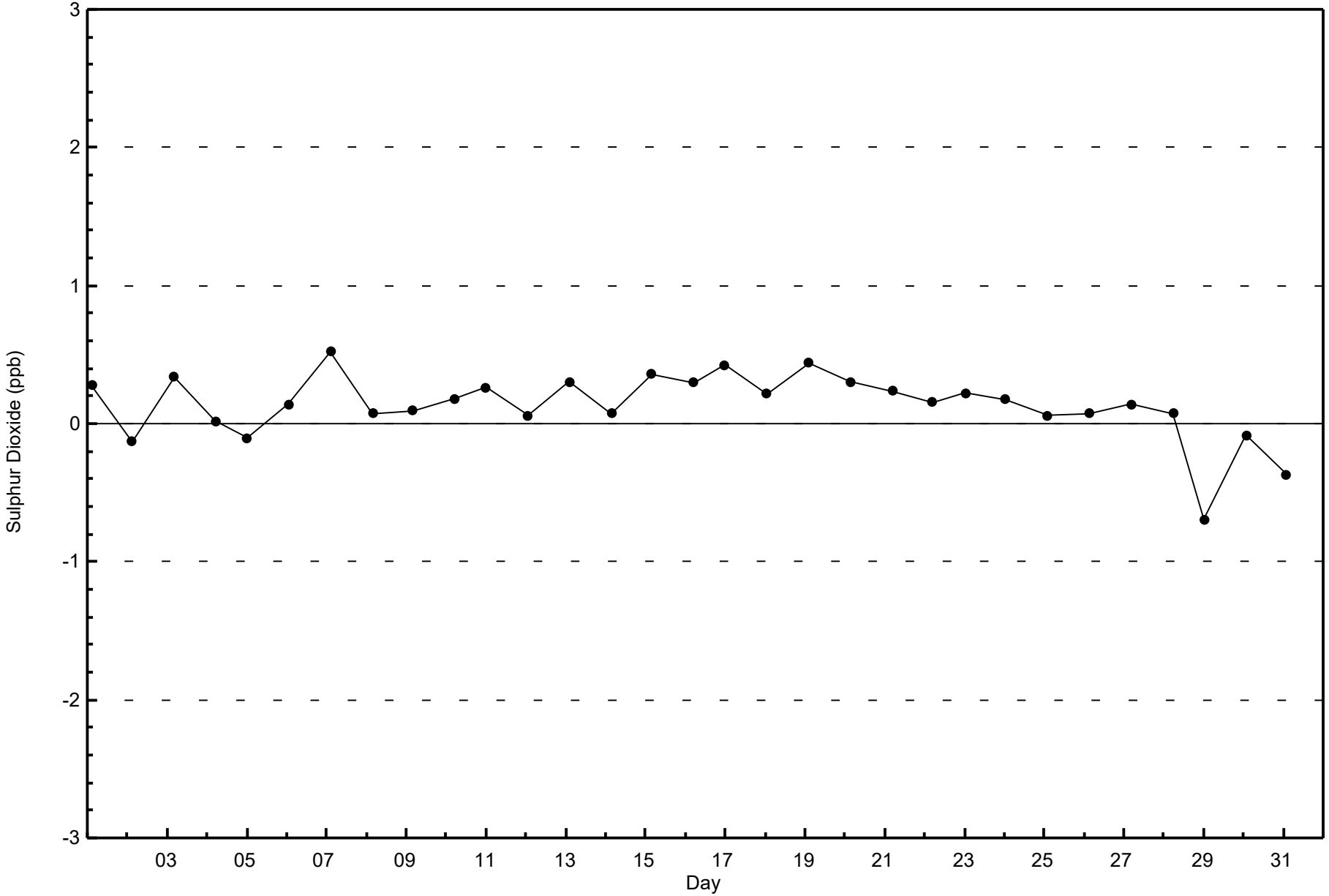
Total Number of Valid Hours: 708

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Sawbones Bay - August 2026**

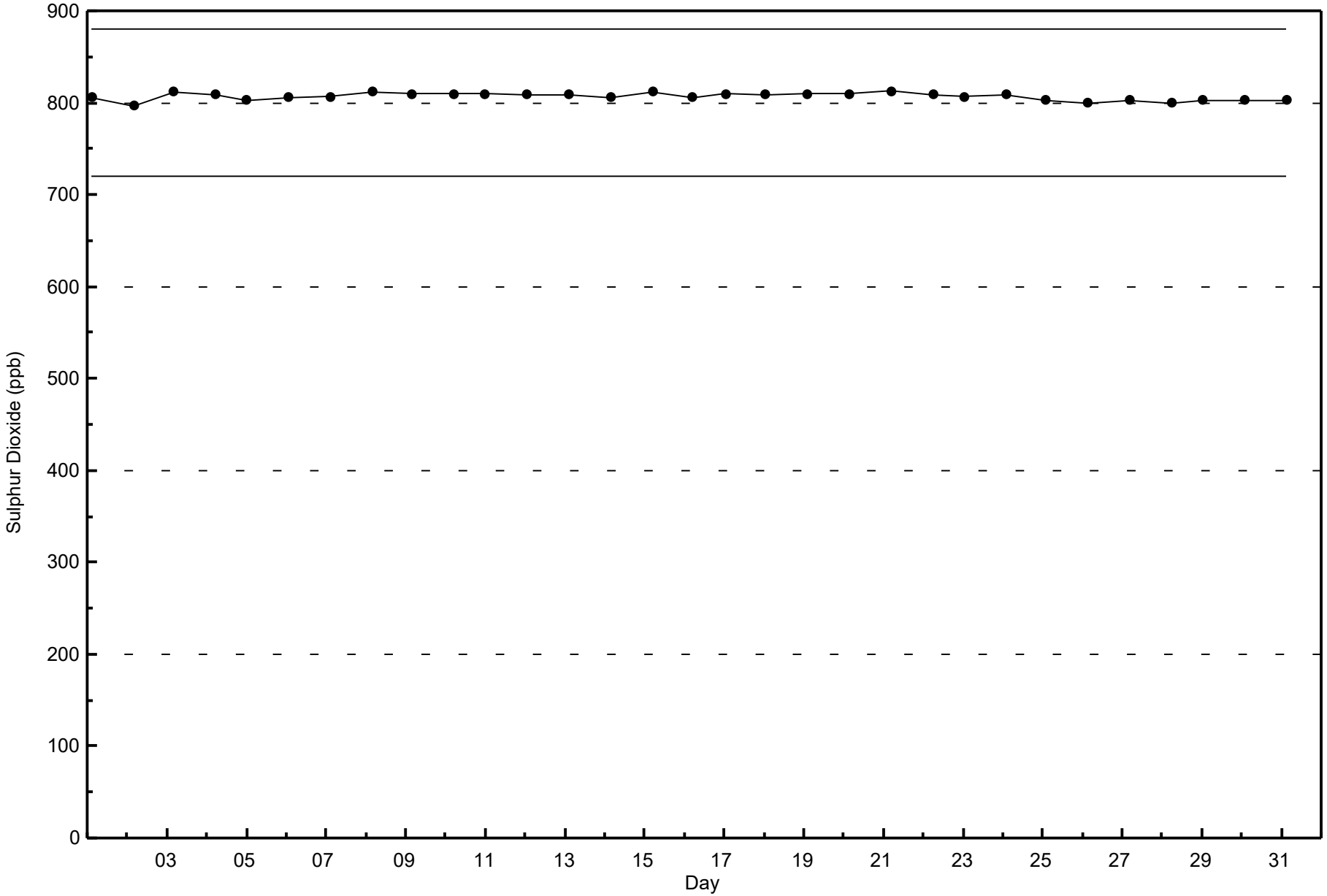


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Sawbones Bay - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide (H2S) - ppb

## Sawbones Bay - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 2.7 ppb on Aug 20 08:00

Maximum Daily Average: 0.8 ppb on Aug 17

Minimum Value: 0.0 ppb on Aug 13 14:00

Minimum Daily Average: 0.1 ppb on Aug 13

Maximum Diurnal Average: 0.6 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 13

Monthly Average: 0.29 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.3 $P_{90}$ = 0.6 $P_{99}$ = 1.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 706 |
| Hours of Missing Data: | 38 |
| Hours of Calibration: | 38 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 |
| 2-Aug | 0.2 | 0.1 | 0.7 | 0.3 | Z | 0.4 | 0.3 | 1.7 | 0.8 | 0.7 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 1.7 |
| 3-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 4-Aug | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.5 | 0.9 | 0.6 | 0.8 | 0.2 | 0.2 | 0.4 | 0.2 | 0.5 | 0.2 | 0.9 | 0.2 | 0.2 | 0.7 | 0.4 | 0.9 |
| 5-Aug | 0.1 | Z | 0.2 | 0.2 | 0.9 | 0.7 | 0.7 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 1.1 | 0.6 | 0.1 | 0.1 | 0.1 | 0.3 | 1.1 |
| 6-Aug | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.1 | 0.1 | 0.7 | 1.2 | 1.3 | 0.6 | 0.3 | 1.3 |
| 7-Aug | 1.8 | 1.1 | 0.6 | Z | 0.1 | 0.5 | 1.4 | 0.8 | 0.3 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.4 | 1.8 |
| 8-Aug | 0.2 | 0.2 | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 |
| 9-Aug | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | Z | 2.2 | 0.4 | 0.9 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 2.2 |
| 10-Aug | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 |
| 11-Aug | 0.2 | Z | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 12-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 13-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 14-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 0.3 | 0.1 | 0.3 |
| 15-Aug | 0.3 | 0.3 | 0.4 | 0.4 | 1.2 | Z | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.7 | 0.8 | 0.2 | 0.1 | 0.8 | 1.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 1.2 |
| 16-Aug | Z | 0.3 | 0.3 | 0.5 | 0.2 | 0.3 | 0.2 | 1.3 | 0.1 | 0.1 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 1.3 |
| 17-Aug | 0.2 | Z | 2.3 | 1.7 | 1.6 | 1.4 | 2.1 | 2.3 | 1.5 | 0.9 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.8 | 0.6 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.8 | 2.3 |
| 18-Aug | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.6 | 0.4 | 1.2 | 1.5 | 0.1 | 0.0 | 0.1 | 1.6 | 0.7 | 0.3 | 0.4 | 1.6 |
| 19-Aug | 0.1 | 0.1 | 0.2 | Z | 1.6 | 2.1 | 1.7 | 1.0 | 1.8 | 0.8 | 0.8 | 1.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 0.2 | 0.2 | 0.2 | 0.6 | 2.1 |
| 20-Aug | 0.3 | 1.1 | 0.2 | 0.2 | Z | 0.3 | 0.4 | 2.7 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 2.7 |
| 21-Aug | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | Z | 0.4 | 0.3 | 0.2 | 0.2 | C | C | C | C | C | C | C | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | -- | 0.4 |
| 22-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| 23-Aug | 0.2 | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 1.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 1.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 1.2 |
| 24-Aug | 0.1 | 0.2 | Z | 2.5 | 1.5 | 1.0 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 0.4 | 2.5 |
| 25-Aug | 0.6 | 0.9 | 0.9 | Z | 0.6 | 0.4 | 0.4 | 1.0 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.0 |
| 26-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 28-Aug | Z | 0.8 | 0.6 | 0.2 | 0.1 | 0.1 | 0.6 | 1.9 | 1.4 | 1.4 | 0.8 | 0.3 | 0.4 | 0.6 | 0.5 | 1.0 | 0.5 | 0.3 | 1.4 | 0.1 | 0.1 | 0.1 | 0.3 | 1.0 | 0.6 | 1.9 |
| 29-Aug | 0.3 | Z | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 |
| 30-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.7 |
| 31-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 0.5 | 0.2 | 0.5 | 0.2 | 0.2 | 0.7 |
| | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 1.8 | 1.1 | 2.3 | 2.5 | 1.6 | 2.1 | 2.2 | 2.7 | 1.8 | 1.4 | 1.0 | 1.2 | 0.6 | 0.8 | 0.8 | 1.0 | 1.2 | 1.5 | 1.4 | 1.1 | 0.9 | 1.6 | 1.3 | 1.0 | Diurnal Maximum | |

Z - zerospan C - Calibration

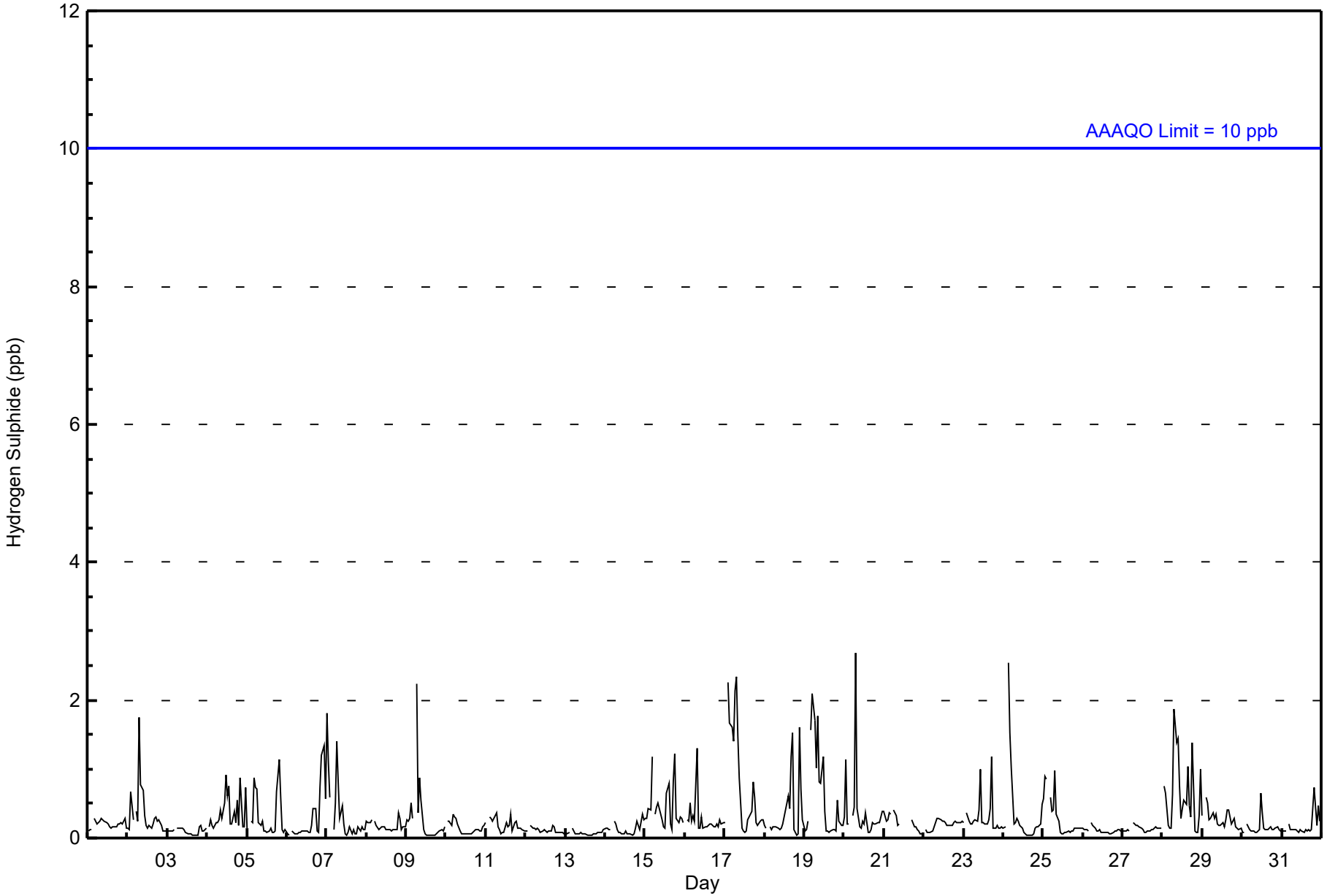
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide (H2S) - ppb**

**Sawbones Bay - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 704 | 99.72 | 99.72 |
| 3 - 4 | 2 | 0.28 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 706

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide (H2S) - ppb**

**Sawbones Bay - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 39 | 27 | 22 | 18 | 15 | 11 | 20 | 68 | 60 | 36 | 44 | 36 | 42 | 119 | 80 | 65 | 702 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 39 | 27 | 22 | 18 | 15 | 11 | 20 | 68 | 60 | 36 | 44 | 37 | 43 | 119 | 80 | 65 | 704 |

Total Number of Valid Hours: 704

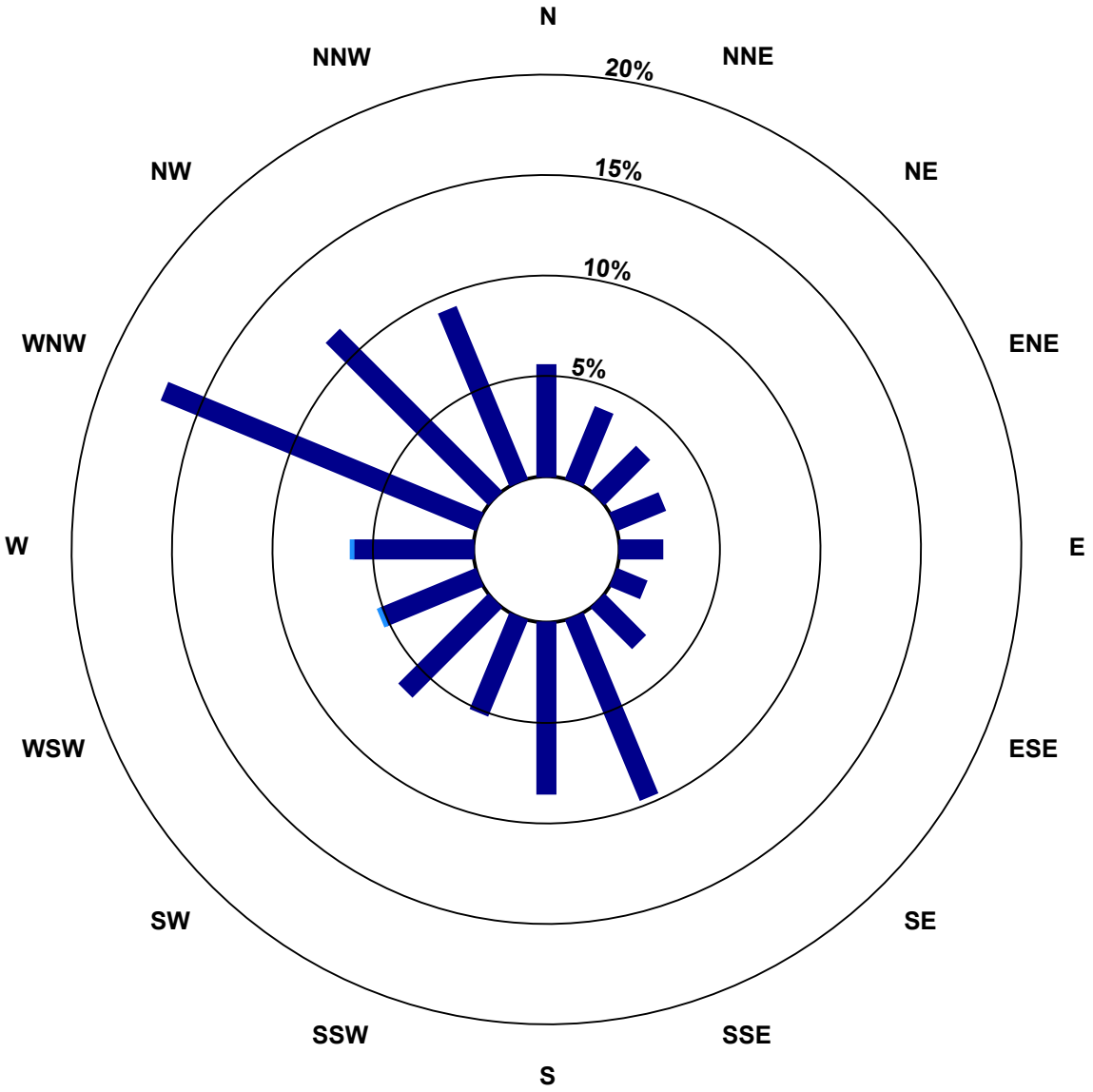
Total Number of Hours: 744

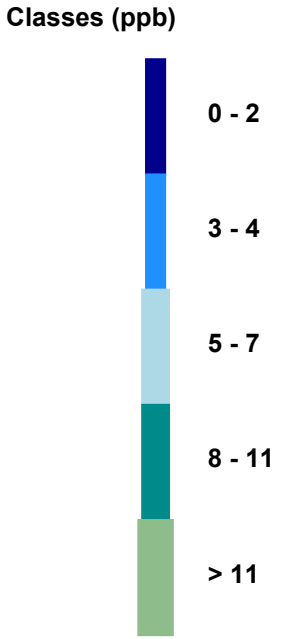
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Hydrogen Sulphide (H2S) - ppb

## Sawbones Bay



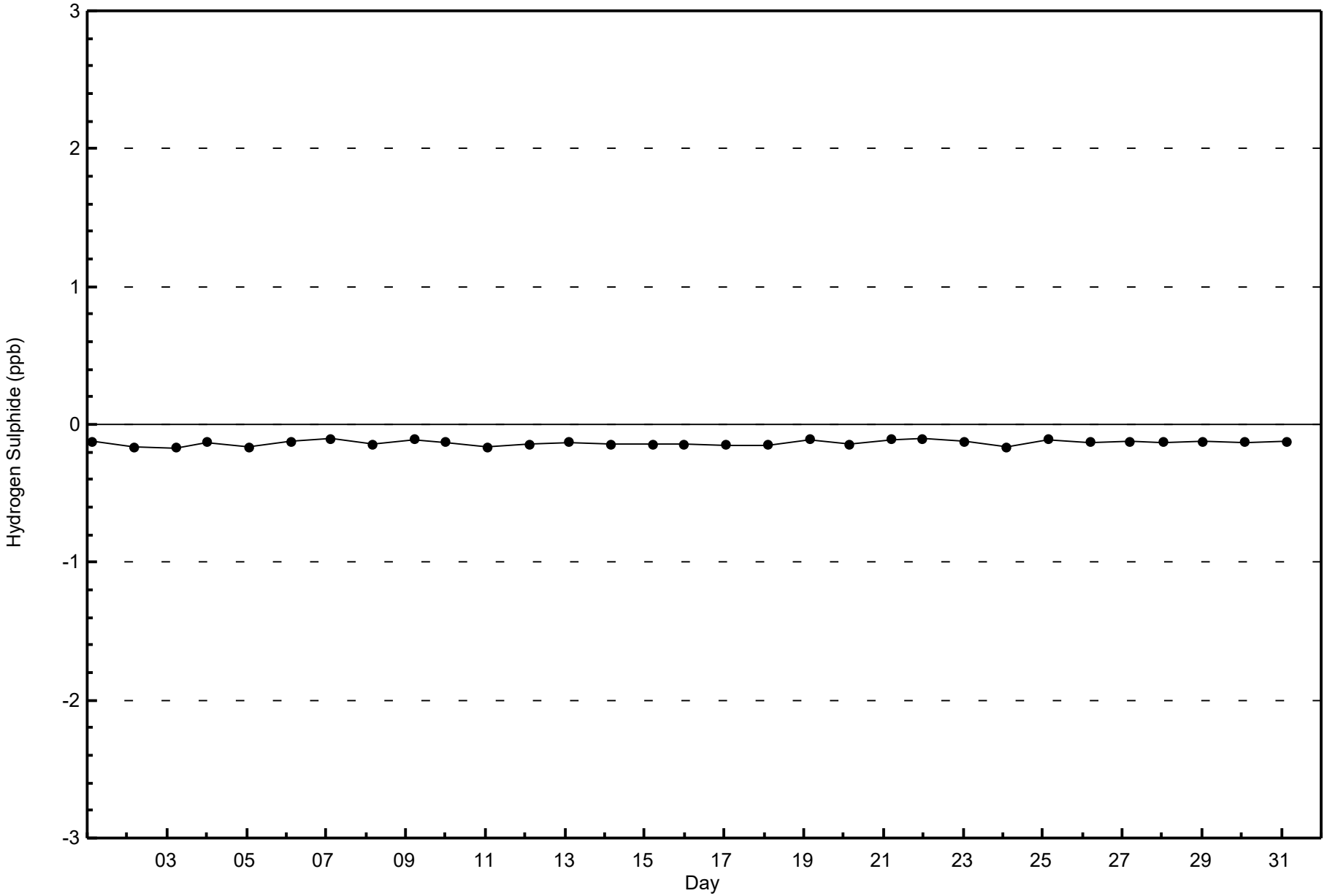

**Total Number of Valid Hours: 704**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide (H2S) - ppb**

**Sawbones Bay - August 2026**

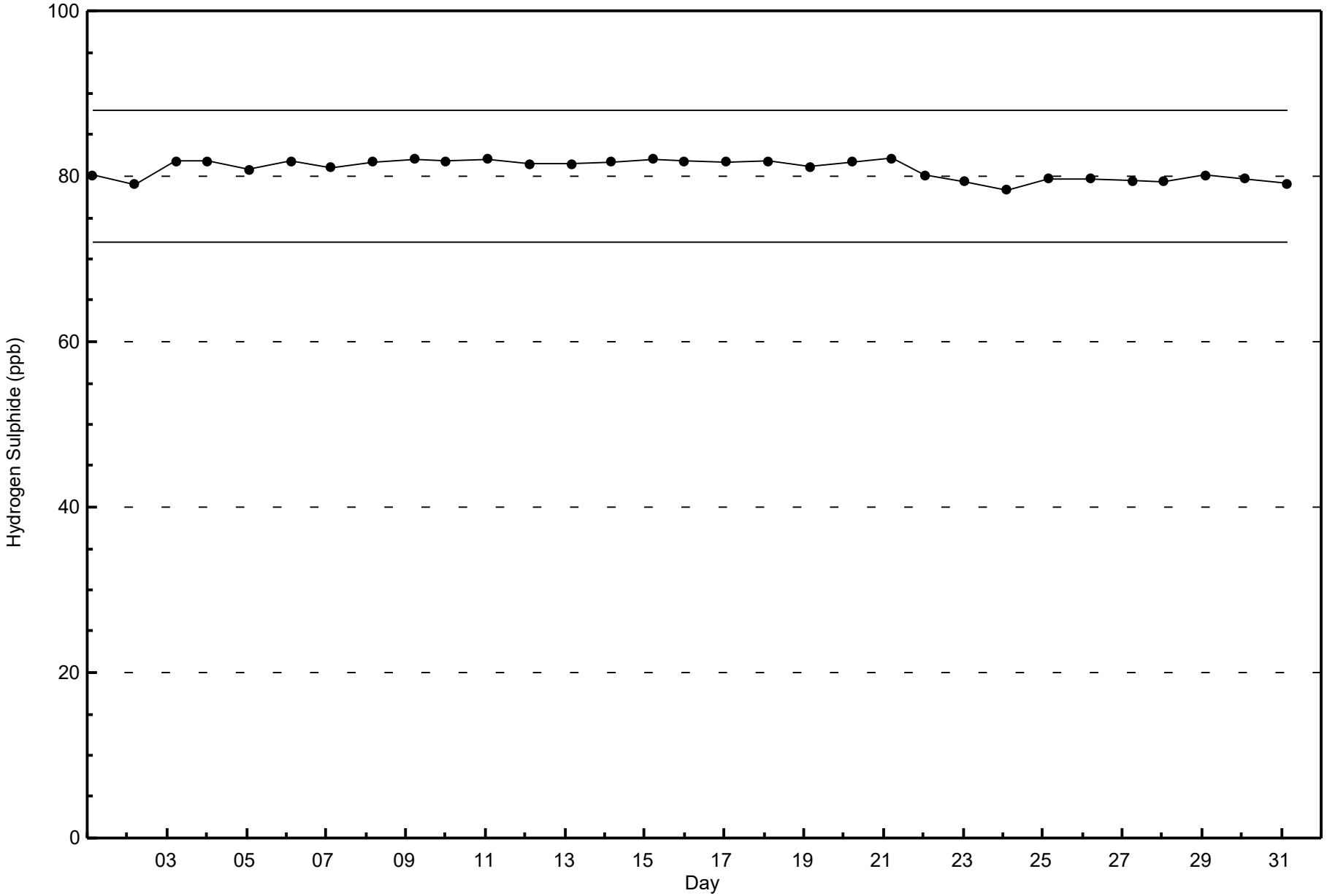


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide (H2S) - ppb**

**Sawbones Bay - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Sawbones Bay - August 2026

Maximum Value: 25.4 ppb on Aug 21 06:00

Maximum Daily Average: 3.7 ppb on Aug 21

Minimum Value: 0.0 ppb on Aug 1 02:00

Minimum Daily Average: 0.1 ppb on Aug 13

Maximum Diurnal Average: 3.4 ppb at hour 7

Minimum Diurnal Average: 0.2 ppb at hour 20

Monthly Average: 1.12 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 1.1 $P_{90}$ = 3.4 $P_{99}$ = 12.5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.6 |
| 2-Aug | 0.0 | Z | 1.8 | 0.4 | 0.8 | 0.5 | 0.1 | 4.7 | 3.2 | 1.3 | 4.5 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 4.7 |
| 3-Aug | 0.0 | 0.0 | Z | 0.1 | 1.0 | 2.4 | 1.3 | 0.7 | 0.4 | 0.9 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.2 | 0.2 | 1.4 | 0.5 | 2.4 |
| 4-Aug | 0.3 | 0.4 | 0.3 | Z | 0.5 | 2.7 | 1.9 | 1.5 | 3.6 | 2.3 | 5.3 | 4.0 | 5.5 | 7.6 | 3.4 | 3.1 | 3.9 | 0.9 | 2.5 | 0.6 | 4.2 | 0.1 | 0.3 | 3.4 | 2.5 | 7.6 |
| 5-Aug | 0.6 | 0.0 | 0.2 | 0.1 | Z | 1.1 | 2.7 | 0.9 | 1.3 | 0.8 | 0.2 | 0.3 | 0.2 | 0.1 | 0.5 | 0.7 | 0.1 | 0.0 | 2.9 | 4.1 | 0.9 | 0.0 | 0.0 | 0.0 | 0.8 | 4.1 |
| 6-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.8 | 0.9 | 0.6 | 1.5 | 0.0 | 0.2 | 2.2 | 4.6 | 1.9 | 0.9 | 0.7 | 4.6 |
| 7-Aug | Z | 15.1 | 1.0 | 0.4 | 0.1 | 5.8 | 16.0 | 9.2 | 2.5 | 3.2 | 0.9 | 0.3 | 0.1 | 0.3 | 0.6 | 0.1 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.0 | 0.1 | 2.5 | 16.0 |
| 8-Aug | 1.3 | Z | 0.2 | 0.2 | 0.1 | 0.3 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 | 0.5 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 2.0 | 0.4 | 2.0 |
| 9-Aug | 0.7 | 1.3 | Z | 0.5 | 1.6 | 3.8 | 6.7 | 3.1 | 2.3 | 1.7 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 1.0 | 6.7 |
| 10-Aug | 0.0 | 0.3 | 0.9 | Z | 1.8 | 2.0 | 5.4 | 4.3 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 5.4 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.2 | 0.6 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.6 | 0.2 | 0.4 | 2.4 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 | 2.4 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | Z | 1.7 | 0.8 | 0.5 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 1.7 |
| 13-Aug | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 |
| 14-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 1.7 | 0.7 | 0.6 | 0.2 | 1.7 |
| 15-Aug | 0.7 | 0.5 | Z | 2.2 | 4.1 | 3.4 | 5.2 | 5.0 | 5.2 | 3.0 | 1.8 | 1.1 | 1.1 | 2.8 | 3.6 | 2.8 | 1.5 | 2.0 | 2.7 | 0.1 | 0.1 | 1.4 | 1.5 | 0.8 | 2.3 | 5.2 |
| 16-Aug | 0.4 | 0.9 | 0.5 | Z | 1.2 | 1.4 | 1.6 | 7.4 | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.7 | 7.4 |
| 17-Aug | 0.8 | 5.8 | 13.0 | 15.8 | Z | 7.7 | 10.9 | 5.8 | 5.0 | 3.5 | 0.2 | 0.1 | 0.0 | 0.1 | 1.0 | 1.0 | 1.5 | 1.6 | 0.3 | 0.8 | 0.7 | 0.5 | 0.0 | 0.0 | 3.3 | 15.8 |
| 18-Aug | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 1.3 | 0.4 | 1.0 | 0.9 | 0.7 | 1.1 | 1.9 | 2.8 | 2.3 | 1.9 | 2.3 | 1.5 | 0.2 | 0.0 | 0.0 | 1.0 | 0.1 | 0.1 | 0.9 | 2.8 |
| 19-Aug | Z | 0.1 | 0.5 | 1.3 | 2.0 | 8.6 | 5.6 | 6.9 | 7.5 | 4.8 | 3.0 | 3.3 | 1.1 | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.5 | 2.3 | 2.1 | 8.6 |
| 20-Aug | 0.1 | Z | 0.3 | 0.5 | 0.7 | 2.2 | 6.4 | 4.5 | 1.6 | 0.6 | 0.1 | 0.7 | 0.3 | 1.5 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 3.4 | 1.0 | 6.4 |
| 21-Aug | 0.2 | 1.0 | Z | 2.2 | 0.8 | 25.4 | 22.8 | 12.6 | 4.2 | 4.3 | 2.0 | 2.5 | 1.3 | 0.6 | 0.7 | 1.3 | 1.3 | 0.4 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 3.7 | 25.4 |
| 22-Aug | 0.1 | 0.2 | 0.1 | Z | 0.1 | 0.1 | 0.3 | 0.6 | 0.9 | 0.7 | 0.7 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.9 |
| 23-Aug | 0.9 | 8.8 | 2.5 | 0.4 | Z | 0.4 | 4.6 | 13.9 | 5.2 | 3.4 | 4.6 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 2.3 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 2.1 | 13.9 |
| 24-Aug | 0.0 | 0.0 | 0.6 | 4.8 | 5.2 | Z | 0.4 | 0.2 | 0.4 | 0.7 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.6 | 5.2 |
| 25-Aug | Z | 1.6 | 3.0 | 2.9 | 2.1 | 4.5 | 2.1 | 5.4 | 1.9 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 1.1 | 5.4 |
| 26-Aug | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.5 | 0.7 | 1.2 | 1.2 | 0.7 | C | C | C | C | C | C | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 1.2 |
| 27-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.3 | 1.9 | 0.1 | 0.1 | 0.6 | 0.0 | 0.1 | 0.0 | 0.3 | 1.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.9 |
| 28-Aug | 0.1 | 0.3 | 1.7 | Z | 0.1 | 0.5 | 1.5 | 5.2 | 5.7 | 2.9 | 3.5 | 3.0 | 7.1 | 5.6 | 5.0 | 5.1 | 5.2 | 2.8 | 2.8 | 0.3 | 0.1 | 0.0 | 1.5 | 4.0 | 2.8 | 7.1 |
| 29-Aug | 0.3 | 1.0 | 2.2 | 2.6 | Z | 3.6 | 3.5 | 1.9 | 4.3 | 2.1 | 3.0 | 2.4 | 2.5 | 1.2 | 2.3 | 3.6 | 2.4 | 0.6 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 1.7 | 4.3 |
| 30-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 | 1.9 | 1.4 | 0.6 | 0.2 | 0.5 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 1.9 |
| 31-Aug | Z | 0.1 | 0.1 | 0.0 | 0.2 | 0.6 | 1.7 | 1.6 | 0.7 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.3 | 1.7 |
| | 0.3 | 1.5 | 1.1 | 1.3 | 0.9 | 3.0 | 3.4 | 3.3 | 2.0 | 1.3 | 1.2 | 0.8 | 0.9 | 0.8 | 0.8 | 0.9 | 0.7 | 0.5 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.7 | Diurnal Average | |
| | 1.3 | 15.1 | 13.0 | 15.8 | 5.2 | 25.4 | 22.8 | 13.9 | 7.5 | 4.8 | 5.3 | 4.0 | 7.1 | 7.6 | 5.0 | 5.1 | 5.2 | 2.8 | 2.9 | 4.1 | 4.2 | 4.6 | 1.9 | 4.0 | Diurnal Maximum | |

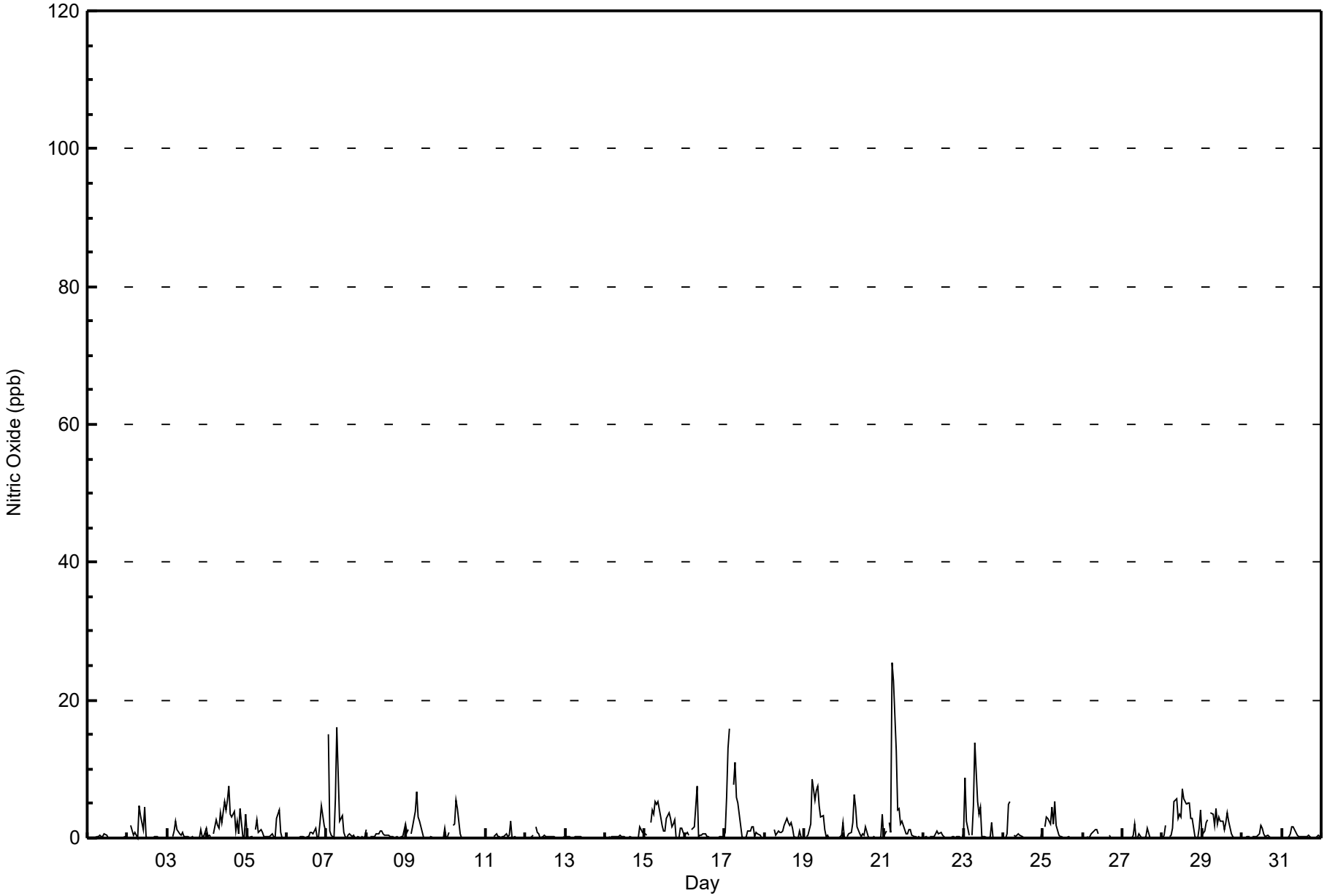
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Sawbones Bay - August 2026**



# Nitric Oxide (NO) - ppb
## Sawbones Bay - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 99.72 | 99.72 |
| 21 - 40 | 2 | 0.28 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 41 | 27 | 22 | 16 | 14 | 11 | 21 | 65 | 59 | 35 | 46 | 41 | 42 | 118 | 81 | 64 | 703 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 41 | 27 | 22 | 16 | 14 | 11 | 21 | 66 | 60 | 35 | 46 | 41 | 42 | 118 | 81 | 64 | 705 |

Total Number of Valid Hours: 705

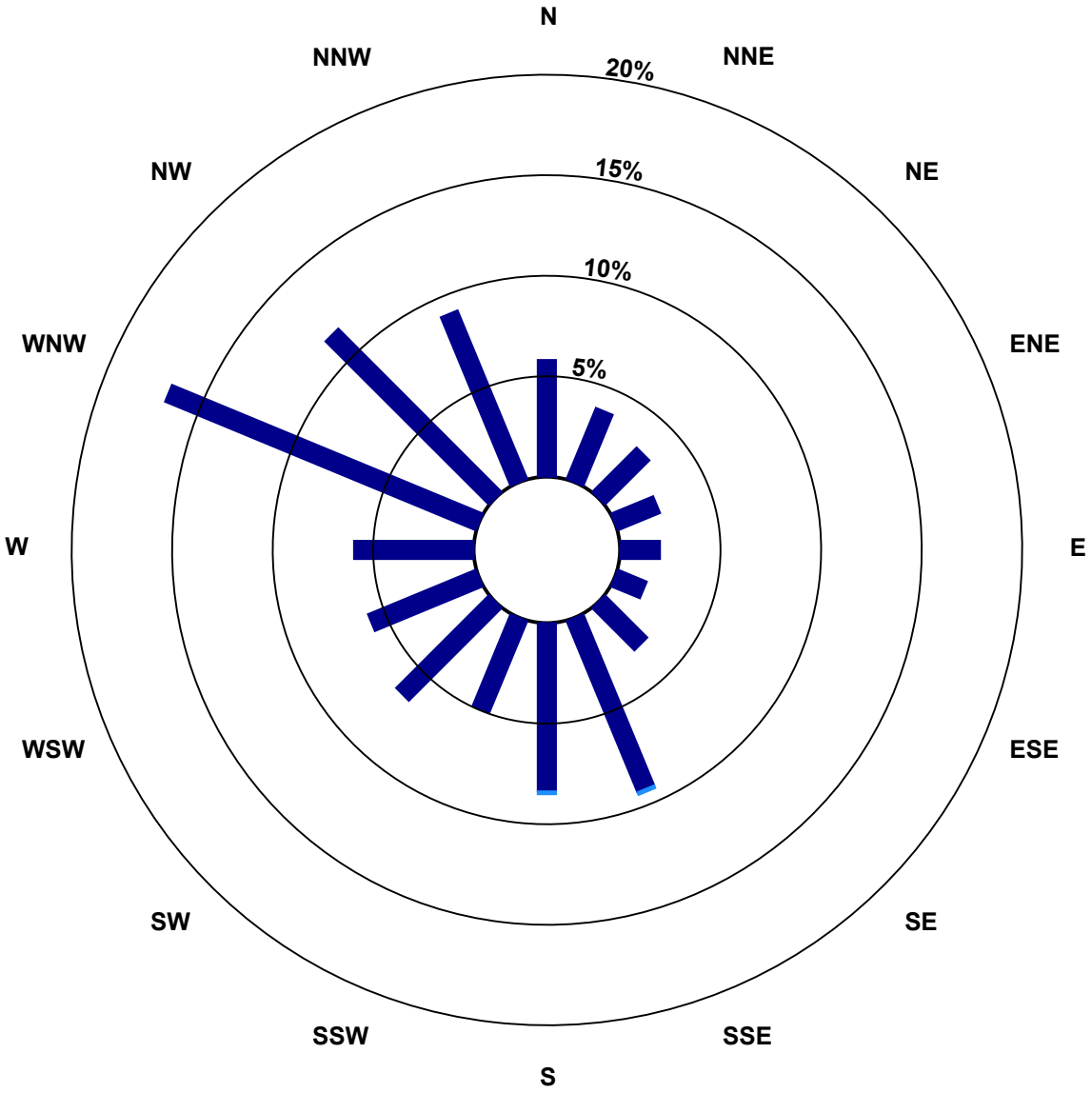
Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Nitric Oxide (NO) - ppb**

**Sawbones Bay**




**Classes (ppb)**

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

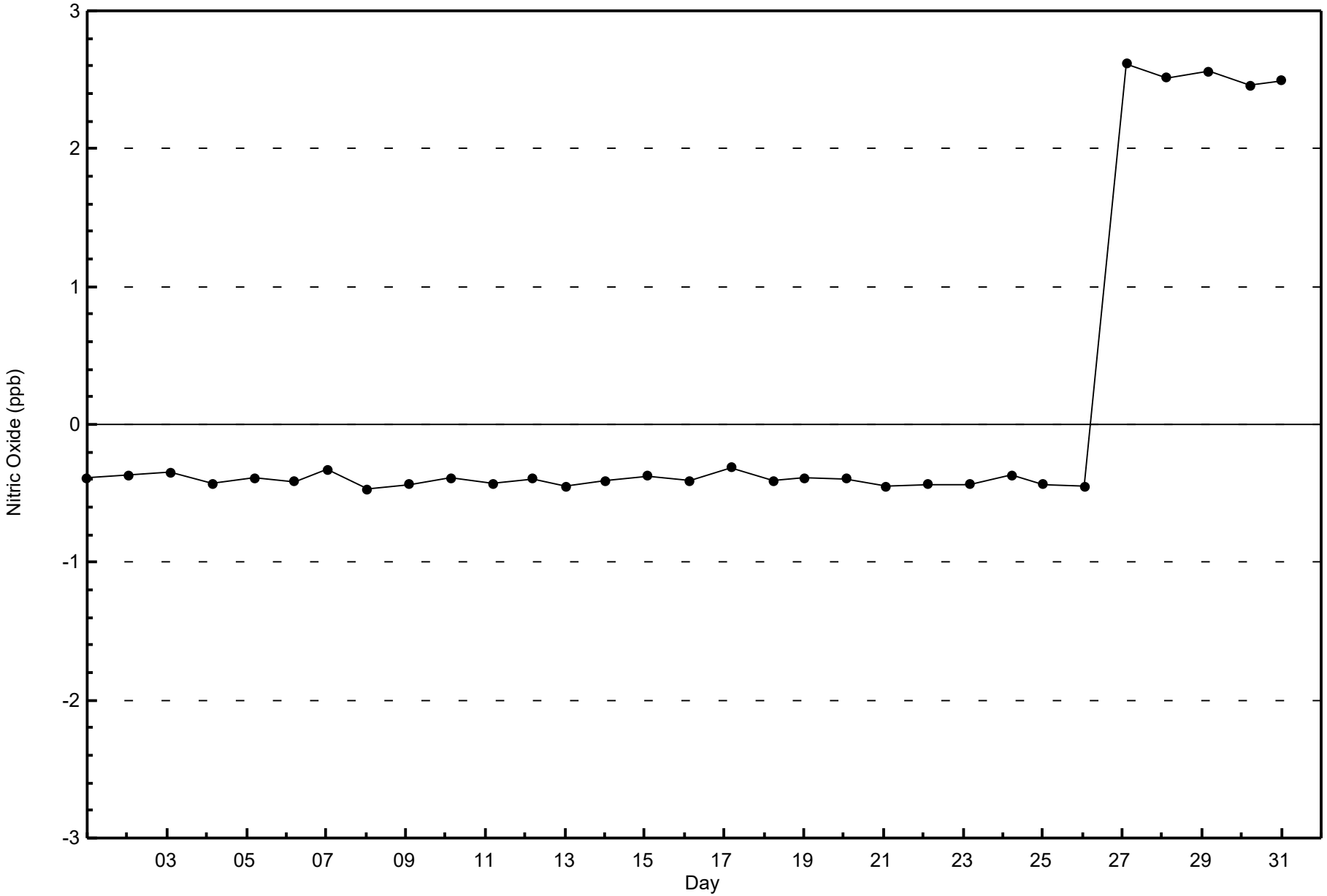
**Total Number of Valid Hours: 705**

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Sawbones Bay - August 2026**

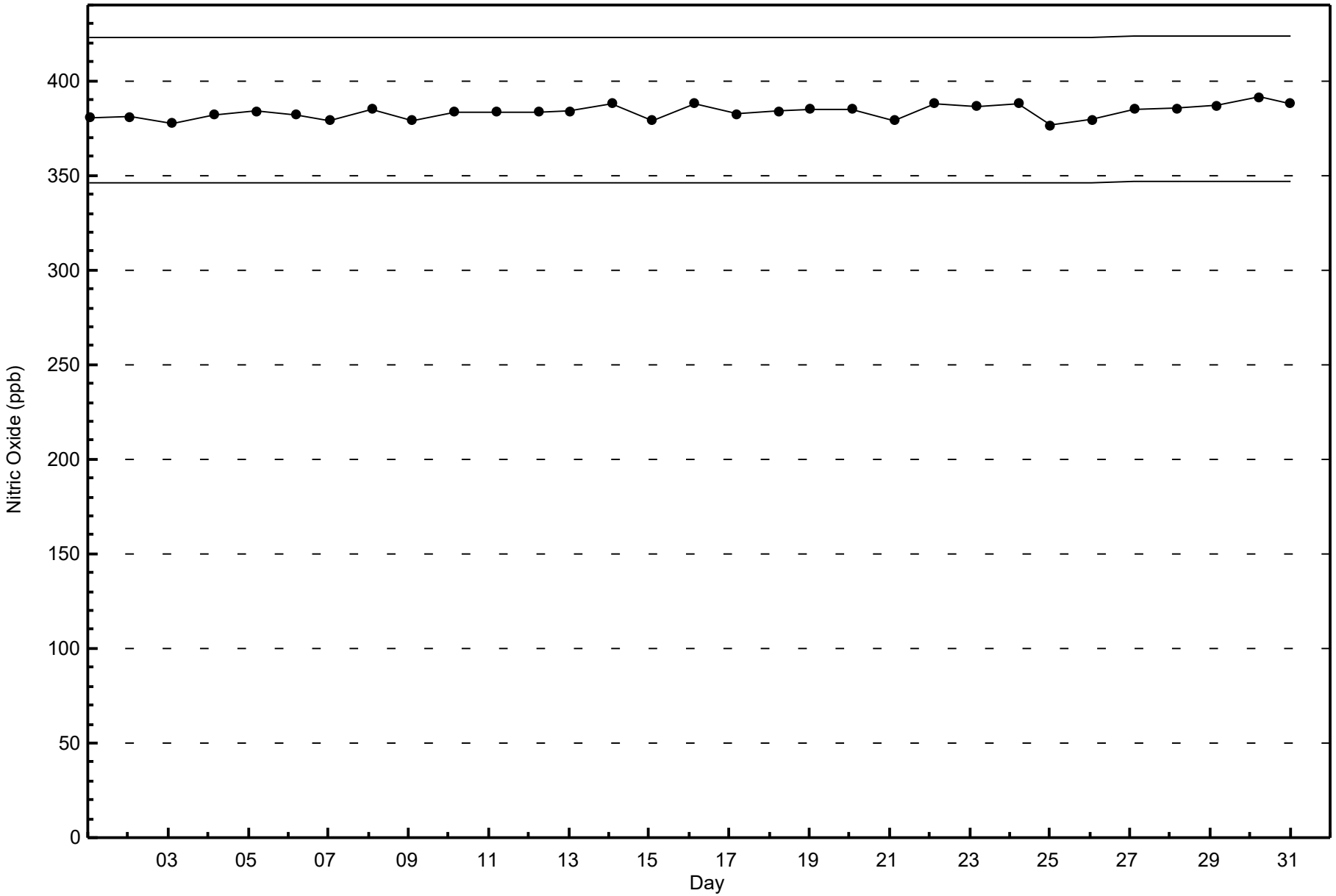


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Sawbones Bay - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Sawbones Bay - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 15.0 ppb on Aug 17 03:00 Maximum Daily Average: 5.8 ppb on Aug 28

Minimum Value: 0.0 ppb on Aug 10 14:00 Minimum Daily Average: 0.2 ppb on Aug 13
Maximum Diurnal Average: 3.8 ppb at hour 8 Minimum Diurnal Average: 1.3 ppb at hour 20
Monthly Average: 2.16 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.2 $Q_1$ = 0.5 Median = 1.2 $Q_3$ = 2.9 $P_{90}$ = 5.4 $P_{99}$ = 10.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 1.2 | 2.6 | 2.2 | 2.3 | 2.5 | 2.2 | 2.2 | 1.5 | 1.3 | 1.3 | 1.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 | 0.8 | 0.5 | 0.7 | 0.7 | 2.4 | 1.0 | 1.2 | 2.6 |
| 2-Aug | 1.1 | Z | 7.7 | 4.7 | 2.8 | 1.9 | 1.2 | 4.9 | 4.2 | 2.6 | 5.3 | 1.6 | 1.0 | 0.9 | 0.5 | 0.5 | 1.2 | 1.2 | 0.9 | 1.2 | 0.8 | 0.5 | 0.4 | 0.4 | 2.1 | 7.7 |
| 3-Aug | 0.3 | 0.4 | Z | 0.9 | 2.1 | 4.3 | 2.5 | 1.4 | 0.9 | 1.3 | 0.7 | 0.5 | 0.5 | 0.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.4 | 1.5 | 1.1 | 1.6 | 5.7 | 1.2 | 5.7 |
| 4-Aug | 3.4 | 2.0 | 1.8 | Z | 1.4 | 2.0 | 2.2 | 2.3 | 3.7 | 3.0 | 5.7 | 5.5 | 6.9 | 9.4 | 4.4 | 4.1 | 5.0 | 2.2 | 8.3 | 2.7 | 9.6 | 1.3 | 0.8 | 5.1 | 4.0 | 9.6 |
| 5-Aug | 1.3 | 0.4 | 0.8 | 0.5 | Z | 2.5 | 3.8 | 1.8 | 1.7 | 1.4 | 0.5 | 0.5 | 0.6 | 0.5 | 1.1 | 1.2 | 0.6 | 0.4 | 6.9 | 9.9 | 1.8 | 1.0 | 0.6 | 0.9 | 1.8 | 9.9 |
| 6-Aug | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.4 | 0.2 | 0.4 | 0.3 | 0.2 | 0.3 | 0.5 | 0.4 | 0.8 | 1.0 | 1.0 | 1.8 | 0.3 | 0.7 | 4.0 | 5.0 | 2.6 | 2.1 | 1.0 | 5.0 |
| 7-Aug | Z | 8.2 | 1.6 | 0.7 | 0.5 | 2.7 | 6.5 | 4.9 | 1.8 | 2.7 | 1.3 | 0.7 | 0.4 | 0.7 | 1.0 | 0.5 | 0.8 | 0.2 | 0.1 | 0.9 | 0.2 | 0.8 | 0.3 | 0.4 | 1.6 | 8.2 |
| 8-Aug | 3.5 | Z | 2.0 | 2.0 | 1.7 | 1.3 | 1.5 | 1.3 | 1.7 | 2.1 | 1.7 | 1.6 | 1.3 | 1.2 | 1.1 | 0.9 | 1.0 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.6 | 4.1 | 1.5 | 4.1 |
| 9-Aug | 5.6 | 4.1 | Z | 3.5 | 3.1 | 3.9 | 4.8 | 2.0 | 3.0 | 3.0 | 0.8 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 | 0.2 | 1.0 | 7.8 | 2.0 | 7.8 |
| 10-Aug | 1.9 | 3.5 | 5.7 | Z | 5.3 | 2.1 | 3.6 | 5.0 | 1.5 | 0.5 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.9 | 1.4 | 5.7 |
| 11-Aug | 1.2 | 1.1 | 1.0 | 0.9 | Z | 1.4 | 2.6 | 1.0 | 0.6 | 0.2 | 0.6 | 0.4 | 2.1 | 0.7 | 0.9 | 5.0 | 0.5 | 2.1 | 1.5 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 | 1.2 | 5.0 |
| 12-Aug | 0.6 | 0.6 | 0.7 | 1.1 | 2.9 | Z | 3.4 | 1.8 | 1.2 | 0.3 | 0.7 | 1.1 | 0.6 | 0.5 | 0.6 | 0.6 | 0.9 | 0.8 | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 | 0.9 | 3.4 |
| 13-Aug | Z | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 |
| 14-Aug | 0.9 | Z | 0.5 | 0.4 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 1.3 | 0.7 | 0.5 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 1.0 | 0.8 | 1.5 | 4.2 | 6.7 | 4.0 | 1.2 | 6.7 |
| 15-Aug | 3.7 | 2.2 | Z | 4.1 | 7.4 | 7.6 | 3.9 | 4.4 | 4.7 | 3.6 | 3.0 | 2.2 | 1.9 | 4.4 | 5.6 | 3.5 | 2.3 | 3.8 | 6.6 | 0.8 | 1.7 | 4.7 | 5.4 | 4.3 | 4.0 | 7.6 |
| 16-Aug | 3.2 | 6.0 | 3.9 | Z | 5.2 | 5.9 | 4.0 | 10.1 | 1.1 | 1.1 | 1.6 | 1.3 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 1.1 | 0.5 | 4.0 | 3.1 | 2.0 | 2.6 | 10.1 |
| 17-Aug | 2.6 | 8.7 | 15.0 | 15.0 | Z | 6.7 | 8.1 | 5.5 | 5.8 | 4.7 | 0.8 | 0.4 | 0.2 | 0.6 | 2.3 | 2.7 | 3.5 | 4.6 | 1.8 | 4.5 | 3.6 | 3.2 | 1.4 | 1.8 | 4.5 | 15.0 |
| 18-Aug | 1.2 | 0.8 | 0.5 | 2.0 | 1.8 | Z | 2.8 | 2.1 | 2.6 | 2.1 | 2.2 | 3.4 | 5.0 | 6.0 | 5.7 | 4.7 | 5.4 | 3.9 | 0.7 | 0.2 | 0.3 | 4.5 | 1.4 | 1.9 | 2.7 | 6.0 |
| 19-Aug | Z | 2.2 | 2.9 | 3.5 | 5.1 | 10.1 | 6.7 | 6.8 | 7.4 | 5.1 | 4.2 | 3.9 | 1.9 | 0.5 | 0.8 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 1.4 | 4.5 | 3.0 | 10.1 |
| 20-Aug | 1.4 | Z | 1.9 | 2.9 | 2.3 | 4.7 | 5.2 | 5.2 | 3.9 | 1.6 | 0.8 | 1.2 | 0.8 | 1.6 | 0.2 | 0.1 | 0.4 | 0.9 | 2.2 | 2.1 | 1.6 | 1.2 | 3.1 | 11.7 | 2.5 | 11.7 |
| 21-Aug | 4.6 | 2.8 | Z | 6.4 | 2.9 | 14.3 | 10.2 | 11.8 | 7.7 | 9.3 | 4.8 | 5.1 | 3.0 | 1.8 | 2.2 | 3.0 | 3.4 | 1.5 | 1.6 | 1.8 | 1.4 | 4.6 | 0.7 | 1.1 | 4.6 | 14.3 |
| 22-Aug | 1.5 | 5.6 | 2.8 | Z | 1.5 | 1.9 | 1.9 | 2.3 | 2.3 | 1.7 | 1.9 | 1.5 | 1.1 | 0.4 | 0.7 | 0.8 | 0.8 | 1.3 | 1.4 | 1.3 | 2.5 | 3.0 | 2.1 | 1.7 | 1.8 | 5.6 |
| 23-Aug | 6.9 | 11.3 | 6.2 | 3.1 | Z | 2.0 | 5.9 | 9.2 | 6.4 | 4.9 | 4.8 | 1.2 | 1.1 | 0.8 | 0.5 | 0.8 | 2.1 | 5.3 | 0.5 | 1.0 | 0.4 | 0.5 | 0.4 | 0.3 | 3.3 | 11.3 |
| 24-Aug | 0.5 | 0.6 | 2.0 | 5.1 | 4.8 | Z | 1.8 | 1.7 | 2.7 | 2.2 | 1.5 | 1.2 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.6 | 0.6 | 0.8 | 6.3 | 1.4 | 6.3 |
| 25-Aug | Z | 7.6 | 9.8 | 8.6 | 6.5 | 3.9 | 2.5 | 5.9 | 2.8 | 1.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.5 | 0.0 | 0.2 | 0.4 | 0.2 | 2.6 | 1.2 | 1.0 | 1.5 | 2.5 | 9.8 |
| 26-Aug | 2.0 | Z | 0.6 | 0.6 | 1.3 | 2.0 | 1.7 | 2.5 | 2.7 | 2.1 | C | C | C | C | C | C | 2.4 | 0.5 | 0.2 | 0.6 | 0.5 | 0.3 | 0.2 | 0.4 | -- | 2.7 |
| 27-Aug | 0.6 | 0.7 | Z | 1.0 | 0.8 | 0.8 | 1.3 | 2.7 | 0.7 | 0.5 | 1.6 | 0.3 | 0.4 | 0.0 | 0.7 | 2.4 | 0.3 | 0.1 | 0.1 | 0.2 | 1.0 | 0.5 | 0.3 | 0.4 | 0.8 | 2.7 |
| 28-Aug | 1.2 | 4.9 | 5.6 | Z | 2.3 | 2.9 | 5.8 | 13.0 | 10.3 | 5.7 | 6.7 | 5.2 | 8.4 | 7.6 | 6.5 | 7.2 | 7.6 | 5.9 | 8.1 | 2.2 | 1.3 | 1.3 | 4.8 | 8.7 | 5.8 | 13.0 |
| 29-Aug | 1.4 | 3.0 | 3.9 | 3.4 | Z | 4.9 | 4.0 | 2.6 | 4.1 | 2.6 | 3.7 | 3.3 | 3.2 | 2.2 | 3.6 | 6.0 | 5.3 | 3.0 | 1.8 | 2.3 | 1.3 | 1.7 | 2.0 | 1.2 | 3.1 | 6.0 |
| 30-Aug | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | Z | 0.4 | 0.3 | 0.3 | 0.3 | 0.8 | 2.4 | 2.3 | 2.0 | 1.0 | 1.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 1.1 | 0.5 | 0.3 | 0.8 | 2.4 |
| 31-Aug | Z | 0.5 | 0.6 | 0.5 | 0.8 | 1.2 | 2.2 | 2.2 | 1.1 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.0 | 0.5 | 0.9 | 1.0 | 2.5 | 2.6 | 0.9 | 2.6 |
| | 2.1 | 3.1 | 3.1 | 2.8 | 2.5 | 3.6 | 3.3 | 3.8 | 2.9 | 2.2 | 2.0 | 1.6 | 1.5 | 1.5 | 1.4 | 1.7 | 1.6 | 1.4 | 1.6 | 1.3 | 1.4 | 1.6 | 1.6 | 2.7 | Diurnal Average | |
| | 6.9 | 11.3 | 15.0 | 15.0 | 7.4 | 14.3 | 10.2 | 13.0 | 10.3 | 9.3 | 6.7 | 5.5 | 8.4 | 9.4 | 6.5 | 7.2 | 7.6 | 5.9 | 8.3 | 9.9 | 9.6 | 5.0 | 6.7 | 11.7 | Diurnal Maximum | |

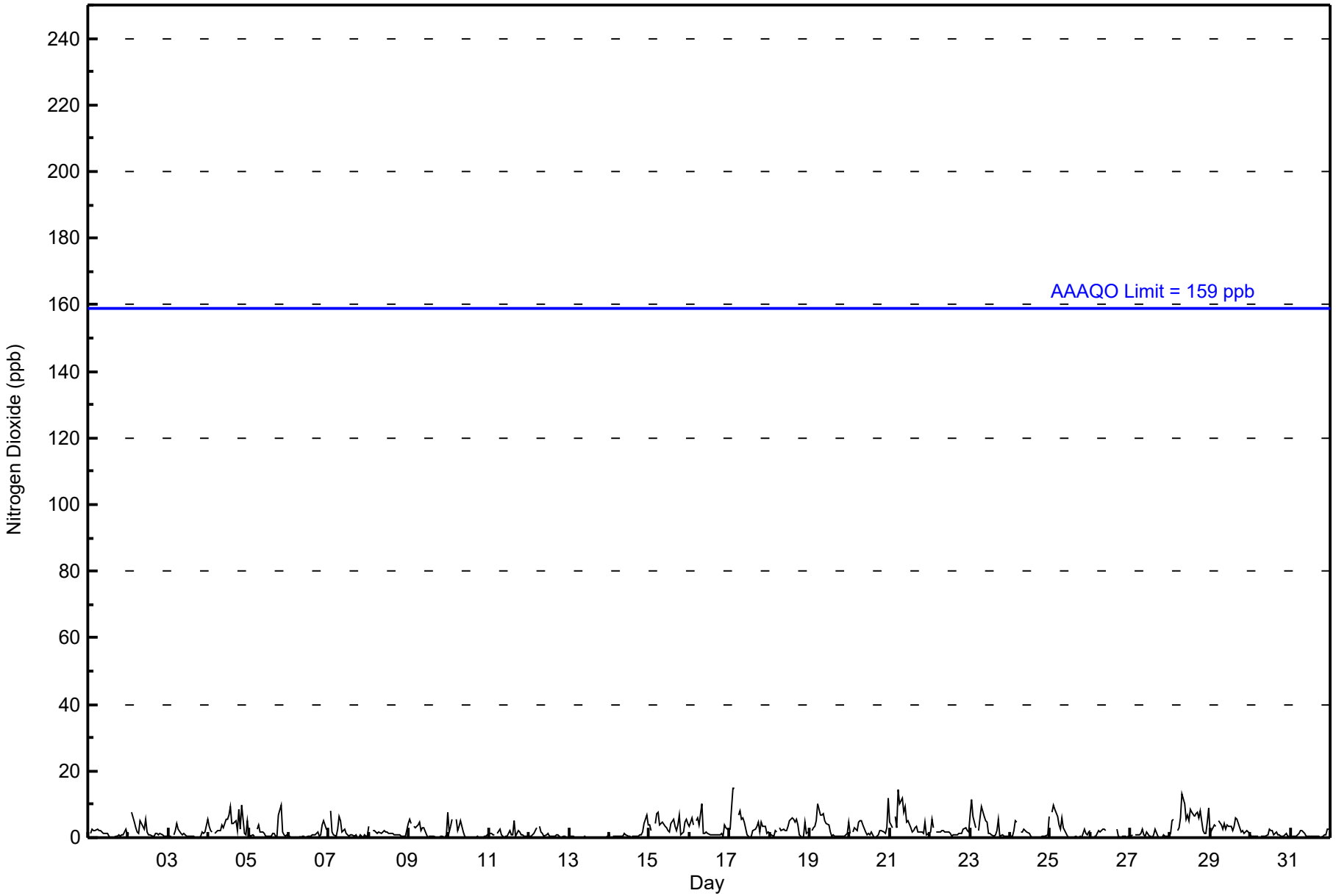
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Sawbones Bay - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Sawbones Bay - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 707 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Sawbones Bay - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 41 | 27 | 22 | 16 | 14 | 11 | 21 | 66 | 60 | 35 | 46 | 41 | 42 | 118 | 81 | 64 | 705 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 41 | 27 | 22 | 16 | 14 | 11 | 21 | 66 | 60 | 35 | 46 | 41 | 42 | 118 | 81 | 64 | 705 |

Total Number of Valid Hours: 705

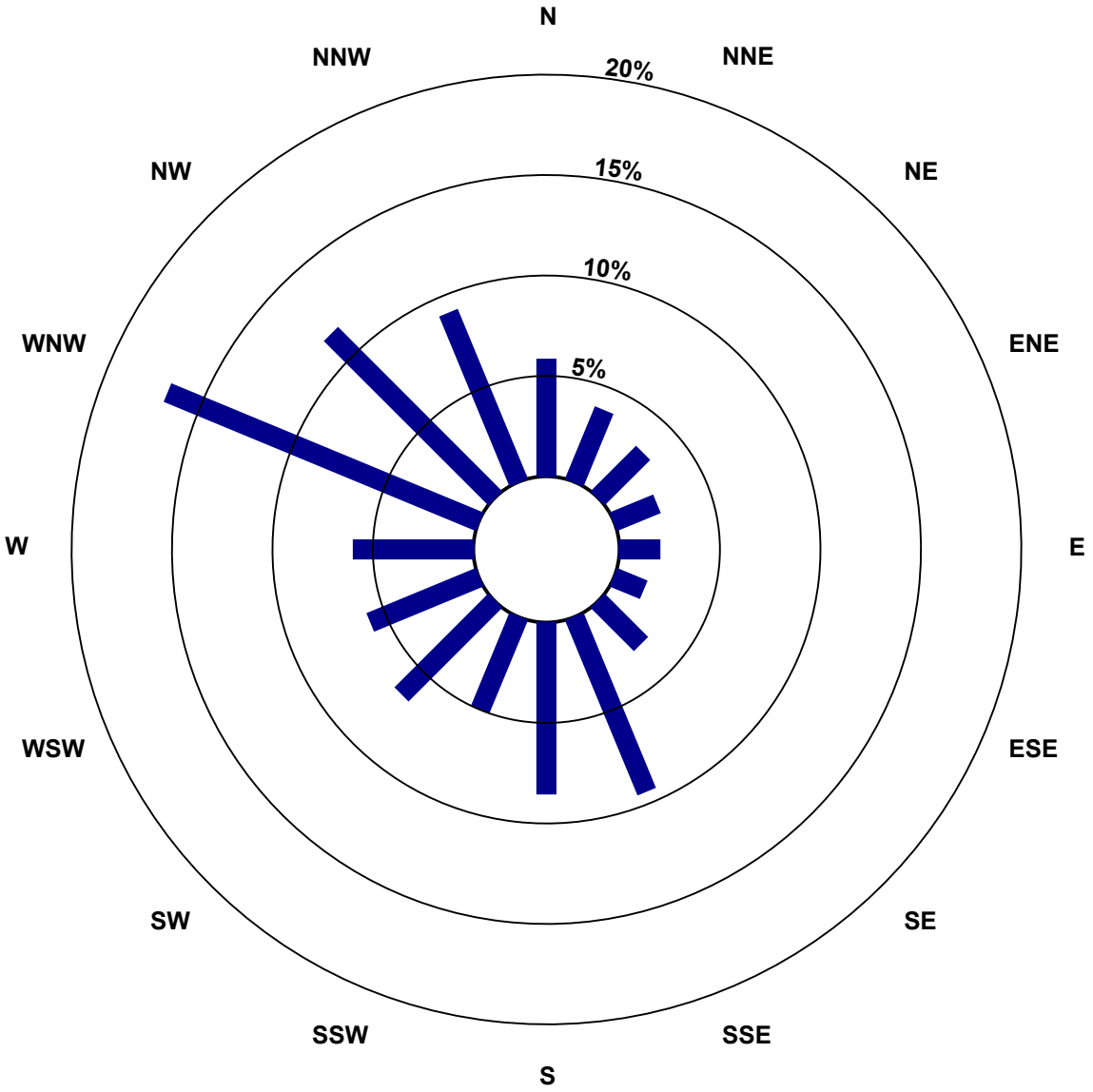
Total Number of Hours: 744

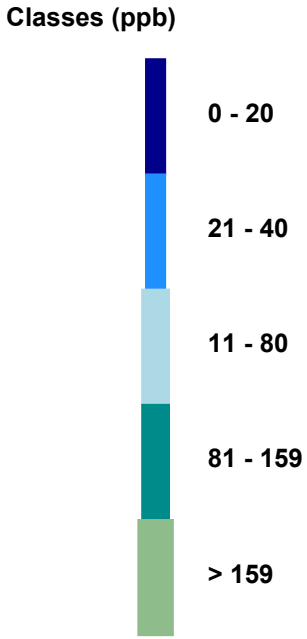
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Sawbones Bay



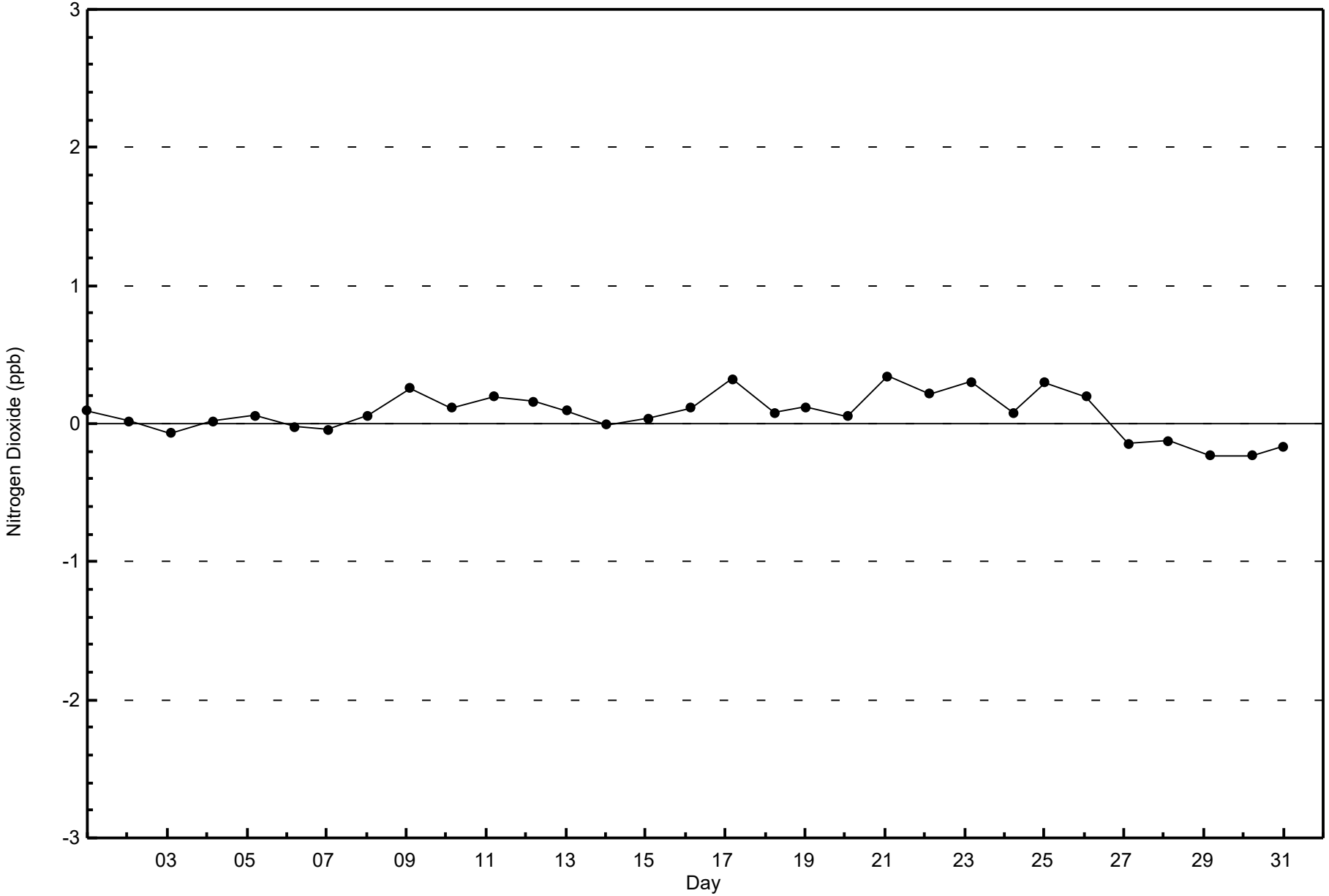

Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Sawbones Bay - August 2026**

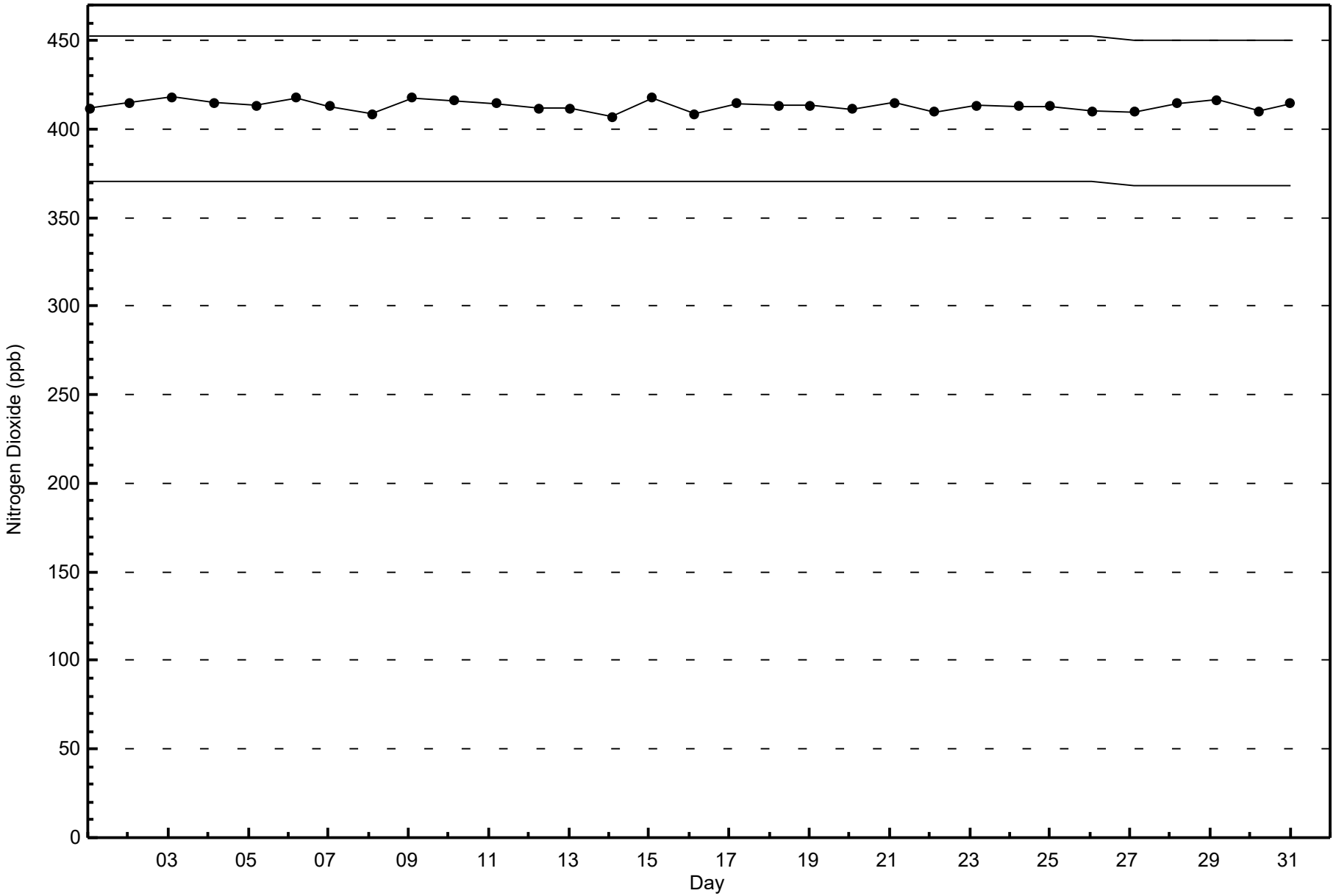


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Sawbones Bay - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Sawbones Bay - August 2026

Maximum Value: 39.7 ppb on Aug 21 06:00

Maximum Daily Average: 8.6 ppb on Aug 28

Minimum Value: 0.0 ppb on Aug 24 17:00

Minimum Daily Average: 0.2 ppb on Aug 13

Maximum Diurnal Average: 7.1 ppb at hour 8

Minimum Diurnal Average: 1.5 ppb at hour 20

Monthly Average: 3.28 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.3 $Q_1$ = 0.6 Median = 1.4 $Q_3$ = 4.2 $P_{90}$ = 8.8 $P_{99}$ = 22.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 707 |
| Hours of Missing Data: | 37 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | Z | 1.2 | 2.6 | 2.2 | 2.4 | 2.7 | 2.4 | 2.5 | 1.7 | 1.4 | 1.9 | 1.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 | 0.8 | 0.5 | 0.7 | 0.7 | 2.6 | 1.0 | 1.4 | 2.7 |
| 2-Aug | 1.1 | Z | 9.5 | 5.1 | 3.6 | 2.4 | 1.3 | 9.6 | 7.4 | 3.9 | 9.8 | 1.8 | 1.1 | 1.0 | 0.5 | 0.6 | 1.3 | 1.4 | 1.0 | 1.2 | 0.8 | 0.5 | 0.4 | 0.4 | 2.9 | 9.8 |
| 3-Aug | 0.3 | 0.4 | Z | 1.0 | 3.1 | 6.7 | 3.8 | 2.1 | 1.3 | 2.2 | 1.0 | 0.6 | 0.6 | 0.3 | 0.3 | 0.6 | 0.2 | 0.2 | 0.1 | 0.4 | 2.7 | 1.3 | 1.8 | 7.1 | 1.7 | 7.1 |
| 4-Aug | 3.7 | 2.4 | 2.1 | Z | 1.9 | 4.7 | 4.1 | 3.8 | 7.3 | 5.3 | 11.0 | 9.5 | 12.4 | 17.0 | 7.8 | 7.2 | 8.9 | 3.1 | 10.8 | 3.3 | 13.8 | 1.4 | 1.1 | 8.5 | 6.6 | 17.0 |
| 5-Aug | 1.9 | 0.4 | 1.0 | 0.6 | Z | 3.6 | 6.5 | 2.7 | 3.0 | 2.2 | 0.7 | 0.8 | 0.8 | 0.6 | 1.6 | 1.9 | 0.7 | 0.4 | 9.8 | 14.0 | 2.7 | 1.0 | 0.6 | 0.9 | 2.5 | 14.0 |
| 6-Aug | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.5 | 0.3 | 0.6 | 0.5 | 0.3 | 0.4 | 0.7 | 0.6 | 1.6 | 1.9 | 1.6 | 3.3 | 0.3 | 0.9 | 6.2 | 9.6 | 4.5 | 3.0 | 1.6 | 9.6 |
| 7-Aug | Z | 23.3 | 2.6 | 1.1 | 0.6 | 8.5 | 22.5 | 14.1 | 4.3 | 5.9 | 2.2 | 1.0 | 0.5 | 1.0 | 1.6 | 0.6 | 1.2 | 0.3 | 0.2 | 1.0 | 0.3 | 1.1 | 0.3 | 0.5 | 4.1 | 23.3 |
| 8-Aug | 4.8 | Z | 2.2 | 2.2 | 1.8 | 1.6 | 2.1 | 2.0 | 2.7 | 3.1 | 2.4 | 2.1 | 1.6 | 1.5 | 1.3 | 1.0 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 6.1 | 1.9 | 6.1 |
| 9-Aug | 6.3 | 5.4 | Z | 4.0 | 4.7 | 7.7 | 11.5 | 5.1 | 5.3 | 4.7 | 0.8 | 0.3 | 0.4 | 0.3 | 0.4 | 0.8 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 | 0.2 | 1.0 | 9.3 | 3.0 | 11.5 |
| 10-Aug | 1.9 | 3.8 | 6.6 | Z | 7.1 | 4.1 | 9.0 | 9.3 | 2.2 | 0.6 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.9 | 2.1 | 9.3 |
| 11-Aug | 1.2 | 1.1 | 1.0 | 1.0 | Z | 1.6 | 3.2 | 1.2 | 0.8 | 0.3 | 0.8 | 0.5 | 2.7 | 0.9 | 1.3 | 7.4 | 0.5 | 2.3 | 1.6 | 1.0 | 1.0 | 0.6 | 0.6 | 0.5 | 1.4 | 7.4 |
| 12-Aug | 0.6 | 0.6 | 0.7 | 1.1 | 3.3 | Z | 5.1 | 2.6 | 1.7 | 0.4 | 0.8 | 1.4 | 0.8 | 0.7 | 0.8 | 0.7 | 1.2 | 1.0 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 1.1 | 5.1 |
| 13-Aug | Z | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.5 |
| 14-Aug | 1.0 | Z | 0.6 | 0.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 1.8 | 0.9 | 0.6 | 0.4 | 0.2 | 0.4 | 0.6 | 0.4 | 0.4 | 1.1 | 0.8 | 1.5 | 5.9 | 7.4 | 4.6 | 1.4 | 7.4 |
| 15-Aug | 4.4 | 2.7 | Z | 6.3 | 11.5 | 11.0 | 9.1 | 9.4 | 9.9 | 6.6 | 4.8 | 3.3 | 3.0 | 7.2 | 9.2 | 6.3 | 3.8 | 5.8 | 9.3 | 0.9 | 1.8 | 6.1 | 6.9 | 5.1 | 6.3 | 11.5 |
| 16-Aug | 3.6 | 6.9 | 4.4 | Z | 6.4 | 7.3 | 5.6 | 17.5 | 1.3 | 1.4 | 2.1 | 1.9 | 1.5 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.7 | 1.1 | 0.5 | 4.3 | 3.4 | 2.3 | 3.3 | 17.5 |
| 17-Aug | 3.4 | 14.5 | 28.0 | 30.8 | Z | 14.4 | 19.0 | 11.3 | 10.8 | 8.2 | 1.0 | 0.5 | 0.2 | 0.7 | 3.3 | 3.7 | 5.0 | 6.2 | 2.1 | 5.3 | 4.3 | 3.7 | 1.4 | 1.8 | 7.8 | 30.8 |
| 18-Aug | 1.2 | 0.8 | 0.6 | 2.1 | 1.9 | Z | 4.1 | 2.5 | 3.6 | 3.0 | 2.9 | 4.5 | 6.9 | 8.8 | 8.0 | 6.6 | 7.7 | 5.4 | 0.9 | 0.2 | 0.3 | 5.5 | 1.5 | 2.0 | 3.5 | 8.8 |
| 19-Aug | Z | 2.3 | 3.4 | 4.8 | 7.1 | 18.7 | 12.3 | 13.7 | 14.9 | 9.9 | 7.2 | 7.2 | 3.0 | 0.7 | 1.2 | 0.6 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 1.9 | 6.8 | 5.1 | 18.7 |
| 20-Aug | 1.5 | Z | 2.2 | 3.4 | 3.0 | 6.9 | 11.6 | 9.7 | 5.5 | 2.2 | 0.9 | 1.9 | 1.1 | 3.1 | 0.3 | 0.2 | 0.5 | 0.9 | 2.3 | 2.2 | 1.6 | 1.3 | 3.2 | 15.1 | 3.5 | 15.1 |
| 21-Aug | 4.8 | 3.8 | Z | 8.6 | 3.7 | 39.7 | 33.0 | 24.4 | 11.9 | 13.6 | 6.8 | 7.6 | 4.3 | 2.4 | 2.9 | 4.3 | 4.7 | 1.9 | 1.9 | 1.9 | 1.4 | 4.7 | 0.7 | 1.2 | 8.3 | 39.7 |
| 22-Aug | 1.6 | 5.8 | 2.9 | Z | 1.6 | 2.0 | 2.2 | 2.9 | 3.2 | 2.4 | 2.6 | 1.9 | 1.3 | 0.5 | 0.8 | 0.9 | 0.9 | 1.4 | 1.6 | 1.4 | 2.6 | 3.1 | 2.2 | 1.8 | 2.1 | 5.8 |
| 23-Aug | 7.8 | 20.1 | 8.7 | 3.5 | Z | 2.4 | 10.5 | 23.1 | 11.6 | 8.3 | 9.4 | 1.4 | 1.3 | 0.9 | 0.6 | 0.9 | 2.4 | 7.6 | 0.5 | 1.1 | 0.5 | 0.5 | 0.4 | 0.3 | 5.4 | 23.1 |
| 24-Aug | 0.5 | 0.6 | 2.6 | 9.9 | 10.0 | Z | 2.2 | 1.9 | 3.1 | 2.9 | 1.9 | 1.4 | 0.5 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 0.6 | 0.6 | 0.8 | 7.8 | 2.1 | 10.0 |
| 25-Aug | Z | 9.2 | 12.8 | 11.5 | 8.6 | 8.4 | 4.6 | 11.3 | 4.7 | 1.6 | 0.5 | 0.2 | 0.0 | 0.1 | 0.2 | 0.7 | 0.0 | 0.2 | 0.4 | 0.3 | 2.6 | 1.3 | 1.0 | 1.5 | 3.5 | 12.8 |
| 26-Aug | 2.1 | Z | 0.7 | 0.7 | 1.4 | 2.5 | 2.4 | 3.7 | 3.9 | 2.8 | C | C | C | C | C | C | 2.8 | 0.5 | 0.2 | 0.6 | 0.5 | 0.3 | 0.2 | 0.4 | -- | 3.9 |
| 27-Aug | 0.6 | 0.7 | Z | 1.0 | 0.8 | 0.8 | 1.6 | 4.6 | 0.8 | 0.6 | 2.2 | 0.3 | 0.5 | 0.0 | 1.0 | 3.8 | 0.4 | 0.1 | 0.1 | 0.2 | 1.0 | 0.5 | 0.3 | 0.4 | 1.0 | 4.6 |
| 28-Aug | 1.3 | 5.2 | 7.3 | Z | 2.4 | 3.4 | 7.3 | 18.2 | 16.0 | 8.6 | 10.2 | 8.2 | 15.5 | 13.2 | 11.5 | 12.3 | 12.8 | 8.7 | 10.9 | 2.5 | 1.4 | 1.3 | 6.3 | 12.7 | 8.6 | 18.2 |
| 29-Aug | 1.7 | 4.0 | 6.1 | 6.0 | Z | 8.5 | 7.5 | 4.5 | 8.4 | 4.7 | 6.7 | 5.7 | 5.7 | 3.4 | 5.9 | 9.6 | 7.7 | 3.6 | 2.0 | 2.4 | 1.3 | 1.7 | 2.1 | 1.3 | 4.8 | 9.6 |
| 30-Aug | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | Z | 0.6 | 0.5 | 0.5 | 0.5 | 1.4 | 4.3 | 3.7 | 2.6 | 1.2 | 2.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 1.1 | 0.6 | 0.3 | 1.1 | 4.3 |
| 31-Aug | Z | 0.6 | 0.7 | 0.5 | 1.0 | 1.8 | 3.9 | 3.8 | 1.8 | 0.9 | 0.8 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.4 | 0.1 | 0.6 | 1.0 | 1.1 | 2.9 | 2.9 | 1.2 | 3.9 |
| | 2.3 | 4.5 | 4.2 | 4.2 | 3.4 | 6.6 | 6.8 | 7.1 | 4.9 | 3.6 | 3.1 | 2.4 | 2.4 | 2.3 | 2.2 | 2.6 | 2.2 | 1.9 | 2.0 | 1.5 | 1.8 | 2.0 | 1.9 | 3.5 | Diurnal Average | |
| | 7.8 | 23.3 | 28.0 | 30.8 | 11.5 | 39.7 | 33.0 | 24.4 | 16.0 | 13.6 | 11.0 | 9.5 | 15.5 | 17.0 | 11.5 | 12.3 | 12.8 | 8.7 | 10.9 | 14.0 | 13.8 | 9.6 | 7.4 | 15.1 | Diurnal Maximum | |

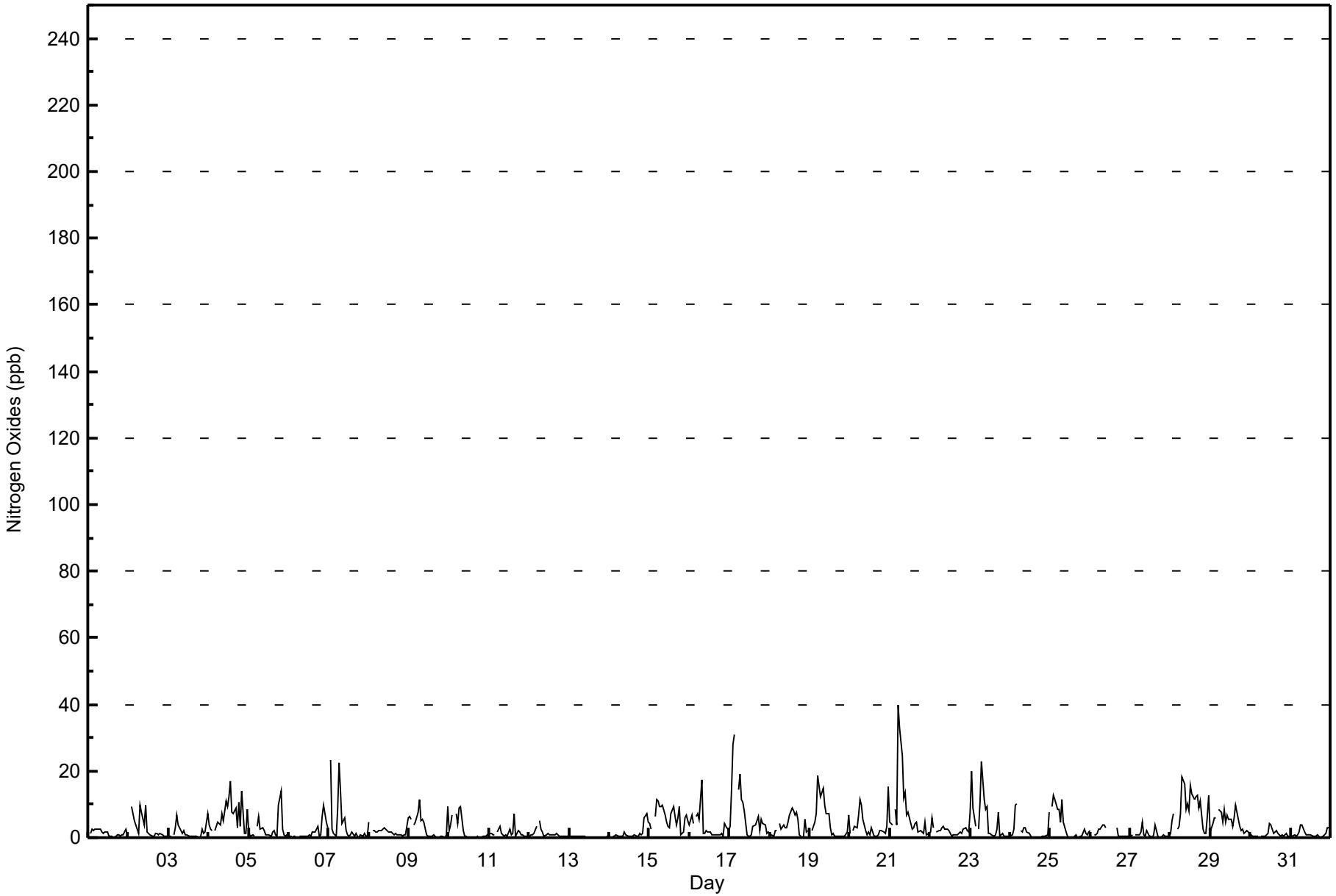
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Sawbones Bay - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Sawbones Bay - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 699 | 98.87 | 98.87 |
| 21 - 40 | 8 | 1.13 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 707

Total Number of Hours: 744

# Nitrogen Oxides ($NO_X$) - ppb
## Sawbones Bay - August 2026

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 41 | 27 | 22 | 16 | 14 | 11 | 21 | 63 | 59 | 35 | 46 | 41 | 38 | 118 | 81 | 64 | 697 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 8 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 41 | 27 | 22 | 16 | 14 | 11 | 21 | 66 | 60 | 35 | 46 | 41 | 42 | 118 | 81 | 64 | 705 |

Total Number of Valid Hours: 705

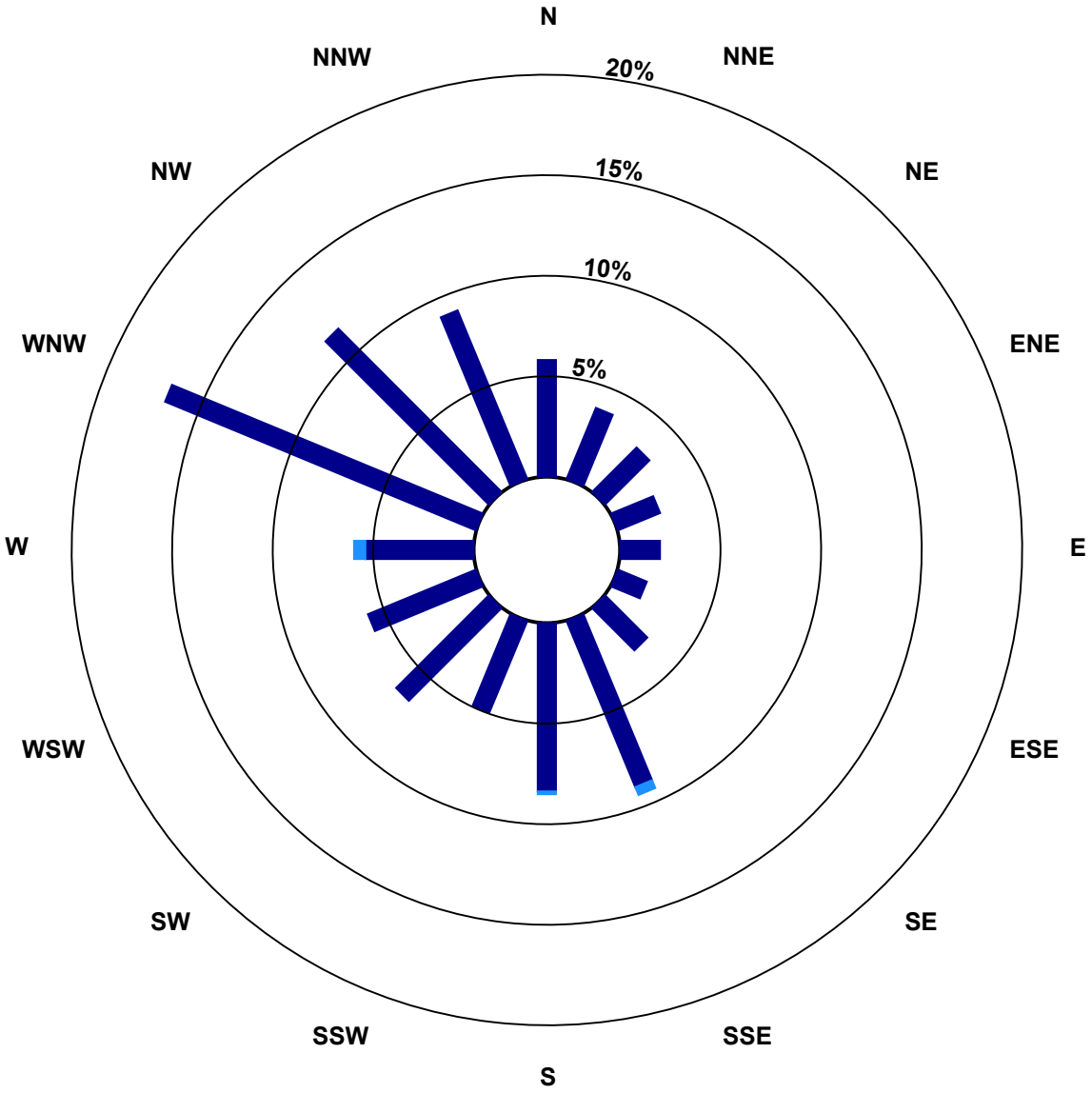
Total Number of Hours: 744

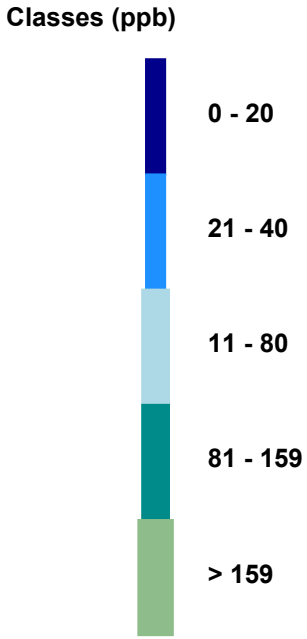
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Sawbones Bay



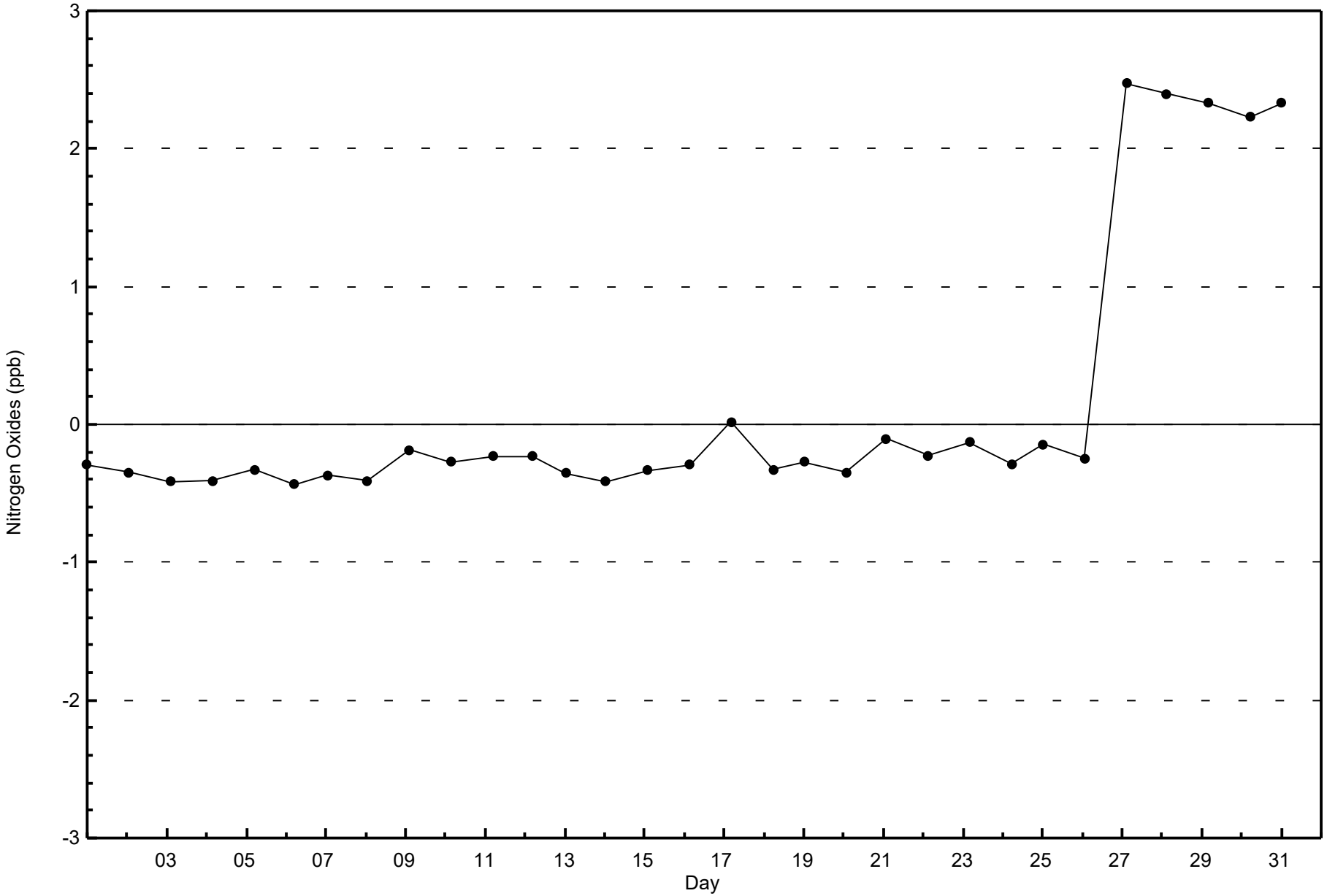

Total Number of Valid Hours: 705

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Sawbones Bay - August 2026**

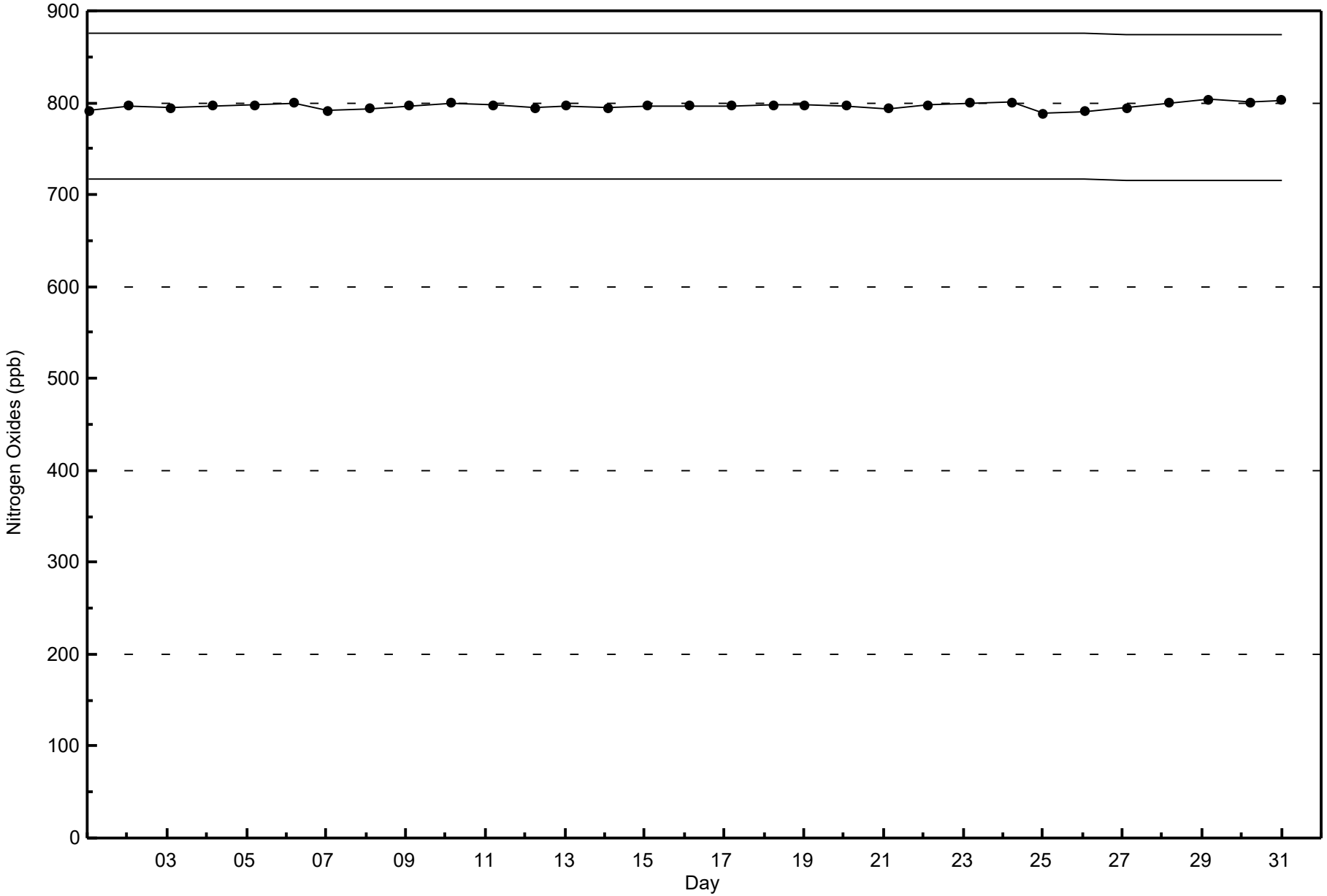


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Sawbones Bay - August 2026**



Maximum Value: 29.8 C on Aug 27 15:00

Maximum Daily Average: 22.5 C on Aug 1

Minimum Value: 3.8 C on Aug 4 05:00

Minimum Daily Average: 11.1 C on Aug 3

Maximum Diurnal Average: 20.9 C at hour 16

Minimum Diurnal Average: 10.9 C at hour 6

Monthly Average: 15.91 C

Percentiles: $P_1$ = 6.3 $P_{10}$ = 9.7 $Q_1$ = 12.1 Median = 15.4 $Q_3$ = 19.3 $P_{90}$ = 22.8 $P_{99}$ = 28.8

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

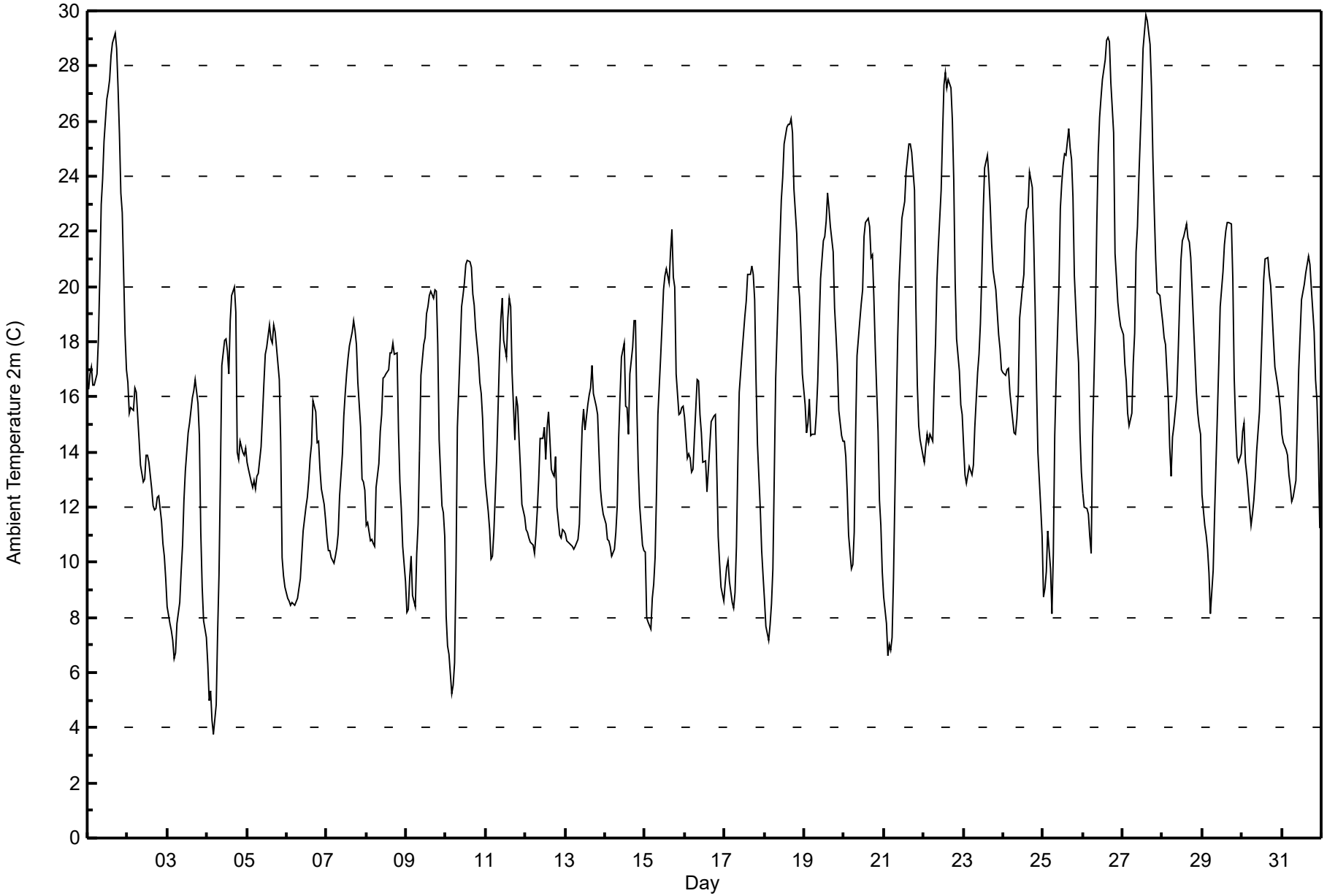
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 16.3 | 16.8 | 17.1 | 16.4 | 16.4 | 16.8 | 18.1 | 20.4 | 23.0 | 23.9 | 25.3 | 26.8 | 27.1 | 27.5 | 28.4 | 28.8 | 29.2 | 28.6 | 27.2 | 25.5 | 23.4 | 22.7 | 18.3 | 17.0 | 22.5 | 29.2 |
| 2-Aug | 16.5 | 15.4 | 15.6 | 15.5 | 16.3 | 16.2 | 15.3 | 14.5 | 13.5 | 12.9 | 13.0 | 13.9 | 13.9 | 13.6 | 12.7 | 12.0 | 11.9 | 12.0 | 12.3 | 12.4 | 11.5 | 10.7 | 10.2 | 9.4 | 13.4 | 16.5 |
| 3-Aug | 8.4 | 7.8 | 7.5 | 7.2 | 6.5 | 6.7 | 7.8 | 8.5 | 9.7 | 10.6 | 12.3 | 13.3 | 14.7 | 15.0 | 15.5 | 16.0 | 16.2 | 16.6 | 15.8 | 14.6 | 11.1 | 9.1 | 7.9 | 7.3 | 11.1 | 16.6 |
| 4-Aug | 6.3 | 5.0 | 5.3 | 4.3 | 3.8 | 4.8 | 7.4 | 9.6 | 13.2 | 17.1 | 18.1 | 18.1 | 17.6 | 16.8 | 18.8 | 19.7 | 20.0 | 19.1 | 14.0 | 13.7 | 14.4 | 14.0 | 13.9 | 14.1 | 12.9 | 20.0 |
| 5-Aug | 13.6 | 13.4 | 12.9 | 12.7 | 13.0 | 12.7 | 13.1 | 13.2 | 14.2 | 15.3 | 16.5 | 17.5 | 17.8 | 18.6 | 18.1 | 17.9 | 18.6 | 18.3 | 17.8 | 16.6 | 14.3 | 10.2 | 9.5 | 9.1 | 14.8 | 18.6 |
| 6-Aug | 8.7 | 8.6 | 8.5 | 8.5 | 8.5 | 8.5 | 8.7 | 9.0 | 9.4 | 10.3 | 11.1 | 12.0 | 12.4 | 13.0 | 13.8 | 14.3 | 15.9 | 15.5 | 14.3 | 14.4 | 13.4 | 12.7 | 12.1 | 11.6 | 11.5 | 15.9 |
| 7-Aug | 10.9 | 10.4 | 10.4 | 10.2 | 10.0 | 10.2 | 10.5 | 11.0 | 12.4 | 14.0 | 15.3 | 16.1 | 16.8 | 17.4 | 17.9 | 18.4 | 18.8 | 18.4 | 17.9 | 16.5 | 14.9 | 13.0 | 12.9 | 12.6 | 14.0 | 18.8 |
| 8-Aug | 11.3 | 11.4 | 10.8 | 10.8 | 10.7 | 10.6 | 12.7 | 13.6 | 14.8 | 15.4 | 16.7 | 16.7 | 16.8 | 17.0 | 17.6 | 17.6 | 17.9 | 17.5 | 17.6 | 14.7 | 12.9 | 12.0 | 10.6 | 9.3 | 14.0 | 17.9 |
| 9-Aug | 8.2 | 8.3 | 9.4 | 10.2 | 8.8 | 8.4 | 10.3 | 11.4 | 14.1 | 16.8 | 17.9 | 18.1 | 19.0 | 19.3 | 19.7 | 19.8 | 19.6 | 19.9 | 19.8 | 17.9 | 14.5 | 12.1 | 11.8 | 10.9 | 14.4 | 19.9 |
| 10-Aug | 8.0 | 7.0 | 6.7 | 5.2 | 5.6 | 6.3 | 9.7 | 14.9 | 17.8 | 19.3 | 19.7 | 20.2 | 20.8 | 21.0 | 20.9 | 20.7 | 19.7 | 19.3 | 18.4 | 17.4 | 16.5 | 16.1 | 15.2 | 13.7 | 15.0 | 21.0 |
| 11-Aug | 12.9 | 11.9 | 11.2 | 10.1 | 10.2 | 11.1 | 13.7 | 15.6 | 17.4 | 18.8 | 19.6 | 18.0 | 17.4 | 18.9 | 19.6 | 19.3 | 16.9 | 14.4 | 16.0 | 15.7 | 14.4 | 13.3 | 12.1 | 11.6 | 15.0 | 19.6 |
| 12-Aug | 11.2 | 11.1 | 10.9 | 10.7 | 10.6 | 10.3 | 11.0 | 11.9 | 13.0 | 14.5 | 14.5 | 14.9 | 13.7 | 14.9 | 15.4 | 13.4 | 13.2 | 13.1 | 13.8 | 12.0 | 11.0 | 10.9 | 11.2 | 11.2 | 12.4 | 15.4 |
| 13-Aug | 11.0 | 10.8 | 10.7 | 10.6 | 10.6 | 10.5 | 10.6 | 10.8 | 11.4 | 13.2 | 14.9 | 15.6 | 14.8 | 15.7 | 16.0 | 16.3 | 17.1 | 16.1 | 15.7 | 15.4 | 13.9 | 12.7 | 12.1 | 11.7 | 13.3 | 17.1 |
| 14-Aug | 11.4 | 10.9 | 10.8 | 10.6 | 10.2 | 10.5 | 11.1 | 12.0 | 14.5 | 16.0 | 17.4 | 18.0 | 15.6 | 15.6 | 14.7 | 16.9 | 17.8 | 18.8 | 18.8 | 15.5 | 13.4 | 12.1 | 10.6 | 10.4 | 13.9 | 18.8 |
| 15-Aug | 10.4 | 8.0 | 7.8 | 7.6 | 8.7 | 9.2 | 10.2 | 12.5 | 15.4 | 17.5 | 18.7 | 19.9 | 20.4 | 20.7 | 20.1 | 21.3 | 22.1 | 20.3 | 20.0 | 16.8 | 15.4 | 15.4 | 15.6 | 15.6 | 15.4 | 22.1 |
| 16-Aug | 15.3 | 13.8 | 13.9 | 13.8 | 13.3 | 13.4 | 14.5 | 16.6 | 16.6 | 15.3 | 14.7 | 13.6 | 13.7 | 12.6 | 13.4 | 14.3 | 15.1 | 15.3 | 15.3 | 13.3 | 10.9 | 10.0 | 9.1 | 8.6 | 13.6 | 16.6 |
| 17-Aug | 9.3 | 9.8 | 10.1 | 9.3 | 8.5 | 8.3 | 8.9 | 10.6 | 13.6 | 16.2 | 17.6 | 18.2 | 18.9 | 19.5 | 20.5 | 20.4 | 20.8 | 20.4 | 19.5 | 16.6 | 14.3 | 11.9 | 10.4 | 9.5 | 14.3 | 20.8 |
| 18-Aug | 8.7 | 7.7 | 7.2 | 7.7 | 8.5 | 9.8 | 13.2 | 16.7 | 20.0 | 21.6 | 23.2 | 24.0 | 25.2 | 25.8 | 25.9 | 25.9 | 26.1 | 25.6 | 23.6 | 21.9 | 20.2 | 19.6 | 18.4 | 16.8 | 18.5 | 26.1 |
| 19-Aug | 15.7 | 14.7 | 15.0 | 15.9 | 14.6 | 14.7 | 14.7 | 15.4 | 16.6 | 18.6 | 20.3 | 21.6 | 21.8 | 22.4 | 23.4 | 22.8 | 22.2 | 21.3 | 19.2 | 18.2 | 17.2 | 15.5 | 14.6 | 14.4 | 17.9 | 23.4 |
| 20-Aug | 14.4 | 13.8 | 12.5 | 11.0 | 9.8 | 9.9 | 11.1 | 14.7 | 17.5 | 18.7 | 19.4 | 19.9 | 21.8 | 22.3 | 22.5 | 22.1 | 21.0 | 21.1 | 19.6 | 17.8 | 14.7 | 12.3 | 11.3 | 9.7 | 16.2 | 22.5 |
| 21-Aug | 8.8 | 7.8 | 6.6 | 7.0 | 6.8 | 7.2 | 9.4 | 15.4 | 18.1 | 20.1 | 21.3 | 22.5 | 23.1 | 24.1 | 24.7 | 25.1 | 25.2 | 24.9 | 23.5 | 19.3 | 16.4 | 14.9 | 14.5 | 13.9 | 16.7 | 25.2 |
| 22-Aug | 13.6 | 14.2 | 14.6 | 14.3 | 14.7 | 14.4 | 16.4 | 18.0 | 20.2 | 21.4 | 23.5 | 25.5 | 27.3 | 27.8 | 27.2 | 27.5 | 27.2 | 26.0 | 23.8 | 20.1 | 18.1 | 16.9 | 15.7 | 15.4 | 20.2 | 27.8 |
| 23-Aug | 14.2 | 13.2 | 12.8 | 13.5 | 13.3 | 13.2 | 13.5 | 14.9 | 16.9 | 17.5 | 18.6 | 20.5 | 22.7 | 24.3 | 24.8 | 24.0 | 22.9 | 21.6 | 20.6 | 19.9 | 19.1 | 18.3 | 17.7 | 17.0 | 18.1 | 24.8 |
| 24-Aug | 16.9 | 16.8 | 17.0 | 17.0 | 16.2 | 15.6 | 14.7 | 14.6 | 15.2 | 16.2 | 18.9 | 20.0 | 20.4 | 22.2 | 22.8 | 22.9 | 24.1 | 23.6 | 21.7 | 19.3 | 16.4 | 14.0 | 12.0 | 10.9 | 17.9 | 24.1 |
| 25-Aug | 8.8 | 9.1 | 9.7 | 11.1 | 9.8 | 8.2 | 10.3 | 14.6 | 16.7 | 20.1 | 22.8 | 23.8 | 24.4 | 24.8 | 24.8 | 25.7 | 25.0 | 24.6 | 23.3 | 20.4 | 18.1 | 17.2 | 14.7 | 13.3 | 17.5 | 25.7 |
| 26-Aug | 12.5 | 12.0 | 11.9 | 11.7 | 10.9 | 10.3 | 14.5 | 18.9 | 22.3 | 24.8 | 26.1 | 26.9 | 27.5 | 28.2 | 28.9 | 29.1 | 28.9 | 27.4 | 25.6 | 21.2 | 20.4 | 19.4 | 18.9 | 18.6 | 20.7 | 29.1 |
| 27-Aug | 18.2 | 17.2 | 16.6 | 15.4 | 14.9 | 15.4 | 17.2 | 18.3 | 21.2 | 22.2 | 24.0 | 26.9 | 28.6 | 29.2 | 29.8 | 29.7 | 28.8 | 27.2 | 24.7 | 22.7 | 21.0 | 19.8 | 19.7 | 19.2 | 22.0 | 29.8 |
| 28-Aug | 18.7 | 18.2 | 17.9 | 15.9 | 14.2 | 13.1 | 14.6 | 14.9 | 16.0 | 17.5 | 19.3 | 20.9 | 21.7 | 21.8 | 22.3 | 21.8 | 21.6 | 21.0 | 19.8 | 17.4 | 16.2 | 15.4 | 14.9 | 14.7 | 17.9 | 22.3 |
| 29-Aug | 12.5 | 11.3 | 11.0 | 10.5 | 9.6 | 8.1 | 9.7 | 11.8 | 13.6 | 15.4 | 17.2 | 19.3 | 20.6 | 21.5 | 22.0 | 22.3 | 22.3 | 22.3 | 20.3 | 16.7 | 15.1 | 13.8 | 13.7 | 13.9 | 15.6 | 22.3 |
| 30-Aug | 14.7 | 15.0 | 13.6 | 13.2 | 11.9 | 11.4 | 11.7 | 12.3 | 13.0 | 14.1 | 15.5 | 17.0 | 18.6 | 20.2 | 21.0 | 21.1 | 20.4 | 20.0 | 19.1 | 18.0 | 17.1 | 16.4 | 16.0 | 15.5 | 16.1 | 21.1 |
| 31-Aug | 14.6 | 14.3 | 14.1 | 13.9 | 13.2 | 12.8 | 12.2 | 12.4 | 13.0 | 14.9 | 17.0 | 18.3 | 19.5 | 20.1 | 20.5 | 20.8 | 21.1 | 20.8 | 20.0 | 18.3 | 16.6 | 15.9 | 14.1 | 11.2 | 16.2 | 21.1 |
| | 12.3 | 11.8 | 11.6 | 11.3 | 11.0 | 10.9 | 12.2 | 13.8 | 15.6 | 17.1 | 18.4 | 19.3 | 19.8 | 20.4 | 20.8 | 20.9 | 20.9 | 20.4 | 19.3 | 17.4 | 15.7 | 14.5 | 13.5 | 12.8 | Diurnal Average | |
| | 18.7 | 18.2 | 17.9 | 17.0 | 16.4 | 16.8 | 18.1 | 20.4 | 23.0 | 24.8 | 26.1 | 26.9 | 28.6 | 29.2 | 29.8 | 29.7 | 29.2 | 28.6 | 27.2 | 25.5 | 23.4 | 22.7 | 19.7 | 19.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Sawbones Bay - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 85 | 11.42 | 11.42 |
| 10 - 20 | 504 | 67.74 | 79.17 |
| > 20 | 155 | 20.83 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Sawbones Bay - August 2026

Maximum Value: 98.7 % on Aug 13 07:00

Maximum Daily Average: 93.0 % on Aug 2

Minimum Value: 30.8 % on Aug 26 17:00

Minimum Daily Average: 54.2 % on Aug 27

Maximum Diurnal Average: 90.3 % at hour 6

Minimum Diurnal Average: 52.0 % at hour 17

Monthly Average: 71.75 %

Percentiles: $P_1$ = 33.9 $P_{10}$ = 44.2 $Q_1$ = 56.1 Median = 74.6 $Q_3$ = 88.2 $P_{90}$ = 95.5 $P_{99}$ = 98.3

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

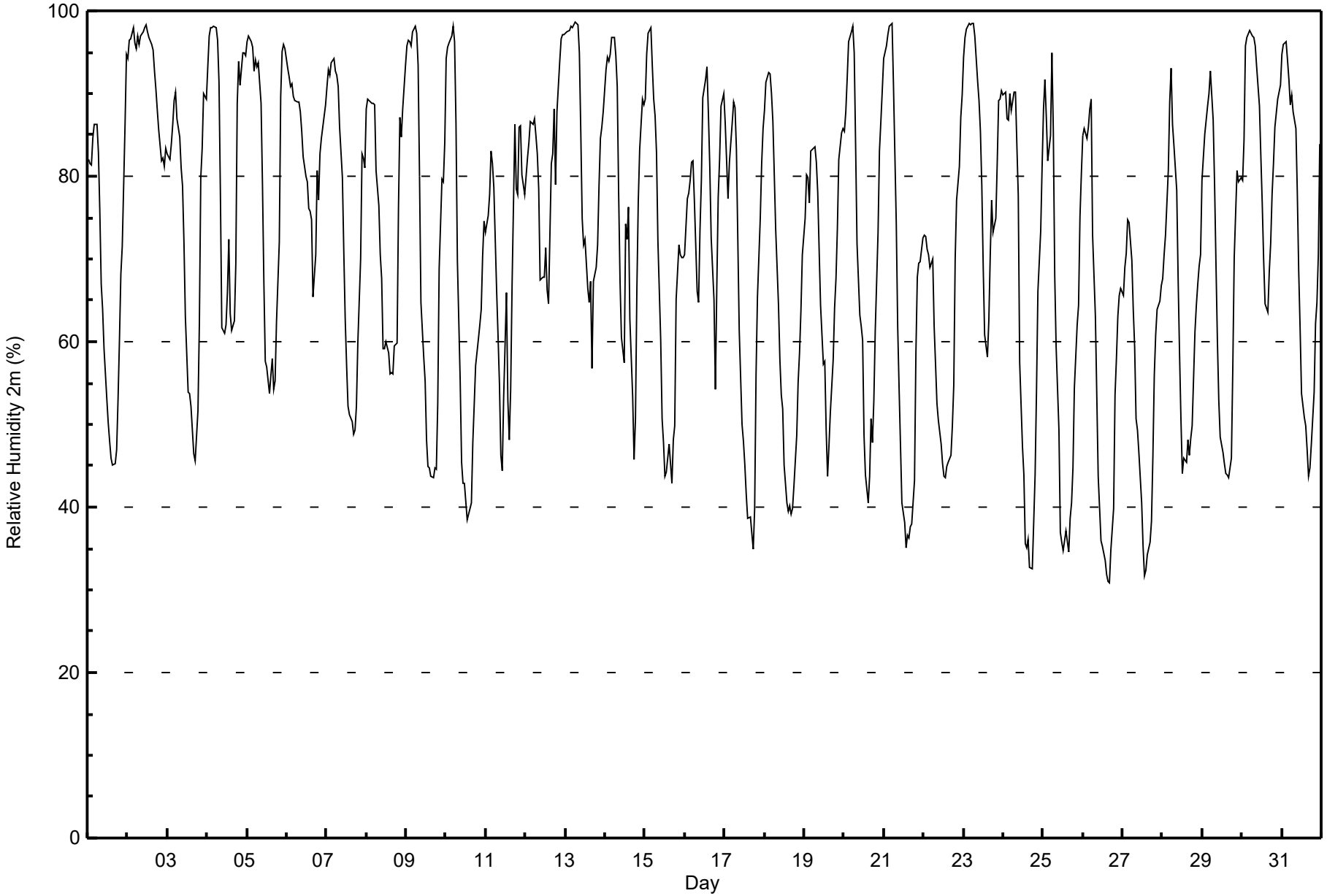
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 82.1 | 81.6 | 81.4 | 84.6 | 86.3 | 86.2 | 82.9 | 75.7 | 66.9 | 63.8 | 59.2 | 53.0 | 50.3 | 48.0 | 45.9 | 45.1 | 45.3 | 46.9 | 53.1 | 60.1 | 68.1 | 71.5 | 86.2 | 94.7 | 67.5 | 94.7 |
| 2-Aug | 94.2 | 96.5 | 96.6 | 97.9 | 96.1 | 95.5 | 96.9 | 95.9 | 96.9 | 97.4 | 97.9 | 98.3 | 97.5 | 96.8 | 95.9 | 95.2 | 92.7 | 90.5 | 88.0 | 85.5 | 81.9 | 82.1 | 81.3 | 83.4 | 93.0 | 98.3 |
| 3-Aug | 82.7 | 82.1 | 84.0 | 86.4 | 89.2 | 90.2 | 87.0 | 84.7 | 80.9 | 78.8 | 72.1 | 63.1 | 53.9 | 53.8 | 52.2 | 49.2 | 46.4 | 45.6 | 51.7 | 62.2 | 79.8 | 83.5 | 89.9 | 89.4 | 72.4 | 90.2 |
| 4-Aug | 93.2 | 97.0 | 97.9 | 98.0 | 98.2 | 98.0 | 96.4 | 91.4 | 77.7 | 61.8 | 60.9 | 62.1 | 65.9 | 72.3 | 63.4 | 61.4 | 62.6 | 69.4 | 88.9 | 93.9 | 91.1 | 94.9 | 94.9 | 94.6 | 82.7 | 98.2 |
| 5-Aug | 96.2 | 96.9 | 96.3 | 95.6 | 92.8 | 94.1 | 93.2 | 93.7 | 88.8 | 78.9 | 67.1 | 57.7 | 57.0 | 53.7 | 55.9 | 58.0 | 54.3 | 55.2 | 62.3 | 72.0 | 89.6 | 95.1 | 96.0 | 95.5 | 79.0 | 96.9 |
| 6-Aug | 93.0 | 92.1 | 90.9 | 91.2 | 89.7 | 89.2 | 88.9 | 88.9 | 87.8 | 85.5 | 82.4 | 80.1 | 79.3 | 76.1 | 75.8 | 74.7 | 65.5 | 70.6 | 80.6 | 77.1 | 82.7 | 84.6 | 87.3 | 88.6 | 83.4 | 93.0 |
| 7-Aug | 90.9 | 92.8 | 92.2 | 93.8 | 94.2 | 92.6 | 92.3 | 90.9 | 86.0 | 79.8 | 70.9 | 62.7 | 57.0 | 52.1 | 51.2 | 50.4 | 48.9 | 49.3 | 52.2 | 59.8 | 70.0 | 82.7 | 82.3 | 81.0 | 74.0 | 94.2 |
| 8-Aug | 88.2 | 89.3 | 89.1 | 88.8 | 88.8 | 88.7 | 80.6 | 76.4 | 70.5 | 67.7 | 59.1 | 59.2 | 60.0 | 58.6 | 56.1 | 56.2 | 56.1 | 59.5 | 59.9 | 76.3 | 87.2 | 84.8 | 88.1 | 93.3 | 74.3 | 93.3 |
| 9-Aug | 95.8 | 96.5 | 96.3 | 95.8 | 97.4 | 98.1 | 97.2 | 93.3 | 80.0 | 64.8 | 58.1 | 55.2 | 48.2 | 44.8 | 44.7 | 43.7 | 43.5 | 44.7 | 44.6 | 52.6 | 68.8 | 79.6 | 79.3 | 84.0 | 71.1 | 98.1 |
| 10-Aug | 94.3 | 95.6 | 96.1 | 96.9 | 98.2 | 96.3 | 86.5 | 69.9 | 55.2 | 45.5 | 42.9 | 42.9 | 40.7 | 38.5 | 39.8 | 40.6 | 47.8 | 52.3 | 57.1 | 60.4 | 62.0 | 63.8 | 70.3 | 74.5 | 65.3 | 98.2 |
| 11-Aug | 73.2 | 75.2 | 77.8 | 83.1 | 81.5 | 78.7 | 66.1 | 60.7 | 54.9 | 46.3 | 44.4 | 53.2 | 65.9 | 53.0 | 48.1 | 54.2 | 66.9 | 86.2 | 78.5 | 77.7 | 85.9 | 86.2 | 80.2 | 77.8 | 69.0 | 86.2 |
| 12-Aug | 80.1 | 82.2 | 84.0 | 86.6 | 86.2 | 86.9 | 84.9 | 82.6 | 78.6 | 67.5 | 67.8 | 67.9 | 71.4 | 66.3 | 64.6 | 81.5 | 82.8 | 88.2 | 79.0 | 87.8 | 93.8 | 96.6 | 97.2 | 97.1 | 81.7 | 97.2 |
| 13-Aug | 97.4 | 97.5 | 97.7 | 98.1 | 98.0 | 98.4 | 98.7 | 98.3 | 94.9 | 85.5 | 74.9 | 71.6 | 72.4 | 66.5 | 64.8 | 67.3 | 56.7 | 67.3 | 69.0 | 71.7 | 78.9 | 84.7 | 85.9 | 87.8 | 82.7 | 98.7 |
| 14-Aug | 92.9 | 94.4 | 93.9 | 94.8 | 96.8 | 96.8 | 94.5 | 90.8 | 77.9 | 67.3 | 60.6 | 57.5 | 74.2 | 72.4 | 76.3 | 62.8 | 53.5 | 45.8 | 50.6 | 66.3 | 76.9 | 83.2 | 89.3 | 88.6 | 77.4 | 96.8 |
| 15-Aug | 89.4 | 94.8 | 97.3 | 98.1 | 93.4 | 89.4 | 87.2 | 82.8 | 72.2 | 60.1 | 50.7 | 47.8 | 43.7 | 44.2 | 47.7 | 45.2 | 43.0 | 48.1 | 49.9 | 65.2 | 71.6 | 70.5 | 70.2 | 70.1 | 68.0 | 98.1 |
| 16-Aug | 70.6 | 77.3 | 77.9 | 79.4 | 81.7 | 81.9 | 77.2 | 66.1 | 64.8 | 73.3 | 79.5 | 89.5 | 91.6 | 93.2 | 87.6 | 81.1 | 72.6 | 65.2 | 54.3 | 66.6 | 77.5 | 82.1 | 88.5 | 90.0 | 77.9 | 93.2 |
| 17-Aug | 86.4 | 81.9 | 77.4 | 81.7 | 86.4 | 89.0 | 88.2 | 83.2 | 72.2 | 61.3 | 50.0 | 48.0 | 45.1 | 41.4 | 38.6 | 38.8 | 36.9 | 34.9 | 39.8 | 56.0 | 65.4 | 75.0 | 81.5 | 85.8 | 64.4 | 89.0 |
| 18-Aug | 88.0 | 91.4 | 92.5 | 92.3 | 90.1 | 86.7 | 80.1 | 73.5 | 64.4 | 57.8 | 53.5 | 51.9 | 45.2 | 40.5 | 39.6 | 40.2 | 39.2 | 39.8 | 42.6 | 48.6 | 55.0 | 58.7 | 63.7 | 70.5 | 62.7 | 92.5 |
| 19-Aug | 75.0 | 80.1 | 79.9 | 76.7 | 83.0 | 83.3 | 83.5 | 81.7 | 78.0 | 71.0 | 64.4 | 57.4 | 57.7 | 49.3 | 43.8 | 47.5 | 51.5 | 57.8 | 64.1 | 67.7 | 73.7 | 82.1 | 85.2 | 85.7 | 70.0 | 85.7 |
| 20-Aug | 85.5 | 87.8 | 91.8 | 96.4 | 97.5 | 98.1 | 94.9 | 83.8 | 71.9 | 63.3 | 61.9 | 60.2 | 48.7 | 43.8 | 40.5 | 43.7 | 50.7 | 47.9 | 52.8 | 61.4 | 73.3 | 83.1 | 86.6 | 90.4 | 71.5 | 98.1 |
| 21-Aug | 94.2 | 95.8 | 97.1 | 98.1 | 98.4 | 98.5 | 91.1 | 74.2 | 61.9 | 54.4 | 47.4 | 40.5 | 38.1 | 35.2 | 36.6 | 36.2 | 37.7 | 38.0 | 43.3 | 58.6 | 67.8 | 69.5 | 69.7 | 72.5 | 64.8 | 98.5 |
| 22-Aug | 72.8 | 72.6 | 71.2 | 70.6 | 69.0 | 70.0 | 61.8 | 57.3 | 52.5 | 50.6 | 47.7 | 45.3 | 43.7 | 43.6 | 44.9 | 45.5 | 46.2 | 49.8 | 54.7 | 70.0 | 77.2 | 81.2 | 87.1 | 89.9 | 61.5 | 89.9 |
| 23-Aug | 94.4 | 96.9 | 97.8 | 98.5 | 98.3 | 98.4 | 98.5 | 97.0 | 91.4 | 89.2 | 85.5 | 78.8 | 69.0 | 60.8 | 58.1 | 62.6 | 70.3 | 77.1 | 73.3 | 75.0 | 81.8 | 89.1 | 89.4 | 90.3 | 84.2 | 98.5 |
| 24-Aug | 89.8 | 90.2 | 87.0 | 86.8 | 90.1 | 88.0 | 90.1 | 90.3 | 83.8 | 77.7 | 57.5 | 47.4 | 44.0 | 35.5 | 35.1 | 36.2 | 32.7 | 32.5 | 38.1 | 43.8 | 54.1 | 66.0 | 73.4 | 81.3 | 64.6 | 90.3 |
| 25-Aug | 88.2 | 91.7 | 87.1 | 81.8 | 84.9 | 94.9 | 85.3 | 68.0 | 59.3 | 49.3 | 36.9 | 35.8 | 34.8 | 36.0 | 37.1 | 34.5 | 38.7 | 40.6 | 44.8 | 54.4 | 62.0 | 64.4 | 75.0 | 80.4 | 61.1 | 94.9 |
| 26-Aug | 84.8 | 85.7 | 84.6 | 86.0 | 88.2 | 89.3 | 72.9 | 63.1 | 53.5 | 43.7 | 39.9 | 36.0 | 35.2 | 33.6 | 31.9 | 31.0 | 30.8 | 34.7 | 39.9 | 53.5 | 58.0 | 63.0 | 65.6 | 66.4 | 57.1 | 89.3 |
| 27-Aug | 65.5 | 69.0 | 70.7 | 74.7 | 74.4 | 69.8 | 63.9 | 59.4 | 50.6 | 49.4 | 46.7 | 40.5 | 35.2 | 31.6 | 32.4 | 34.3 | 35.8 | 38.2 | 46.1 | 55.9 | 60.8 | 63.9 | 64.9 | 66.7 | 54.2 | 74.7 |
| 28-Aug | 67.6 | 70.5 | 72.9 | 80.6 | 88.9 | 93.1 | 86.3 | 83.8 | 78.4 | 67.6 | 58.6 | 50.7 | 44.1 | 46.0 | 45.4 | 48.1 | 46.3 | 48.3 | 49.9 | 61.1 | 64.5 | 67.0 | 69.2 | 70.6 | 65.0 | 93.1 |
| 29-Aug | 79.4 | 85.2 | 86.8 | 88.6 | 90.1 | 92.7 | 86.7 | 79.0 | 69.4 | 60.1 | 52.9 | 48.5 | 46.6 | 45.3 | 44.1 | 43.8 | 43.6 | 45.9 | 56.9 | 70.1 | 75.3 | 80.6 | 79.2 | 79.8 | 67.9 | 92.7 |
| 30-Aug | 79.5 | 84.3 | 95.8 | 96.7 | 97.7 | 97.4 | 97.0 | 96.8 | 95.8 | 93.2 | 88.4 | 82.4 | 76.6 | 69.8 | 64.6 | 63.5 | 68.6 | 71.9 | 77.8 | 81.5 | 86.0 | 89.3 | 90.1 | 91.0 | 84.8 | 97.7 |
| 31-Aug | 94.7 | 95.9 | 96.3 | 94.1 | 91.6 | 88.6 | 89.8 | 87.9 | 85.8 | 78.0 | 68.5 | 61.5 | 53.8 | 50.9 | 49.9 | 47.0 | 43.7 | 44.7 | 47.6 | 54.0 | 62.2 | 64.7 | 70.5 | 83.9 | 71.1 | 96.3 |
| | 85.8 | 87.8 | 88.3 | 89.4 | 90.2 | 90.3 | 86.5 | 81.3 | 74.3 | 67.4 | 61.6 | 58.3 | 56.3 | 53.3 | 52.0 | 52.2 | 52.0 | 54.4 | 57.8 | 66.0 | 73.6 | 78.2 | 81.2 | 83.7 | Diurnal Average | |
| | 97.4 | 97.5 | 97.9 | 98.5 | 98.4 | 98.5 | 98.7 | 98.3 | 96.9 | 97.4 | 97.9 | 98.3 | 97.5 | 96.8 | 95.9 | 95.2 | 92.7 | 90.5 | 88.9 | 93.9 | 93.8 | 96.6 | 97.2 | 97.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Sawbones Bay - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 44 | 5.91 | 5.91 |
| 40 - 60 | 174 | 23.39 | 29.30 |
| 60 - 80 | 212 | 28.49 | 57.80 |
| 80 - 100 | 314 | 42.20 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Sawbones Bay - August 2026

Maximum Speed: 26 km/h on Aug 2 15:00

Maximum Daily Speed Average: 18.1 km/h on Aug 5

Minimum Speed Value: 0 km/h on Aug 9 09:00

Minimum Daily Speed Average: 1.5 km/h on Aug 9

Maximum Diurnal Speed Average: 7.5 km/h at hour 12

Minimum Diurnal Speed Average: 2.3 km/h at hour 21

Monthly Average Velocity: 4.4 km/h 280.9 deg

Percentiles: $P_1 = 2$ $P_{10} = 3$ $Q_1 = 5$ Median = 9 $Q_3 = 13$ $P_{90} = 17$ $P_{99} = 22$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | S8 | S8 | S9 | S9 | S9 | S10 | SSE8 | SSE8 | SSE12 | SSE14 | SSE15 | SSE15 | SSE16 | SE17 | SE17 | SE18 | SSE18 | S17 | SSE13 | SSE9 | SE5 | SSE7 | NW14 | NNW13 | SSE9.6 | SE18 |
| 2-Aug | NNW13 | ENE9 | SW8 | S3 | WNW15 | WNW19 | WNW16 | W18 | WNW19 | WNW18 | WNW14 | NW12 | NNW19 | NNW20 | NNW26 | NNW25 | NW20 | NW18 | NW17 | NW17 | NW16 | NW15 | NW16 | NW13 | NW14.2 | NNW26 |
| 3-Aug | NW14 | NW13 | WNW14 | WNW13 | WNW12 | WNW9 | WNW11 | WNW12 | NW13 | WNW15 | NW16 | NW16 | NW15 | NNW16 | NNW14 | NW16 | NW16 | NNW12 | NNE6 | SE2 | E2 | S3 | S4 | NNW1 | NW9.8 | NW16 |
| 4-Aug | S2 | S5 | S5 | S5 | S5 | S5 | S4 | S6 | SSW7 | SW10 | WSW17 | W20 | WSW19 | WSW17 | SW18 | SW17 | WSW15 | SW14 | WSW9 | SW9 | W14 | WNW16 | WNW17 | WNW18 | WSW9.6 | W20 |
| 5-Aug | WNW15 | WNW13 | WNW13 | WNW16 | WNW19 | WNW20 | WNW19 | WNW20 | WNW21 | WNW20 | WNW24 | WNW25 | WNW21 | NW25 | WNW24 | WNW25 | WNW20 | WNW17 | WSW13 | W15 | WNW18 | N21 | NW11 | NW17 | WNW18.1 | WNW25 |
| 6-Aug | NW17 | WNW19 | NW20 | WNW19 | WNW21 | WNW21 | NW23 | NW20 | NW21 | NW21 | NW20 | NW17 | NW17 | NW17 | WNW18 | WNW19 | WNW20 | WNW17 | WNW12 | WNW17 | W12 | W15 | WNW18 | WNW18 | WNW18.0 | NW23 |
| 7-Aug | W18 | W15 | WNW15 | WNW15 | WNW13 | W14 | W12 | W10 | WNW10 | WNW12 | WNW14 | WNW17 | WNW18 | WNW20 | WNW20 | WNW17 | WNW18 | WNW15 | WNW13 | NW8 | NE4 | NNE3 | NNE5 | N4 | WNW12.0 | WNW20 |
| 8-Aug | WNW2 | NW4 | NNW7 | NNW7 | NNW7 | NNE9 | N3 | NNW7 | N9 | N7 | NNE8 | NNW8 | NNW9 | NNW8 | NW10 | NW10 | NNW8 | NNW6 | NNW4 | NE2 | NNE4 | N5 | N2 | SSW1 | NNW5.5 | NW10 |
| 9-Aug | WSW1 | SE2 | SSW3 | NNW3 | SSE4 | S4 | W2 | S3 | WSW0 | WNW3 | NNE5 | NNE7 | ENE2 | NW4 | WNW3 | N6 | NE5 | N4 | NE4 | NE6 | ENE5 | ENE5 | E6 | SE6 | NE1.5 | NNE7 |
| 10-Aug | SE5 | NE2 | SE3 | SSE2 | ENE4 | SE4 | ESE3 | E2 | E6 | E4 | NNE5 | NNW3 | NE2 | N4 | NE5 | NNE7 | NNW8 | NW9 | NNW6 | NNW6 | N8 | N9 | NNW6 | N7 | NNE3.1 | NW9 |
| 11-Aug | N8 | N7 | N5 | NNW4 | NNW4 | NW4 | NW3 | N4 | NW4 | NNW9 | NNW9 | NNW12 | SW2 | NNE8 | NW4 | WSW9 | NNW11 | SSW3 | WNW6 | WNW9 | NW7 | NW7 | NNW8 | NNW7 | NNW5.4 | NNW12 |
| 12-Aug | N7 | N8 | NW6 | WNW7 | WNW9 | WNW9 | WNW9 | WNW8 | WNW8 | NNW10 | NNW11 | NNW10 | N16 | N12 | NNW10 | NNW11 | NNW13 | NNW9 | N9 | N11 | N7 | NNW6 | N8 | N9 | NNW8.5 | N16 |
| 13-Aug | N8 | N8 | N8 | N7 | NNE9 | NNE10 | NNE7 | NNE8 | NNE9 | N8 | NNE10 | NE10 | E13 | NE12 | ENE15 | ENE13 | ENE13 | NNE10 | NNE8 | NNE4 | NNE6 | NE5 | NE4 | NE1 | NE7.8 | ENE15 |
| 14-Aug | UO | N3 | N4 | UO | N2 | NW3 | NNW2 | NE4 | E3 | E5 | E5 | NNW3 | ENE2 | NNW8 | NE12 | E8 | ENE7 | ESE3 | SSE2 | NNW2 | NNE1 | NW2 | SW3 | SSW2 | NE2.2 | NE12 |
| 15-Aug | SSW4 | SW4 | SW4 | SW4 | WSW6 | WSW5 | SSW4 | W4 | WSW5 | W8 | W10 | W9 | WNW12 | W14 | WSW13 | SW7 | SW11 | W18 | W9 | S3 | SSW7 | SSW9 | SSW9 | SSW10 | WSW6.9 | W18 |
| 16-Aug | SSW10 | SSW10 | SW9 | SW12 | SW11 | SW9 | SW10 | W17 | WNW22 | WNW17 | WNW15 | WNW15 | WNW15 | NNW13 | NNW11 | NW12 | NW13 | NW11 | NNW9 | NW7 | WNW8 | W4 | SSW6 | SSW4 | W8.4 | WNW22 |
| 17-Aug | SSW7 | WSW11 | W15 | W16 | W18 | W17 | W16 | WNW12 | WNW11 | WNW14 | WNW16 | WNW16 | NW13 | WNW10 | W9 | W11 | WSW10 | W10 | W6 | SSW9 | SSW9 | SSW8 | S7 | S6 | W9.9 | W18 |
| 18-Aug | S5 | S6 | S6 | S8 | SSE7 | SSE6 | SSE8 | S10 | S9 | SSW13 | SSW13 | SW12 | SW11 | WSW12 | SW11 | WSW12 | W13 | W15 | WNW16 | WNW15 | WNW10 | WNW13 | WNW11 | SSE3 | SW6.8 | WNW16 |
| 19-Aug | S4 | SSE3 | SW5 | W14 | WSW8 | W12 | WSW9 | WSW9 | WSW9 | WSW9 | W11 | W16 | WNW16 | NW17 | WNW20 | NW17 | NW12 | NW9 | NW12 | NW8 | WNW10 | NW9 | WNW6 | WNW10 | WNW9.3 | WNW20 |
| 20-Aug | WNW10 | W6 | NW8 | WNW3 | S5 | SSW3 | SW3 | W4 | WSW5 | WNW9 | WNW14 | WNW9 | WNW15 | NW11 | NW13 | NNW16 | N12 | N13 | NNE10 | NNE5 | NNE3 | N5 | NW5 | W2 | NW5.8 | NNW16 |
| 21-Aug | SSW3 | S5 | S4 | SSW4 | SSW2 | S6 | SE2 | SSE4 | S4 | SW7 | SW9 | SW9 | SW8 | SW8 | SSW7 | SW10 | SSW7 | SSW9 | SSW6 | SSW6 | S5 | S7 | SSE8 | S8 | SSW5.8 | SW10 |
| 22-Aug | S8 | SSE9 | SSE9 | SSE9 | SSE9 | S10 | SSE12 | S12 | S13 | SSW15 | SSW12 | S10 | S9 | SSE9 | SE12 | SSE12 | SSE14 | S13 | SSW9 | S5 | S4 | SSE5 | SSE6 | SSE5 | S9.4 | SSW15 |
| 23-Aug | S4 | S6 | S7 | SSE5 | ENE3 | SSE4 | S3 | SSE3 | S3 | WNW6 | W9 | NW14 | NNW8 | ENE7 | N9 | NW6 | WNW10 | WNW18 | N11 | NW1 | NNW5 | NNW6 | NNW7 | NW7 | NW3.0 | WNW18 |
| 24-Aug | NW7 | WNW7 | WSW7 | WSW9 | WSW13 | WNW17 | NW11 | NNW8 | NNW10 | NW10 | NNW16 | NNW16 | NNW14 | NNW21 | NW22 | NNW16 | NNW19 | NNW18 | N10 | N7 | N5 | NW6 | NW5 | WNW3 | NW10.2 | NW22 |
| 25-Aug | S4 | WSW3 | WSW3 | W5 | SW2 | S4 | S1 | SW4 | WNW10 | WNW8 | NW11 | NW9 | NW10 | NW10 | NNW6 | NW8 | NE9 | NE10 | ENE8 | E6 | ESE6 | SE7 | SSE6 | SSE5 | NW1.8 | NW11 |
| 26-Aug | SSE5 | S6 | S5 | S6 | S4 | SSE4 | SSE4 | SSE5 | S7 | SSW9 | S13 | SSW12 | S11 | S12 | SSW12 | SSW12 | S11 | S9 | S9 | SSE8 | SSE9 | SE8 | SSE10 | SSE13 | S8.2 | SSE13 |
| 27-Aug | SSE12 | SSE10 | SSE10 | SSE8 | SSE8 | SSE8 | SSE7 | SSE8 | SSE11 | SE10 | SSE11 | SSE9 | SE12 | SE18 | SSE18 | SSE18 | SSE17 | SSE15 | SE12 | ESE11 | E10 | ESE9 | SE11 | SE10 | SSE11.0 | SSE18 |
| 28-Aug | S6 | SW6 | WSW11 | NNW9 | S4 | SSE4 | SW11 | W14 | W18 | W19 | WSW17 | SW17 | WSW22 | WSW21 | WSW22 | WSW20 | WSW19 | SW17 | WSW16 | SSW11 | SW13 | SW14 | SW12 | WSW13 | WSW12.8 | WSW22 |
| 29-Aug | WNW13 | WSW7 | SW10 | SW10 | SW8 | S6 | S9 | SW12 | SW14 | SW15 | SW15 | SW13 | SW14 | SW15 | SW13 | WSW13 | WSW11 | SW8 | S4 | S5 | SSE6 | SSE6 | SSE4 | SE5 | SW8.6 | SW15 |
| 30-Aug | ESE6 | SSE6 | N4 | ENE3 | ENE6 | E5 | ESE6 | ENE4 | NE5 | ENE2 | S3 | NW2 | ENE4 | SE6 | SE4 | NNE3 | NE4 | NE3 | NE5 | E6 | ESE5 | ESE7 | ESE5 | E6 | E3.4 | ESE7 |
| 31-Aug | NW3 | NE2 | NNE3 | NW7 | WNW8 | WNW16 | WNW11 | WNW13 | WNW9 | WNW11 | WNW11 | WNW14 | WNW13 | NW13 | NW14 | NW16 | WNW16 | NW12 | WNW11 | WNW12 | WNW12 | WNW14 | W5 | S5 | WNW9.7 | WNW16 |
| | W3.0 | WSW2.5 | WSW3.7 | W4.4 | W4.0 | W4.5 | W4.1 | W4.6 | W5.4 | W6.4 | WNW7.2 | WNW7.5 | WNW6.3 | WNW6.2 | WNW5.9 | WNW6.4 | WNW5.6 | WNW5.8 | WNW3.9 | WNW2.6 | WNW2.3 | WNW2.4 | W2.8 | W2.3 | Diurnal Average | |
| | W18 | WNW19 | NW20 | WNW19 | WNW21 | WNW21 | NW23 | WNW20 | WNW22 | NW21 | WNW24 | WNW25 | WSW22 | NW25 | NNW26 | WNW25 | WNW20 | NW18 | NW17 | NW17 | WNW18 | N21 | WNW18 | WNW18 | Diurnal Maximum | |

UO - Unstable Operation

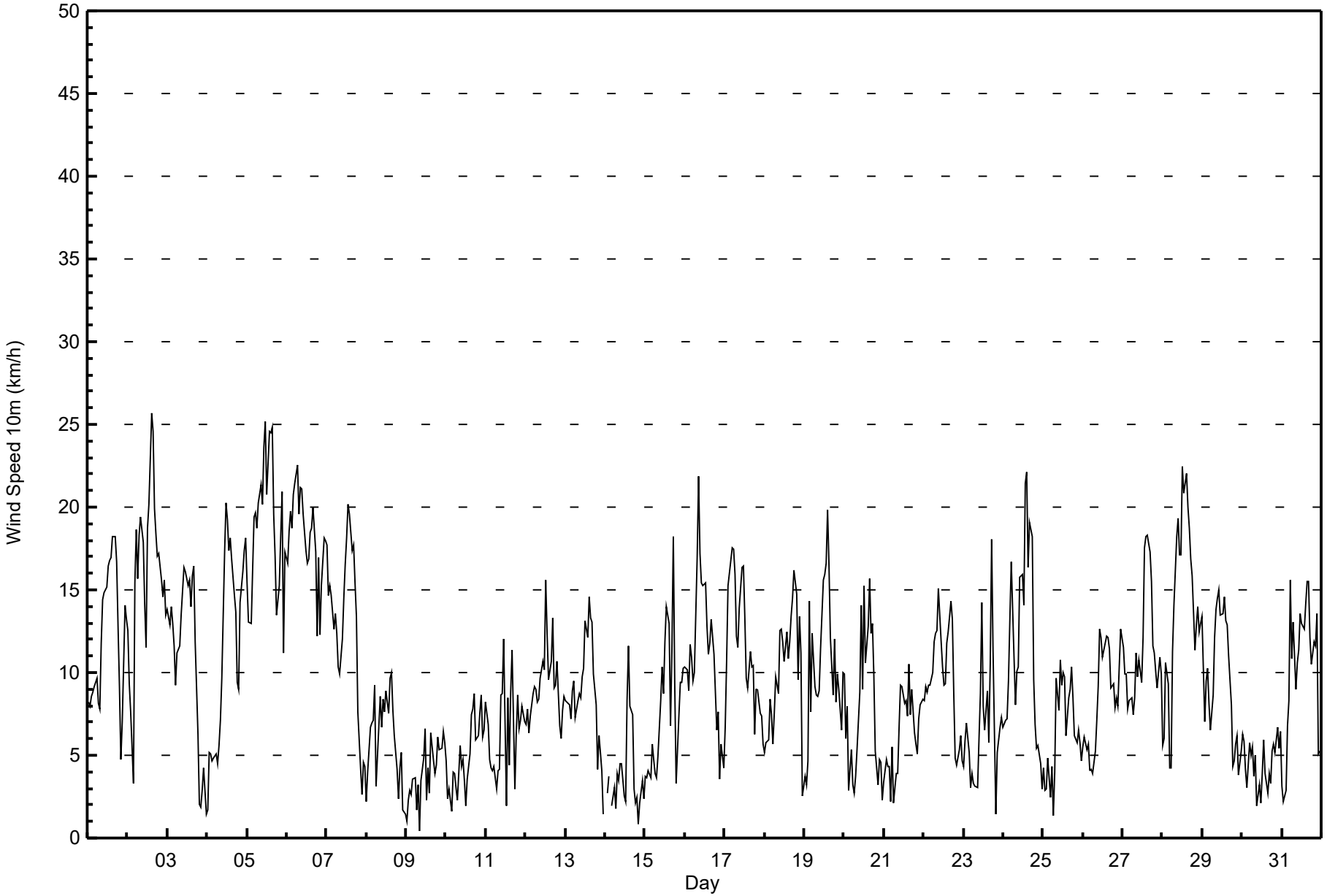
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Sawbones Bay - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 186 | 25.07 | 25.07 |
| 6 - 11 | 298 | 40.16 | 65.23 |
| 12 - 19 | 222 | 29.92 | 95.15 |
| 20 - 28 | 36 | 4.85 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 742

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Sawbones Bay - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 14 | 11 | 16 | 10 | 7 | 5 | 7 | 20 | 33 | 12 | 9 | 7 | 7 | 5 | 13 | 10 | 186 |
| 6 - 11 | 24 | 16 | 4 | 5 | 7 | 6 | 7 | 34 | 30 | 20 | 22 | 16 | 12 | 33 | 27 | 35 | 298 |
| 12 - 19 | 4 | 0 | 2 | 3 | 1 | 0 | 7 | 16 | 6 | 7 | 18 | 14 | 25 | 68 | 34 | 17 | 222 |
| 20 - 28 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 17 | 9 | 4 | 36 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 43 | 27 | 22 | 18 | 15 | 11 | 21 | 70 | 69 | 39 | 49 | 41 | 45 | 123 | 83 | 66 | 742 |

Total Number of Valid Hours: 742

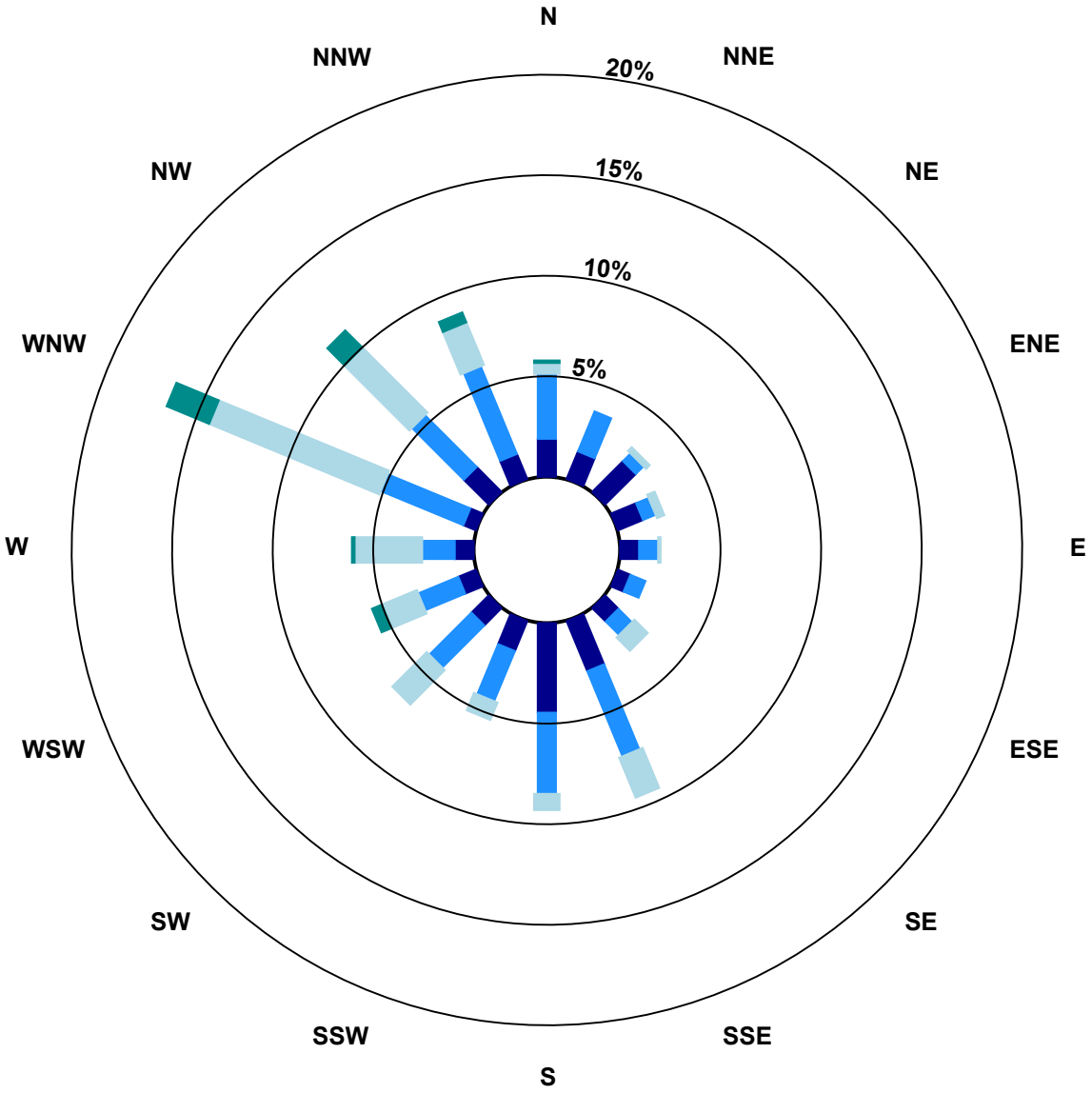
Total Number of Hours: 744

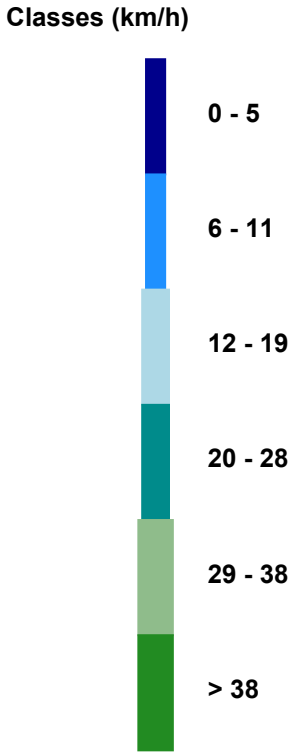
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Sawbones Bay




Total Number of Valid Hours: 742

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## Sawbones Bay - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Aug 4 19:00

Minimum Value: 0 km/h on Aug 20 22:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 3 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 6$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 5 | 6 | 5 | 6 | 6 | 5 | 4 | 3 | 2 | 3 | 8 | 3 | 8 |
| 2-Aug | 5 | 2 | 6 | 2 | 5 | 4 | 6 | 5 | 4 | 4 | 5 | 3 | 6 | 5 | 7 | 6 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 7 |
| 3-Aug | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 6 | 6 | 6 | 5 | 5 | 4 | 5 | 6 | 9 | 5 | 3 | 4 | 3 | 4 | 9 |
| 5-Aug | 3 | 2 | 2 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 6 | 4 | 4 | 6 |
| 6-Aug | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 5 |
| 7-Aug | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 1 | 1 | 2 | 1 | 5 |
| 8-Aug | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| 9-Aug | 1 | 1 | 2 | 2 | 1 | 1 | 3 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 11-Aug | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 6 | 2 | 5 | 4 | 4 | 6 | 2 | 4 | 2 | 1 | 1 | 1 | 1 | 6 |
| 12-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 4 | 5 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 5 |
| 13-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 14-Aug | UO | 1 | 1 | UO | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 5 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 5 |
| 15-Aug | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 5 | 3 | 3 | 5 | 4 | 3 | 1 | 2 | 2 | 3 | 5 |
| 16-Aug | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 2 | 2 | 4 |
| 17-Aug | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 5 |
| 18-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 2 | 1 | 4 |
| 19-Aug | 2 | 1 | 3 | 3 | 4 | 3 | 5 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 4 | 2 | 3 | 3 | 2 | 3 | 5 | 2 | 2 | 5 |
| 20-Aug | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 4 | 2 | 5 | 6 | 4 | 5 | 4 | 3 | 3 | 2 | 1 | 0 | 1 | 2 | 6 |
| 21-Aug | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 4 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 4 |
| 23-Aug | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | 3 | 5 | 3 | 3 | 2 | 2 | 1 | 1 | 5 |
| 24-Aug | 1 | 3 | 3 | 4 | 3 | 4 | 2 | 2 | 2 | 2 | 5 | 5 | 4 | 6 | 6 | 5 | 8 | 5 | 3 | 1 | 1 | 1 | 1 | 2 | 8 |
| 25-Aug | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 4 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 5 |
| 26-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 4 |
| 27-Aug | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 6 | 6 | 6 | 6 | 5 | 4 | 2 | 2 | 2 | 3 | 3 | 6 |
| 28-Aug | 3 | 3 | 8 | 7 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 7 | 6 | 6 | 6 | 5 | 5 | 6 | 3 | 3 | 3 | 3 | 4 | 8 |
| 29-Aug | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 3 | 5 |
| 30-Aug | 2 | 3 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 |
| 31-Aug | 2 | 2 | 1 | 2 | 2 | 4 | 3 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 2 | 2 | 5 | 1 | 5 |
| | 5 | 4 | 8 | 7 | 5 | 4 | 6 | 5 | 5 | 5 | 6 | 6 | 7 | 6 | 7 | 6 | 8 | 6 | 9 | 5 | 4 | 6 | 8 | 4 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## Sawbones Bay - August 2026

Direction of Maximum Speed: 334 deg on Aug 2 15:00
Direction of Maximum Daily Speed Average: 295.7 deg on Aug 5

Direction of Minimum Speed: 258 deg on Aug 9 09:00

Direction of Minimum Daily Speed Average: 1.5 deg on Aug 9

Monthly Average Direction: 280.9 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 173 | 177 | 173 | 170 | 170 | 171 | 168 | 166 | 161 | 158 | 152 | 153 | 147 | 142 | 138 | 142 | 154 | 173 | 168 | 162 | 139 | 163 | 309 | 335 | 159.9 |
| 2-Aug | 329 | 59 | 234 | 191 | 289 | 291 | 299 | 272 | 287 | 291 | 292 | 324 | 336 | 338 | 334 | 333 | 326 | 316 | 316 | 318 | 317 | 312 | 313 | 314 | 312.5 |
| 3-Aug | 312 | 306 | 303 | 296 | 291 | 294 | 301 | 303 | 310 | 299 | 311 | 322 | 326 | 332 | 339 | 323 | 317 | 333 | 21 | 124 | 90 | 169 | 186 | 341 | 313.8 |
| 4-Aug | 188 | 175 | 175 | 170 | 174 | 180 | 181 | 177 | 210 | 218 | 255 | 268 | 252 | 252 | 232 | 230 | 247 | 227 | 246 | 227 | 272 | 291 | 286 | 283 | 244.6 |
| 5-Aug | 292 | 292 | 293 | 289 | 287 | 287 | 290 | 292 | 290 | 293 | 299 | 300 | 303 | 307 | 298 | 294 | 297 | 294 | 251 | 266 | 285 | 351 | 321 | 311 | 295.7 |
| 6-Aug | 306 | 303 | 308 | 299 | 302 | 301 | 304 | 311 | 305 | 305 | 306 | 306 | 304 | 318 | 295 | 292 | 285 | 285 | 300 | 295 | 275 | 279 | 282 | 286 | 298.6 |
| 7-Aug | 280 | 268 | 288 | 292 | 291 | 281 | 274 | 281 | 298 | 282 | 294 | 301 | 300 | 294 | 294 | 300 | 295 | 299 | 300 | 324 | 39 | 25 | 17 | 10 | 294.5 |
| 8-Aug | 295 | 320 | 344 | 345 | 347 | 12 | 350 | 343 | 2 | 353 | 20 | 344 | 344 | 335 | 308 | 307 | 331 | 342 | 342 | 43 | 20 | 7 | 7 | 192 | 344.9 |
| 9-Aug | 258 | 146 | 201 | 336 | 152 | 188 | 281 | 176 | 258 | 288 | 13 | 32 | 64 | 325 | 284 | 359 | 39 | 352 | 50 | 48 | 67 | 72 | 92 | 125 | 47.1 |
| 10-Aug | 125 | 46 | 131 | 155 | 64 | 130 | 115 | 84 | 98 | 93 | 18 | 339 | 39 | 352 | 34 | 14 | 341 | 323 | 341 | 340 | 356 | 351 | 348 | 2 | 16.2 |
| 11-Aug | 3 | 1 | 357 | 334 | 345 | 320 | 315 | 356 | 326 | 347 | 337 | 336 | 220 | 18 | 322 | 252 | 327 | 201 | 296 | 291 | 307 | 320 | 330 | 346 | 329.0 |
| 12-Aug | 349 | 357 | 322 | 294 | 291 | 294 | 296 | 290 | 302 | 347 | 333 | 334 | 2 | 353 | 328 | 330 | 347 | 344 | 354 | 350 | 350 | 347 | 354 | 3 | 335.0 |
| 13-Aug | 1 | 3 | 3 | 7 | 16 | 16 | 18 | 19 | 28 | 6 | 23 | 41 | 79 | 40 | 73 | 73 | 75 | 17 | 18 | 24 | 28 | 35 | 46 | 51 | 34.1 |
| 14-Aug | UO | 354 | 3 | UO | 6 | 325 | 347 | 34 | 81 | 82 | 90 | 344 | 77 | 337 | 45 | 89 | 69 | 102 | 151 | 344 | 31 | 323 | 226 | 195 | 42.5 |
| 15-Aug | 205 | 225 | 228 | 229 | 258 | 237 | 196 | 272 | 256 | 270 | 276 | 273 | 287 | 263 | 249 | 215 | 224 | 276 | 264 | 185 | 195 | 206 | 205 | 213 | 244.8 |
| 16-Aug | 212 | 208 | 223 | 231 | 221 | 230 | 229 | 272 | 294 | 295 | 294 | 296 | 294 | 339 | 338 | 321 | 317 | 315 | 337 | 305 | 300 | 262 | 203 | 197 | 280.8 |
| 17-Aug | 213 | 256 | 261 | 263 | 270 | 274 | 273 | 283 | 283 | 282 | 297 | 295 | 304 | 302 | 264 | 270 | 256 | 269 | 264 | 203 | 201 | 197 | 185 | 181 | 266.1 |
| 18-Aug | 175 | 173 | 170 | 169 | 166 | 159 | 162 | 170 | 186 | 199 | 209 | 224 | 234 | 247 | 236 | 248 | 261 | 276 | 297 | 300 | 302 | 284 | 288 | 155 | 235.3 |
| 19-Aug | 186 | 160 | 218 | 275 | 242 | 266 | 257 | 255 | 256 | 250 | 279 | 269 | 297 | 308 | 300 | 307 | 316 | 318 | 314 | 309 | 293 | 305 | 294 | 290 | 285.4 |
| 20-Aug | 289 | 278 | 306 | 283 | 186 | 202 | 227 | 270 | 251 | 298 | 296 | 303 | 297 | 310 | 321 | 334 | 6 | 11 | 13 | 15 | 32 | 1 | 321 | 262 | 315.8 |
| 21-Aug | 211 | 177 | 178 | 201 | 192 | 174 | 146 | 159 | 184 | 220 | 227 | 222 | 234 | 216 | 206 | 221 | 208 | 207 | 201 | 195 | 186 | 172 | 167 | 172 | 199.7 |
| 22-Aug | 173 | 164 | 166 | 167 | 168 | 169 | 168 | 174 | 189 | 197 | 196 | 186 | 173 | 155 | 141 | 152 | 161 | 171 | 193 | 188 | 173 | 165 | 163 | 156 | 171.6 |
| 23-Aug | 178 | 175 | 169 | 163 | 61 | 154 | 169 | 164 | 182 | 290 | 272 | 310 | 348 | 60 | 11 | 325 | 299 | 285 | 358 | 325 | 340 | 336 | 328 | 326 | 311.4 |
| 24-Aug | 314 | 294 | 237 | 258 | 252 | 284 | 309 | 338 | 327 | 313 | 339 | 332 | 328 | 337 | 324 | 334 | 340 | 335 | 356 | 352 | 351 | 312 | 315 | 283 | 320.4 |
| 25-Aug | 188 | 243 | 237 | 274 | 225 | 190 | 181 | 226 | 297 | 301 | 305 | 315 | 317 | 324 | 334 | 322 | 43 | 40 | 59 | 80 | 115 | 137 | 163 | 164 | 320.5 |
| 26-Aug | 167 | 176 | 179 | 174 | 169 | 156 | 162 | 159 | 175 | 196 | 188 | 194 | 178 | 185 | 195 | 198 | 185 | 182 | 170 | 165 | 149 | 140 | 159 | 166 | 176.5 |
| 27-Aug | 166 | 157 | 154 | 161 | 158 | 152 | 157 | 158 | 158 | 145 | 154 | 159 | 127 | 144 | 158 | 160 | 153 | 155 | 131 | 108 | 99 | 118 | 136 | 140 | 146.9 |
| 28-Aug | 169 | 216 | 242 | 336 | 172 | 159 | 231 | 260 | 259 | 267 | 256 | 236 | 238 | 242 | 238 | 250 | 237 | 235 | 254 | 211 | 216 | 217 | 227 | 248 | 240.3 |
| 29-Aug | 297 | 241 | 235 | 232 | 220 | 190 | 191 | 216 | 229 | 227 | 227 | 224 | 230 | 223 | 232 | 238 | 237 | 218 | 186 | 182 | 156 | 167 | 168 | 138 | 222.2 |
| 30-Aug | 122 | 157 | 6 | 74 | 58 | 83 | 103 | 78 | 47 | 68 | 190 | 310 | 62 | 138 | 132 | 22 | 51 | 45 | 38 | 90 | 118 | 105 | 103 | 90 | 88.1 |
| 31-Aug | 312 | 48 | 28 | 310 | 301 | 287 | 291 | 290 | 288 | 299 | 300 | 300 | 303 | 308 | 313 | 304 | 297 | 304 | 302 | 289 | 289 | 294 | 273 | 182 | 298.0 |
| | 266.4 | 251.0 | 257.3 | 264.4 | 262.4 | 263.6 | 262.0 | 268.0 | 274.3 | 275.7 | 283.5 | 289.1 | 293.1 | 301.4 | 291.5 | 289.1 | 293.2 | 288.4 | 303.4 | 289.2 | 288.8 | 292.6 | 274.6 | 271.5 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

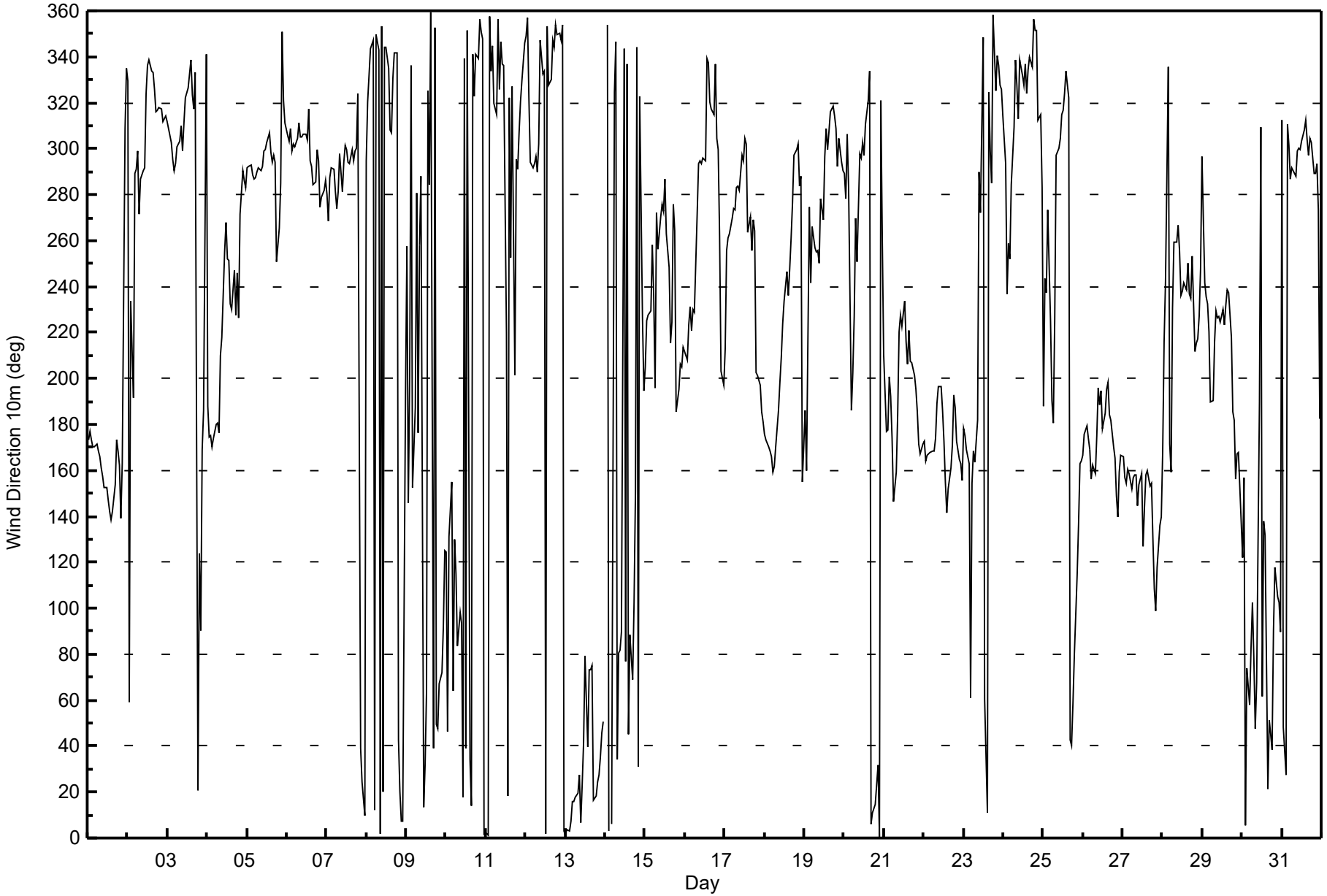
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Sawbones Bay - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Sawbones Bay - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 98 deg on Aug 23 20:00

Minimum Value: 5 deg on Aug 24 22:00

Percentiles: $P_1$ = 8 $P_{10}$ = 11 $Q_1$ = 14 Median = 20 $Q_3$ = 30 $P_{90}$ = 46 $P_{99}$ = 83

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 742 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 12 | 15 | 14 | 13 | 13 | 15 | 17 | 20 | 22 | 21 | 23 | 24 | 24 | 24 | 25 | 24 | 23 | 22 | 20 | 20 | 28 | 25 | 44 | 19 | 44 |
| 2-Aug | 21 | 33 | 49 | 73 | 25 | 9 | 12 | 18 | 14 | 13 | 11 | 16 | 17 | 16 | 15 | 16 | 15 | 14 | 13 | 13 | 13 | 11 | 12 | 11 | 73 |
| 3-Aug | 11 | 11 | 10 | 11 | 9 | 9 | 12 | 15 | 17 | 16 | 18 | 19 | 24 | 20 | 27 | 23 | 17 | 23 | 29 | 44 | 58 | 25 | 18 | 56 | 58 |
| 4-Aug | 62 | 10 | 15 | 10 | 11 | 14 | 23 | 19 | 30 | 24 | 24 | 14 | 23 | 22 | 21 | 22 | 24 | 23 | 46 | 32 | 22 | 12 | 12 | 16 | 62 |
| 5-Aug | 9 | 9 | 10 | 9 | 10 | 12 | 11 | 10 | 10 | 13 | 14 | 16 | 15 | 16 | 14 | 12 | 14 | 12 | 24 | 19 | 16 | 18 | 16 | 13 | 24 |
| 6-Aug | 13 | 13 | 13 | 11 | 12 | 13 | 13 | 14 | 14 | 15 | 14 | 15 | 15 | 15 | 13 | 15 | 17 | 15 | 12 | 10 | 19 | 12 | 10 | 10 | 19 |
| 7-Aug | 11 | 15 | 11 | 9 | 9 | 13 | 15 | 18 | 16 | 21 | 15 | 15 | 14 | 15 | 15 | 20 | 16 | 12 | 12 | 40 | 17 | 62 | 19 | 22 | 62 |
| 8-Aug | 45 | 56 | 10 | 11 | 12 | 14 | 54 | 32 | 27 | 44 | 36 | 30 | 27 | 30 | 21 | 19 | 32 | 25 | 22 | 23 | 10 | 14 | 29 | 77 | 77 |
| 9-Aug | 81 | 41 | 59 | 54 | 41 | 33 | 86 | 36 | 85 | 47 | 57 | 38 | 69 | 54 | 66 | 42 | 36 | 44 | 31 | 12 | 6 | 10 | 17 | 14 | 86 |
| 10-Aug | 14 | 36 | 34 | 61 | 29 | 23 | 22 | 37 | 31 | 59 | 63 | 71 | 88 | 65 | 40 | 30 | 15 | 14 | 19 | 11 | 13 | 14 | 12 | 14 | 88 |
| 11-Aug | 15 | 14 | 30 | 14 | 15 | 20 | 44 | 27 | 44 | 32 | 43 | 28 | 78 | 61 | 69 | 54 | 36 | 56 | 42 | 9 | 9 | 12 | 7 | 9 | 78 |
| 12-Aug | 11 | 13 | 18 | 10 | 7 | 8 | 9 | 13 | 20 | 29 | 21 | 26 | 21 | 25 | 39 | 28 | 23 | 18 | 20 | 16 | 13 | 13 | 15 | 17 | 39 |
| 13-Aug | 15 | 15 | 16 | 17 | 16 | 14 | 17 | 18 | 20 | 27 | 24 | 24 | 19 | 21 | 21 | 22 | 20 | 19 | 14 | 17 | 20 | 8 | 18 | 71 | 71 |
| 14-Aug | UO | 24 | 18 | UO | 19 | 13 | 20 | 30 | 41 | 35 | 60 | 92 | 76 | 60 | 27 | 31 | 22 | 73 | 61 | 58 | 93 | 45 | 36 | 68 | 93 |
| 15-Aug | 53 | 56 | 37 | 40 | 31 | 33 | 41 | 42 | 45 | 32 | 34 | 43 | 30 | 28 | 35 | 40 | 25 | 18 | 22 | 73 | 12 | 13 | 14 | 17 | 73 |
| 16-Aug | 15 | 15 | 22 | 19 | 18 | 19 | 21 | 21 | 11 | 10 | 13 | 9 | 11 | 25 | 19 | 17 | 15 | 15 | 17 | 13 | 6 | 44 | 16 | 43 | 44 |
| 17-Aug | 25 | 19 | 12 | 14 | 13 | 11 | 12 | 11 | 15 | 20 | 18 | 18 | 23 | 39 | 44 | 34 | 40 | 25 | 40 | 13 | 14 | 13 | 13 | 13 | 44 |
| 18-Aug | 12 | 11 | 10 | 11 | 13 | 19 | 19 | 22 | 30 | 25 | 27 | 26 | 31 | 30 | 30 | 31 | 25 | 23 | 11 | 10 | 14 | 16 | 11 | 53 | 53 |
| 19-Aug | 52 | 48 | 55 | 12 | 33 | 14 | 29 | 24 | 27 | 28 | 19 | 20 | 27 | 21 | 16 | 16 | 16 | 13 | 13 | 15 | 14 | 25 | 18 | 6 | 55 |
| 20-Aug | 8 | 21 | 15 | 27 | 18 | 45 | 64 | 39 | 43 | 16 | 18 | 20 | 19 | 45 | 21 | 26 | 21 | 22 | 17 | 9 | 11 | 16 | 15 | 60 | 64 |
| 21-Aug | 41 | 12 | 14 | 32 | 59 | 10 | 34 | 22 | 46 | 37 | 29 | 38 | 47 | 36 | 44 | 25 | 30 | 27 | 20 | 13 | 11 | 13 | 15 | 14 | 59 |
| 22-Aug | 15 | 16 | 17 | 17 | 17 | 16 | 18 | 21 | 25 | 22 | 27 | 27 | 27 | 27 | 28 | 25 | 22 | 23 | 22 | 15 | 15 | 11 | 12 | 13 | 28 |
| 23-Aug | 26 | 9 | 12 | 17 | 41 | 30 | 55 | 61 | 56 | 45 | 34 | 14 | 55 | 42 | 19 | 36 | 21 | 29 | 21 | 98 | 47 | 26 | 11 | 11 | 98 |
| 24-Aug | 17 | 14 | 41 | 37 | 25 | 13 | 13 | 19 | 16 | 15 | 18 | 17 | 18 | 21 | 16 | 19 | 29 | 20 | 20 | 19 | 22 | 5 | 10 | 24 | 41 |
| 25-Aug | 25 | 30 | 42 | 31 | 49 | 18 | 93 | 47 | 13 | 21 | 23 | 38 | 32 | 35 | 43 | 54 | 20 | 20 | 14 | 20 | 16 | 23 | 10 | 7 | 93 |
| 26-Aug | 8 | 10 | 15 | 12 | 13 | 14 | 16 | 17 | 24 | 26 | 25 | 27 | 29 | 32 | 30 | 28 | 26 | 23 | 17 | 16 | 16 | 16 | 18 | 18 | 32 |
| 27-Aug | 19 | 17 | 16 | 16 | 16 | 17 | 18 | 21 | 20 | 25 | 24 | 27 | 32 | 25 | 26 | 24 | 23 | 22 | 23 | 16 | 11 | 19 | 19 | 20 | 32 |
| 28-Aug | 51 | 30 | 67 | 79 | 33 | 47 | 24 | 21 | 20 | 19 | 25 | 23 | 23 | 24 | 23 | 24 | 21 | 21 | 27 | 14 | 16 | 15 | 24 | 23 | 79 |
| 29-Aug | 12 | 30 | 18 | 24 | 22 | 27 | 18 | 22 | 22 | 20 | 18 | 23 | 28 | 25 | 28 | 28 | 29 | 21 | 22 | 21 | 17 | 11 | 70 | 36 | 70 |
| 30-Aug | 30 | 39 | 44 | 34 | 19 | 14 | 24 | 52 | 41 | 83 | 36 | 83 | 64 | 36 | 51 | 63 | 23 | 41 | 8 | 34 | 21 | 11 | 45 | 32 | 83 |
| 31-Aug | 35 | 33 | 52 | 15 | 13 | 8 | 9 | 8 | 15 | 17 | 21 | 18 | 20 | 17 | 23 | 17 | 13 | 14 | 12 | 10 | 9 | 8 | 57 | 16 | 57 |
| | 81 | 56 | 67 | 79 | 59 | 47 | 93 | 61 | 85 | 83 | 63 | 92 | 88 | 65 | 69 | 63 | 40 | 73 | 61 | 98 | 93 | 62 | 70 | 77 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS506
## JACKFISH 1
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 1 (AMS506)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 708 | 34 | 36 | 99.73 | 8.7 | 0 | 2.3 | 0 |
| H2S (ppb) Average | 709 | 35 | 35 | 100 | 9.5 | 0 | 1.3 | 0 |
| NO2 (ppb) Average | 704 | 37 | 40 | 99.6 | 15.1 | 0 | 5.4 | - |
| NO (ppb) Average | 704 | 37 | 40 | 99.6 | 21.1 | - | 6.2 | - |
| NOX (ppb) Average | 704 | 37 | 40 | 99.6 | 34.9 | - | 11.7 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 28.8 | - | 21.8 | - |
| Relative Humidity (%) Average | 718 | 0 | 26 | 96.51 | 100 | - | 98.3 | - |
| Wind Speed 10 m (km/h) Average | 734 | 0 | 10 | 98.66 | 16 | - | 8 | - |
| Wind Direction 10 m (deg) Average | 734 | 0 | 10 | 98.66 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 1 (AMS506)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 708 | 0.49 | 0.9 | - | 0 | 0 | 0.1 | 0.2 | 0.4 | 1.3 | 8.7 |
| H2S (ppb) Average | 709 | 0.54 | 1.1 | - | 0 | 0.1 | 0.1 | 0.2 | 0.5 | 1.1 | 9.5 |
| NO2 (ppb) Average | 704 | 1.83 | 1.8 | - | 0 | 0.5 | 0.7 | 1.3 | 2.3 | 3.5 | 15.1 |
| NO (ppb) Average | 704 | 0.76 | 1.9 | - | 0 | 0 | 0 | 0.1 | 0.7 | 1.9 | 21.1 |
| NOX (ppb) Average | 704 | 2.59 | 3.5 | - | 0 | 0.5 | 0.8 | 1.5 | 2.9 | 5.2 | 34.9 |
| Temperature 2 m (C) Average | 744 | 15.69 | 4.9 | - | 4.3 | 9.7 | 12.1 | 15.2 | 18.9 | 22.4 | 28.8 |
| Relative Humidity (%) Average | 718 | 77.09 | 18.7 | - | 37.6 | 49.8 | 62.5 | 79.3 | 95.2 | 100 | 100 |
| Wind Speed 10 m (km/h) Average | 734 | 4.1 | 3 | - | 0 | 1 | 2 | 4 | 5 | 7 | 16 |
| Wind Direction 10 m (deg) Average | 734 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 1 (AMS506)
AUGUST 2026

## OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| NO2 | 19 Aug 2026 09:00 | 19 Aug 2026 09:00 | 1 | Maintenance - verify daily QA response |
| NO2, SO2 | 26 Aug 2026 12:00 | 26 Aug 2026 13:00 | 2 | Maintenance - sample manifold cleaned |
| Wind Speed, Wind Direction | 09 Aug 2026 01:00 | 30 Aug 2026 18:00 | 10 | Flat line in sensor output signal |
| Relative Humidity | 02 Aug 2026 14:00 | 31 Aug 2026 08:00 | 26 | Sensor operated out of range |

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Sulphur Dioxide ($SO_2$) - ppb

## Jackfish 1 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 8.7 ppb on Aug 5 15:00 Maximum Daily Average: 2.3 ppb on Aug 6

Minimum Value: 0.0 ppb on Aug 1 01:00 Minimum Daily Average: 0.0 ppb on Aug 22

Maximum Diurnal Average: 1.0 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 1

Monthly Average: 0.49 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.4 $P_{90}$ = 1.3 $P_{99}$ = 5.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 |
| 2-Aug | 0.1 | 0.0 | 0.1 | 0.2 | Z | 0.1 | 0.2 | 0.2 | 0.3 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 1.3 | 0.7 | 0.2 | 1.3 |
| 3-Aug | 0.4 | 1.7 | 0.6 | 0.5 | 0.2 | Z | 0.7 | 2.4 | 3.2 | 3.1 | 1.5 | 0.4 | 1.1 | 1.3 | 1.9 | 4.0 | 2.4 | 4.4 | 1.5 | 0.8 | 0.6 | 1.2 | 0.2 | 0.3 | 1.5 | 4.4 |
| 4-Aug | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.6 | 1.0 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 1.0 |
| 5-Aug | 0.1 | Z | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 1.1 | 3.3 | 3.5 | 3.4 | 3.7 | 6.4 | 8.7 | 6.6 | 5.5 | 2.1 | 0.8 | 0.2 | 0.3 | 0.1 | 0.0 | 0.2 | 2.0 | 8.7 |
| 6-Aug | 0.7 | 1.6 | Z | 1.9 | 2.3 | 4.8 | 5.1 | 5.0 | 2.5 | 2.7 | 4.3 | 2.6 | 4.6 | 5.1 | 2.9 | 3.5 | 1.5 | 0.5 | 0.7 | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 2.3 | 5.1 |
| 7-Aug | 0.2 | 0.2 | 0.0 | Z | 0.0 | 0.1 | 0.3 | 0.4 | 1.7 | 1.8 | 2.0 | 3.6 | 1.7 | 0.9 | 1.8 | 1.5 | 0.9 | 0.5 | 0.3 | 0.4 | 0.8 | 1.5 | 0.6 | 0.4 | 0.9 | 3.6 |
| 8-Aug | 0.3 | 0.2 | 0.3 | 0.3 | Z | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.8 | 0.3 | 0.5 | 0.8 | 0.4 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 | 0.9 |
| 9-Aug | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 1.1 | 5.2 | 4.9 | 1.6 | 0.8 | 0.4 | 0.6 | 1.7 | 1.1 | 0.5 | 0.3 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.8 | 5.2 |
| 10-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 |
| 11-Aug | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.1 | 0.5 | 0.7 | 0.3 | 0.5 | 0.4 | 0.2 | 1.0 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.0 |
| 12-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.1 | 0.2 | 0.5 | 1.0 | 0.8 | 0.4 | 0.5 | 0.9 | 0.3 | 0.7 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.4 | 1.0 |
| 13-Aug | 0.1 | 0.1 | 0.2 | Z | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 |
| 14-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.1 | 0.8 | 0.6 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.8 |
| 15-Aug | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | Z | 0.1 | 1.0 | 1.6 | 2.1 | 1.7 | 0.5 | 0.2 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.4 | 2.1 |
| 16-Aug | Z | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 1.1 | 0.8 | 0.6 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 1.1 |
| 17-Aug | 0.2 | Z | 0.4 | 0.6 | 0.5 | 0.4 | 0.9 | 2.3 | 1.8 | 1.0 | 3.0 | 1.1 | 1.6 | 1.0 | 0.9 | 0.5 | 0.5 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 3.0 |
| 18-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | C | C | C | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.4 | 0.0 | 0.1 | 0.2 | 1.2 | 0.2 | 1.2 |
| 19-Aug | 0.5 | 0.0 | 0.0 | Z | 0.2 | 0.0 | 0.6 | 1.3 | 1.4 | 3.0 | 0.9 | 1.0 | 0.6 | 1.1 | 3.3 | 3.4 | 1.5 | 2.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 | 3.4 |
| 20-Aug | 0.2 | 0.1 | 0.3 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.4 | 0.9 | 0.4 | 1.8 | 2.1 | 1.4 | 0.9 | 2.6 | 0.7 | 0.6 | 0.6 | 0.9 | 0.7 | 0.6 | 0.3 | 0.2 | 0.7 | 2.6 |
| 21-Aug | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.4 | 0.9 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 |
| 22-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 23-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 24-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.2 | 0.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 |
| 25-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.7 | 0.3 | 1.3 | 0.8 | 0.0 | 0.2 | 0.3 | 0.7 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 1.3 |
| 26-Aug | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | M | M | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 |
| 28-Aug | Z | 0.0 | 0.8 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.6 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.8 |
| 29-Aug | 0.1 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.9 | 0.7 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | 0.9 |
| 30-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 1.6 | 2.5 | 0.7 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 2.5 |
| 31-Aug | 0.0 | 0.1 | 0.0 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.7 | 1.1 | 1.3 | 1.6 | 1.3 | 0.8 | 1.5 | 0.6 | 1.0 | 0.8 | 0.3 | 0.2 | 0.4 | 0.6 | 0.2 | 0.1 | 0.6 | 1.6 |
| | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.6 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 0.7 | 1.7 | 0.8 | 1.9 | 2.3 | 4.8 | 5.1 | 5.0 | 3.2 | 5.2 | 4.9 | 3.6 | 4.6 | 6.4 | 8.7 | 6.6 | 5.5 | 4.4 | 1.5 | 0.9 | 0.8 | 1.5 | 1.3 | 1.2 | Diurnal Maximum | |

Z - zerospan C - Calibration M - Maintenance

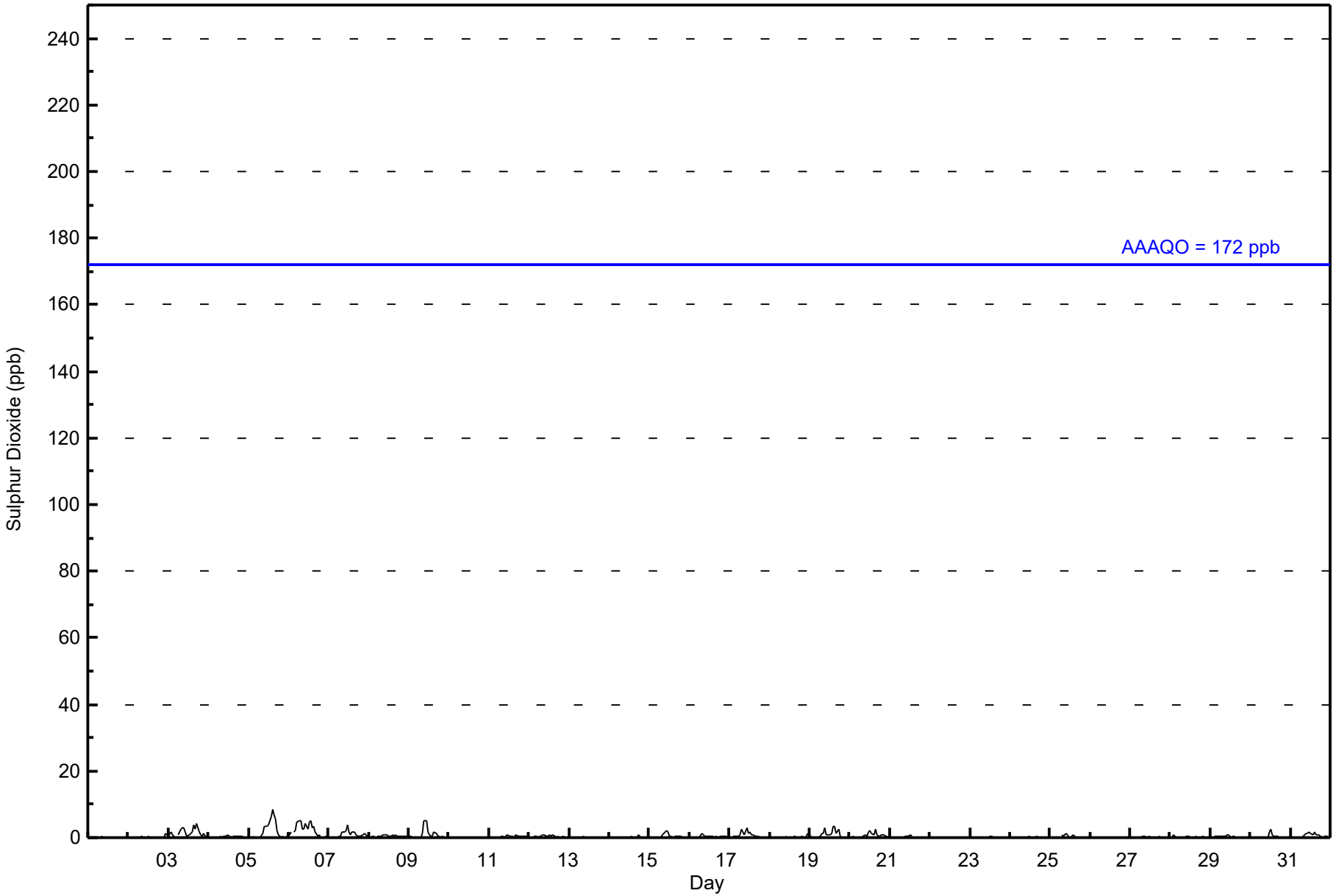
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 1 - August 2026**



# Sulphur Dioxide ($SO_2$) - ppb
## Jackfish 1 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 708 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 1 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 34 | 20 | 6 | 8 | 9 | 9 | 8 | 42 | 86 | 59 | 76 | 51 | 41 | 46 | 113 | 91 | 699 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 34 | 20 | 6 | 8 | 9 | 9 | 8 | 42 | 86 | 59 | 76 | 51 | 41 | 46 | 113 | 91 | 699 |

Total Number of Valid Hours: 699

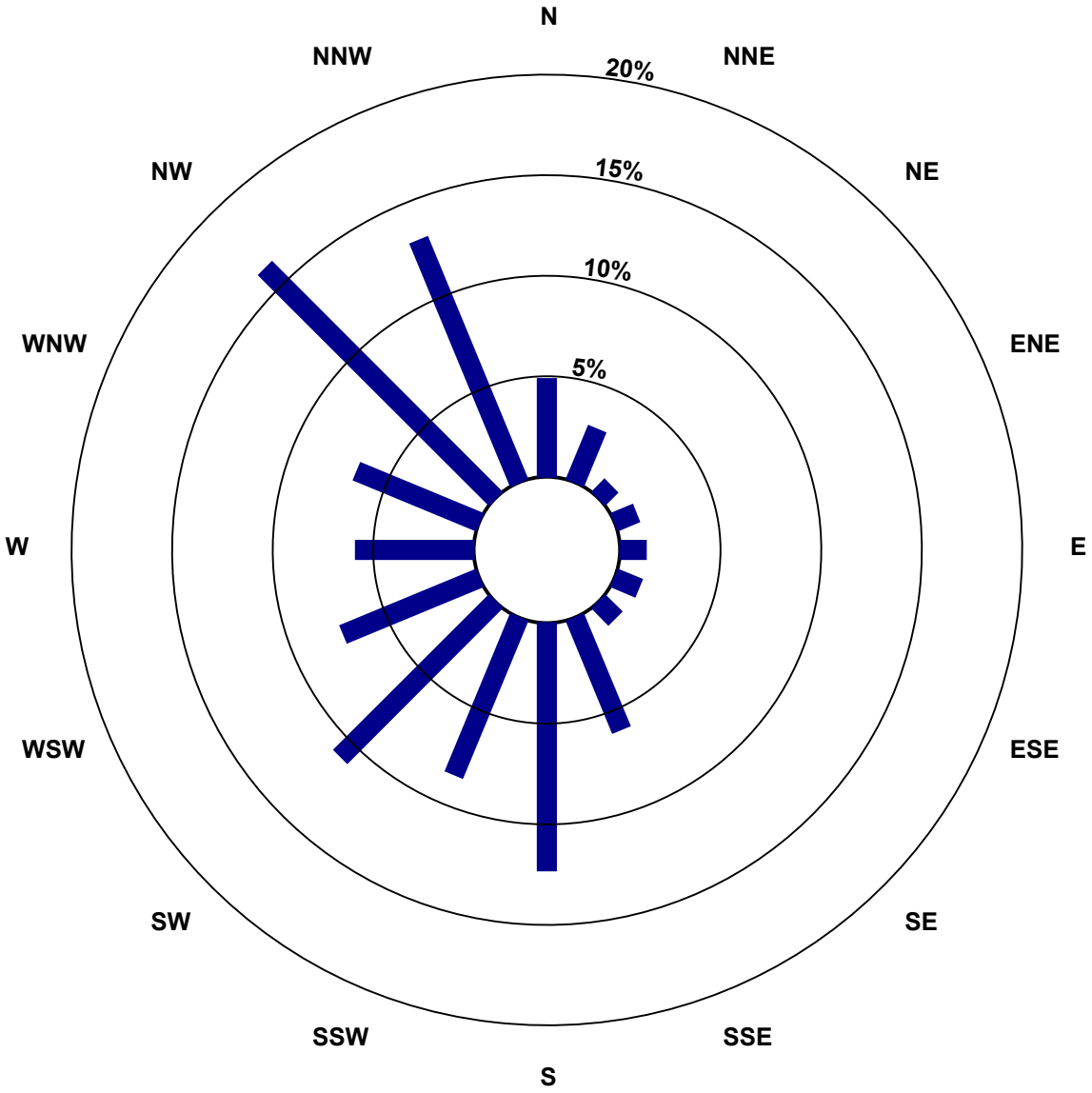
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Jackfish 1




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

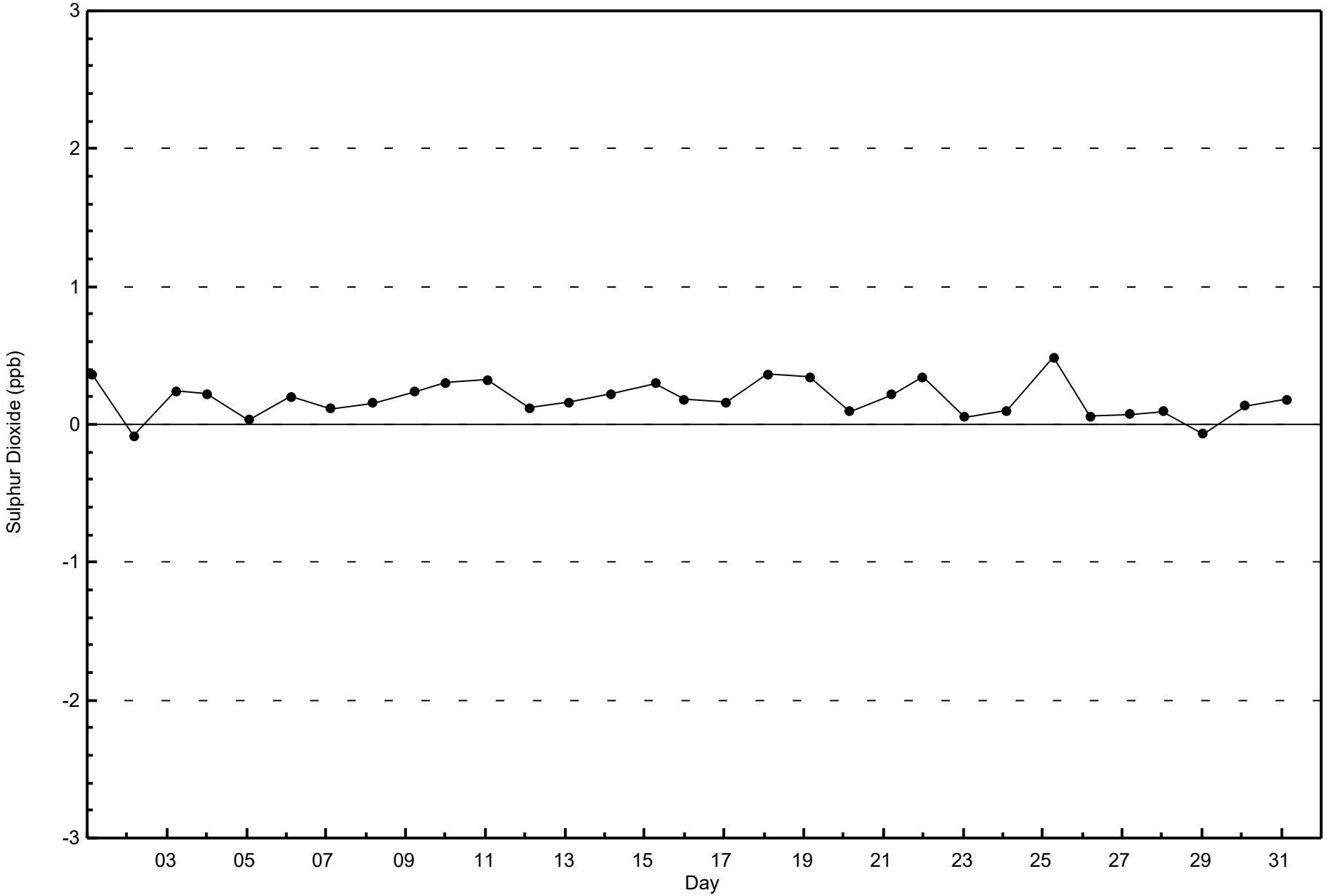
Total Number of Valid Hours: 699

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 1 - August 2026**

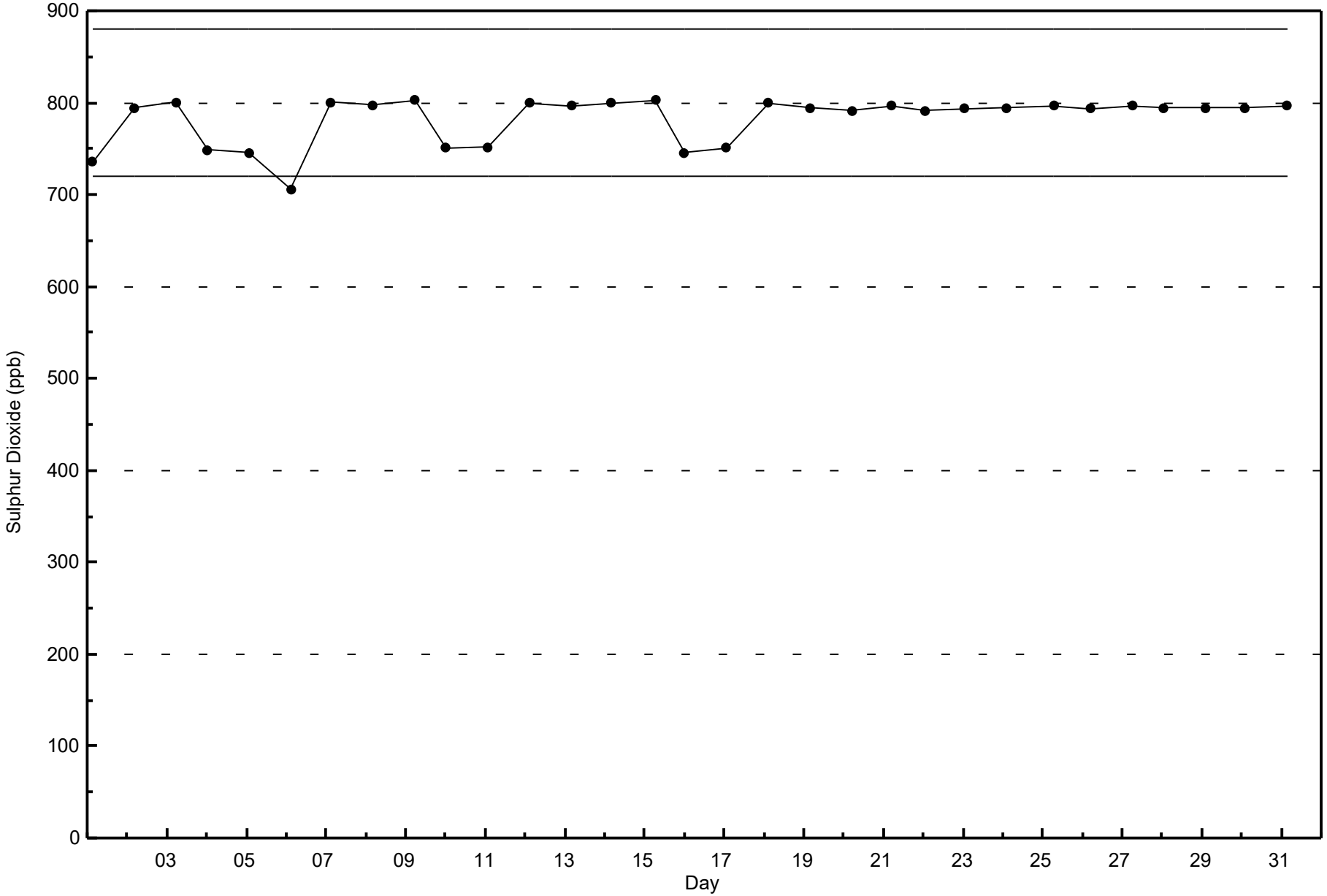


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Jackfish 1 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide (H2S) - ppb

## Jackfish 1 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.5 ppb on Aug 25 04:00 Maximum Daily Average: 1.3 ppb on Aug 25

Minimum Value: 0.0 ppb on Aug 25 16:00 Minimum Daily Average: 0.2 ppb on Aug 19
Maximum Diurnal Average: 1.1 ppb at hour 4 Minimum Diurnal Average: 0.2 ppb at hour 17
Monthly Average: 0.54 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.5 $P_{90}$ = 1.1 $P_{99}$ = 6.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 709 |
| Hours of Missing Data: | 35 |
| Hours of Calibration: | 35 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.2 | 0.2 | 0.3 | 0.4 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 1.5 | 1.3 | 0.6 | 1.1 | 0.8 | 0.5 | 0.2 | 0.2 | 0.3 | 0.3 | 0.7 | 0.3 | 0.3 | 0.2 | 0.5 | 1.5 |
| 2-Aug | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.8 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | 0.9 |
| 3-Aug | Z | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.5 | 0.2 | 0.1 | 0.2 | 0.5 |
| 4-Aug | 1.2 | Z | 1.3 | 0.8 | 0.9 | 1.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 1.3 |
| 5-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.4 | 0.2 | 0.4 |
| 6-Aug | 0.5 | 0.5 | 0.5 | Z | 0.4 | 0.6 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 |
| 7-Aug | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |
| 8-Aug | 0.3 | 0.2 | 0.3 | 0.7 | 0.5 | Z | 0.6 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.7 |
| 9-Aug | Z | 1.1 | 1.9 | 2.0 | 0.6 | 1.0 | 0.9 | 1.2 | 0.6 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 2.0 |
| 10-Aug | 0.2 | Z | 0.5 | 0.6 | 2.1 | 1.0 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.4 | 0.5 | 0.5 | 0.3 | 0.4 | 2.1 |
| 11-Aug | 0.3 | 0.3 | Z | 0.3 | 0.2 | 0.3 | 1.9 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.3 | 0.1 | 0.3 | 0.4 | 0.5 | 0.3 | 1.9 |
| 12-Aug | 0.4 | 0.2 | 0.1 | Z | 0.4 | 0.2 | 0.3 | 0.3 | 0.4 | 0.2 | 0.1 | 0.2 | 0.5 | 0.7 | 0.2 | 0.1 | 0.1 | 0.3 | 0.5 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.7 |
| 13-Aug | 0.2 | 0.5 | 0.5 | 0.6 | Z | 1.2 | 0.4 | 0.3 | 0.7 | 0.5 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.5 | 0.1 | 0.4 | 1.2 | 0.4 | 0.4 | 1.2 |
| 14-Aug | 0.2 | 0.3 | 0.1 | 0.2 | 0.1 | Z | 0.3 | 0.6 | 0.8 | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 2.4 | 1.4 | 7.3 | 0.7 | 7.3 |
| 15-Aug | Z | 3.6 | 4.1 | 3.7 | 0.9 | 0.9 | 2.9 | 1.4 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.1 | 0.3 | 0.5 | 0.6 | 0.5 | 0.2 | 0.9 | 4.1 |
| 16-Aug | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.6 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.1 | 7.4 | 0.3 | 0.5 | 7.4 |
| 17-Aug | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 7.0 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.9 | 0.5 | 7.0 |
| 18-Aug | 0.7 | 0.3 | 0.3 | Z | 0.2 | 0.9 | 0.6 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 | 0.9 |
| 19-Aug | 0.2 | 0.1 | 0.1 | 0.3 | Z | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 20-Aug | 0.1 | 0.2 | 0.8 | 1.1 | 7.7 | Z | 2.3 | 0.6 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 0.4 | 0.2 | 1.1 | 0.3 | 0.6 | 8.7 | 1.1 | 8.7 |
| 21-Aug | Z | 1.7 | 3.4 | 4.4 | 5.4 | 4.5 | 1.5 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.7 | 0.4 | 1.1 | 5.4 |
| 22-Aug | 0.2 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.4 | 0.7 |
| 23-Aug | 0.3 | 0.3 | Z | 0.5 | 1.2 | 1.9 | 1.4 | 0.6 | 0.5 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.4 | 1.9 |
| 24-Aug | 0.4 | 0.2 | 0.1 | Z | 0.2 | 0.2 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.4 | 1.4 | 2.4 | 1.3 | 0.5 | 2.4 |
| 25-Aug | 6.5 | 3.4 | 5.6 | 9.5 | 2.4 | 0.2 | 0.4 | Z | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 1.4 | 0.3 | 0.2 | 0.3 | 1.3 | 9.5 |
| 26-Aug | 0.4 | 0.4 | 0.5 | 0.7 | 0.4 | Z | 0.7 | 0.5 | 0.2 | 0.2 | C | C | C | C | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.8 | 4.9 | 2.0 | 1.0 | 0.9 | 0.8 | 4.9 |
| 27-Aug | Z | 0.8 | 1.2 | 1.3 | 1.3 | 1.2 | 0.8 | 0.6 | 0.7 | 1.5 | 1.2 | 0.4 | 0.5 | 0.6 | 1.2 | 0.9 | 0.5 | 0.5 | 1.4 | 0.6 | 1.5 | 2.8 | 1.8 | 1.7 | 1.1 | 2.8 |
| 28-Aug | 0.9 | Z | 0.7 | 0.4 | 0.3 | 6.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.4 | 6.3 |
| 29-Aug | 0.1 | 0.3 | Z | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.8 | 0.4 | 1.3 | 0.3 | 1.3 |
| 30-Aug | 4.8 | 1.9 | 0.5 | Z | 0.3 | 0.2 | 6.6 | 3.1 | 0.3 | 0.2 | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 1.6 | 0.6 | 2.0 | 2.8 | 0.8 | 1.1 | 1.2 | 6.6 |
| 31-Aug | 0.2 | 0.8 | 0.3 | 0.4 | Z | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 8.0 | 1.6 | 0.6 | 8.0 |
| | 0.7 | 0.7 | 0.9 | 1.1 | 1.0 | 0.9 | 1.1 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.6 | 0.6 | 1.0 | 1.0 | Diurnal Average | |
| | 6.5 | 3.6 | 5.6 | 9.5 | 7.7 | 6.3 | 7.0 | 3.1 | 0.8 | 1.5 | 1.5 | 1.3 | 0.6 | 1.1 | 1.2 | 0.9 | 0.9 | 0.7 | 1.6 | 0.8 | 4.9 | 2.8 | 8.0 | 8.7 | Diurnal Maximum | |

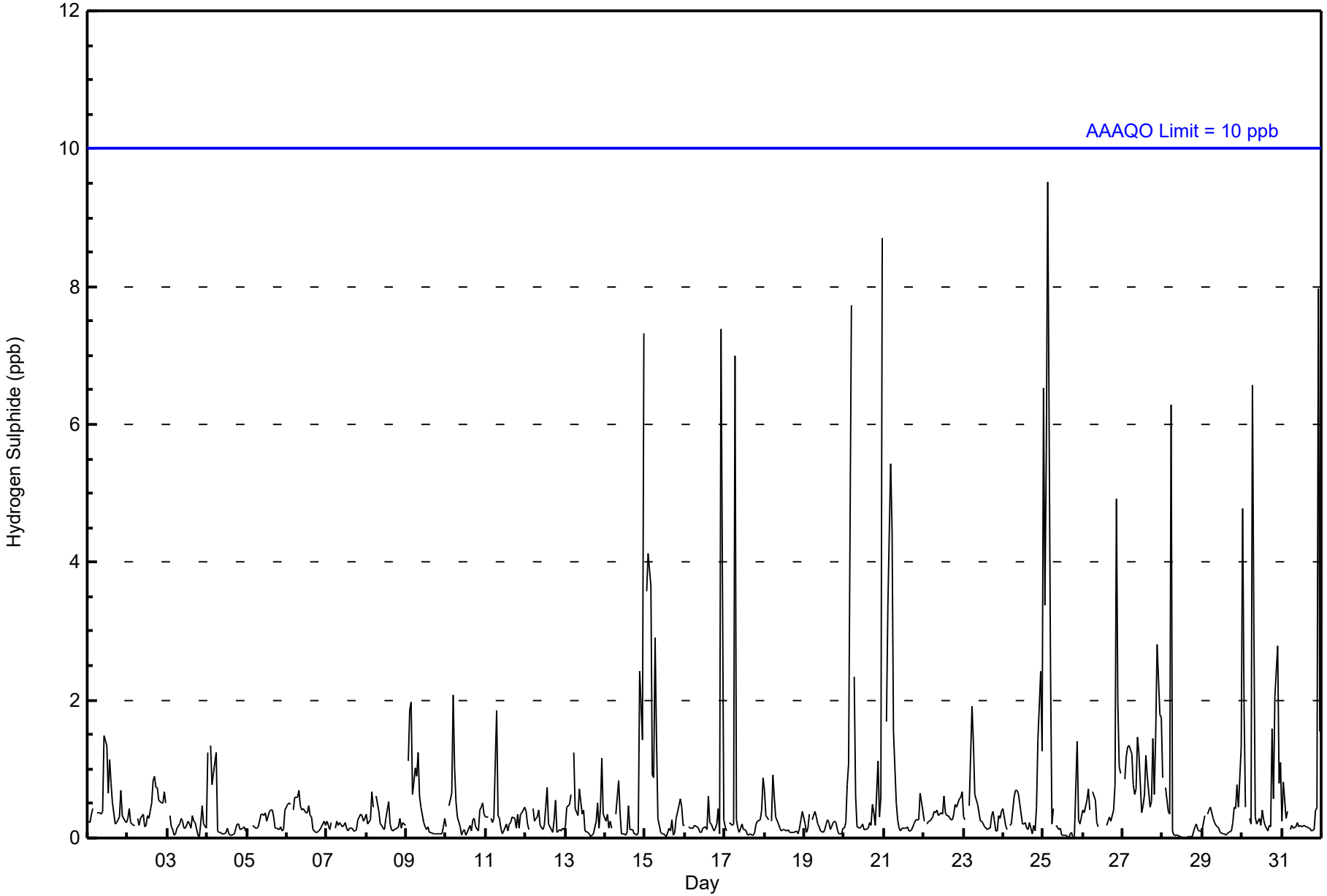
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 1 - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 684 | 96.47 | 96.47 |
| 3 - 4 | 11 | 1.55 | 98.03 |
| 5 - 7 | 10 | 1.41 | 99.44 |
| 8 - 11 | 4 | 0.56 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 709

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 1 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 33 | 20 | 6 | 8 | 9 | 8 | 6 | 40 | 81 | 56 | 72 | 49 | 40 | 50 | 110 | 91 | 679 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 9 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 9 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 33 | 20 | 6 | 8 | 9 | 8 | 8 | 41 | 87 | 61 | 76 | 51 | 40 | 50 | 111 | 91 | 700 |

Total Number of Valid Hours: 700

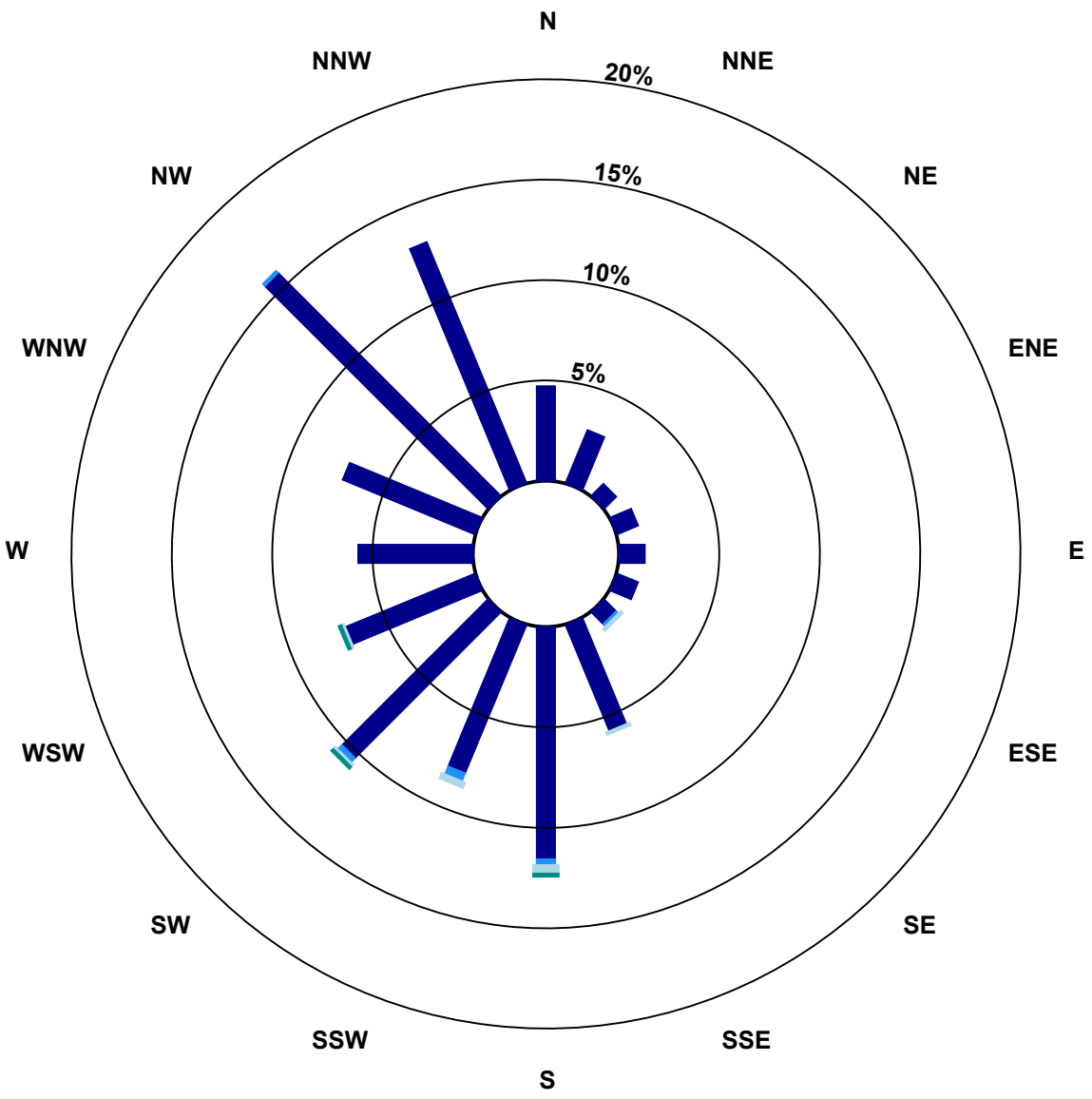
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide (H2S) - ppb

Jackfish 1




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

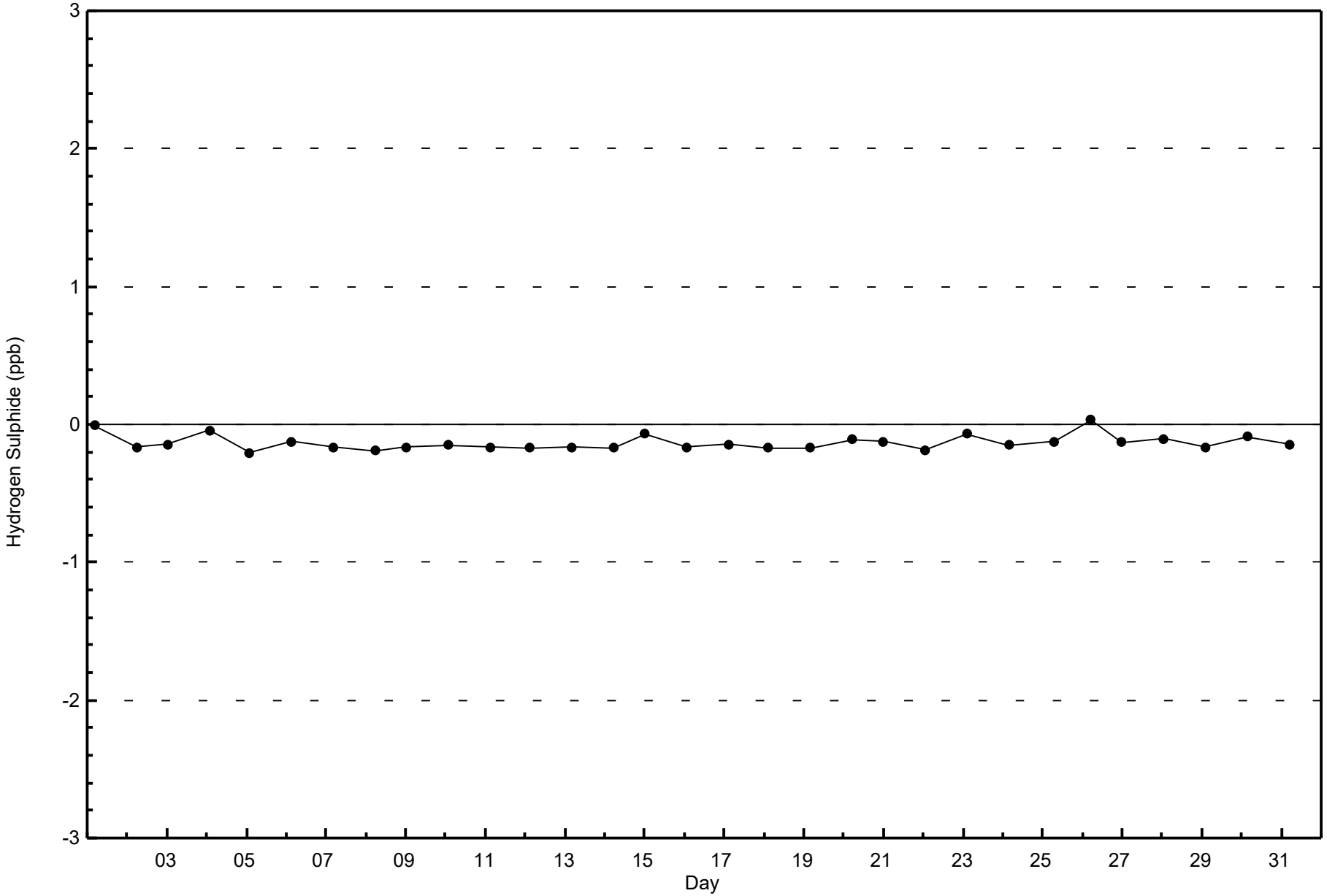
Total Number of Valid Hours: 700

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 1 - August 2026**

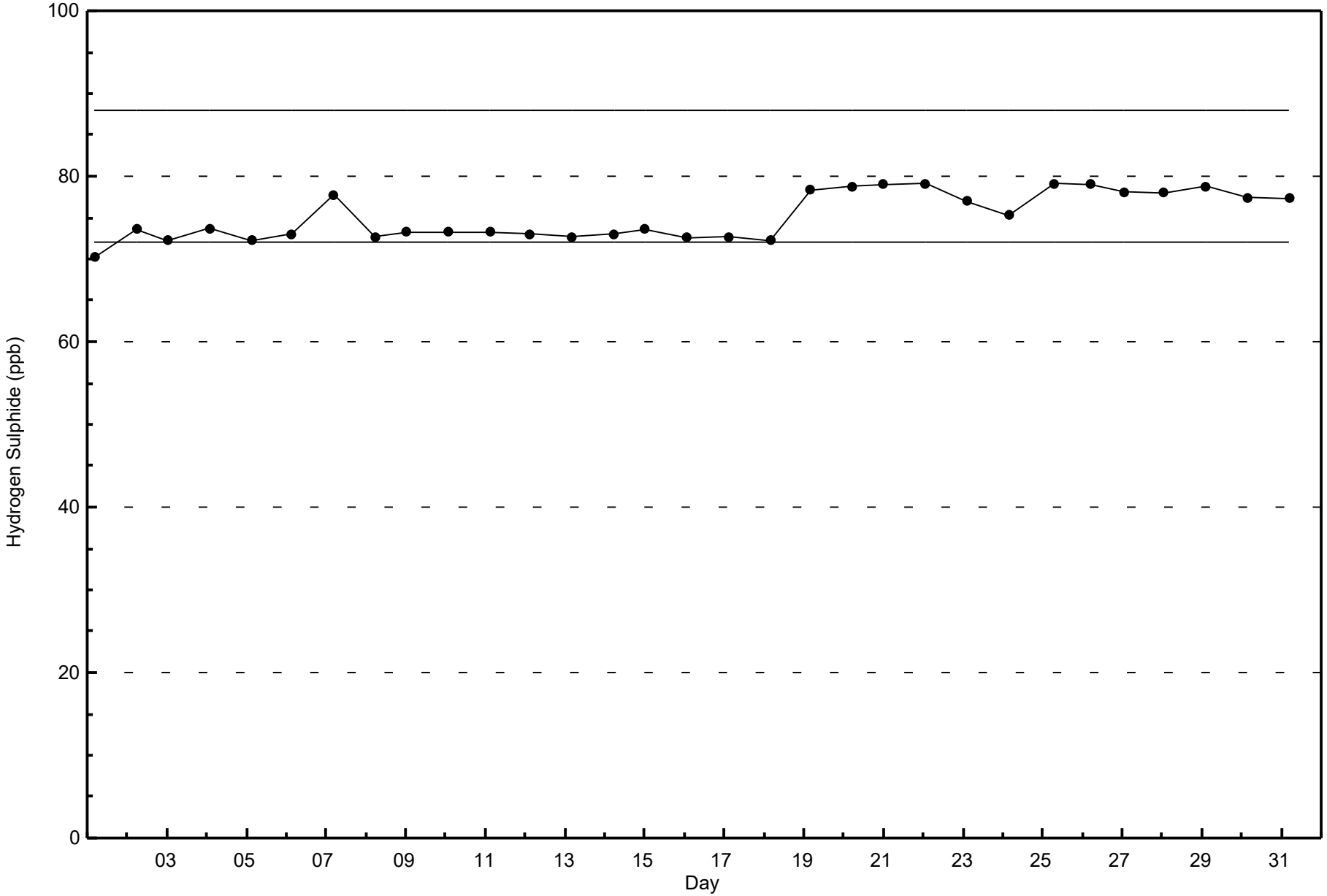


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide (H2S) - ppb**

**Jackfish 1 - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## Jackfish 1 - August 2026

Maximum Value: 21.1 ppb on Aug 6 06:00

Maximum Daily Average: 6.2 ppb on Aug 6

Minimum Value: 0.0 ppb on Aug 1 10:00

Minimum Daily Average: 0.1 ppb on Aug 1

Maximum Diurnal Average: 1.9 ppb at hour 7

Minimum Diurnal Average: 0.0 ppb at hour 20

Monthly Average: 0.76 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.7 $P_{90}$ = 1.9 $P_{99}$ = 8.6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 704 |
| Hours of Missing Data: | 40 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.6 | 0.5 | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.7 |
| 2-Aug | 0.5 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 1.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.8 | 0.1 | 0.1 | 0.1 | 0.5 | 2.9 | 1.1 | 0.4 | 2.9 |
| 3-Aug | 0.8 | 3.0 | 2.1 | Z | 0.1 | 0.3 | 3.2 | 5.5 | 4.1 | 3.4 | 2.3 | 0.4 | 1.0 | 2.1 | 2.5 | 3.6 | 1.8 | 2.9 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.7 | 5.5 |
| 4-Aug | 0.2 | 0.1 | 0.1 | 0.1 | Z | 1.2 | 0.3 | 0.1 | 0.1 | 0.7 | 0.3 | 0.8 | 0.1 | 0.0 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 1.2 | 0.1 | 0.3 | 1.2 |
| 5-Aug | 0.1 | 0.2 | 1.1 | 0.7 | 0.2 | Z | 0.3 | 0.3 | 6.3 | 8.6 | 6.2 | 5.0 | 5.4 | 8.7 | 11.0 | 7.2 | 4.9 | 1.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.6 | 3.0 | 11.0 |
| 6-Aug | Z | 6.5 | 9.1 | 6.2 | 8.9 | 21.1 | 20.0 | 16.2 | 7.5 | 5.0 | 8.5 | 4.3 | 8.6 | 9.4 | 4.4 | 5.2 | 1.4 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 6.2 | 21.1 |
| 7-Aug | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.7 | 0.6 | 1.1 | 1.2 | 2.7 | 4.0 | 1.2 | 0.9 | 1.7 | 1.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.7 | 4.0 |
| 8-Aug | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.3 | 2.3 | 1.4 | 0.6 | 0.7 | 1.5 | 0.2 | 0.0 | 0.4 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.3 |
| 9-Aug | 0.1 | 0.0 | 0.1 | Z | 0.1 | 1.8 | 2.0 | 1.4 | 1.5 | 4.7 | 2.7 | 0.2 | 0.1 | 0.8 | 0.3 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 4.7 |
| 10-Aug | 0.0 | 0.0 | 0.1 | 0.2 | Z | 0.4 | 0.4 | 0.2 | 0.2 | 0.0 | 0.0 | 1.1 | 0.2 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 1.1 |
| 11-Aug | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | Z | 1.4 | 1.2 | 0.9 | 0.0 | 0.0 | 0.0 | 1.3 | 0.2 | 0.0 | 0.2 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.4 |
| 12-Aug | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.6 | 1.3 | 0.9 | 0.7 | 0.2 | 0.1 | 0.5 | 0.3 | 1.6 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.6 |
| 13-Aug | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 1.0 | 0.7 | 0.5 | 0.5 | 0.1 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 1.0 |
| 14-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.4 | 0.5 | 1.9 | 1.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.5 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 1.9 |
| 15-Aug | 0.3 | 0.2 | 0.2 | Z | 0.1 | 4.1 | 5.6 | 3.0 | 1.4 | 0.5 | 0.5 | 0.6 | 0.1 | 0.2 | 0.1 | 0.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 5.6 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.8 | 0.5 | 0.7 | 0.7 | 1.4 | 1.1 | 1.2 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 | 0.1 | 0.4 | 1.4 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 1.0 | 1.2 | 1.0 | 1.0 | 3.2 | 1.8 | 1.3 | 0.6 | 0.6 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 3.2 |
| 18-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.0 | 0.8 | 1.6 | 1.4 | 0.3 | 1.9 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.9 |
| 19-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.4 | 0.8 | 1.1 | M | 0.9 | 2.5 | 0.4 | 0.3 | 2.4 | 4.2 | 4.8 | 1.1 | 2.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 | 4.8 |
| 20-Aug | 0.1 | 0.0 | Z | 0.1 | 4.8 | 6.3 | 3.4 | 1.0 | 0.5 | 1.1 | 1.0 | 3.4 | 1.9 | 1.3 | 0.7 | 2.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.2 | 6.3 |
| 21-Aug | 0.1 | 0.2 | 0.2 | Z | 0.3 | 1.3 | 1.1 | 0.7 | 0.5 | 0.1 | 0.0 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 1.3 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.2 | 1.0 | 1.5 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.5 |
| 23-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | Z | 0.3 | 0.9 | 0.5 | 2.4 | 0.9 | 1.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.9 | 0.4 | 2.4 |
| 24-Aug | Z | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 3.6 | 0.6 | 1.9 | 1.4 | 1.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 3.6 |
| 25-Aug | 0.2 | Z | 0.2 | 0.3 | 0.2 | 0.0 | 0.2 | 2.1 | 1.5 | C | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 2.1 |
| 26-Aug | 0.0 | 0.1 | Z | 0.1 | 0.3 | 0.4 | 2.9 | 1.6 | 1.9 | 0.4 | 0.7 | M | M | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.9 |
| 27-Aug | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.8 | 0.2 | 0.3 | 0.2 | 0.1 | 0.8 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.8 |
| 28-Aug | 0.0 | 0.0 | 1.6 | 0.0 | Z | 1.9 | 0.2 | 0.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.9 |
| 29-Aug | 0.0 | 0.0 | 0.1 | 0.0 | 2.4 | Z | 0.3 | 0.5 | 0.9 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 2.4 |
| 30-Aug | Z | 0.1 | 0.1 | 0.1 | 0.6 | 0.2 | 1.3 | 1.0 | 0.9 | 1.6 | 4.2 | 2.4 | 2.7 | 0.2 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.7 | 4.2 |
| 31-Aug | 0.1 | Z | 0.8 | 3.2 | 2.3 | 0.5 | 2.1 | 1.5 | 3.2 | 2.7 | 1.7 | 2.0 | 1.2 | 0.5 | 1.5 | 0.4 | 1.1 | 0.3 | 0.0 | 0.0 | 0.2 | 0.2 | 1.5 | 1.5 | 1.2 | 3.2 |
| | 0.1 | 0.4 | 0.6 | 0.5 | 0.8 | 1.6 | 1.9 | 1.6 | 1.5 | 1.4 | 1.4 | 1.1 | 1.0 | 1.0 | 1.1 | 1.0 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | Diurnal Average | |
| | 0.8 | 6.5 | 9.1 | 6.2 | 8.9 | 21.1 | 20.0 | 16.2 | 7.5 | 8.6 | 8.5 | 5.0 | 8.6 | 9.4 | 11.0 | 7.2 | 4.9 | 2.9 | 0.5 | 0.1 | 0.2 | 0.5 | 2.9 | 1.5 | Diurnal Maximum | |

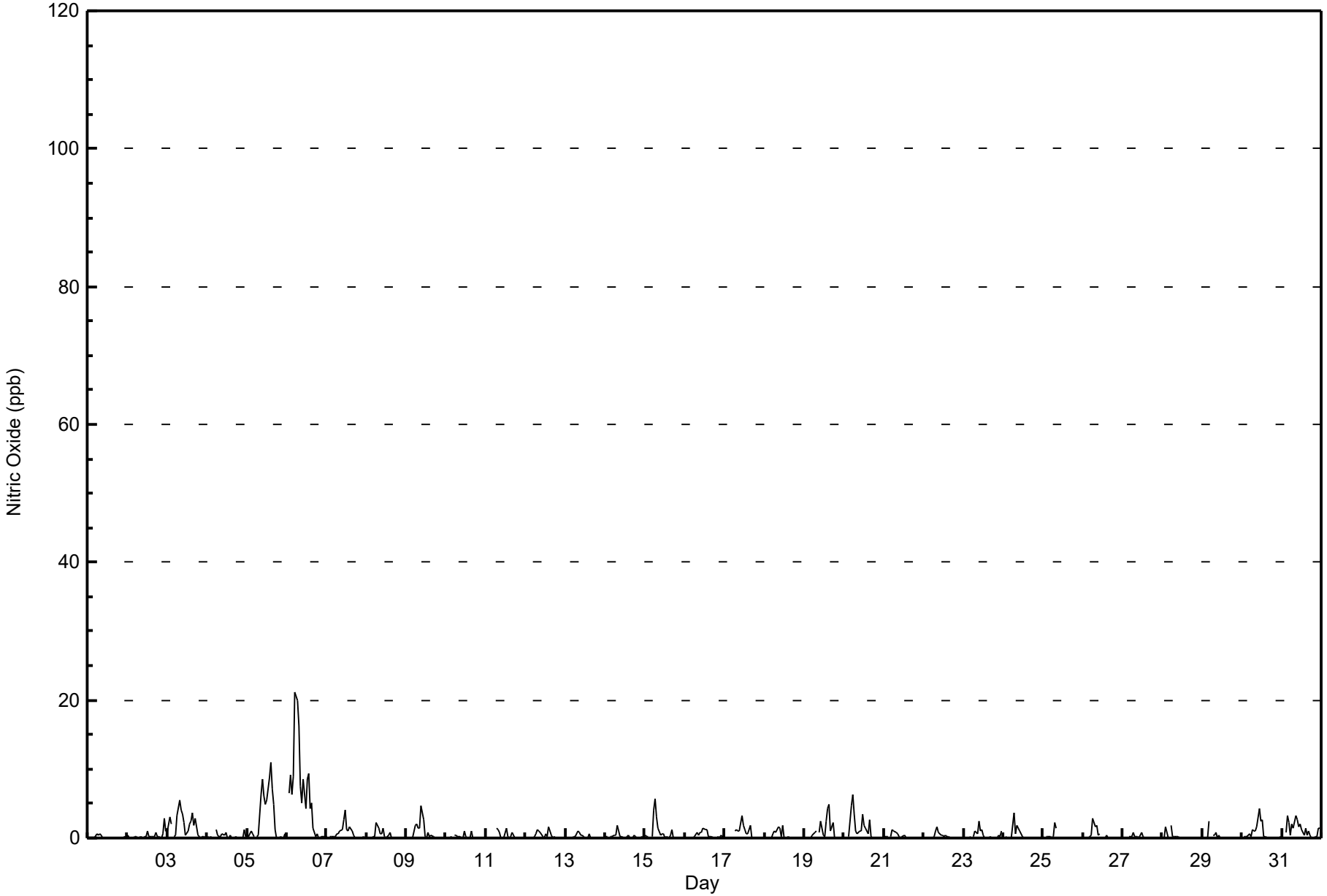
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Jackfish 1 - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 703 | 99.86 | 99.86 |
| 21 - 40 | 1 | 0.14 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 704

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Jackfish 1 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 35 | 20 | 6 | 8 | 9 | 9 | 8 | 41 | 86 | 58 | 82 | 50 | 40 | 50 | 109 | 83 | 694 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 20 | 6 | 8 | 9 | 9 | 8 | 41 | 86 | 58 | 82 | 50 | 40 | 50 | 110 | 83 | 695 |

Total Number of Valid Hours: 695

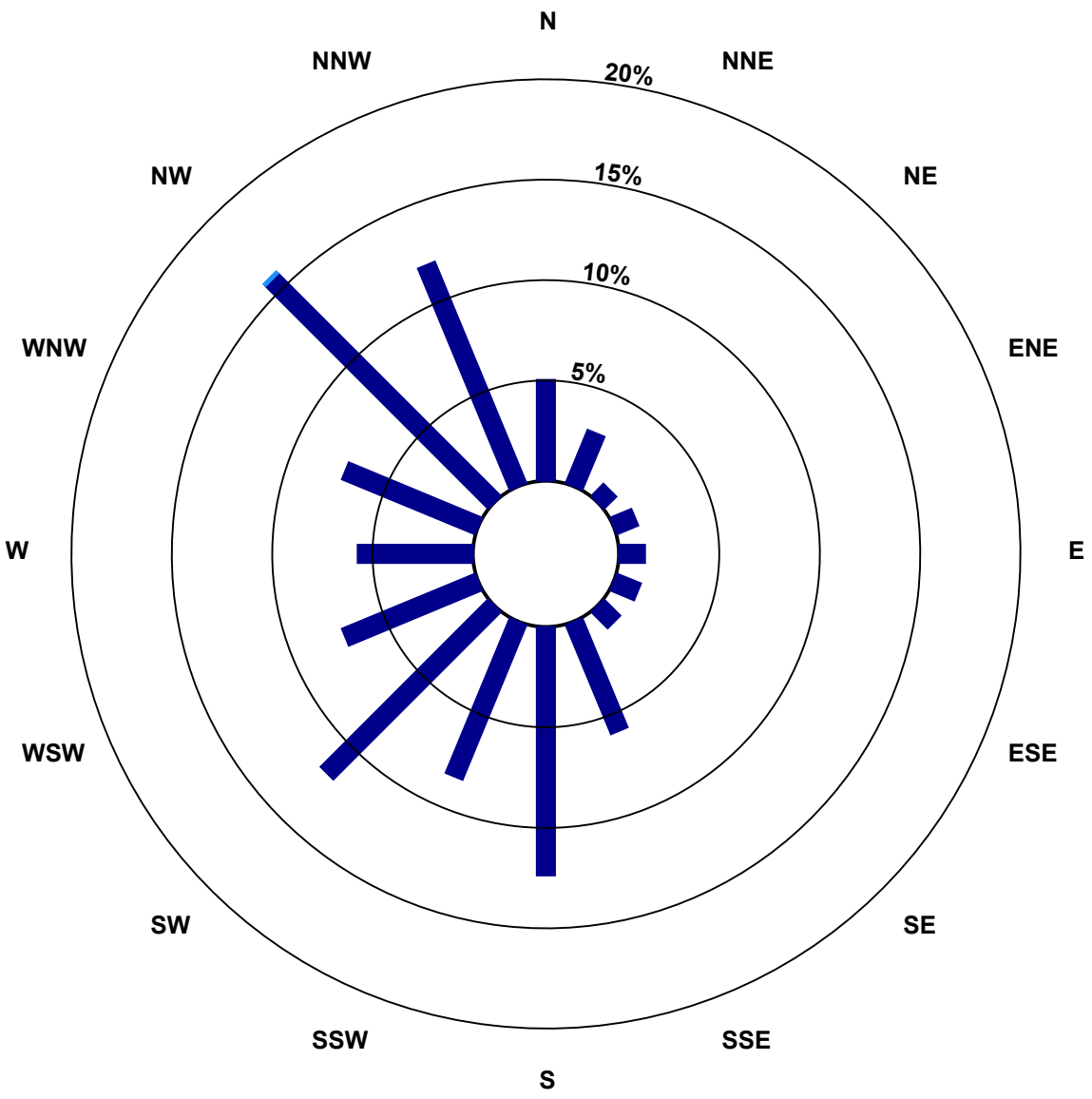
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

Jackfish 1




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

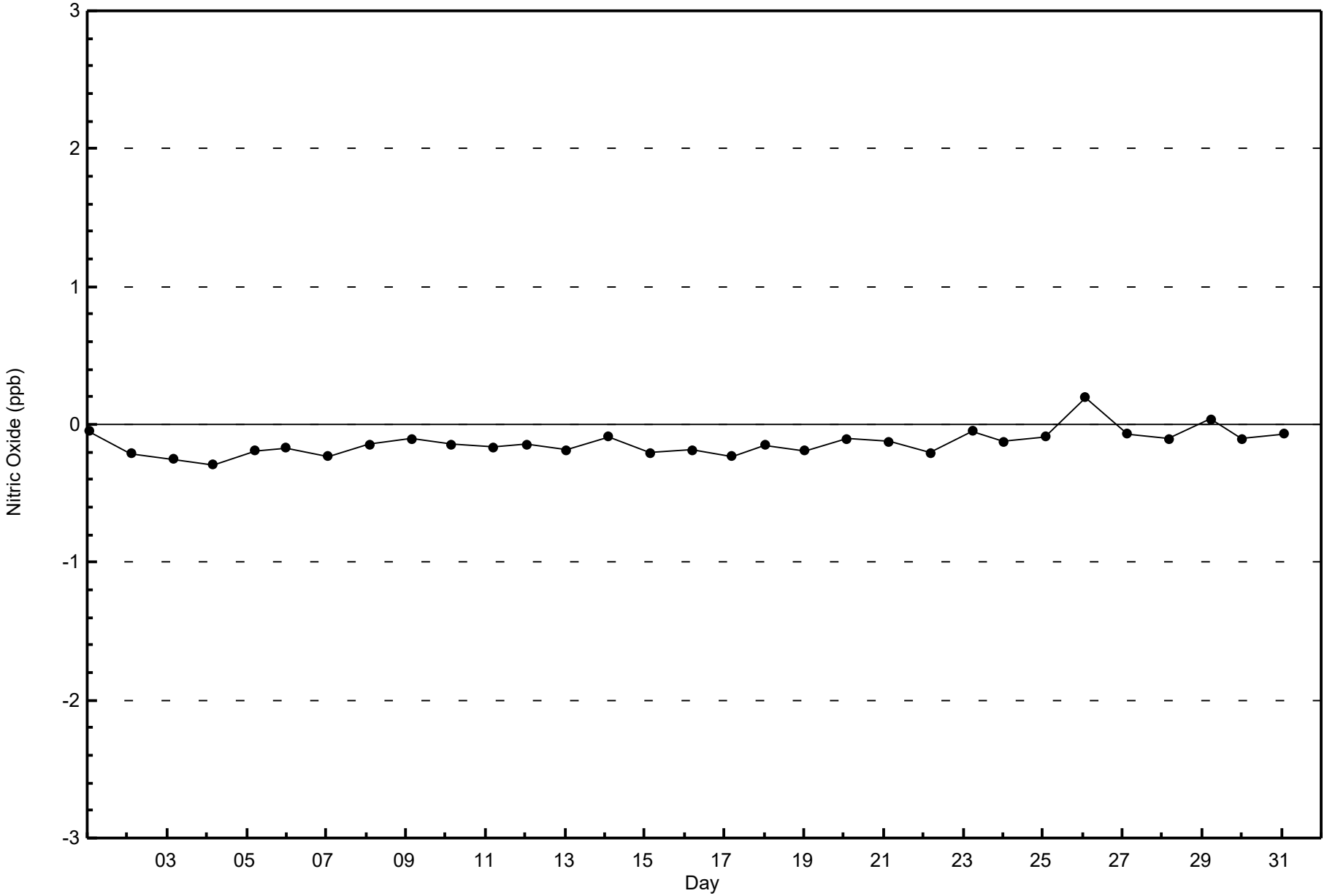
Total Number of Valid Hours: 695

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Jackfish 1 - August 2026**

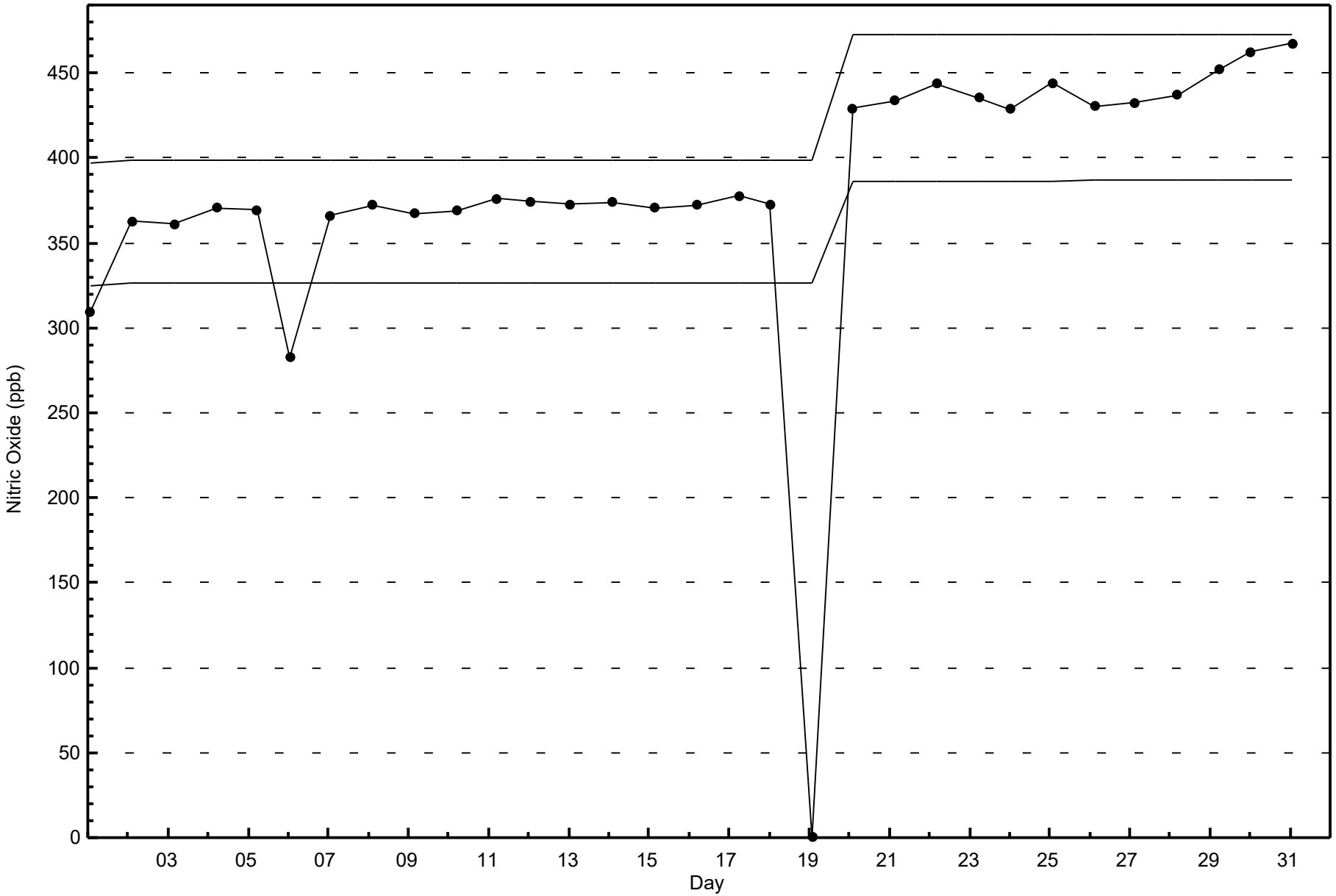


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Jackfish 1 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Jackfish 1 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 15.1 ppb on Aug 6 02:00 Maximum Daily Average: 5.4 ppb on Aug 6

Minimum Value: 0.0 ppb on Aug 13 16:00 Minimum Daily Average: 0.8 ppb on Aug 13
Maximum Diurnal Average: 2.8 ppb at hour 7 Minimum Diurnal Average: 0.9 ppb at hour 19
Monthly Average: 1.83 ppb Percentiles: $P_1$ = 0.2 $P_{10}$ = 0.5 $Q_1$ = 0.7 Median = 1.3 $Q_3$ = 2.3 $P_{90}$ = 3.5 $P_{99}$ = 9.2

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 704 |
| Hours of Missing Data: | 40 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.6 | Z | 2.9 | 3.7 | 2.4 | 2.3 | 2.0 | 2.2 | 1.8 | 0.9 | 1.1 | 1.0 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 4.5 | 2.1 | 1.4 | 4.5 |
| 2-Aug | 3.0 | 1.4 | Z | 1.0 | 1.3 | 1.1 | 0.5 | 0.5 | 1.3 | 0.6 | 0.8 | 0.6 | 1.9 | 1.1 | 0.7 | 0.7 | 1.3 | 1.7 | 0.5 | 0.5 | 0.3 | 1.9 | 6.0 | 2.5 | 1.4 | 6.0 |
| 3-Aug | 1.8 | 6.6 | 5.0 | Z | 0.8 | 0.9 | 4.0 | 5.9 | 4.8 | 3.7 | 1.3 | 0.7 | 1.6 | 2.5 | 2.4 | 5.3 | 2.6 | 6.7 | 2.1 | 1.0 | 0.6 | 1.5 | 0.5 | 0.6 | 2.7 | 6.7 |
| 4-Aug | 0.5 | 0.4 | 0.2 | 0.2 | Z | 0.4 | 0.7 | 0.5 | 0.5 | 1.1 | 1.1 | 1.5 | 0.7 | 0.5 | 0.6 | 0.4 | 0.5 | 1.0 | 2.0 | 1.5 | 0.7 | 0.6 | 4.1 | 0.8 | 0.9 | 4.1 |
| 5-Aug | 0.8 | 0.9 | 3.5 | 2.6 | 1.3 | Z | 1.1 | 1.0 | 5.3 | 6.5 | 6.0 | 5.5 | 6.0 | 9.2 | 11.9 | 9.1 | 8.3 | 3.0 | 0.9 | 0.5 | 1.6 | 1.9 | 0.5 | 7.1 | 4.1 | 11.9 |
| 6-Aug | Z | 15.1 | 14.1 | 9.7 | 10.4 | 13.8 | 11.4 | 8.5 | 5.1 | 4.0 | 5.3 | 3.0 | 5.0 | 4.9 | 3.3 | 4.4 | 1.6 | 0.5 | 1.3 | 0.4 | 0.3 | 0.5 | 1.2 | 0.5 | 5.4 | 15.1 |
| 7-Aug | 0.6 | Z | 0.4 | 0.9 | 0.4 | 0.5 | 1.6 | 1.5 | 2.0 | 1.5 | 3.8 | 6.0 | 3.3 | 1.7 | 2.7 | 2.9 | 1.7 | 0.9 | 0.4 | 0.9 | 1.4 | 1.7 | 2.1 | 1.7 | 1.8 | 6.0 |
| 8-Aug | 1.0 | 0.9 | Z | 1.4 | 1.8 | 1.8 | 2.5 | 2.4 | 1.6 | 2.0 | 2.3 | 2.2 | 1.6 | 2.4 | 2.4 | 1.1 | 1.5 | 1.4 | 1.1 | 1.2 | 2.1 | 1.3 | 1.3 | 1.4 | 1.7 | 2.5 |
| 9-Aug | 1.4 | 0.9 | 0.6 | Z | 1.0 | 2.9 | 2.2 | 2.2 | 3.7 | 8.4 | 6.7 | 2.4 | 1.4 | 2.6 | 1.8 | 2.3 | 2.2 | 1.3 | 0.9 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 2.1 | 8.4 |
| 10-Aug | 0.4 | 0.4 | 1.2 | 1.1 | Z | 1.9 | 1.2 | 0.7 | 0.8 | 0.4 | 0.4 | 0.7 | 1.1 | 0.7 | 0.4 | 2.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.1 | 1.8 | 2.8 | 1.0 | 2.8 |
| 11-Aug | 2.0 | 2.5 | 2.2 | 2.7 | 2.0 | Z | 5.9 | 3.5 | 2.4 | 0.6 | 0.9 | 1.1 | 1.0 | 1.2 | 1.3 | 2.0 | 3.3 | 0.8 | 0.8 | 1.5 | 1.7 | 3.5 | 2.2 | 3.5 | 2.1 | 5.9 |
| 12-Aug | Z | 1.5 | 1.4 | 2.7 | 2.8 | 2.8 | 3.7 | 3.4 | 2.3 | 2.2 | 1.3 | 1.1 | 1.9 | 1.3 | 2.6 | 1.1 | 0.9 | 1.5 | 1.1 | 1.1 | 1.8 | 0.9 | 0.7 | 0.5 | 1.8 | 3.7 |
| 13-Aug | 0.5 | Z | 0.4 | 0.6 | 0.9 | 2.0 | 1.9 | 2.4 | 1.8 | 0.8 | 0.8 | 0.5 | 0.2 | 0.1 | 0.8 | 0.0 | 0.0 | 0.0 | 0.5 | 0.2 | 0.2 | 1.2 | 0.9 | 1.1 | 0.8 | 2.4 |
| 14-Aug | 0.8 | 0.9 | Z | 1.4 | 1.1 | 1.5 | 1.3 | 2.4 | 1.5 | 0.7 | 0.5 | 0.5 | 0.3 | 1.0 | 0.7 | 0.5 | 0.6 | 2.1 | 2.2 | 0.6 | 1.7 | 1.1 | 2.6 | 0.8 | 1.2 | 2.6 |
| 15-Aug | 1.0 | 0.8 | 1.0 | Z | 1.2 | 3.5 | 2.1 | 2.8 | 2.3 | 1.5 | 1.9 | 1.7 | 0.8 | 0.9 | 1.0 | 1.9 | 2.1 | 0.7 | 0.7 | 1.4 | 1.9 | 0.6 | 0.9 | 0.8 | 1.5 | 3.5 |
| 16-Aug | 1.0 | 1.1 | 1.1 | 1.0 | Z | 1.0 | 1.1 | 3.0 | 2.0 | 2.6 | 2.8 | 2.9 | 2.2 | 1.8 | 1.1 | 1.4 | 1.3 | 1.0 | 1.3 | 1.8 | 3.1 | 1.0 | 1.0 | 0.6 | 1.6 | 3.1 |
| 17-Aug | 0.6 | 0.6 | 2.0 | 2.5 | 2.4 | Z | 2.7 | 2.6 | 2.1 | 2.4 | 6.3 | 2.1 | 3.1 | 1.9 | 1.9 | 2.1 | 0.7 | 0.6 | 0.6 | 0.3 | 0.4 | 0.5 | 0.6 | 0.5 | 1.7 | 6.3 |
| 18-Aug | Z | 0.5 | 0.4 | 0.9 | 2.1 | 2.5 | 3.1 | 2.2 | 3.4 | 3.3 | 2.1 | 2.2 | 1.5 | 1.5 | 1.6 | 1.0 | 0.5 | 0.6 | 0.3 | 3.6 | 0.6 | 1.2 | 1.9 | 2.0 | 1.7 | 3.6 |
| 19-Aug | 1.1 | Z | 0.7 | 1.0 | 1.4 | 1.9 | 3.7 | 4.2 | M | 2.5 | 2.2 | 1.4 | 1.1 | 3.2 | 5.9 | 6.6 | 2.8 | 6.4 | 1.0 | 2.5 | 0.8 | 0.8 | 0.8 | 4.0 | 2.5 | 6.6 |
| 20-Aug | 2.1 | 1.7 | Z | 2.5 | 3.4 | 4.9 | 2.6 | 1.9 | 1.8 | 2.4 | 2.2 | 5.2 | 3.9 | 2.6 | 2.3 | 6.3 | 2.2 | 0.6 | 1.2 | 2.2 | 3.1 | 3.0 | 2.8 | 2.5 | 2.8 | 6.3 |
| 21-Aug | 2.1 | 1.8 | 1.5 | Z | 1.4 | 2.8 | 2.7 | 2.0 | 2.0 | 1.6 | 0.9 | 1.2 | 2.3 | 1.1 | 0.9 | 0.5 | 0.5 | 0.5 | 1.1 | 1.0 | 0.8 | 0.7 | 1.1 | 1.7 | 1.4 | 2.8 |
| 22-Aug | 1.7 | 1.8 | 1.6 | 1.5 | Z | 1.3 | 1.5 | 2.4 | 3.1 | 2.4 | 2.0 | 2.4 | 2.2 | 2.6 | 2.4 | 3.0 | 1.1 | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.3 | 1.7 | 3.1 |
| 23-Aug | 2.0 | 1.9 | 2.0 | 1.8 | 2.4 | Z | 2.1 | 2.4 | 1.9 | 4.1 | 3.9 | 3.3 | 2.6 | 1.8 | 1.6 | 1.7 | 4.3 | 3.6 | 1.7 | 0.7 | 0.5 | 1.3 | 1.4 | 3.9 | 2.3 | 4.3 |
| 24-Aug | Z | 1.8 | 0.5 | 0.8 | 0.8 | 1.9 | 6.8 | 2.0 | 3.2 | 3.3 | 2.6 | 1.4 | 0.8 | 0.5 | 0.2 | 0.8 | 0.7 | 0.0 | 0.3 | 0.9 | 1.2 | 2.3 | 2.3 | 1.3 | 1.6 | 6.8 |
| 25-Aug | 0.8 | Z | 0.9 | 1.5 | 1.5 | 1.1 | 2.2 | 4.4 | 3.4 | C | C | C | C | C | C | 0.8 | 0.3 | 0.4 | 0.3 | 0.5 | 1.3 | 0.8 | 1.0 | 0.7 | -- | 4.4 |
| 26-Aug | 0.5 | 0.5 | Z | 0.8 | 1.6 | 2.2 | 4.0 | 3.0 | 3.5 | 1.4 | 2.5 | M | M | 1.3 | 2.0 | 1.0 | 0.3 | 0.3 | 0.4 | 0.5 | 0.9 | 0.8 | 0.8 | 1.1 | 1.4 | 4.0 |
| 27-Aug | 1.1 | 1.4 | 1.4 | Z | 1.5 | 1.3 | 3.1 | 1.3 | 1.4 | 1.3 | 0.9 | 2.1 | 1.1 | 0.3 | 0.8 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 3.1 |
| 28-Aug | 0.6 | 0.9 | 6.2 | 2.2 | Z | 3.9 | 1.3 | 0.8 | 1.3 | 1.5 | 0.7 | 0.6 | 0.5 | 0.3 | 0.6 | 0.9 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 1.1 | 6.2 |
| 29-Aug | 0.6 | 1.1 | 0.5 | 1.1 | 1.9 | Z | 1.0 | 1.0 | 1.6 | 1.0 | 1.5 | 1.0 | 0.6 | 0.5 | 0.5 | 0.8 | 0.6 | 0.4 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 0.6 | 0.9 | 1.9 |
| 30-Aug | Z | 0.4 | 0.5 | 0.5 | 0.9 | 0.4 | 1.8 | 1.0 | 2.3 | 2.3 | 3.3 | 3.5 | 4.4 | 1.7 | 1.8 | 1.5 | 1.7 | 0.8 | 0.6 | 1.0 | 1.0 | 0.6 | 1.0 | 1.5 | 1.5 | 4.4 |
| 31-Aug | 1.1 | Z | 3.0 | 5.8 | 3.2 | 1.0 | 3.5 | 1.9 | 3.1 | 2.8 | 2.4 | 2.5 | 2.1 | 1.4 | 2.4 | 1.4 | 2.4 | 1.5 | 0.4 | 2.7 | 2.4 | 1.5 | 1.9 | 1.8 | 2.3 | 5.8 |
| | 1.1 | 1.9 | 2.1 | 2.0 | 2.0 | 2.4 | 2.8 | 2.5 | 2.4 | 2.3 | 2.4 | 2.1 | 1.9 | 1.8 | 2.0 | 2.1 | 1.5 | 1.3 | 0.9 | 1.1 | 1.1 | 1.2 | 1.6 | 1.6 | Diurnal Average | |
| | 3.0 | 15.1 | 14.1 | 9.7 | 10.4 | 13.8 | 11.4 | 8.5 | 5.3 | 8.4 | 6.7 | 6.0 | 6.0 | 9.2 | 11.9 | 9.1 | 8.3 | 6.7 | 2.2 | 3.6 | 3.1 | 3.5 | 6.0 | 7.1 | Diurnal Maximum | |

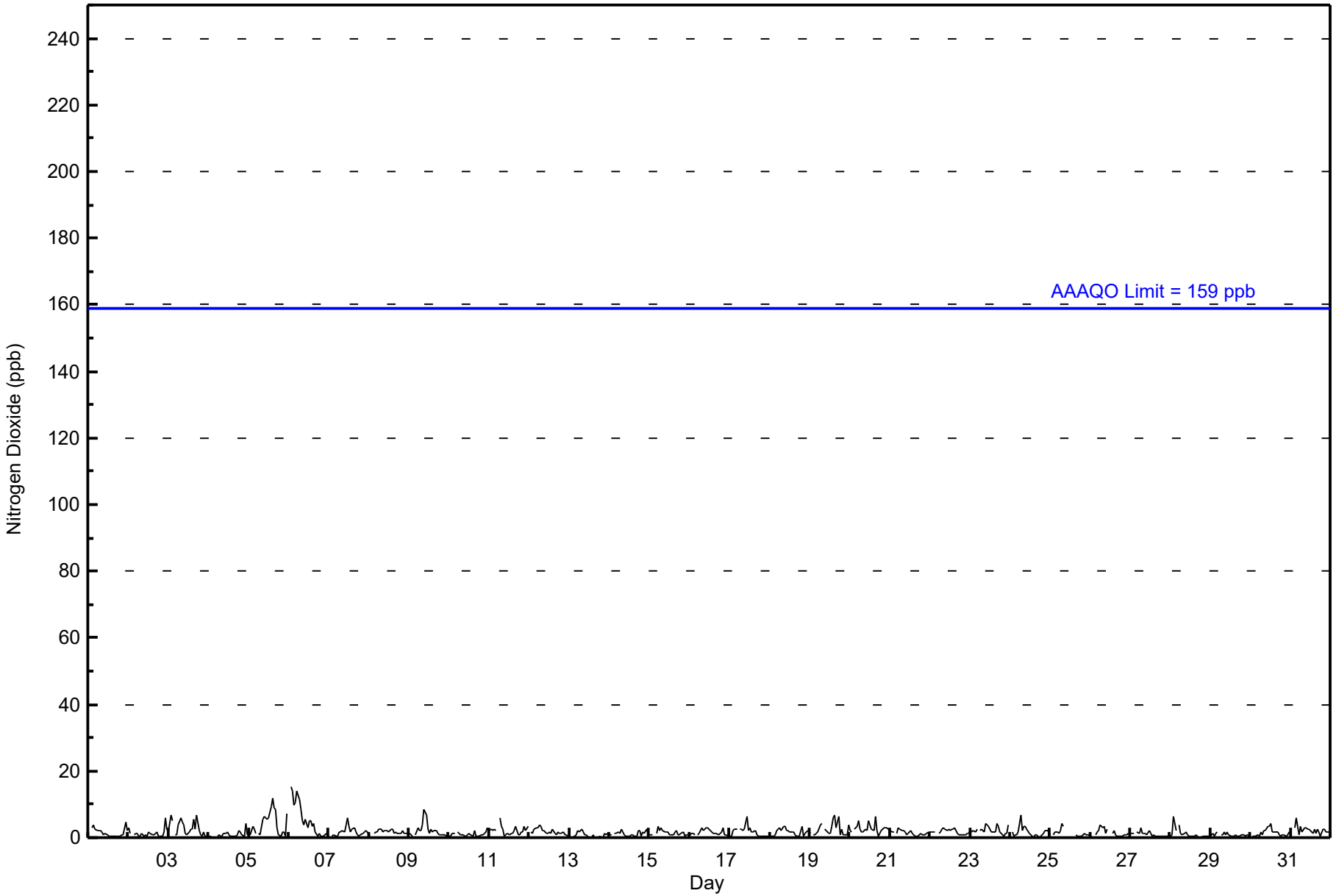
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 1 - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Jackfish 1 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 704 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 704

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 1 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 35 | 20 | 6 | 8 | 9 | 9 | 8 | 41 | 86 | 58 | 82 | 50 | 40 | 50 | 110 | 83 | 695 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 20 | 6 | 8 | 9 | 9 | 8 | 41 | 86 | 58 | 82 | 50 | 40 | 50 | 110 | 83 | 695 |

Total Number of Valid Hours: 695

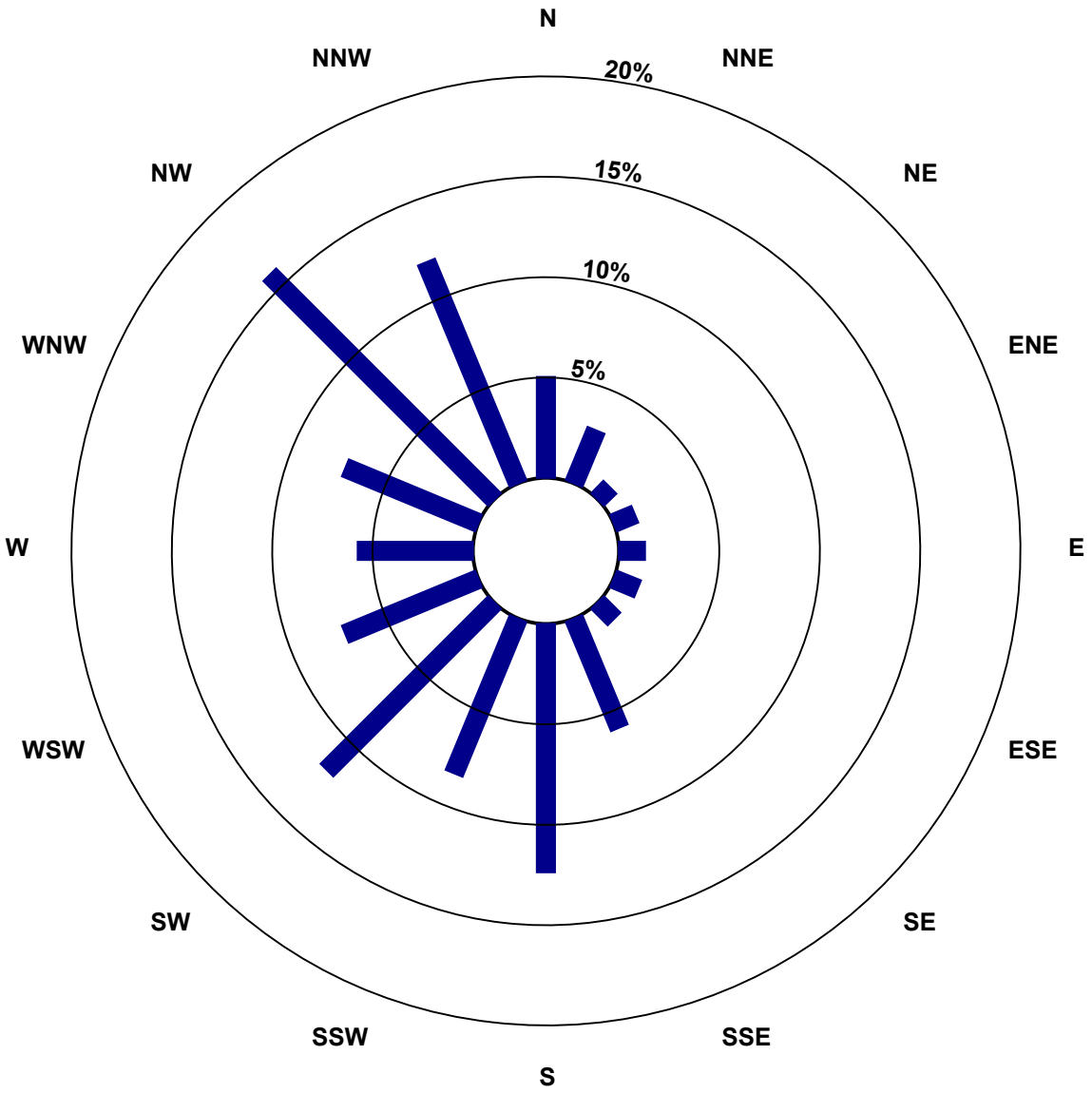
Total Number of Hours: 744

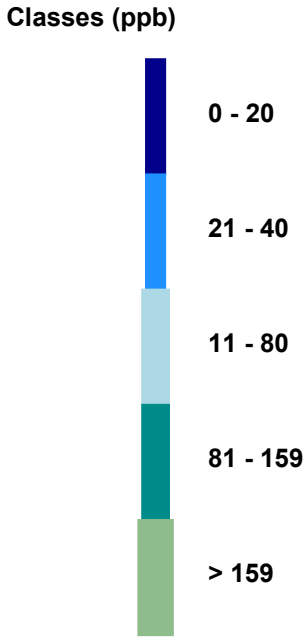
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Jackfish 1



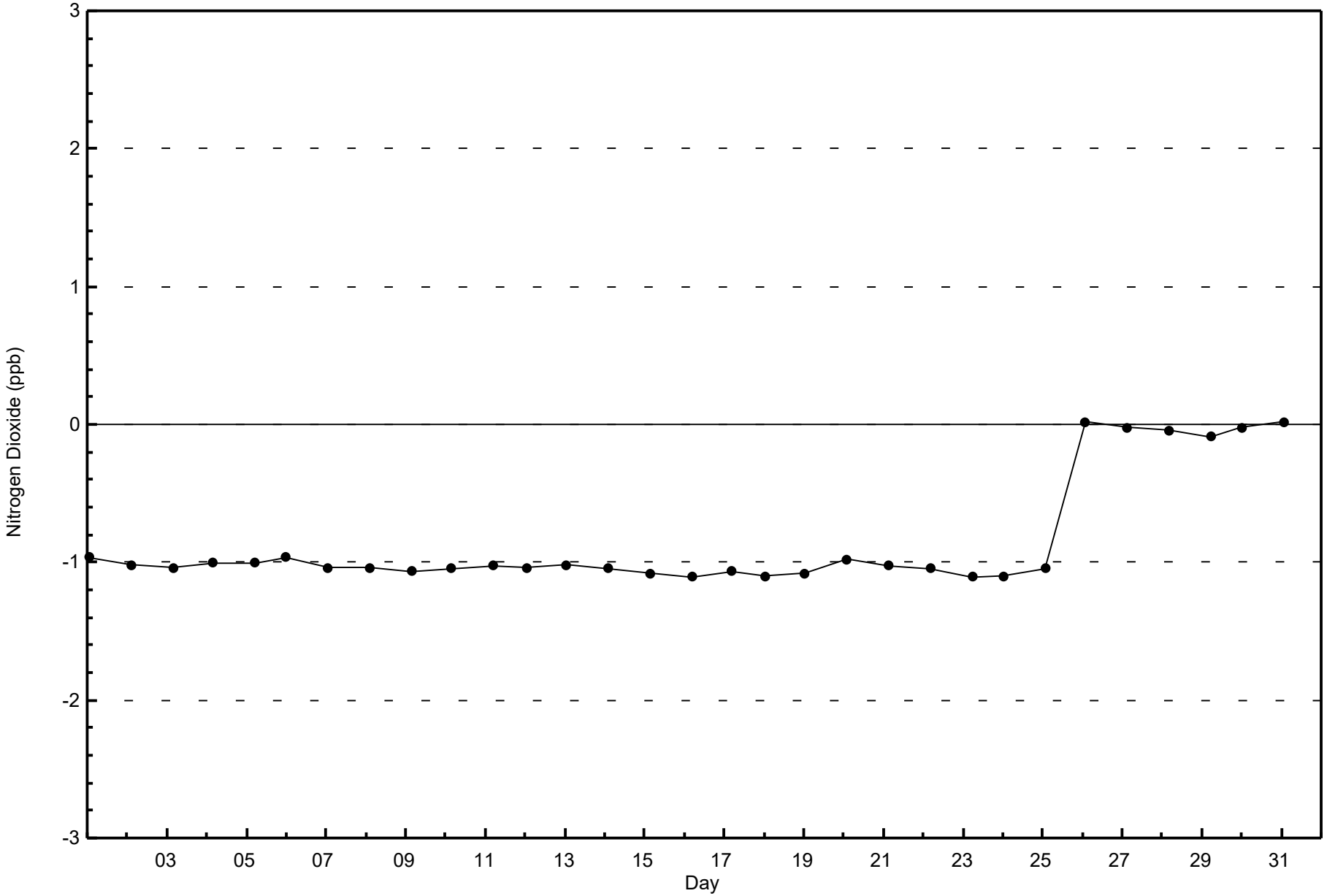

Total Number of Valid Hours: 695

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 1 - August 2026**

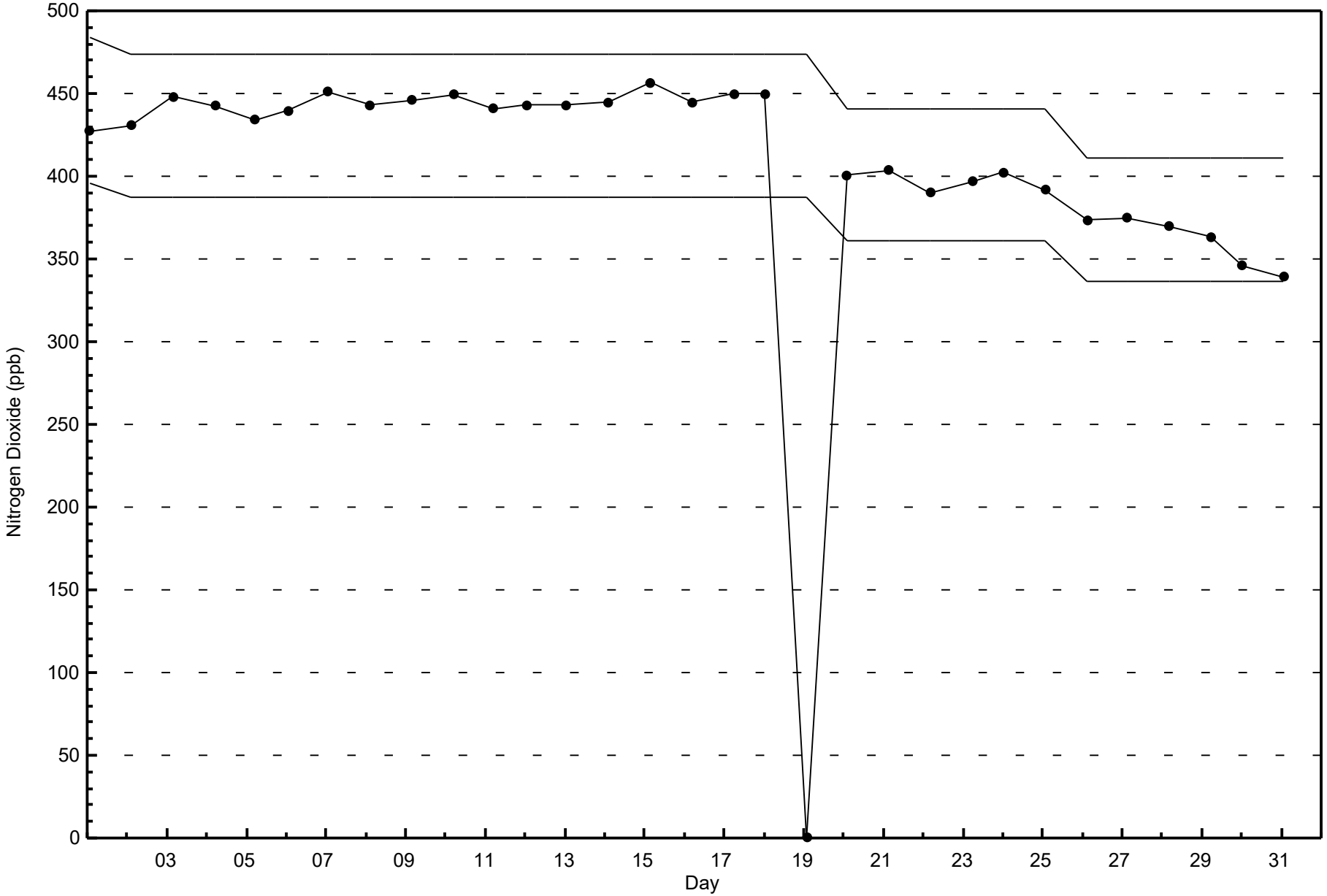


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Jackfish 1 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Jackfish 1 - August 2026

Maximum Value: 34.9 ppb on Aug 6 06:00

Maximum Daily Average: 11.7 ppb on Aug 6

Minimum Value: 0.0 ppb on Aug 13 16:00

Minimum Daily Average: 1.0 ppb on Aug 13

Maximum Diurnal Average: 4.6 ppb at hour 7

Minimum Diurnal Average: 0.9 ppb at hour 19

Monthly Average: 2.59 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.5$ $Q_1 = 0.8$ Median = 1.5 $Q_3 = 2.9$ $P_{90} = 5.2$ $P_{99} = 17.8$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 704 |
| Hours of Missing Data: | 40 |
| Hours of Calibration: | 37 |
| Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.6 | Z | 3.0 | 3.8 | 2.5 | 2.9 | 2.5 | 2.9 | 2.1 | 0.9 | 1.1 | 1.0 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 4.6 | 2.1 | 1.5 | 4.6 |
| 2-Aug | 3.5 | 1.5 | Z | 1.1 | 1.5 | 1.3 | 0.6 | 0.6 | 1.4 | 0.7 | 1.0 | 0.7 | 2.9 | 1.3 | 0.9 | 0.9 | 1.6 | 2.5 | 0.6 | 0.6 | 0.4 | 2.4 | 8.9 | 3.6 | 1.8 | 8.9 |
| 3-Aug | 2.6 | 9.6 | 7.1 | Z | 0.9 | 1.2 | 7.2 | 11.4 | 8.9 | 7.1 | 3.6 | 1.1 | 2.6 | 4.6 | 4.9 | 8.9 | 4.4 | 9.6 | 2.4 | 1.1 | 0.7 | 1.6 | 0.6 | 0.7 | 4.5 | 11.4 |
| 4-Aug | 0.7 | 0.5 | 0.3 | 0.3 | Z | 1.6 | 1.0 | 0.6 | 0.6 | 1.8 | 1.4 | 2.3 | 0.8 | 0.5 | 0.9 | 0.5 | 0.5 | 1.1 | 2.1 | 1.5 | 0.7 | 0.6 | 5.3 | 0.9 | 1.1 | 5.3 |
| 5-Aug | 0.9 | 1.1 | 4.6 | 3.3 | 1.5 | Z | 1.4 | 1.3 | 11.6 | 15.1 | 12.2 | 10.5 | 11.4 | 17.9 | 22.9 | 16.3 | 13.2 | 4.3 | 0.9 | 0.5 | 1.7 | 1.9 | 0.5 | 7.7 | 7.1 | 22.9 |
| 6-Aug | Z | 21.6 | 23.2 | 15.9 | 19.3 | 34.9 | 31.4 | 24.7 | 12.6 | 9.0 | 13.8 | 7.3 | 13.6 | 14.3 | 7.7 | 9.6 | 3.0 | 0.7 | 1.8 | 0.5 | 0.4 | 0.6 | 1.3 | 0.6 | 11.7 | 34.9 |
| 7-Aug | 0.8 | Z | 0.5 | 1.0 | 0.5 | 0.7 | 2.3 | 2.1 | 3.1 | 2.7 | 6.5 | 10.0 | 4.5 | 2.6 | 4.4 | 4.0 | 2.1 | 1.0 | 0.4 | 0.9 | 1.4 | 1.7 | 2.2 | 1.7 | 2.5 | 10.0 |
| 8-Aug | 1.0 | 0.9 | Z | 1.5 | 2.0 | 2.1 | 4.8 | 3.8 | 2.2 | 2.7 | 3.8 | 2.4 | 1.6 | 2.8 | 3.3 | 1.1 | 1.5 | 1.4 | 1.1 | 1.2 | 2.1 | 1.3 | 1.3 | 1.4 | 2.1 | 4.8 |
| 9-Aug | 1.5 | 0.9 | 0.7 | Z | 1.1 | 4.7 | 4.2 | 3.6 | 5.2 | 13.1 | 9.4 | 2.6 | 1.5 | 3.4 | 2.1 | 2.7 | 2.4 | 1.3 | 0.9 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 2.8 | 13.1 |
| 10-Aug | 0.4 | 0.4 | 1.3 | 1.3 | Z | 2.3 | 1.6 | 0.9 | 1.0 | 0.4 | 0.4 | 1.8 | 1.3 | 0.7 | 0.4 | 3.2 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.1 | 1.8 | 2.9 | 1.1 | 3.2 |
| 11-Aug | 2.0 | 2.5 | 2.3 | 2.8 | 2.1 | Z | 7.3 | 4.7 | 3.3 | 0.6 | 0.9 | 1.1 | 2.3 | 1.4 | 1.3 | 2.2 | 4.1 | 0.8 | 0.8 | 1.5 | 1.7 | 3.5 | 2.2 | 3.5 | 2.4 | 7.3 |
| 12-Aug | Z | 1.6 | 1.4 | 2.7 | 2.9 | 2.9 | 4.3 | 4.7 | 3.2 | 2.9 | 1.5 | 1.2 | 2.4 | 1.6 | 4.2 | 1.5 | 0.9 | 1.7 | 1.1 | 1.1 | 1.8 | 0.9 | 0.7 | 0.5 | 2.1 | 4.7 |
| 13-Aug | 0.5 | Z | 0.5 | 0.7 | 1.0 | 2.2 | 2.2 | 3.4 | 2.5 | 1.3 | 1.3 | 0.6 | 0.2 | 0.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.2 | 0.2 | 1.2 | 0.9 | 1.2 | 1.0 | 3.4 |
| 14-Aug | 0.9 | 1.0 | Z | 1.6 | 1.3 | 1.9 | 1.8 | 4.3 | 2.6 | 0.8 | 0.6 | 0.5 | 0.3 | 1.2 | 1.2 | 0.5 | 0.6 | 2.4 | 2.3 | 0.6 | 1.7 | 1.2 | 2.8 | 1.0 | 1.4 | 4.3 |
| 15-Aug | 1.3 | 1.0 | 1.2 | Z | 1.3 | 7.6 | 7.7 | 5.8 | 3.7 | 2.0 | 2.4 | 2.3 | 0.9 | 1.1 | 1.1 | 2.2 | 3.3 | 0.7 | 0.7 | 1.4 | 1.9 | 0.6 | 0.9 | 0.8 | 2.3 | 7.7 |
| 16-Aug | 1.0 | 1.1 | 1.1 | 1.0 | Z | 1.1 | 1.2 | 3.8 | 2.5 | 3.3 | 3.5 | 4.3 | 3.3 | 3.0 | 1.4 | 1.7 | 1.6 | 1.0 | 1.3 | 1.9 | 3.2 | 1.1 | 1.4 | 0.7 | 2.0 | 4.3 |
| 17-Aug | 0.6 | 0.6 | 2.0 | 2.5 | 2.4 | Z | 3.7 | 3.8 | 3.1 | 3.4 | 9.5 | 3.9 | 4.4 | 2.5 | 2.5 | 4.0 | 0.7 | 0.6 | 0.6 | 0.3 | 0.4 | 0.5 | 0.6 | 0.5 | 2.3 | 9.5 |
| 18-Aug | Z | 0.5 | 0.4 | 0.9 | 2.1 | 3.1 | 4.1 | 3.0 | 5.0 | 4.7 | 2.4 | 4.1 | 1.5 | 1.6 | 1.8 | 1.0 | 0.5 | 0.6 | 0.3 | 3.6 | 0.6 | 1.2 | 1.9 | 2.0 | 2.0 | 5.0 |
| 19-Aug | 1.1 | Z | 0.7 | 1.0 | 1.4 | 2.3 | 4.5 | 5.3 | M | 3.4 | 4.7 | 1.8 | 1.4 | 5.6 | 10.1 | 11.4 | 3.9 | 8.7 | 1.0 | 2.6 | 0.8 | 0.8 | 0.8 | 4.1 | 3.5 | 11.4 |
| 20-Aug | 2.2 | 1.7 | Z | 2.6 | 8.2 | 11.2 | 6.0 | 2.9 | 2.3 | 3.5 | 3.2 | 8.6 | 5.8 | 3.9 | 3.0 | 8.9 | 2.4 | 0.6 | 1.2 | 2.2 | 3.1 | 3.0 | 2.8 | 2.6 | 4.0 | 11.2 |
| 21-Aug | 2.2 | 2.0 | 1.7 | Z | 1.7 | 4.1 | 3.8 | 2.7 | 2.5 | 1.7 | 0.9 | 1.3 | 2.7 | 1.1 | 0.9 | 0.5 | 0.5 | 0.5 | 1.1 | 1.0 | 0.8 | 0.7 | 1.1 | 1.8 | 1.6 | 4.1 |
| 22-Aug | 1.8 | 1.9 | 1.7 | 1.6 | Z | 1.4 | 1.7 | 3.4 | 4.6 | 3.1 | 2.4 | 2.8 | 2.5 | 3.0 | 2.6 | 3.2 | 1.1 | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.3 | 2.0 | 4.6 |
| 23-Aug | 2.0 | 1.9 | 2.0 | 1.8 | 2.5 | Z | 2.4 | 3.3 | 2.4 | 6.5 | 4.8 | 4.5 | 3.1 | 1.8 | 1.6 | 1.7 | 4.4 | 3.6 | 1.7 | 0.7 | 0.5 | 1.6 | 1.5 | 4.8 | 2.6 | 6.5 |
| 24-Aug | Z | 2.0 | 0.6 | 0.9 | 0.8 | 1.9 | 10.4 | 2.6 | 5.1 | 4.7 | 3.7 | 1.5 | 0.8 | 0.5 | 0.2 | 0.9 | 0.7 | 0.0 | 0.3 | 0.9 | 1.2 | 2.3 | 2.3 | 1.3 | 2.0 | 10.4 |
| 25-Aug | 1.0 | Z | 1.1 | 1.8 | 1.7 | 1.1 | 2.4 | 6.5 | 4.9 | C | C | C | C | C | C | 0.8 | 0.3 | 0.4 | 0.3 | 0.5 | 1.3 | 0.8 | 1.0 | 0.7 | -- | 6.5 |
| 26-Aug | 0.5 | 0.6 | Z | 0.9 | 1.9 | 2.6 | 6.9 | 4.6 | 5.4 | 1.8 | 3.2 | M | M | 1.3 | 2.4 | 1.0 | 0.3 | 0.3 | 0.4 | 0.5 | 0.9 | 0.8 | 0.8 | 1.1 | 1.8 | 6.9 |
| 27-Aug | 1.1 | 1.4 | 1.5 | Z | 1.6 | 1.4 | 3.9 | 1.5 | 1.7 | 1.5 | 1.0 | 2.9 | 1.4 | 0.3 | 0.9 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 1.2 | 3.9 |
| 28-Aug | 0.6 | 0.9 | 7.8 | 2.2 | Z | 5.8 | 1.5 | 0.9 | 1.5 | 1.8 | 0.7 | 0.6 | 0.5 | 0.3 | 0.6 | 0.9 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 1.3 | 7.8 |
| 29-Aug | 0.6 | 1.1 | 0.6 | 1.1 | 4.3 | Z | 1.3 | 1.5 | 2.5 | 1.1 | 1.8 | 1.1 | 0.6 | 0.5 | 0.5 | 0.8 | 0.6 | 0.4 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 | 1.1 | 4.3 |
| 30-Aug | Z | 0.5 | 0.6 | 0.6 | 1.5 | 0.6 | 3.1 | 2.0 | 3.2 | 3.9 | 7.5 | 5.9 | 7.1 | 1.9 | 2.0 | 1.5 | 1.8 | 0.8 | 0.6 | 1.0 | 1.0 | 0.7 | 1.1 | 1.7 | 2.2 | 7.5 |
| 31-Aug | 1.2 | Z | 3.8 | 9.0 | 5.5 | 1.5 | 5.6 | 3.4 | 6.3 | 5.5 | 4.1 | 4.5 | 3.3 | 1.9 | 3.9 | 1.8 | 3.5 | 1.8 | 0.4 | 2.7 | 2.6 | 1.7 | 3.4 | 3.3 | 3.5 | 9.0 |
| | 1.3 | 2.3 | 2.8 | 2.5 | 2.8 | 4.0 | 4.6 | 4.1 | 3.9 | 3.7 | 3.8 | 3.2 | 2.9 | 2.8 | 3.1 | 3.0 | 2.0 | 1.6 | 0.9 | 1.1 | 1.2 | 1.2 | 1.8 | 1.8 | Diurnal Average | |
| | 3.5 | 21.6 | 23.2 | 15.9 | 19.3 | 34.9 | 31.4 | 24.7 | 12.6 | 15.1 | 13.8 | 10.5 | 13.6 | 17.9 | 22.9 | 16.3 | 13.2 | 9.6 | 2.4 | 3.6 | 3.2 | 3.5 | 8.9 | 7.7 | Diurnal Maximum | |

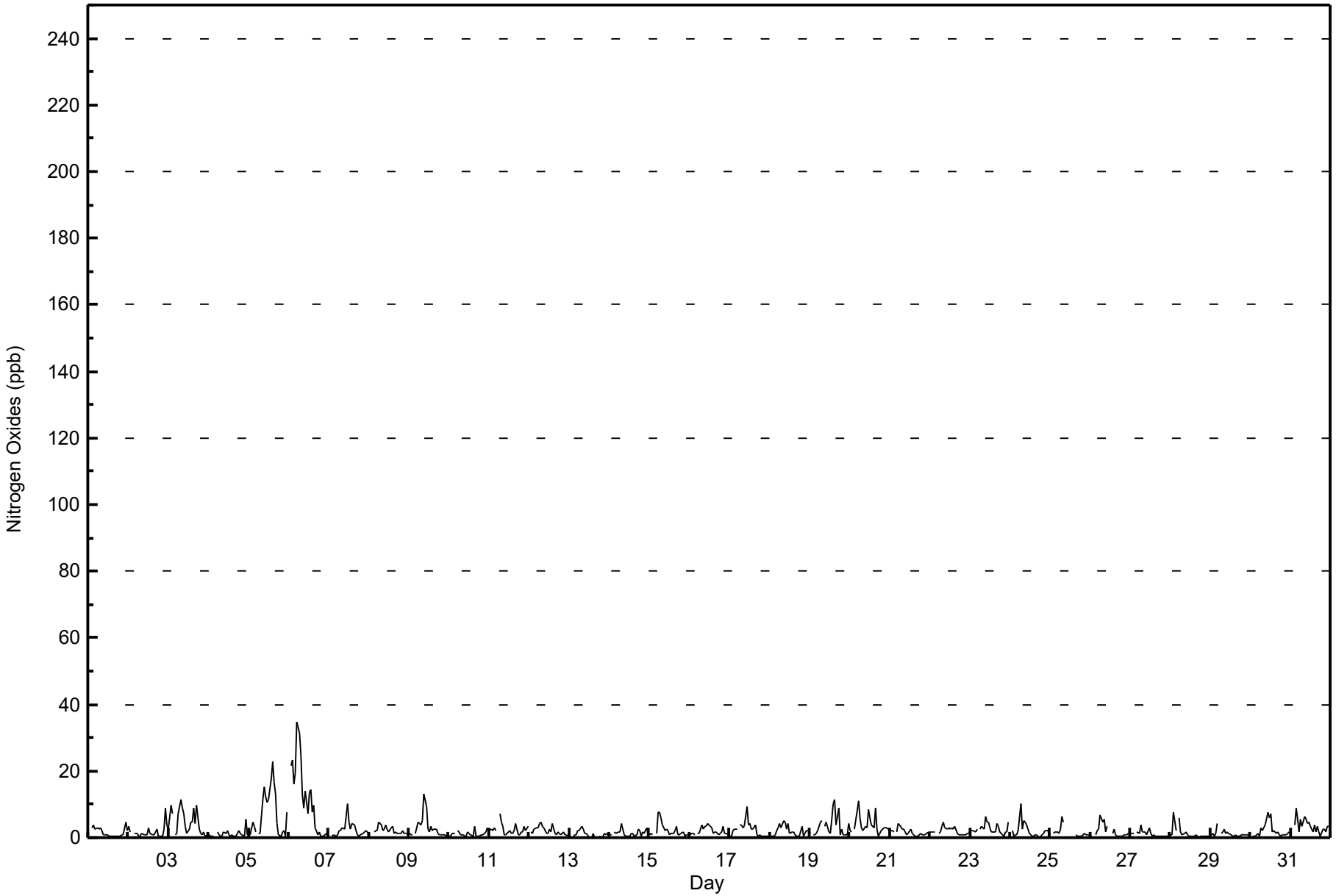
Z - zerospan C - Calibration M - Maintenance

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 1 - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Jackfish 1 - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 698 | 99.15 | 99.15 |
| 21 - 40 | 6 | 0.85 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 704

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 1 - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 35 | 20 | 6 | 8 | 9 | 9 | 8 | 41 | 86 | 58 | 82 | 50 | 40 | 50 | 104 | 83 | 689 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 20 | 6 | 8 | 9 | 9 | 8 | 41 | 86 | 58 | 82 | 50 | 40 | 50 | 110 | 83 | 695 |

Total Number of Valid Hours: 695

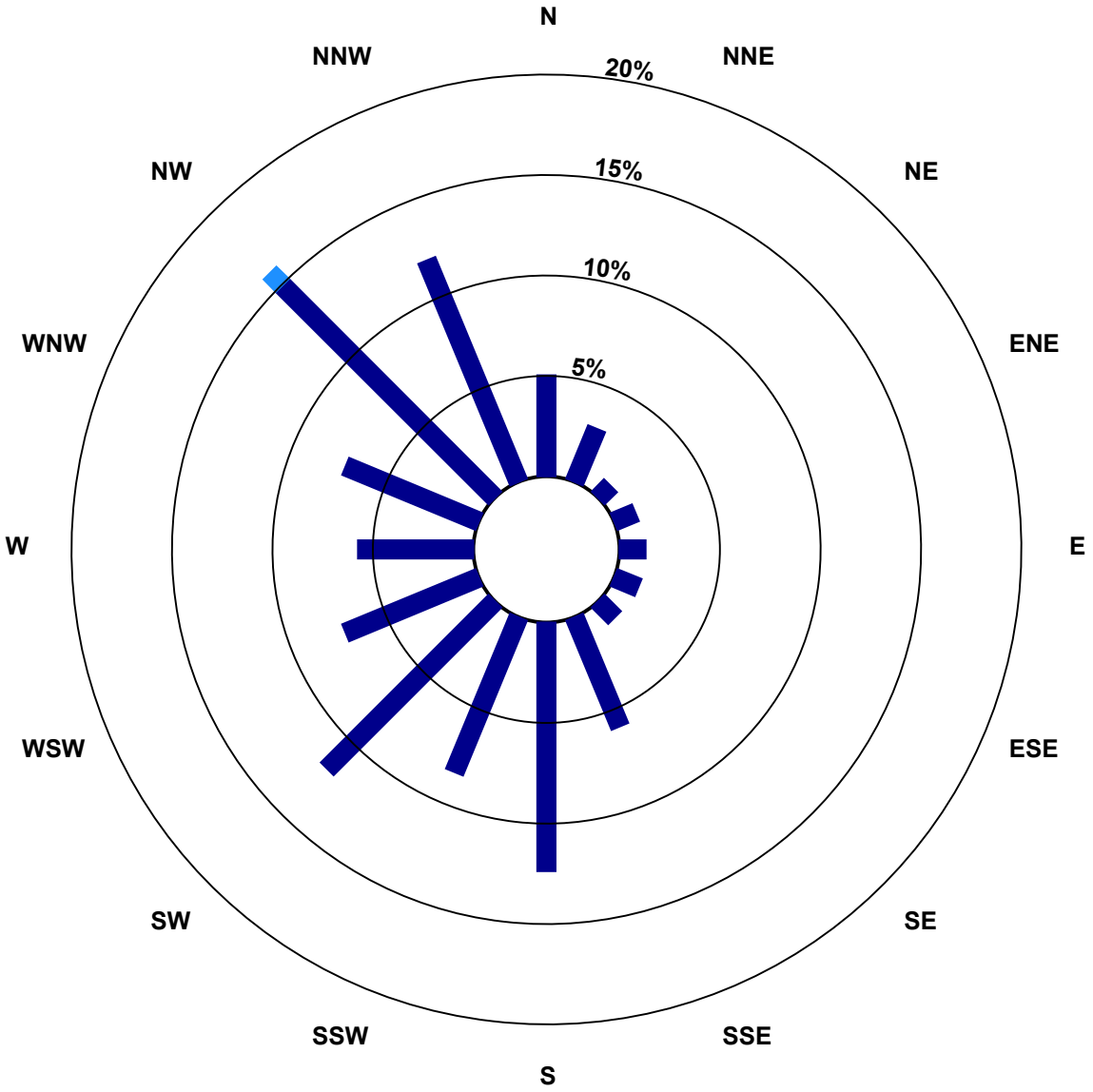
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Jackfish 1




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

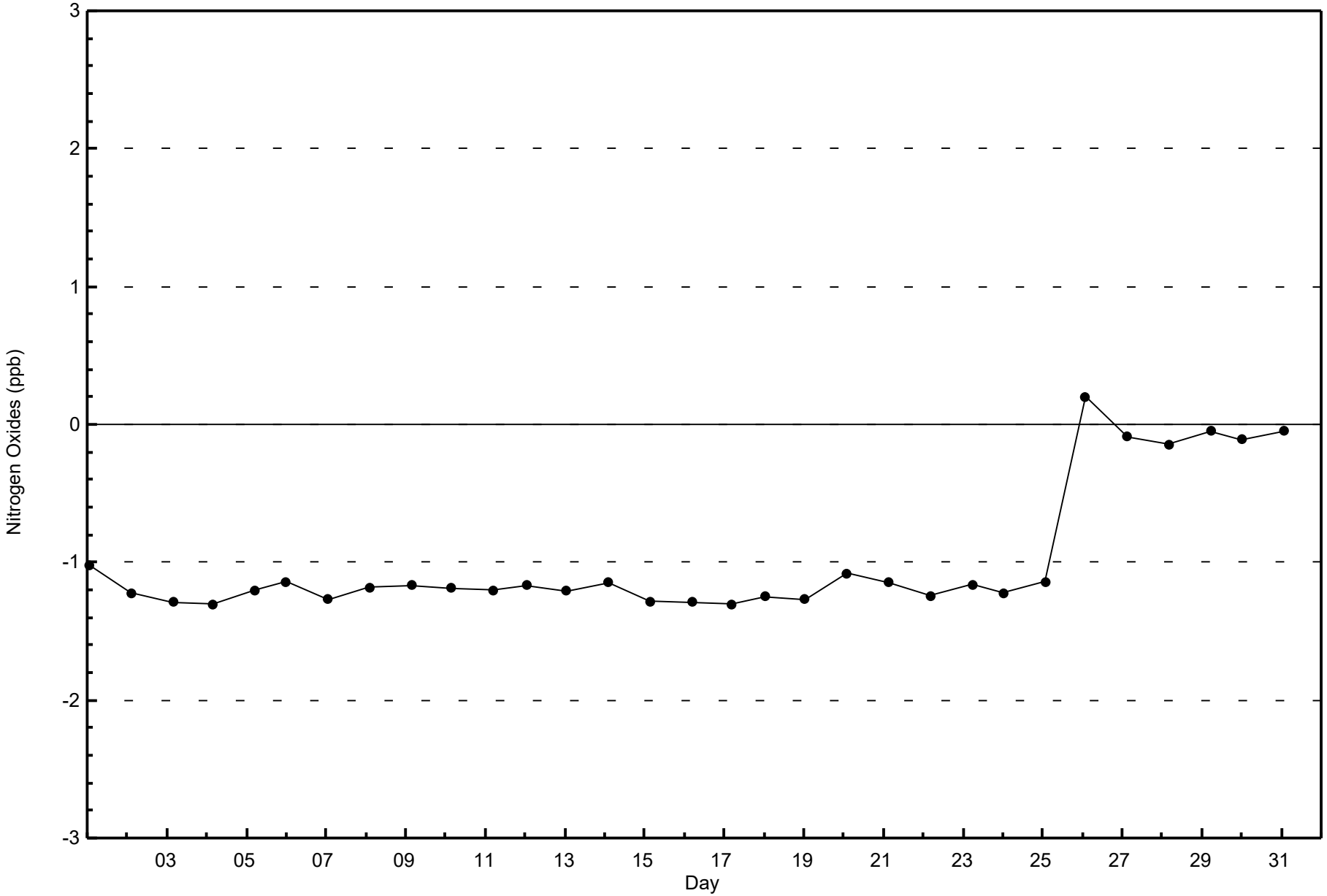
Total Number of Valid Hours: 695

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 1 - August 2026**

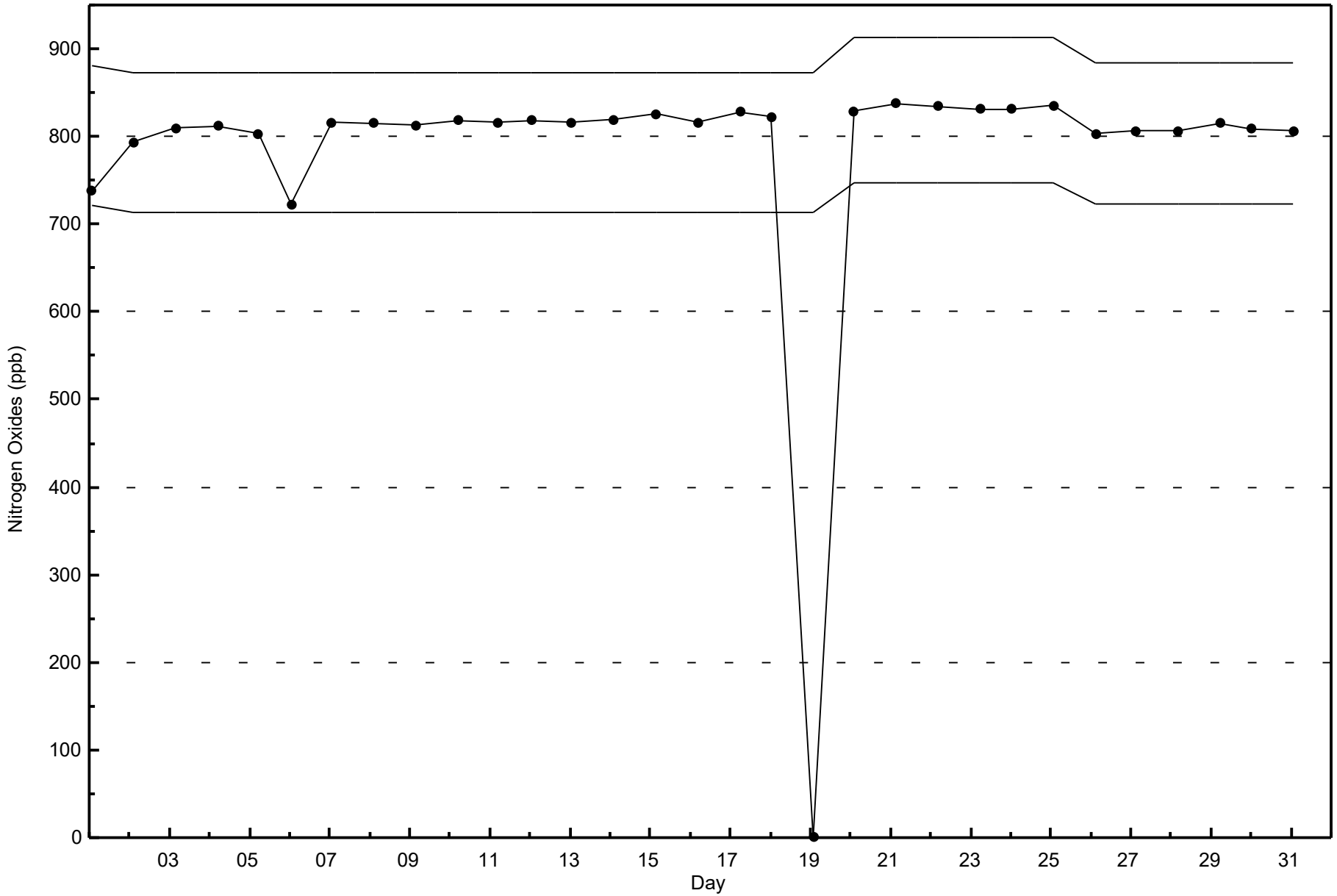


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Jackfish 1 - August 2026**



Maximum Value: 28.8 C on Aug 1 16:00

Maximum Daily Average: 21.8 C on Aug 1

Minimum Value: 4.3 C on Aug 3 05:00

Minimum Daily Average: 11.3 C on Aug 6

Maximum Diurnal Average: 20.8 C at hour 15

Minimum Diurnal Average: 10.7 C at hour 6

Monthly Average: 15.69 C

Percentiles: $P_1$ = 6.6 $P_{10}$ = 9.7 $Q_1$ = 12.1 Median = 15.2 $Q_3$ = 18.9 $P_{90}$ = 22.4 $P_{99}$ = 28.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

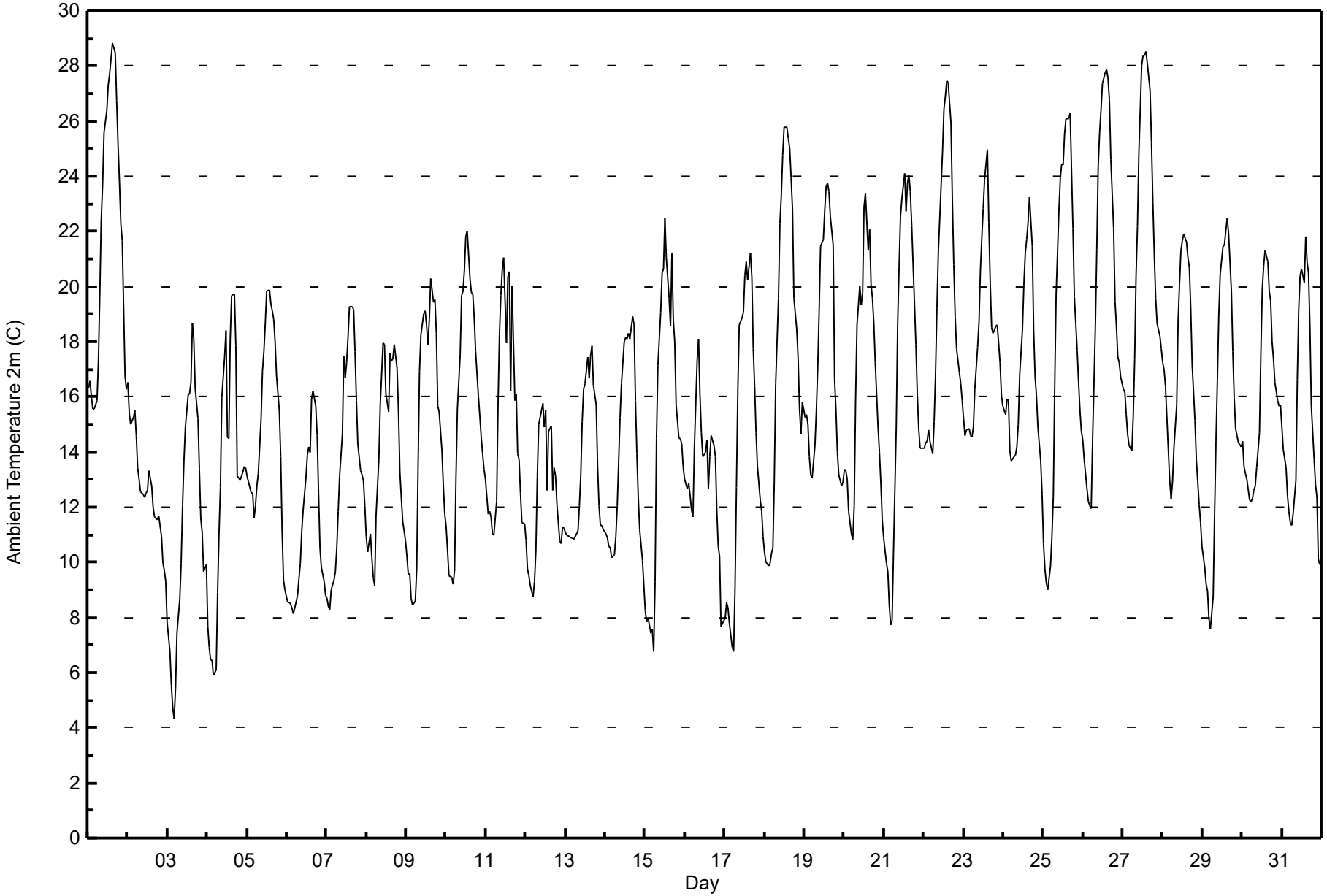
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 16.3 | 16.6 | 16.0 | 15.6 | 15.6 | 15.9 | 17.3 | 19.7 | 22.4 | 23.7 | 25.6 | 26.4 | 27.3 | 27.7 | 28.2 | 28.8 | 28.5 | 26.8 | 25.2 | 23.8 | 22.3 | 21.6 | 16.7 | 16.3 | 21.8 | 28.8 |
| 2-Aug | 16.5 | 15.4 | 15.0 | 15.3 | 15.5 | 14.6 | 13.4 | 13.0 | 12.6 | 12.5 | 12.4 | 12.5 | 12.6 | 13.3 | 12.8 | 12.0 | 11.6 | 11.6 | 11.6 | 11.7 | 11.0 | 9.9 | 9.7 | 9.3 | 12.7 | 16.5 |
| 3-Aug | 7.8 | 6.7 | 5.5 | 4.7 | 4.3 | 5.5 | 7.4 | 8.6 | 10.0 | 12.1 | 13.7 | 14.9 | 16.0 | 16.1 | 16.5 | 18.7 | 18.1 | 16.3 | 15.2 | 13.4 | 11.6 | 11.1 | 9.7 | 9.9 | 11.4 | 18.7 |
| 4-Aug | 7.7 | 6.9 | 6.5 | 6.5 | 5.9 | 6.1 | 8.9 | 11.0 | 12.7 | 16.0 | 17.4 | 18.4 | 14.5 | 14.5 | 18.1 | 19.7 | 19.8 | 17.9 | 13.1 | 13.0 | 12.9 | 13.3 | 13.5 | 13.4 | 12.8 | 19.8 |
| 5-Aug | 13.1 | 12.9 | 12.5 | 12.5 | 11.6 | 12.1 | 12.7 | 13.2 | 15.2 | 16.9 | 17.7 | 18.7 | 19.8 | 19.9 | 19.4 | 19.1 | 18.8 | 18.0 | 16.8 | 15.5 | 13.8 | 11.1 | 9.4 | 9.0 | 15.0 | 19.9 |
| 6-Aug | 8.6 | 8.5 | 8.5 | 8.3 | 8.2 | 8.3 | 8.8 | 9.4 | 10.0 | 11.1 | 11.9 | 13.0 | 13.9 | 14.2 | 14.0 | 15.9 | 16.2 | 15.7 | 14.6 | 12.5 | 10.5 | 9.8 | 9.3 | 8.8 | 11.3 | 16.2 |
| 7-Aug | 8.7 | 8.4 | 8.3 | 9.0 | 9.3 | 9.7 | 10.5 | 11.8 | 13.1 | 14.6 | 17.5 | 16.7 | 17.2 | 18.2 | 19.3 | 19.3 | 19.2 | 17.6 | 15.9 | 14.3 | 13.3 | 13.2 | 13.0 | 12.1 | 13.8 | 19.3 |
| 8-Aug | 10.9 | 10.4 | 11.0 | 10.2 | 9.4 | 9.1 | 11.7 | 13.7 | 15.7 | 16.8 | 17.9 | 17.9 | 16.1 | 15.5 | 17.6 | 17.3 | 17.4 | 17.9 | 17.0 | 15.5 | 13.3 | 12.4 | 11.5 | 10.8 | 14.0 | 17.9 |
| 9-Aug | 10.2 | 9.6 | 9.6 | 8.7 | 8.5 | 8.6 | 9.8 | 13.6 | 17.0 | 18.3 | 19.0 | 19.1 | 18.6 | 17.9 | 18.8 | 20.3 | 19.4 | 19.5 | 18.3 | 15.7 | 15.5 | 14.0 | 12.8 | 11.7 | 14.8 | 20.3 |
| 10-Aug | 11.3 | 10.4 | 9.5 | 9.5 | 9.2 | 9.7 | 13.1 | 15.6 | 17.5 | 19.7 | 19.8 | 20.6 | 21.8 | 22.0 | 20.3 | 19.8 | 19.7 | 18.8 | 17.6 | 16.0 | 15.3 | 14.5 | 13.9 | 13.4 | 15.8 | 22.0 |
| 11-Aug | 13.0 | 11.7 | 11.9 | 11.6 | 11.0 | 11.0 | 12.2 | 15.7 | 18.2 | 19.7 | 20.6 | 21.1 | 18.0 | 20.3 | 20.5 | 16.2 | 20.0 | 15.9 | 16.1 | 13.9 | 13.8 | 12.5 | 11.4 | 11.4 | 15.3 | 21.1 |
| 12-Aug | 10.8 | 9.8 | 9.5 | 9.2 | 8.8 | 9.3 | 10.4 | 13.1 | 15.0 | 15.3 | 15.7 | 14.9 | 15.5 | 12.6 | 14.7 | 14.9 | 12.6 | 13.4 | 13.1 | 12.1 | 10.8 | 10.7 | 11.3 | 11.2 | 12.3 | 15.7 |
| 13-Aug | 11.1 | 11.0 | 10.9 | 10.9 | 10.9 | 10.8 | 10.9 | 11.2 | 12.0 | 13.2 | 15.1 | 16.3 | 16.5 | 17.5 | 16.7 | 17.5 | 17.9 | 16.4 | 15.7 | 13.5 | 12.0 | 11.3 | 11.3 | 11.2 | 13.4 | 17.9 |
| 14-Aug | 11.1 | 10.9 | 10.6 | 10.5 | 10.2 | 10.2 | 10.9 | 12.0 | 13.6 | 15.3 | 16.5 | 18.0 | 18.1 | 18.1 | 18.3 | 18.1 | 18.9 | 18.6 | 15.8 | 13.9 | 12.4 | 11.2 | 10.1 | 9.2 | 13.9 | 18.9 |
| 15-Aug | 8.2 | 7.8 | 8.0 | 7.4 | 7.6 | 6.8 | 9.3 | 14.5 | 17.1 | 19.1 | 20.5 | 20.7 | 22.5 | 21.1 | 19.6 | 18.5 | 21.2 | 18.8 | 18.0 | 15.7 | 14.5 | 14.5 | 14.3 | 13.5 | 15.0 | 22.5 |
| 16-Aug | 13.0 | 12.7 | 12.8 | 12.4 | 11.9 | 11.7 | 14.1 | 17.3 | 18.1 | 16.1 | 14.7 | 13.9 | 14.0 | 14.4 | 12.7 | 13.8 | 14.6 | 14.2 | 13.9 | 11.9 | 10.6 | 10.2 | 7.7 | 7.9 | 13.1 | 18.1 |
| 17-Aug | 8.0 | 8.5 | 8.4 | 7.8 | 6.9 | 6.8 | 9.1 | 12.7 | 16.2 | 18.6 | 18.9 | 19.1 | 20.4 | 20.9 | 20.2 | 21.2 | 20.3 | 17.8 | 16.4 | 14.7 | 13.5 | 12.3 | 11.8 | 10.9 | 14.2 | 21.2 |
| 18-Aug | 10.4 | 10.0 | 9.9 | 10.0 | 10.3 | 10.5 | 12.9 | 16.5 | 19.6 | 22.3 | 23.3 | 24.8 | 25.8 | 25.8 | 25.4 | 25.0 | 24.0 | 22.8 | 19.6 | 18.5 | 17.4 | 15.5 | 14.7 | 15.8 | 17.9 | 25.8 |
| 19-Aug | 15.3 | 15.3 | 15.0 | 13.8 | 13.2 | 13.1 | 14.3 | 15.5 | 17.1 | 19.1 | 21.4 | 21.7 | 22.8 | 23.6 | 23.7 | 23.5 | 22.5 | 21.5 | 16.6 | 15.5 | 14.0 | 13.1 | 12.8 | 12.9 | 17.4 | 23.7 |
| 20-Aug | 13.4 | 13.3 | 13.0 | 11.9 | 11.0 | 10.8 | 12.0 | 15.9 | 18.6 | 20.0 | 19.3 | 19.8 | 22.9 | 23.4 | 21.3 | 22.1 | 20.1 | 19.6 | 18.7 | 17.2 | 14.9 | 14.0 | 12.8 | 11.5 | 16.6 | 23.4 |
| 21-Aug | 10.9 | 10.0 | 9.7 | 8.4 | 7.7 | 7.9 | 10.3 | 15.0 | 18.7 | 20.7 | 22.5 | 23.2 | 24.1 | 22.7 | 23.8 | 24.1 | 23.5 | 22.2 | 19.4 | 17.9 | 16.1 | 14.8 | 14.1 | 14.1 | 16.7 | 24.1 |
| 22-Aug | 14.1 | 14.4 | 14.4 | 14.8 | 14.4 | 13.9 | 15.1 | 16.8 | 19.2 | 21.3 | 23.7 | 24.9 | 26.4 | 26.9 | 27.5 | 27.4 | 25.9 | 23.1 | 20.8 | 18.9 | 17.7 | 16.9 | 16.5 | 15.8 | 19.6 | 27.5 |
| 23-Aug | 15.2 | 14.6 | 14.8 | 14.9 | 14.6 | 14.6 | 14.9 | 16.3 | 17.8 | 18.7 | 20.6 | 21.8 | 22.8 | 23.9 | 25.0 | 22.3 | 20.2 | 18.5 | 18.3 | 18.6 | 18.6 | 17.9 | 17.2 | 16.1 | 18.2 | 25.0 |
| 24-Aug | 15.6 | 15.4 | 15.9 | 15.8 | 14.1 | 13.7 | 13.8 | 13.9 | 14.2 | 15.0 | 16.8 | 18.5 | 20.1 | 21.2 | 21.7 | 22.3 | 23.2 | 21.4 | 18.4 | 16.7 | 16.0 | 14.9 | 13.7 | 12.5 | 16.9 | 23.2 |
| 25-Aug | 10.7 | 9.8 | 9.3 | 9.0 | 9.9 | 10.9 | 12.4 | 16.4 | 19.7 | 22.8 | 24.0 | 24.5 | 24.4 | 25.5 | 26.1 | 26.1 | 26.3 | 24.1 | 22.1 | 19.7 | 17.7 | 16.5 | 15.5 | 14.7 | 18.3 | 26.3 |
| 26-Aug | 14.5 | 13.7 | 12.6 | 12.2 | 12.1 | 11.9 | 14.5 | 18.6 | 21.4 | 24.3 | 25.6 | 26.4 | 27.4 | 27.8 | 27.9 | 27.6 | 26.7 | 24.6 | 22.1 | 19.5 | 18.6 | 17.4 | 17.3 | 16.8 | 20.1 | 27.9 |
| 27-Aug | 16.3 | 16.2 | 15.3 | 14.6 | 14.3 | 14.1 | 15.3 | 17.3 | 20.4 | 22.2 | 24.8 | 28.0 | 28.4 | 28.4 | 28.5 | 28.1 | 27.1 | 25.2 | 23.0 | 21.2 | 19.6 | 18.7 | 18.2 | 17.8 | 21.0 | 28.5 |
| 28-Aug | 17.2 | 17.0 | 16.4 | 14.1 | 13.0 | 12.3 | 12.9 | 14.2 | 15.7 | 18.7 | 20.1 | 21.3 | 21.7 | 21.9 | 21.6 | 21.1 | 20.7 | 19.2 | 17.2 | 15.1 | 13.7 | 12.9 | 12.1 | 11.5 | 16.7 | 21.9 |
| 29-Aug | 10.6 | 9.8 | 9.2 | 9.0 | 8.0 | 7.6 | 8.7 | 11.7 | 14.4 | 16.7 | 19.0 | 20.5 | 21.5 | 21.5 | 22.0 | 22.5 | 21.9 | 19.8 | 17.6 | 16.0 | 14.9 | 14.6 | 14.3 | 14.2 | 15.2 | 22.5 |
| 30-Aug | 14.4 | 13.5 | 13.2 | 13.0 | 12.2 | 12.2 | 12.3 | 12.6 | 12.8 | 13.4 | 14.7 | 17.6 | 19.9 | 20.8 | 21.3 | 20.9 | 19.9 | 19.5 | 18.0 | 17.4 | 16.5 | 15.9 | 15.7 | 15.7 | 16.0 | 21.3 |
| 31-Aug | 14.9 | 14.1 | 13.4 | 12.4 | 11.8 | 11.5 | 11.3 | 11.7 | 13.0 | 16.6 | 19.2 | 20.4 | 20.6 | 20.1 | 21.8 | 20.9 | 20.5 | 18.5 | 15.6 | 13.7 | 12.8 | 12.4 | 10.1 | 9.9 | 15.3 | 21.8 |
| | 12.2 | 11.8 | 11.5 | 11.1 | 10.7 | 10.7 | 12.0 | 14.2 | 16.1 | 17.8 | 19.0 | 19.8 | 20.4 | 20.6 | 20.8 | 20.8 | 20.5 | 19.2 | 17.5 | 15.9 | 14.7 | 13.8 | 13.0 | 12.6 | Diurnal Average | |
| | 17.2 | 17.0 | 16.4 | 15.8 | 15.6 | 15.9 | 17.3 | 19.7 | 22.4 | 24.3 | 25.6 | 28.0 | 28.4 | 28.4 | 28.5 | 28.8 | 28.5 | 26.8 | 25.2 | 23.8 | 22.3 | 21.6 | 18.2 | 17.8 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Jackfish 1 - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 93 | 12.50 | 12.50 |
| 10 - 20 | 507 | 68.15 | 80.65 |
| > 20 | 144 | 19.35 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## Jackfish 1 - August 2026

Maximum Value: 100.0 % on Aug 2 00:00

Maximum Daily Average: 98.3 % on Aug 2

Minimum Value: 37.6 % on Aug 10 14:00

Minimum Daily Average: 60.6 % on Aug 27

Maximum Diurnal Average: 96.0 % at hour 5

Minimum Diurnal Average: 56.8 % at hour 15

Monthly Average: 77.09 %

Percentiles: $P_1$ = 38.9 $P_{10}$ = 49.8 $Q_1$ = 62.5 Median = 79.3 $Q_3$ = 95.2 $P_{90}$ = 100.0 $P_{99}$ = 100.0

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 718 |
| Hours of Missing Data: | 26 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 96.5 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 86.5 | 86.4 | 89.2 | 93.3 | 94.4 | 95.3 | 90.4 | 81.7 | 72.1 | 66.4 | 57.8 | 53.4 | 49.2 | 45.9 | 45.8 | 48.2 | 50.1 | 56.1 | 62.6 | 68.5 | 75.7 | 81.4 | 96.9 | 100.0 | 72.8 | 100.0 |
| 2-Aug | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | OR | OR | OR | OR | OR | 98.8 | 95.2 | 92.8 | 95.6 | 93.5 | 92.4 | 98.3 | 100.0 |
| 3-Aug | 94.5 | 96.8 | 99.4 | 99.9 | 100.0 | 100.0 | 98.6 | 93.1 | 87.0 | 79.0 | 71.0 | 62.7 | 57.5 | 56.9 | 55.3 | 50.4 | 50.3 | 56.5 | 65.9 | 73.8 | 78.7 | 79.6 | 89.2 | 85.5 | 78.4 | 100.0 |
| 4-Aug | 97.4 | 99.5 | 100.0 | 100.0 | 100.0 | 100.0 | 96.9 | 89.3 | 83.9 | 71.3 | 68.7 | 67.2 | 93.4 | 96.1 | 78.3 | 67.3 | 69.5 | 82.2 | 99.8 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 90.0 | 100.0 |
| 5-Aug | OR | OR | OR | OR | OR | OR | OR | OR | 95.5 | 82.5 | 73.6 | 65.9 | 62.5 | 62.0 | 63.2 | 63.6 | 63.4 | 67.5 | 73.4 | 82.1 | 96.9 | 100.0 | 100.0 | 100.0 | -- | 100.0 |
| 6-Aug | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.9 | 98.0 | 94.6 | 89.7 | 87.2 | 81.3 | 80.5 | 80.4 | 84.5 | 76.6 | 71.6 | 73.4 | 80.4 | 89.5 | 97.7 | 99.9 | 100.0 | 100.0 | 91.0 | 100.0 |
| 7-Aug | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | OR | OR | 96.0 | 87.2 | 80.6 | 67.5 | 67.4 | 64.9 | 61.2 | 55.1 | 54.7 | 56.9 | 64.3 | 72.6 | 78.1 | 86.4 | 84.9 | 88.4 | 89.0 | 79.8 | 100.0 |
| 8-Aug | 93.9 | 96.8 | 94.4 | 98.0 | 99.4 | 100.0 | 87.7 | 78.6 | 70.6 | 64.7 | 60.1 | 58.9 | 68.9 | 75.0 | 64.0 | 64.5 | 62.6 | 63.4 | 70.0 | 71.2 | 79.9 | 82.1 | 88.5 | 91.9 | 78.5 | 100.0 |
| 9-Aug | 95.8 | 97.4 | 97.2 | 99.7 | 100.0 | 100.0 | 100.0 | 84.0 | 68.3 | 62.1 | 56.9 | 57.3 | 58.4 | 63.7 | 57.1 | 51.0 | 55.9 | 51.7 | 53.7 | 65.0 | 62.5 | 68.7 | 76.2 | 83.0 | 73.6 | 100.0 |
| 10-Aug | 89.7 | 96.3 | 98.1 | 98.0 | 98.6 | 99.9 | 82.6 | 76.6 | 65.2 | 50.6 | 50.4 | 46.7 | 41.7 | 37.6 | 48.2 | 49.5 | 51.4 | 55.6 | 65.1 | 74.8 | 72.3 | 79.6 | 83.8 | 85.7 | 70.8 | 99.9 |
| 11-Aug | 84.4 | 89.5 | 88.3 | 88.6 | 90.0 | 90.2 | 86.2 | 66.8 | 56.1 | 50.2 | 46.9 | 44.6 | 61.7 | 49.1 | 47.6 | 75.5 | 53.3 | 69.4 | 69.0 | 78.1 | 76.5 | 83.8 | 87.7 | 84.1 | 71.6 | 90.2 |
| 12-Aug | 88.7 | 91.8 | 93.2 | 92.5 | 95.0 | 95.8 | 92.3 | 78.3 | 70.0 | 68.2 | 66.4 | 72.7 | 68.1 | 91.1 | 86.8 | 79.1 | 88.4 | 88.6 | 87.1 | 90.8 | 97.3 | 99.8 | 100.0 | 100.0 | 86.8 | 100.0 |
| 13-Aug | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | OR | OR | OR | 98.5 | 93.0 | 81.7 | 74.8 | 71.6 | 63.1 | 67.1 | 60.4 | 59.5 | 62.6 | 70.3 | 87.4 | 94.1 | 97.7 | 97.7 | 98.9 | 84.7 | 100.0 |
| 14-Aug | 98.9 | 99.8 | 100.0 | 100.0 | 100.0 | 100.0 | 99.4 | 96.4 | 89.6 | 80.7 | 69.3 | 60.9 | 62.7 | 62.2 | 62.7 | 59.6 | 55.4 | 55.7 | 67.9 | 79.1 | 89.5 | 94.6 | 98.3 | 99.8 | 82.6 | 100.0 |
| 15-Aug | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 97.0 | 79.6 | 64.7 | 54.5 | 48.6 | 48.7 | 42.9 | 48.7 | 58.8 | 64.1 | 52.3 | 64.7 | 61.7 | 72.3 | 78.9 | 76.5 | 78.9 | 82.1 | 73.9 | 100.0 |
| 16-Aug | 84.7 | 87.6 | 88.1 | 89.8 | 92.2 | 93.7 | 82.4 | 69.8 | 69.7 | 80.6 | 92.6 | 99.3 | 100.0 | 96.9 | 99.1 | 96.3 | 90.0 | 82.8 | 80.2 | 87.0 | 92.9 | 89.5 | 99.0 | 97.2 | 89.2 | 100.0 |
| 17-Aug | 95.1 | 91.1 | 91.4 | 93.7 | 98.6 | 100.0 | 91.2 | 77.8 | 66.7 | 56.6 | 53.4 | 48.9 | 43.5 | 39.6 | 43.2 | 39.8 | 44.2 | 55.4 | 62.1 | 67.3 | 71.4 | 78.2 | 78.4 | 82.2 | 69.6 | 100.0 |
| 18-Aug | 84.6 | 86.6 | 87.0 | 89.2 | 91.9 | 95.7 | 88.2 | 76.7 | 68.7 | 59.4 | 56.1 | 51.2 | 46.0 | 47.1 | 49.0 | 52.7 | 55.4 | 56.3 | 65.0 | 68.1 | 70.1 | 79.5 | 84.5 | 78.4 | 70.3 | 95.7 |
| 19-Aug | 80.9 | 82.0 | 84.9 | 89.8 | 92.7 | 94.3 | 90.9 | 86.4 | 80.5 | 72.2 | 64.9 | 63.5 | 61.3 | 53.6 | 50.1 | 55.1 | 60.7 | 63.7 | 94.6 | 99.9 | 100.0 | 100.0 | 100.0 | 100.0 | 80.1 | 100.0 |
| 20-Aug | 94.9 | 93.7 | 94.8 | 99.4 | 100.0 | 100.0 | 98.0 | 84.8 | 74.2 | 64.8 | 70.2 | 65.8 | 53.4 | 50.0 | 53.9 | 53.5 | 61.4 | 57.3 | 60.1 | 62.6 | 73.9 | 78.2 | 86.1 | 92.5 | 76.0 | 100.0 |
| 21-Aug | 95.6 | 98.1 | 98.9 | 99.8 | 100.0 | 100.0 | 91.7 | 73.3 | 64.0 | 57.3 | 46.8 | 42.2 | 42.4 | 48.1 | 44.3 | 44.4 | 47.1 | 50.5 | 58.2 | 63.1 | 69.1 | 73.5 | 75.2 | 74.3 | 69.1 | 100.0 |
| 22-Aug | 74.0 | 73.1 | 72.8 | 69.9 | 70.4 | 72.5 | 69.4 | 65.6 | 60.3 | 55.2 | 51.9 | 51.0 | 49.9 | 49.1 | 47.9 | 49.7 | 53.0 | 60.3 | 69.0 | 77.1 | 83.2 | 88.7 | 91.8 | 94.9 | 66.7 | 94.9 |
| 23-Aug | 98.3 | 99.9 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 98.4 | 94.3 | 92.0 | 86.6 | 80.2 | 72.5 | 67.0 | 63.8 | 81.9 | 86.8 | 87.7 | 95.6 | 94.7 | 97.7 | 98.5 | 94.3 | 95.6 | 91.1 | 100.0 |
| 24-Aug | 96.8 | 97.9 | 94.9 | 95.6 | 98.9 | 100.0 | OR | 99.3 | 98.9 | 95.8 | 82.5 | 65.4 | 61.3 | 47.0 | 44.6 | 43.2 | 42.3 | 43.2 | 57.4 | 60.9 | 59.3 | 64.1 | 70.3 | 76.8 | 73.8 | 100.0 |
| 25-Aug | 88.0 | 92.5 | 94.6 | 92.8 | 91.9 | 85.4 | 77.6 | 66.5 | 57.2 | 48.1 | 42.7 | 40.1 | 41.2 | 38.8 | 39.0 | 39.7 | 39.0 | 41.5 | 49.4 | 57.3 | 63.9 | 71.6 | 76.5 | 80.7 | 63.2 | 94.6 |
| 26-Aug | 80.5 | 83.4 | 88.2 | 89.1 | 88.8 | 89.0 | 79.3 | 65.4 | 58.6 | 50.5 | 44.4 | 41.7 | 39.2 | 38.9 | 38.1 | 38.7 | 41.2 | 45.9 | 53.1 | 63.5 | 66.5 | 73.9 | 74.3 | 76.3 | 62.8 | 89.1 |
| 27-Aug | 76.6 | 75.5 | 78.3 | 78.8 | 78.5 | 77.8 | 70.9 | 63.7 | 55.9 | 54.3 | 46.8 | 38.9 | 37.8 | 37.9 | 39.9 | 40.7 | 42.3 | 47.2 | 54.8 | 62.5 | 72.1 | 74.0 | 74.2 | 75.3 | 60.6 | 78.8 |
| 28-Aug | 76.1 | 77.6 | 87.7 | 96.6 | 99.7 | 100.0 | 99.7 | 96.0 | 85.3 | 68.9 | 61.2 | 51.5 | 49.4 | 50.0 | 52.9 | 53.6 | 54.0 | 57.0 | 63.8 | 72.4 | 81.7 | 84.3 | 87.6 | 89.6 | 74.9 | 100.0 |
| 29-Aug | 94.7 | 97.9 | 99.8 | 99.9 | 99.6 | 100.0 | 98.5 | 85.3 | 73.6 | 62.9 | 51.4 | 48.9 | 47.7 | 49.8 | 47.6 | 48.4 | 51.4 | 59.8 | 68.8 | 76.3 | 78.6 | 79.2 | 78.4 | 80.4 | 74.1 | 100.0 |
| 30-Aug | 82.8 | 98.6 | 100.0 | 100.0 | 100.0 | 100.0 | OR | OR | OR | OR | 97.7 | 81.7 | 71.1 | 67.4 | 63.4 | 67.7 | 76.9 | 76.0 | 83.0 | 83.1 | 90.1 | 94.3 | 95.3 | 95.2 | 86.2 | 100.0 |
| 31-Aug | 97.7 | 100.0 | 100.0 | 100.0 | 100.0 | OR | OR | OR | 95.8 | 80.7 | 66.9 | 60.3 | 56.8 | 58.5 | 52.6 | 54.4 | 58.3 | 61.3 | 71.5 | 81.6 | 83.1 | 82.9 | 93.2 | 97.3 | 78.7 | 100.0 |
| | 91.0 | 93.0 | 94.0 | 95.1 | 96.0 | 95.9 | 90.7 | 82.5 | 76.9 | 69.8 | 65.2 | 61.1 | 59.9 | 57.7 | 56.8 | 57.5 | 58.1 | 61.9 | 70.5 | 76.9 | 81.7 | 85.0 | 88.3 | 89.6 | Diurnal Average | |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 96.9 | 99.1 | 96.3 | 90.0 | 88.6 | 99.8 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Diurnal Maximum | |

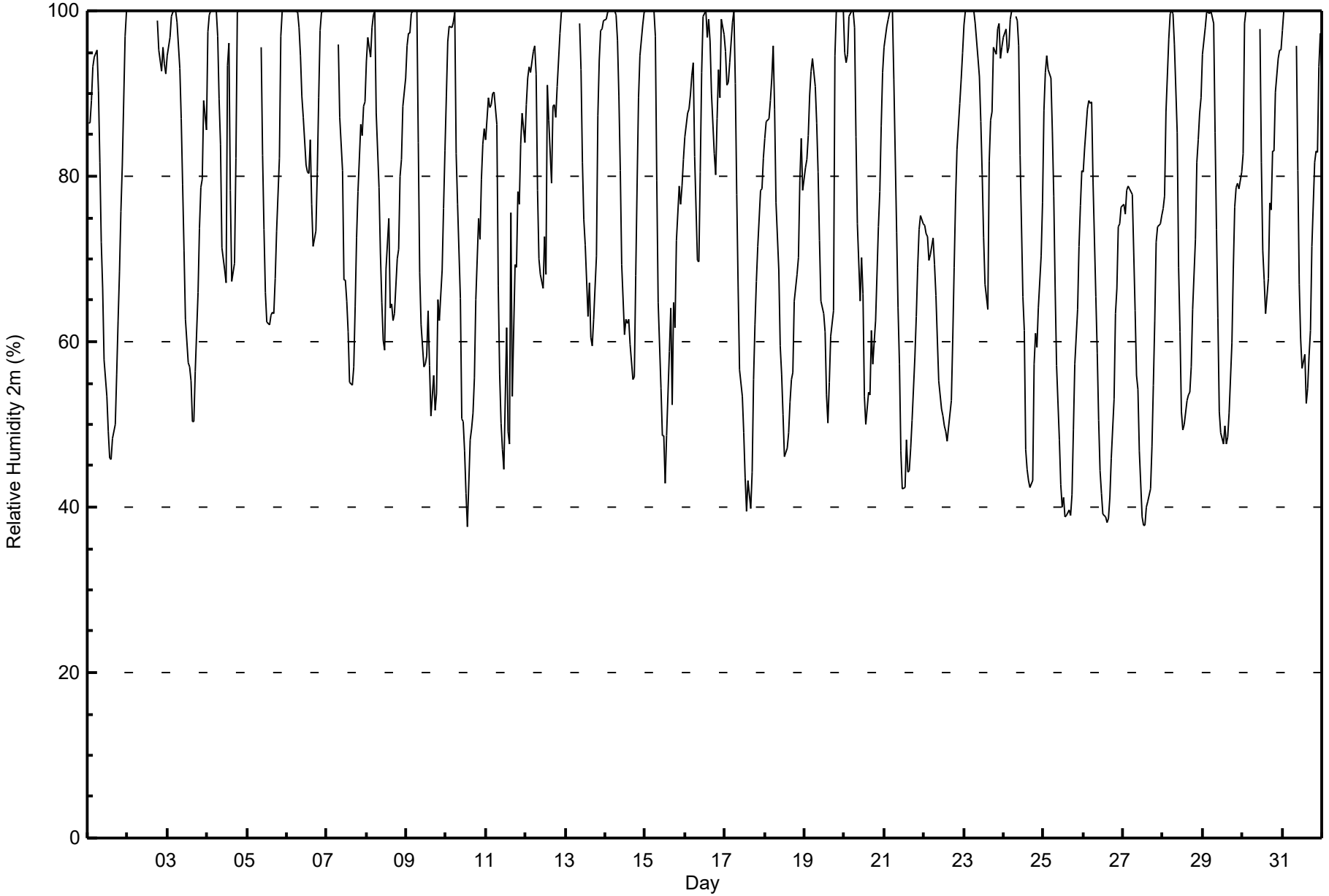
OR - Out of Range

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Jackfish 1 - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 15 | 2.09 | 2.09 |
| 40 - 60 | 143 | 19.92 | 22.01 |
| 60 - 80 | 207 | 28.83 | 50.84 |
| 80 - 100 | 268 | 37.33 | 88.16 |

Total Number of Valid Hours: 718

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Jackfish 1 - August 2026

Maximum Speed: 16 km/h on Aug 2 16:00

Maximum Daily Speed Average: 6.6 km/h on Aug 27

Minimum Speed Value: 0 km/h on Aug 30 17:00

Minimum Daily Speed Average: 0.7 km/h on Aug 30

Maximum Diurnal Speed Average: 2.8 km/h at hour 15

Minimum Diurnal Speed Average: 0.6 km/h at hour 21

Monthly Average Velocity: 1.5 km/h 287.0 deg

Percentiles: $P_1 = 0$ $P_{10} = 1$ $Q_1 = 2$ Median = 4 $Q_3 = 5$ $P_{90} = 7$ $P_{99} = 13$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 734 |
| Hours of Missing Data: | 10 |
| Percent Operational Time: | 98.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | S3 | S3 | S3 | S3 | S3 | S4 | SSE4 | S4 | S6 | S8 | SSE11 | SSE12 | SSE11 | SE13 | SSE13 | SSE10 | SSW8 | S7 | S6 | S4 | S2 | SW2 | NW7 | NNW10 | SSE5.0 | SE13 |
| 2-Aug | NNW9 | ENE2 | SSW3 | SW4 | WNW4 | SW5 | SW7 | WSW6 | WNW5 | WNW4 | NW5 | WNW4 | NW5 | NNW13 | NNW16 | NNW16 | NW12 | NW10 | NNW12 | NNW11 | NNW10 | NW7 | NW7 | NW8 | NW6.4 | NNW16 |
| 3-Aug | NW7 | NW5 | NW5 | WNW4 | WNW3 | WNW3 | NW5 | NW4 | NW5 | NW5 | NNW10 | NNW10 | NW9 | NW9 | NNW9 | NW7 | NW8 | NW6 | WNW2 | SW2 | S1 | WSW1 | WSW1 | WSW2 | NW4.7 | NNW10 |
| 4-Aug | SW2 | SW1 | S3 | SW3 | S2 | S2 | SW4 | SW5 | SW5 | SW5 | WSW5 | W4 | SW5 | SW5 | SW6 | SW7 | WSW5 | WSW3 | WSW2 | SW3 | SW4 | WNW3 | NW4 | WNW4 | SW3.4 | SW7 |
| 5-Aug | WNW4 | WNW4 | WNW4 | NW4 | WNW4 | WNW4 | WNW4 | WNW5 | NW5 | NW6 | NW8 | NW8 | NW7 | NW8 | NW8 | NW7 | NW6 | W4 | WSW4 | SW3 | WNW2 | NNW13 | NNW10 | NW8 | NW5.4 | NNW13 |
| 6-Aug | NW8 | NW7 | NW6 | NW7 | NW7 | NW7 | NW7 | NW9 | NW9 | NW8 | NW7 | NW7 | NW6 | NW7 | NW7 | NW6 | NW5 | WNW4 | WNW4 | WNW3 | W2 | W2 | W1 | SW1 | NW5.6 | NW9 |
| 7-Aug | SW2 | WSW1 | WSW1 | W1 | WNW2 | WSW2 | WSW2 | W3 | W4 | WNW3 | NW5 | NW4 | NW4 | NW5 | NW5 | NW5 | WNW4 | WNW3 | WSW2 | SW3 | SW2 | NW2 | NW1 | W2 | WNW2.5 | NW5 |
| 8-Aug | W2 | W2 | W2 | NNW3 | NW3 | NNW5 | WNW2 | N4 | NNE5 | N6 | N5 | N4 | N4 | N3 | NNW4 | N5 | N5 | N2 | N2 | ENE2 | ESE1 | E0 | SE1 | WSW1 | N2.4 | N6 |
| 9-Aug | UO | SSW3 | WSW2 | SSW1 | SSW2 | SW1 | WSW1 | ESE1 | NNW1 | NNE5 | NNE4 | N3 | N3 | NNE3 | ENE1 | N3 | N1 | NNE3 | NE4 | E2 | ENE3 | ENE3 | ESE2 | ESE1 | NNE1.2 | NNE5 |
| 10-Aug | S3 | SSW1 | SSW1 | SSW1 | NNW2 | NNW2 | E3 | SSE2 | SE3 | E3 | NNW3 | NNE4 | NE4 | N5 | NNE6 | NNE4 | N4 | N5 | NNW5 | NNW4 | NW2 | NNW5 | NW4 | NW3 | N1.9 | NNE6 |
| 11-Aug | WNW2 | WSW2 | WSW1 | W0 | WNW1 | WSW1 | WSW1 | NNW4 | NNW3 | N6 | N6 | NNE4 | NNE7 | NNW6 | N7 | NNW1 | NNW7 | N7 | SSE1 | NNW1 | WSW1 | NW3 | NNW4 | NNW6 | NNW2.7 | N7 |
| 12-Aug | NW3 | WNW3 | WNW1 | W2 | WNW1 | W1 | WNW2 | NNW6 | N6 | NNW7 | NNW7 | NNW6 | N7 | N4 | NW2 | NNW8 | NNW7 | NNW7 | NNW6 | NNW8 | NNW6 | NNW6 | NNW6 | NNW5 | NNW4.6 | NNW8 |
| 13-Aug | NNW6 | NNW5 | N5 | N5 | N5 | N5 | NNE4 | N5 | NNE7 | N6 | N7 | N7 | NE8 | NNE10 | NE8 | ENE10 | ENE7 | NE5 | N5 | S3 | WSW0 | NNW1 | NW1 | WNW1 | NNE4.4 | NNE10 |
| 14-Aug | NW1 | NW2 | NW1 | NW1 | WNW2 | NW1 | NW0 | NNW3 | NNW2 | NNE1 | E4 | SE2 | NNW5 | NNW9 | NNE9 | SE4 | SSW2 | S2 | SSW1 | WSW1 | SW1 | SSE1 | S0 | UO | NNW1.0 | NNE9 |
| 15-Aug | SW0 | SSW1 | SW1 | SSW1 | SW0 | S1 | UO | SE1 | SSW3 | WSW3 | WSW2 | WSW3 | W3 | WSW2 | N3 | ENE2 | NW1 | W1 | SW2 | SSW0 | UO | S1 | SSW3 | SSW3 | SW1.1 | WSW3 |
| 16-Aug | SSW3 | SW3 | SW4 | SW3 | SW3 | SW4 | SSW3 | W2 | NW4 | WNW2 | WNW2 | NW1 | NW1 | NW2 | N6 | NNW6 | NNW7 | NNW7 | NNW5 | SW1 | WSW2 | WSW3 | SSW2 | SW4 | WNW1.9 | NNW7 |
| 17-Aug | SW4 | SW4 | SW4 | SW4 | SSW3 | S2 | SSW2 | WSW2 | W3 | NW4 | NW6 | NW5 | NW4 | WNW3 | W3 | W3 | WSW2 | WSW1 | SSW2 | SW2 | SSW3 | SW3 | SSW1 | S1 | WSW2.2 | NW6 |
| 18-Aug | S1 | S2 | S3 | S4 | S4 | S4 | SSE5 | S4 | SSW5 | SSW5 | SW4 | SW5 | SSW4 | SW4 | W3 | W2 | W2 | WNW3 | W2 | W1 | SSW1 | SSW2 | SW2 | SW4 | SSW2.6 | SSW5 |
| 19-Aug | SW4 | SW4 | SW3 | SSW3 | SW4 | SW2 | SSW2 | SSW2 | W2 | WNW3 | WNW3 | WNW4 | NW5 | NW8 | NW8 | NW5 | NW4 | WNW4 | NNW4 | WSW0 | SSW1 | WSW0 | W1 | W2 | W2.4 | NW8 |
| 20-Aug | WSW3 | WNW2 | NW2 | WNW2 | SW2 | SW2 | S1 | SW1 | W2 | NNW4 | NNW6 | NW4 | NW4 | NW6 | NW8 | NW6 | NW4 | N6 | N5 | NNE3 | SSE1 | UO | UO | UO | NW2.7 | NW8 |
| 21-Aug | W2 | WSW1 | SW2 | SSW3 | S4 | S4 | S3 | S2 | WNW1 | SW4 | WSW2 | S2 | WNW1 | S3 | SSW4 | SSW3 | SW4 | SSW3 | SW2 | SSW2 | S2 | S3 | S3 | S4 | SSW2.3 | S4 |
| 22-Aug | S4 | S5 | SSW5 | S5 | S5 | S5 | S6 | S6 | S6 | SSW5 | S5 | S5 | S4 | S5 | S6 | S5 | SSW5 | SSW5 | SSW3 | SSW1 | S1 | S2 | S3 | S3 | S4.3 | S6 |
| 23-Aug | WSW1 | SW0 | S2 | S2 | SSE1 | S1 | S2 | S2 | W1 | W2 | NW3 | NW7 | NNE3 | ESE2 | NNW3 | WSW1 | W3 | NNW6 | NNW3 | NNW7 | NNW8 | NNW8 | NNW8 | NW6 | NW2.2 | NNW8 |
| 24-Aug | NW5 | WNW2 | SW3 | SSW4 | WSW4 | WNW2 | NW7 | NNW9 | NW7 | NW6 | NNW8 | NNW11 | NNW6 | NNW14 | NNW14 | NNW13 | NW13 | NNW12 | NNW9 | NNW5 | NW4 | W2 | W2 | SW2 | NW6.1 | NNW14 |
| 25-Aug | WSW2 | UO | SW2 | WSW2 | WSW4 | SW4 | SW1 | N2 | WNW2 | NW3 | NNW6 | N7 | NNW6 | NNW7 | NNW6 | NNW5 | NNW5 | NNE5 | NNE4 | E3 | SSE4 | S2 | SSW1 | S2 | NNW1.9 | NNW7 |
| 26-Aug | S3 | S2 | SSE1 | SSE1 | S1 | SSE1 | SSE2 | S4 | S4 | S5 | S6 | S6 | S6 | S6 | SSW6 | S5 | S5 | SSW4 | S4 | S3 | SSE4 | SSE4 | SSE5 | SSE5 | S3.9 | S6 |
| 27-Aug | SSE5 | S5 | SSE5 | SSE5 | SSE5 | SSE6 | SSE6 | SSE7 | SSE5 | SSE6 | SSE7 | SSW6 | S7 | S9 | SSE10 | SSE11 | SSE10 | SSE9 | SSE7 | ESE7 | SE8 | SE8 | SSE6 | SSE6 | SSE6.6 | SSE11 |
| 28-Aug | S3 | SW3 | NW3 | NNW4 | SW2 | S2 | SW4 | WSW4 | W5 | WNW5 | WSW7 | WSW7 | WSW8 | WSW8 | W7 | W6 | WSW6 | WSW6 | SW5 | SSW3 | SSW3 | SSW4 | SW4 | SSW3 | WSW4.0 | WSW8 |
| 29-Aug | SW3 | SW3 | SW3 | SSW3 | SSW3 | SSW2 | SW4 | SW5 | SW5 | SW5 | W4 | W5 | SW6 | SW6 | SW6 | SW4 | SSW4 | SSW3 | SSW1 | S2 | UO | S2 | S1 | SSE3 | SW3.3 | SW6 |
| 30-Aug | S3 | SSE4 | NNW3 | ESE3 | NE1 | E1 | SE3 | NW1 | NNW4 | ESE1 | SW0 | W1 | SW1 | SSE3 | S3 | SSW1 | SSE0 | UO | E1 | E1 | S2 | S2 | ESE1 | WSW1 | SSE0.7 | NNW4 |
| 31-Aug | NNW6 | N1 | NW2 | WNW3 | NW4 | NW3 | NW2 | NW3 | NW3 | NW6 | NW5 | NW6 | NNW7 | NW6 | NW5 | NW6 | NW2 | WNW2 | SW3 | SW3 | SW2 | SSW2 | S1 | SW3 | NW2.8 | NNW7 |
| | W1.7 | WSW1.4 | WSW1.5 | WSW1.4 | WSW1.5 | SW1.3 | SW1.6 | W1.4 | WNW1.9 | WNW1.9 | NW2.6 | NW2.6 | NW2.0 | NW2.7 | NW2.8 | NW2.2 | WNW2.4 | NW2.2 | NW1.4 | W0.7 | WSW0.6 | W1.0 | WNW1.1 | W1.5 | Diurnal Average | |
| | NNW9 | NW7 | NW6 | NW7 | NW7 | NW7 | NW7 | NW9 | NW9 | S8 | SSE11 | SSE12 | SSE11 | NNW14 | NNW16 | NNW16 | NW13 | NNW12 | NNW12 | NNW11 | NNW10 | NNW13 | NNW10 | NNW10 | Diurnal Maximum | |

UO - Unstable Operation

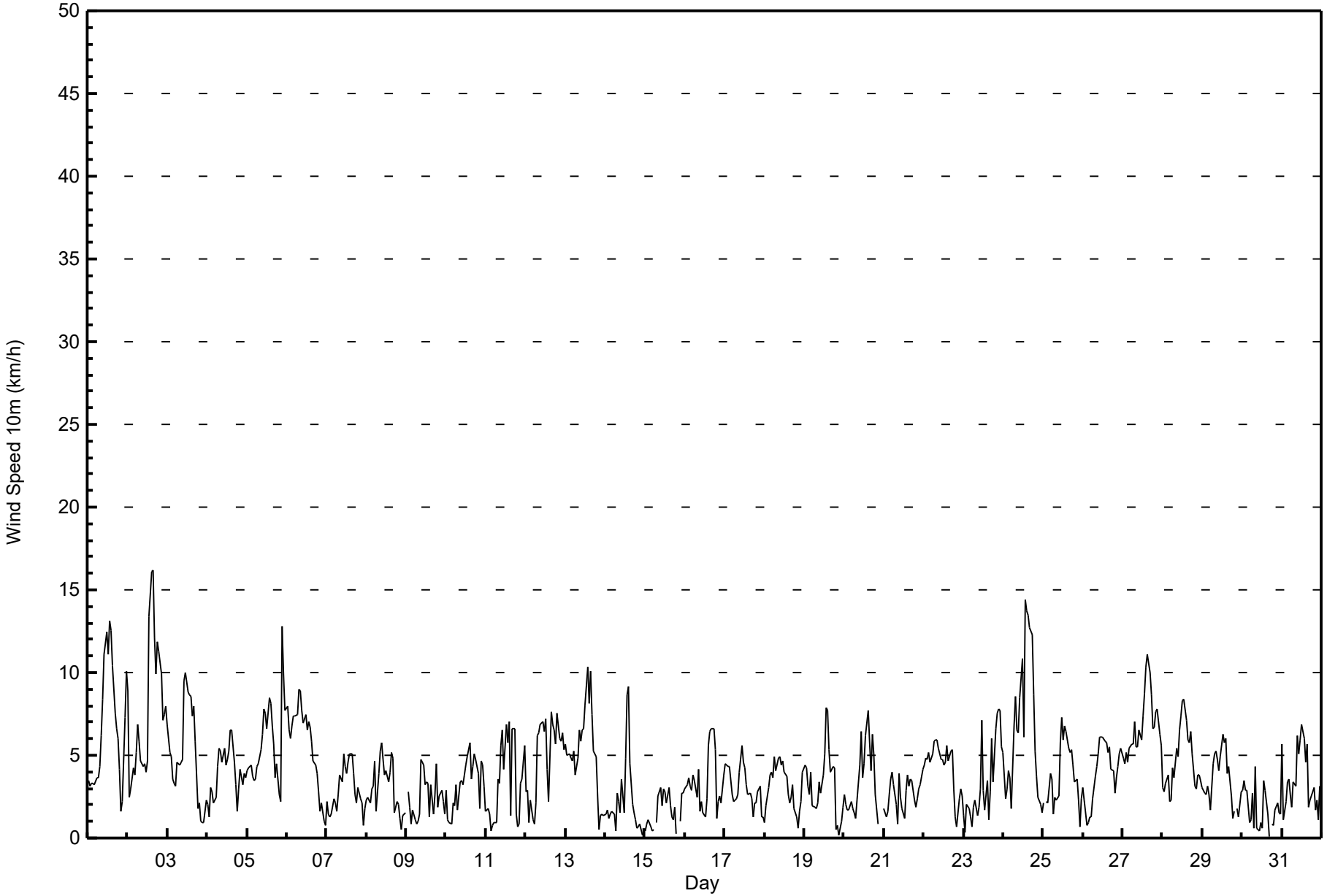
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Jackfish 1 - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 552 | 75.20 | 75.20 |
| 6 - 11 | 168 | 22.89 | 98.09 |
| 12 - 19 | 14 | 1.91 | 100.00 |
| 20 - 28 | 0 | 0.00 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 734

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Jackfish 1 - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 23 | 15 | 4 | 6 | 9 | 8 | 5 | 26 | 81 | 60 | 79 | 45 | 40 | 52 | 63 | 36 | 552 |
| 6 - 11 | 12 | 5 | 2 | 2 | 0 | 1 | 2 | 15 | 14 | 3 | 6 | 7 | 2 | 0 | 51 | 46 | 168 |
| 12 - 19 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 14 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 35 | 20 | 6 | 8 | 9 | 9 | 8 | 43 | 95 | 63 | 85 | 52 | 42 | 52 | 115 | 92 | 734 |

Total Number of Valid Hours: 734

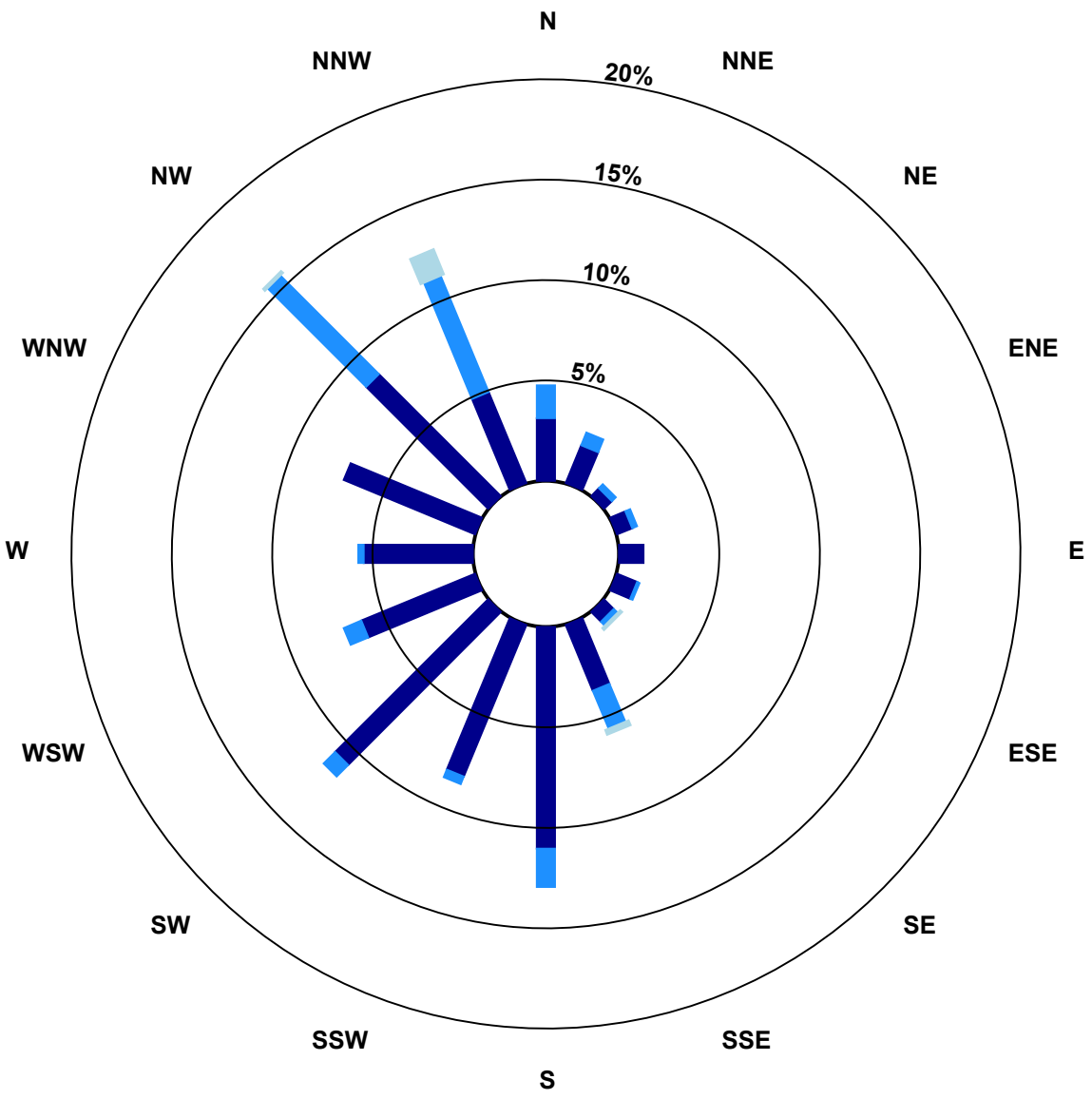
Total Number of Hours: 744

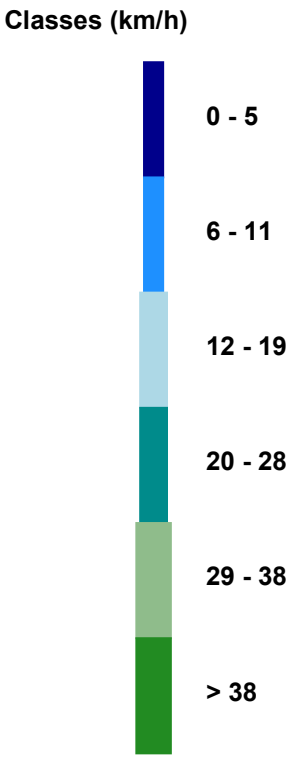
Wood Buffalo Environmental Association

Wind Rose Aug 2026

Wind Speed 10m (WS10) - km/h

Jackfish 1




Total Number of Valid Hours: 734

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7 km/h on Aug 5 22:00

Minimum Value: 0 km/h on Aug 24 22:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 1 Median = 2 $Q_3$ = 2 $P_{90}$ = 3 $P_{99}$ = 5

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 734 |
| Hours of Missing Data: | 10 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 98.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 1 | 3 | 2 | 3 | 5 |
| 2-Aug | 3 | 2 | 1 | 1 | 1 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 4 |
| 3-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 4 |
| 4-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 2 | 1 | 1 | 3 |
| 5-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 7 | 3 | 2 | 7 |
| 6-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 3 |
| 7-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| 8-Aug | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 |
| 9-Aug | UO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 10-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 |
| 11-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 4 | 4 | 4 | 4 | 5 | 4 | 1 | 2 | 1 | 2 | 2 | 1 | 5 |
| 12-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 4 |
| 13-Aug | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 14-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 5 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | UO | 5 |
| 15-Aug | 1 | 1 | 2 | 1 | 1 | 1 | UO | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | UO | 1 | 2 | 2 | 3 |
| 16-Aug | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 3 |
| 17-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 |
| 18-Aug | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 |
| 19-Aug | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 1 | 1 | 1 | 1 | 2 | 4 |
| 20-Aug | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | UO | UO | UO | 4 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 23-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 4 |
| 24-Aug | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 5 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 0 | 1 | 1 | 5 |
| 25-Aug | 1 | UO | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 |
| 27-Aug | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 2 | 2 | 3 | 2 | 2 | 5 |
| 28-Aug | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 4 |
| 29-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | UO | 1 | 1 | 1 | 4 |
| 30-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | UO | 1 | 1 | 1 | 1 | 2 | 1 | 2 |
| 31-Aug | 4 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 7 | 3 | 3 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Direction 10m (WD10) - deg

## Jackfish 1 - August 2026

Direction of Maximum Speed: 328 deg on Aug 2 16:00
Direction of Maximum Daily Speed Average: 158.5 deg on Aug 27

Direction of Minimum Speed: 161 deg on Aug 30 17:00

Direction of Minimum Daily Speed Average: 0.7 deg on Aug 30

Monthly Average Direction: 287.0 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 734 |
| Hours of Missing Data: | 10 |
| Percent Operational Time: | 98.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 178 | 180 | 171 | 174 | 180 | 171 | 167 | 169 | 175 | 169 | 152 | 147 | 155 | 144 | 150 | 157 | 193 | 187 | 188 | 187 | 179 | 220 | 321 | 335 | 167.3 |
| 2-Aug | 332 | 78 | 210 | 226 | 298 | 234 | 226 | 237 | 296 | 298 | 307 | 297 | 307 | 333 | 331 | 328 | 326 | 321 | 327 | 329 | 328 | 319 | 317 | 323 | 314.3 |
| 3-Aug | 320 | 305 | 309 | 302 | 301 | 291 | 309 | 313 | 313 | 315 | 332 | 333 | 324 | 324 | 327 | 318 | 319 | 312 | 285 | 234 | 188 | 257 | 240 | 243 | 314.5 |
| 4-Aug | 224 | 235 | 181 | 217 | 186 | 182 | 225 | 221 | 221 | 215 | 258 | 278 | 233 | 226 | 227 | 222 | 241 | 248 | 245 | 230 | 219 | 292 | 307 | 292 | 234.4 |
| 5-Aug | 299 | 301 | 303 | 305 | 296 | 292 | 300 | 302 | 311 | 311 | 313 | 316 | 317 | 312 | 316 | 314 | 308 | 276 | 252 | 226 | 296 | 332 | 333 | 317 | 309.3 |
| 6-Aug | 317 | 313 | 311 | 313 | 310 | 310 | 311 | 317 | 316 | 316 | 317 | 317 | 316 | 319 | 315 | 315 | 307 | 296 | 289 | 287 | 269 | 263 | 274 | 232 | 310.8 |
| 7-Aug | 227 | 245 | 249 | 262 | 287 | 252 | 254 | 270 | 266 | 286 | 315 | 306 | 304 | 313 | 310 | 309 | 295 | 289 | 240 | 218 | 218 | 324 | 306 | 273 | 284.4 |
| 8-Aug | 274 | 267 | 271 | 341 | 315 | 340 | 285 | 11 | 12 | 4 | 351 | 359 | 350 | 7 | 343 | 355 | 350 | 11 | 7 | 61 | 117 | 95 | 135 | 243 | 349.0 |
| 9-Aug | UO | 201 | 257 | 202 | 196 | 233 | 243 | 116 | 338 | 21 | 15 | 357 | 4 | 20 | 67 | 353 | 4 | 22 | 37 | 81 | 70 | 76 | 119 | 121 | 30.1 |
| 10-Aug | 180 | 207 | 212 | 207 | 339 | 329 | 91 | 154 | 134 | 84 | 341 | 16 | 40 | 0 | 18 | 19 | 11 | 349 | 339 | 330 | 312 | 330 | 321 | 320 | 0.2 |
| 11-Aug | 303 | 239 | 254 | 265 | 283 | 249 | 247 | 345 | 348 | 5 | 10 | 14 | 26 | 337 | 356 | 332 | 346 | 11 | 158 | 346 | 256 | 312 | 328 | 329 | 346.9 |
| 12-Aug | 304 | 286 | 282 | 261 | 292 | 281 | 301 | 342 | 4 | 338 | 339 | 348 | 1 | 358 | 321 | 333 | 334 | 341 | 345 | 335 | 335 | 332 | 335 | 339 | 336.4 |
| 13-Aug | 344 | 348 | 350 | 351 | 3 | 9 | 16 | 349 | 13 | 7 | 3 | 8 | 53 | 26 | 49 | 60 | 66 | 49 | 357 | 170 | 251 | 329 | 323 | 287 | 18.8 |
| 14-Aug | 308 | 314 | 307 | 306 | 285 | 305 | 313 | 336 | 336 | 18 | 82 | 145 | 341 | 339 | 24 | 146 | 205 | 175 | 195 | 253 | 228 | 167 | 181 | UO | 347.2 |
| 15-Aug | 217 | 201 | 217 | 208 | 225 | 191 | UO | 138 | 212 | 239 | 241 | 242 | 272 | 248 | 358 | 75 | 315 | 275 | 227 | 198 | UO | 187 | 207 | 208 | 233.8 |
| 16-Aug | 211 | 220 | 219 | 216 | 222 | 215 | 209 | 264 | 307 | 297 | 301 | 307 | 305 | 307 | 353 | 334 | 337 | 341 | 348 | 231 | 245 | 238 | 212 | 226 | 282.7 |
| 17-Aug | 224 | 227 | 223 | 225 | 211 | 189 | 196 | 240 | 260 | 310 | 316 | 304 | 321 | 292 | 271 | 271 | 242 | 244 | 213 | 218 | 204 | 214 | 206 | 179 | 248.6 |
| 18-Aug | 178 | 172 | 171 | 172 | 176 | 171 | 168 | 182 | 201 | 207 | 222 | 223 | 211 | 229 | 273 | 271 | 273 | 284 | 266 | 279 | 207 | 213 | 219 | 220 | 209.7 |
| 19-Aug | 220 | 219 | 215 | 210 | 221 | 216 | 193 | 198 | 262 | 285 | 288 | 282 | 305 | 324 | 317 | 309 | 306 | 301 | 330 | 238 | 197 | 240 | 269 | 269 | 278.1 |
| 20-Aug | 249 | 290 | 326 | 296 | 230 | 215 | 189 | 221 | 262 | 329 | 329 | 324 | 319 | 313 | 324 | 319 | 312 | 352 | 8 | 17 | 164 | UO | UO | UO | 317.8 |
| 21-Aug | 266 | 237 | 236 | 197 | 175 | 174 | 175 | 177 | 299 | 214 | 257 | 191 | 296 | 175 | 193 | 207 | 221 | 201 | 215 | 192 | 185 | 184 | 171 | 182 | 198.6 |
| 22-Aug | 188 | 190 | 193 | 188 | 188 | 187 | 190 | 191 | 188 | 195 | 186 | 181 | 174 | 188 | 184 | 187 | 199 | 199 | 201 | 198 | 184 | 174 | 177 | 177 | 188.3 |
| 23-Aug | 245 | 218 | 180 | 183 | 162 | 173 | 182 | 183 | 276 | 271 | 314 | 326 | 33 | 109 | 333 | 250 | 275 | 348 | 332 | 343 | 341 | 329 | 329 | 320 | 323.1 |
| 24-Aug | 321 | 303 | 219 | 205 | 249 | 293 | 321 | 330 | 324 | 325 | 331 | 335 | 333 | 330 | 330 | 327 | 325 | 332 | 330 | 330 | 326 | 271 | 260 | 236 | 321.9 |
| 25-Aug | 248 | UO | 230 | 249 | 242 | 231 | 218 | 5 | 298 | 309 | 342 | 349 | 337 | 341 | 336 | 348 | 341 | 13 | 33 | 86 | 151 | 184 | 207 | 181 | 330.7 |
| 26-Aug | 175 | 177 | 164 | 164 | 169 | 164 | 164 | 170 | 187 | 185 | 188 | 176 | 191 | 189 | 200 | 182 | 180 | 196 | 189 | 180 | 159 | 155 | 162 | 161 | 178.7 |
| 27-Aug | 166 | 169 | 158 | 164 | 164 | 163 | 166 | 165 | 165 | 147 | 148 | 204 | 174 | 169 | 154 | 159 | 167 | 165 | 151 | 122 | 129 | 142 | 149 | 152 | 158.5 |
| 28-Aug | 177 | 233 | 314 | 330 | 225 | 183 | 228 | 243 | 276 | 297 | 258 | 250 | 245 | 256 | 260 | 272 | 239 | 242 | 219 | 195 | 193 | 201 | 214 | 210 | 244.8 |
| 29-Aug | 219 | 214 | 216 | 210 | 201 | 201 | 218 | 218 | 216 | 226 | 270 | 270 | 225 | 222 | 226 | 215 | 213 | 209 | 198 | 188 | UO | 184 | 188 | 165 | 219.3 |
| 30-Aug | 178 | 155 | 333 | 118 | 53 | 83 | 127 | 307 | 327 | 114 | 218 | 273 | 217 | 149 | 185 | 210 | 161 | UO | 92 | 88 | 187 | 169 | 118 | 238 | 159.2 |
| 31-Aug | 339 | 349 | 307 | 303 | 305 | 307 | 304 | 308 | 317 | 326 | 318 | 325 | 330 | 323 | 309 | 326 | 308 | 300 | 218 | 218 | 214 | 202 | 189 | 235 | 308.2 |
| | 266.2 | 242.7 | 245.5 | 238.6 | 243.9 | 233.0 | 226.8 | 265.1 | 285.5 | 298.9 | 312.2 | 308.9 | 313.2 | 314.4 | 318.5 | 310.8 | 299.9 | 310.8 | 304.3 | 278.9 | 244.0 | 275.3 | 285.9 | 268.6 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

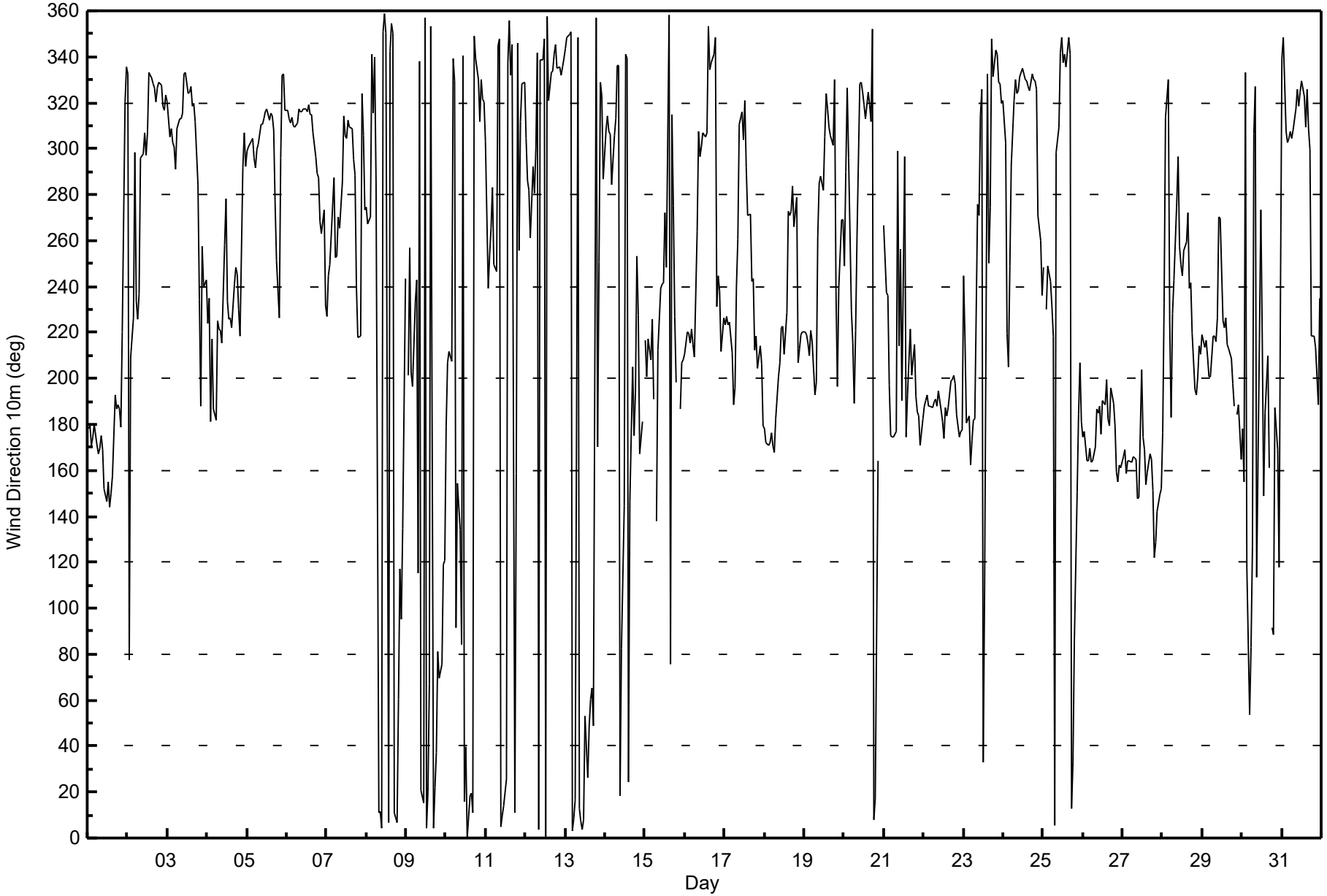
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Jackfish 1 - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Jackfish 1 - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 104 deg on Aug 30 13:00

Minimum Value: 9 deg on Aug 26 01:00

Percentiles: $P_1$ = 13 $P_{10}$ = 18 $Q_1$ = 25 Median = 38 $Q_3$ = 55 $P_{90}$ = 71 $P_{99}$ = 90

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 734 |
| Hours of Missing Data: | 10 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 98.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 30 | 31 | 16 | 23 | 27 | 24 | 28 | 36 | 47 | 45 | 36 | 33 | 37 | 32 | 34 | 41 | 55 | 54 | 45 | 45 | 26 | 89 | 28 | 16 | 89 |
| 2-Aug | 23 | 81 | 33 | 26 | 31 | 62 | 47 | 59 | 71 | 63 | 49 | 51 | 49 | 17 | 19 | 18 | 16 | 17 | 16 | 16 | 14 | 16 | 19 | 20 | 81 |
| 3-Aug | 18 | 21 | 16 | 27 | 23 | 31 | 23 | 24 | 30 | 34 | 23 | 22 | 23 | 23 | 27 | 26 | 22 | 35 | 70 | 45 | 66 | 77 | 74 | 24 | 77 |
| 4-Aug | 27 | 31 | 16 | 23 | 28 | 29 | 20 | 22 | 28 | 42 | 62 | 60 | 62 | 47 | 57 | 53 | 65 | 59 | 61 | 53 | 35 | 49 | 29 | 37 | 65 |
| 5-Aug | 34 | 27 | 25 | 30 | 38 | 38 | 40 | 33 | 34 | 31 | 27 | 32 | 48 | 29 | 26 | 30 | 30 | 72 | 63 | 65 | 67 | 22 | 20 | 20 | 72 |
| 6-Aug | 21 | 22 | 21 | 25 | 24 | 22 | 24 | 22 | 21 | 22 | 22 | 22 | 32 | 22 | 25 | 33 | 51 | 59 | 55 | 68 | 76 | 55 | 78 | 37 | 78 |
| 7-Aug | 47 | 66 | 70 | 87 | 37 | 57 | 64 | 53 | 53 | 60 | 39 | 37 | 48 | 46 | 49 | 42 | 57 | 65 | 56 | 21 | 28 | 77 | 94 | 58 | 94 |
| 8-Aug | 40 | 36 | 27 | 22 | 41 | 21 | 58 | 44 | 41 | 47 | 47 | 63 | 27 | 34 | 43 | 23 | 27 | 85 | 52 | 42 | 26 | 70 | 47 | 44 | 85 |
| 9-Aug | UO | 30 | 54 | 65 | 17 | 50 | 56 | 67 | 90 | 41 | 53 | 62 | 50 | 30 | 83 | 66 | 67 | 45 | 35 | 21 | 32 | 25 | 33 | 40 | 90 |
| 10-Aug | 12 | 47 | 67 | 38 | 46 | 31 | 28 | 41 | 47 | 76 | 60 | 75 | 70 | 46 | 36 | 35 | 30 | 23 | 17 | 16 | 49 | 13 | 22 | 27 | 76 |
| 11-Aug | 36 | 18 | 19 | 56 | 38 | 57 | 76 | 43 | 53 | 44 | 42 | 76 | 53 | 59 | 45 | 88 | 35 | 47 | 68 | 82 | 72 | 34 | 38 | 9 | 88 |
| 12-Aug | 29 | 31 | 74 | 28 | 38 | 49 | 33 | 24 | 35 | 27 | 30 | 36 | 42 | 58 | 76 | 31 | 18 | 22 | 23 | 15 | 16 | 13 | 16 | 21 | 76 |
| 13-Aug | 23 | 25 | 26 | 28 | 31 | 32 | 39 | 29 | 36 | 35 | 37 | 40 | 46 | 43 | 42 | 39 | 47 | 52 | 55 | 46 | 56 | 42 | 24 | 32 | 56 |
| 14-Aug | 29 | 15 | 28 | 36 | 31 | 27 | 34 | 18 | 27 | 74 | 50 | 81 | 48 | 23 | 44 | 58 | 83 | 54 | 70 | 42 | 73 | 64 | 80 | UO | 83 |
| 15-Aug | 72 | 74 | 27 | 25 | 67 | 82 | UO | 38 | 36 | 57 | 89 | 56 | 84 | 85 | 60 | 61 | 84 | 66 | 43 | 53 | UO | 31 | 38 | 32 | 89 |
| 16-Aug | 38 | 32 | 35 | 48 | 30 | 27 | 28 | 59 | 41 | 38 | 31 | 27 | 40 | 37 | 32 | 24 | 23 | 20 | 21 | 80 | 13 | 49 | 26 | 16 | 80 |
| 17-Aug | 17 | 22 | 19 | 22 | 40 | 51 | 42 | 39 | 63 | 60 | 41 | 49 | 60 | 88 | 86 | 88 | 82 | 95 | 38 | 14 | 30 | 23 | 19 | 27 | 95 |
| 18-Aug | 53 | 66 | 18 | 17 | 23 | 19 | 31 | 52 | 54 | 61 | 71 | 58 | 73 | 79 | 78 | 69 | 78 | 69 | 72 | 64 | 21 | 28 | 23 | 17 | 79 |
| 19-Aug | 18 | 18 | 27 | 22 | 33 | 62 | 42 | 43 | 59 | 60 | 54 | 55 | 59 | 28 | 23 | 35 | 44 | 42 | 63 | 69 | 59 | 63 | 73 | 53 | 73 |
| 20-Aug | 36 | 49 | 54 | 36 | 14 | 56 | 43 | 76 | 58 | 33 | 25 | 57 | 54 | 48 | 23 | 34 | 52 | 27 | 31 | 31 | 67 | UO | UO | UO | 76 |
| 21-Aug | 27 | 53 | 23 | 18 | 17 | 18 | 17 | 65 | 75 | 49 | 84 | 92 | 99 | 68 | 60 | 67 | 49 | 42 | 25 | 18 | 18 | 23 | 18 | 40 | 99 |
| 22-Aug | 47 | 44 | 51 | 52 | 45 | 44 | 51 | 57 | 60 | 55 | 59 | 51 | 56 | 51 | 49 | 54 | 54 | 48 | 52 | 21 | 66 | 21 | 26 | 29 | 66 |
| 23-Aug | 46 | 79 | 15 | 41 | 31 | 66 | 40 | 35 | 77 | 72 | 34 | 18 | 65 | 82 | 34 | 56 | 62 | 39 | 40 | 22 | 17 | 18 | 15 | 22 | 82 |
| 24-Aug | 27 | 40 | 36 | 35 | 77 | 45 | 21 | 16 | 18 | 16 | 19 | 18 | 23 | 19 | 18 | 19 | 18 | 18 | 15 | 14 | 17 | 14 | 16 | 18 | 77 |
| 25-Aug | 11 | UO | 21 | 37 | 20 | 21 | 17 | 32 | 51 | 58 | 44 | 28 | 41 | 38 | 42 | 55 | 39 | 29 | 33 | 25 | 27 | 15 | 68 | 10 | 68 |
| 26-Aug | 9 | 15 | 20 | 21 | 21 | 17 | 25 | 30 | 51 | 51 | 52 | 48 | 52 | 51 | 54 | 53 | 50 | 45 | 40 | 18 | 21 | 26 | 29 | 23 | 54 |
| 27-Aug | 26 | 27 | 24 | 19 | 21 | 20 | 25 | 29 | 40 | 40 | 35 | 61 | 53 | 47 | 39 | 42 | 41 | 40 | 34 | 20 | 21 | 32 | 34 | 31 | 61 |
| 28-Aug | 53 | 71 | 89 | 82 | 44 | 45 | 33 | 51 | 61 | 64 | 66 | 61 | 59 | 63 | 69 | 75 | 64 | 62 | 42 | 33 | 45 | 48 | 47 | 58 | 89 |
| 29-Aug | 31 | 15 | 18 | 27 | 24 | 17 | 25 | 34 | 44 | 55 | 79 | 70 | 69 | 58 | 57 | 62 | 50 | 48 | 50 | 13 | UO | 17 | 21 | 25 | 79 |
| 30-Aug | 30 | 64 | 42 | 43 | 74 | 65 | 23 | 79 | 20 | 90 | 93 | 85 | 104 | 45 | 50 | 29 | 86 | UO | 52 | 60 | 38 | 53 | 76 | 59 | 104 |
| 31-Aug | 48 | 87 | 39 | 34 | 25 | 24 | 38 | 23 | 29 | 24 | 33 | 43 | 32 | 39 | 50 | 31 | 77 | 77 | 34 | 11 | 25 | 36 | 24 | 21 | 87 |
| | 72 | 87 | 89 | 87 | 77 | 82 | 76 | 79 | 90 | 90 | 93 | 92 | 104 | 88 | 86 | 88 | 86 | 95 | 72 | 82 | 76 | 89 | 94 | 59 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS508
## KIRBY NORTH
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY NORTH (AMS 508)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 710 | 34 | 34 | 100 | 8.4 | 0 | 1.5 | 0 |
| H2S (ppb) Average | 708 | 36 | 36 | 100 | 1 | 0 | 0.2 | 0 |
| THC (ppm) Average | 710 | 34 | 34 | 100 | 2.9 | - | 2.4 | - |
| NO2 (ppb) Average | 705 | 39 | 39 | 100 | 4.7 | 0 | 1.4 | - |
| NO (ppb) Average | 705 | 39 | 39 | 100 | 5.7 | - | 1.2 | - |
| NOX (ppb) Average | 705 | 39 | 39 | 100 | 10.1 | - | 2.5 | - |
| Temperature 2 m (C) Average | 744 | 0 | 0 | 100 | 28.1 | - | 21.5 | - |
| Relative Humidity (%) Average | 744 | 0 | 0 | 100 | 98.4 | - | 90.6 | - |
| Wind Speed 10 m (km/h) Average | 743 | 0 | 1 | 99.87 | 23 | - | 15 | - |
| Wind Direction 10 m (deg) Average | 743 | 0 | 1 | 99.87 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY NORTH (AMS508)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 710 | 0.41 | 0.8 | - | 0 | 0 | 0.1 | 0.2 | 0.4 | 0.9 | 8.4 |
| H2S (ppb) Average | 708 | 0.15 | 0.1 | - | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 1 |
| THC (ppm) Average | 710 | 2.31 | 0.1 | - | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.9 |
| NO2 (ppb) Average | 705 | 0.91 | 0.6 | - | 0.1 | 0.3 | 0.5 | 0.8 | 1.1 | 1.6 | 4.7 |
| NO (ppb) Average | 705 | 0.25 | 0.5 | - | 0 | 0 | 0 | 0.1 | 0.3 | 0.6 | 5.7 |
| NOX (ppb) Average | 705 | 1.15 | 1 | - | 0.1 | 0.4 | 0.6 | 0.9 | 1.4 | 2.1 | 10.1 |
| Temperature 2 m (C) Average | 744 | 15.37 | 4.7 | - | 5.2 | 9.6 | 12 | 15 | 18.4 | 21.6 | 28.1 |
| Relative Humidity (%) Average | 744 | 73.45 | 17.8 | - | 32.7 | 47.5 | 58.9 | 76.3 | 89.3 | 94.8 | 98.4 |
| Wind Speed 10 m (km/h) Average | 743 | 9.2 | 4 | - | 0 | 4 | 6 | 9 | 12 | 15 | 23 |
| Wind Direction 10 m (deg) Average | 743 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY NORTH (AMS508)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| Wind Speed, Wind Direction | 11 Aug 2026 23:00 | 11 Aug 2026 23:00 | 1 | Flat line in sensor output signal |

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Sulphur Dioxide ($SO_2$) - ppb

## Kirby North - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 8.4 ppb on Aug 2 11:00 Maximum Daily Average: 1.5 ppb on Aug 2

Minimum Value: 0.0 ppb on Aug 2 00:00 Minimum Daily Average: 0.0 ppb on Aug 31

Maximum Diurnal Average: 0.7 ppb at hour 11 Minimum Diurnal Average: 0.2 ppb at hour 4

Monthly Average: 0.41 ppb Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.1 Median = 0.2 $Q_3$ = 0.4 $P_{90}$ = 0.9 $P_{99}$ = 4.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.4 | 0.4 | 0.2 | Z | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.3 | 1.5 | 0.2 | 0.0 | 0.4 | 1.5 |
| 2-Aug | 0.0 | 0.0 | 0.5 | 0.7 | Z | 3.3 | 0.1 | 0.1 | 3.0 | 7.1 | 8.4 | 5.8 | 3.2 | 0.4 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 1.5 | 8.4 |
| 3-Aug | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | Z | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.5 | 0.5 | 0.0 | 0.2 | 0.5 |
| 4-Aug | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 1.7 | 0.0 | 0.7 | 0.2 | 3.1 | 3.6 | 2.5 | 0.6 | 3.6 |
| 5-Aug | 0.7 | Z | 0.1 | 0.1 | 0.3 | 0.6 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.6 | 1.1 | 4.4 | 0.9 | 0.3 | 3.8 | 3.9 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.8 | 4.4 |
| 6-Aug | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | C | C | C | 0.1 | 2.1 | 0.6 | 1.8 | 0.4 | 1.5 | 0.9 | 2.2 | 4.2 | 5.2 | 1.0 | 5.2 |
| 7-Aug | 2.6 | 1.6 | 2.5 | Z | 5.9 | 4.5 | 0.8 | 0.6 | 0.5 | 0.4 | 0.1 | 1.0 | 2.4 | 0.1 | 1.0 | 0.5 | 0.2 | 0.0 | 0.2 | 0.3 | 0.1 | 1.0 | 2.0 | 0.0 | 1.2 | 5.9 |
| 8-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.3 | 0.4 | 0.6 | 0.5 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.6 |
| 9-Aug | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.4 | 0.6 | 0.9 | 2.3 | 1.1 | 0.4 | 0.5 | 0.5 | 2.1 | 0.7 | 0.8 | 1.6 | 1.5 | 0.7 | 0.5 | 0.3 | 0.2 | 0.7 | 2.3 |
| 10-Aug | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.4 | 0.4 | 1.1 | 1.1 | 0.9 | 0.6 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 1.1 |
| 11-Aug | 0.3 | Z | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 12-Aug | 0.2 | 0.2 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.9 | 0.6 | 1.0 | 0.5 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 |
| 13-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 1.0 | 1.1 | 0.9 | 0.4 | 0.8 | 0.4 | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 1.1 |
| 14-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.5 | 0.6 | 0.7 | 2.5 | 0.8 | 0.3 | 0.0 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.3 | 2.5 |
| 15-Aug | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 1.1 | 0.3 | 0.2 | 0.2 | 0.4 | 0.6 | 0.3 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 1.1 |
| 16-Aug | Z | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 1.0 | 0.3 | 0.4 | 0.3 | 0.5 | 0.7 | 0.3 | 0.1 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 1.0 |
| 17-Aug | 0.2 | Z | 0.1 | 0.4 | 3.1 | 0.4 | 0.3 | 0.4 | 0.3 | 0.9 | 1.2 | 0.3 | 1.0 | 0.5 | 1.0 | 0.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.5 | 3.1 |
| 18-Aug | 0.2 | 0.1 | Z | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.7 | 0.2 | 1.7 | 0.6 | 1.9 | 0.7 | 1.2 | 1.0 | 0.2 | 0.5 | 1.9 |
| 19-Aug | 0.1 | 0.2 | 0.1 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.8 | 1.2 | 1.3 | 2.1 | 1.2 | 0.3 | 0.5 | 1.0 | 0.3 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 2.1 |
| 20-Aug | 0.2 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.5 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.3 | 1.0 | 0.8 | 0.5 | 0.2 | 1.0 |
| 21-Aug | 1.3 | 0.5 | 0.1 | 0.0 | 0.0 | Z | 0.4 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 1.3 |
| 22-Aug | Z | 0.1 | 0.0 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 |
| 23-Aug | 0.1 | Z | 0.3 | 0.2 | 0.4 | 0.3 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.2 | 0.3 | 0.2 | 1.1 | 0.5 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.1 |
| 24-Aug | 0.1 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 1.1 | 2.1 | 0.8 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 2.1 |
| 25-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 1.2 | 0.7 | 1.3 | 1.0 | 1.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.2 | 0.2 | 0.0 | 0.4 | 1.3 |
| 26-Aug | 0.1 | 0.1 | 0.2 | 0.1 | Z | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.7 | 0.7 | 0.6 | 0.3 | 0.7 |
| 27-Aug | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | Z | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 1.1 | 0.7 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.5 | 0.6 | 0.9 | 0.5 | 0.6 | 0.5 | 0.6 | 1.1 |
| 28-Aug | Z | 1.1 | 3.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 0.5 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.5 | 0.4 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 3.3 |
| 29-Aug | 0.0 | Z | 0.1 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.1 | 0.5 |
| 30-Aug | 0.0 | 0.0 | Z | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.4 | 0.1 | 0.1 | 0.6 |
| 31-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| | 0.3 | 0.2 | 0.4 | 0.2 | 0.5 | 0.5 | 0.2 | 0.2 | 0.4 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.2 | 0.3 | 0.2 | 0.5 | 0.5 | 0.4 | Diurnal Average | |
| | 2.6 | 1.6 | 3.3 | 0.7 | 5.9 | 4.5 | 0.8 | 0.8 | 3.0 | 7.1 | 8.4 | 5.8 | 3.2 | 4.4 | 1.2 | 2.1 | 3.8 | 3.9 | 1.6 | 1.9 | 0.9 | 3.1 | 4.2 | 5.2 | Diurnal Maximum | |

Z - zerospan C - Calibration

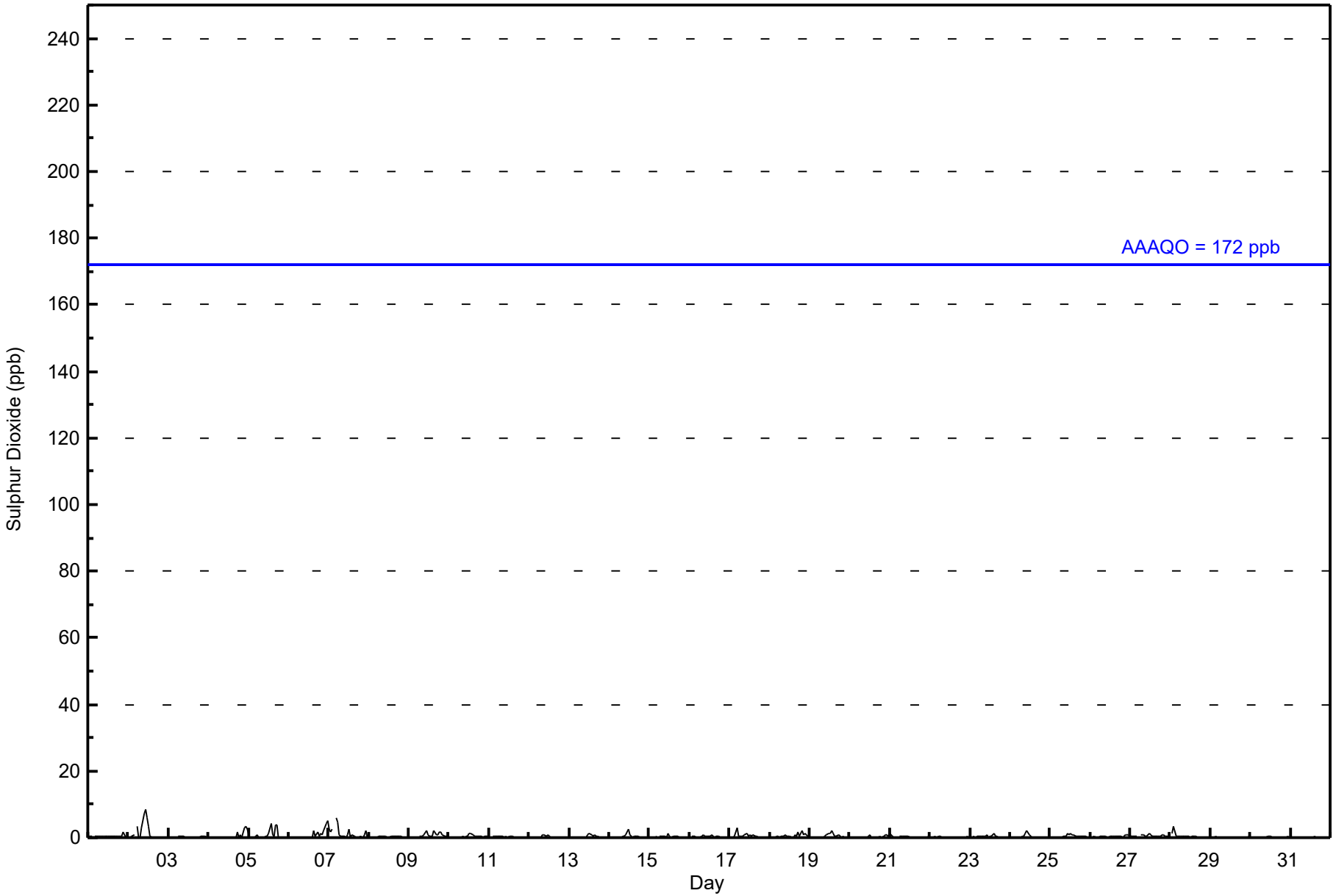
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**Kirby North - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 710 | 100.00 | 100.00 |
| 11 - 20 | 0 | 0.00 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**Kirby North - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 42 | 54 | 20 | 20 | 8 | 10 | 32 | 75 | 60 | 52 | 65 | 41 | 29 | 80 | 66 | 55 | 709 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 42 | 54 | 20 | 20 | 8 | 10 | 32 | 75 | 60 | 52 | 65 | 41 | 29 | 80 | 66 | 55 | 709 |

Total Number of Valid Hours: 709

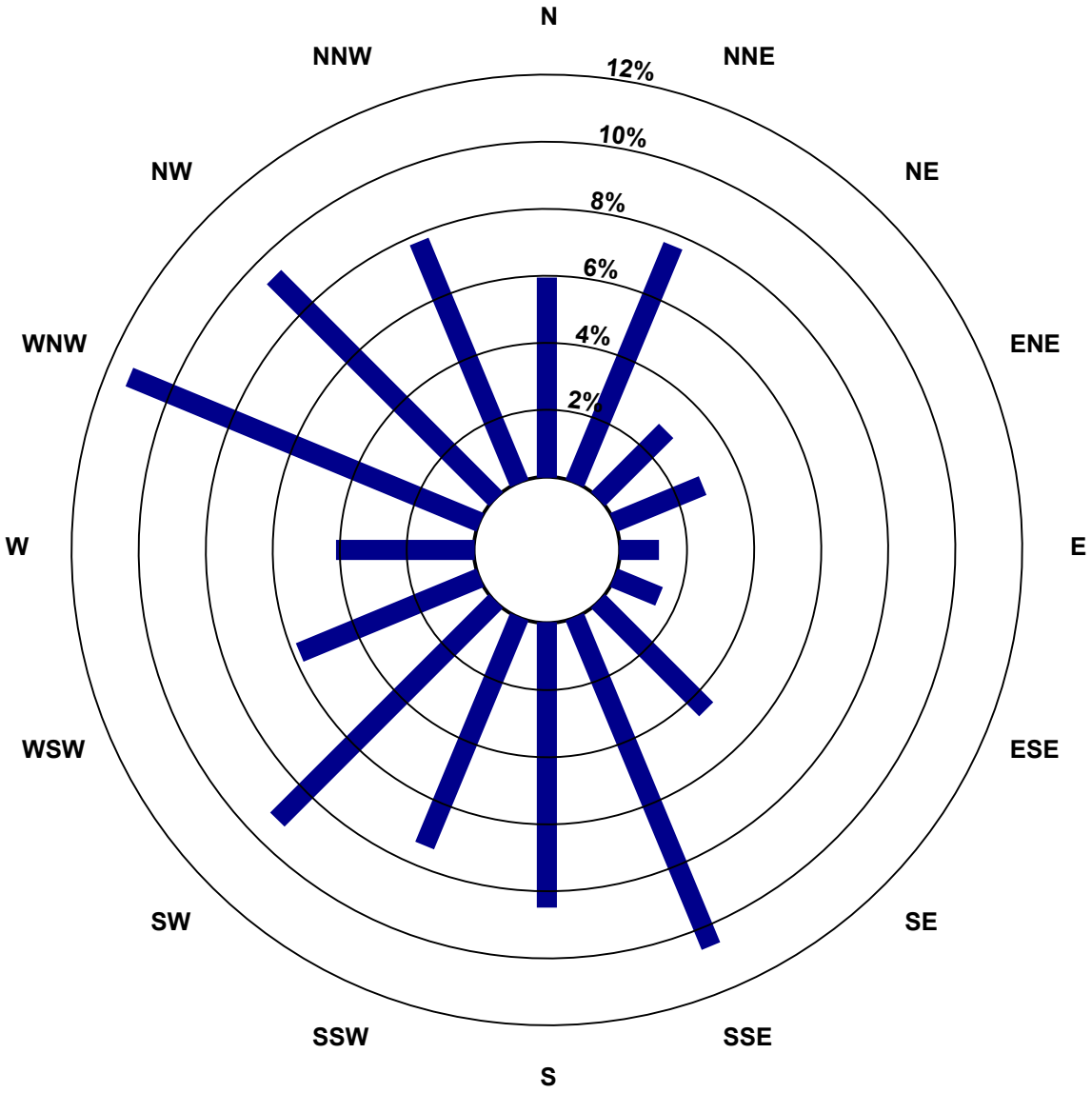
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

Kirby North




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

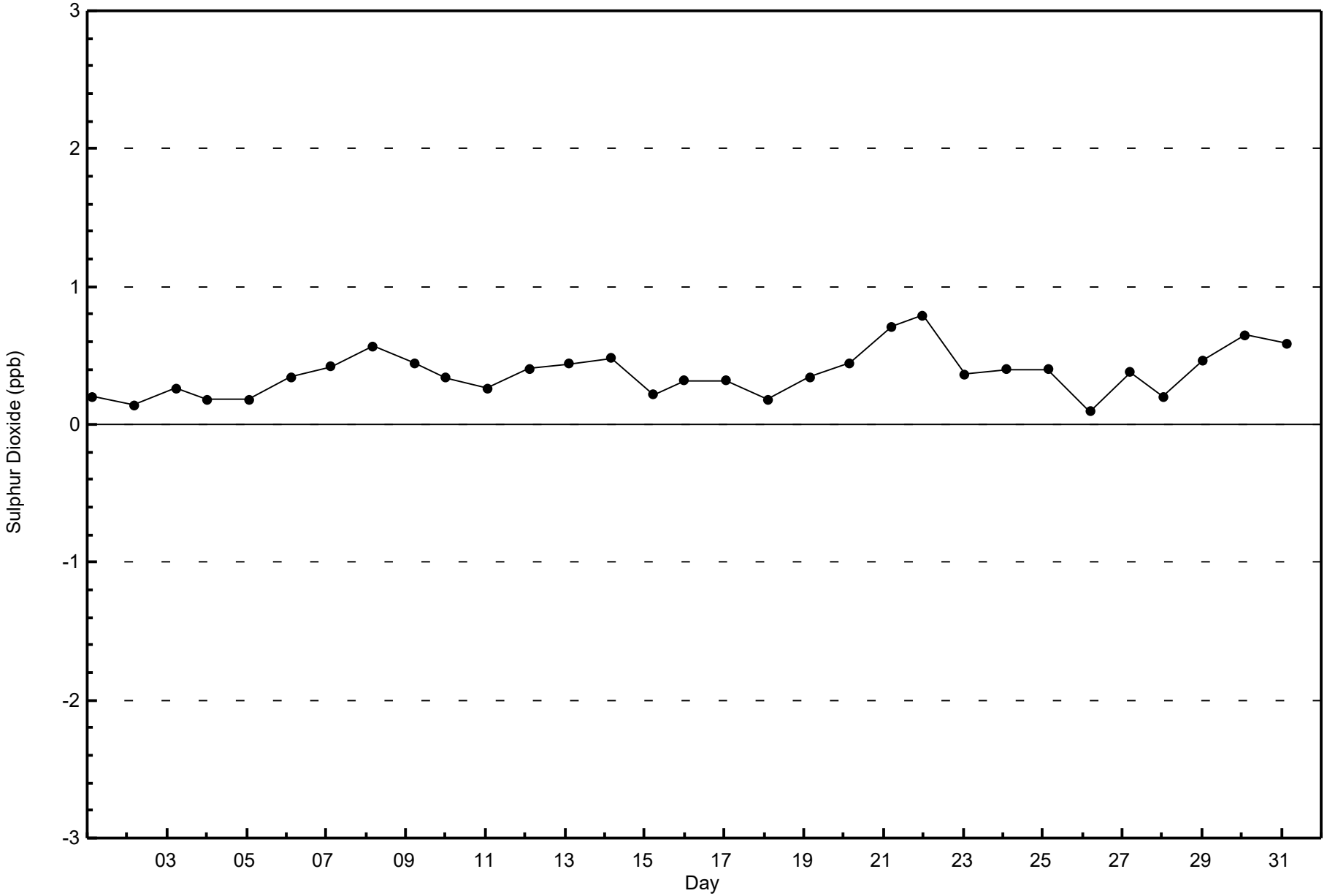
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Kirby North - August 2026**

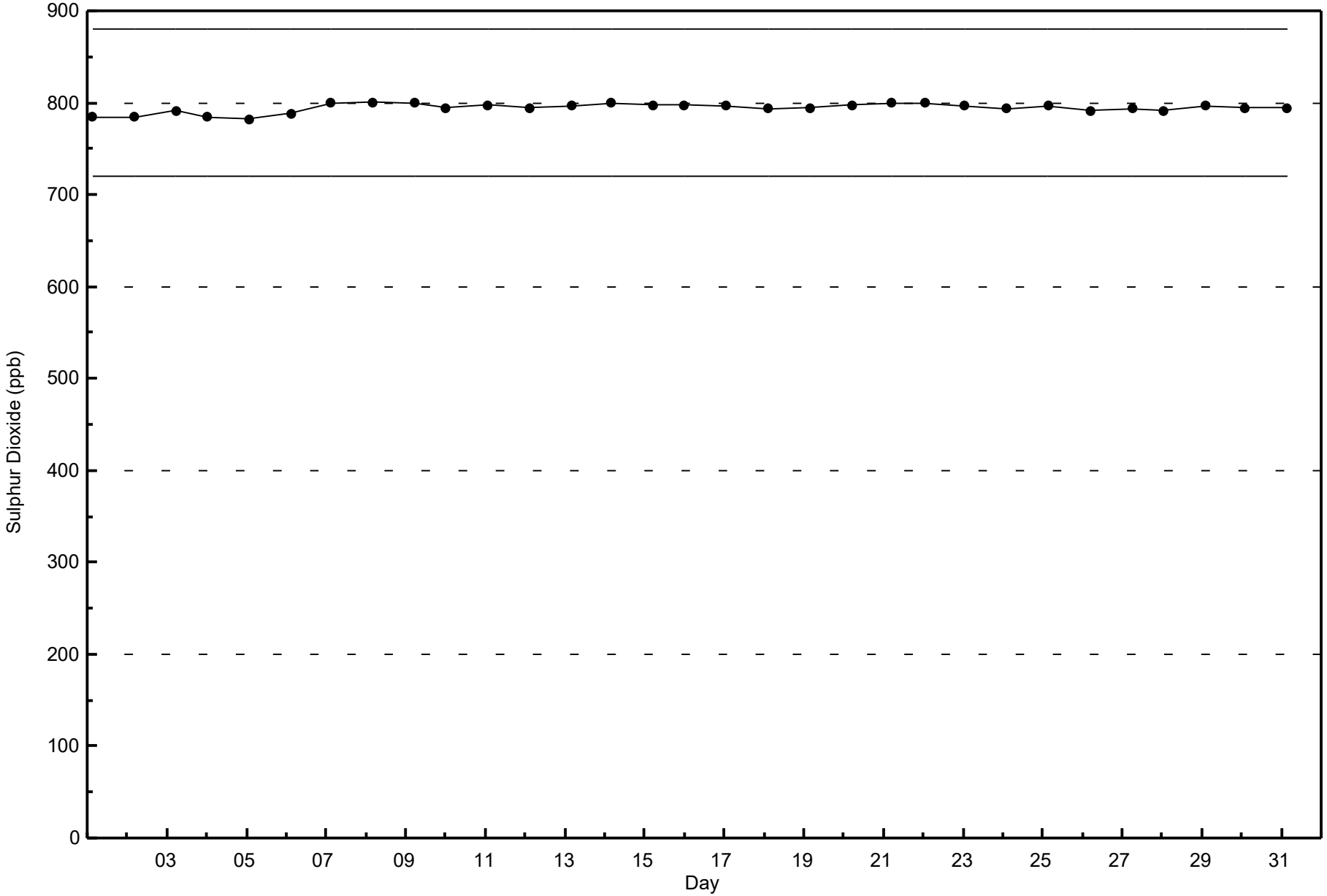


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**Kirby North - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Hydrogen Sulphide ($H_2S$) - ppb

## Kirby North - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.0 ppb on Aug 18 22:00 Maximum Daily Average: 0.2 ppb on Aug 22

Minimum Value: 0.0 ppb on Aug 28 13:00
Maximum Diurnal Average: 0.2 ppb at hour 20
Monthly Average: 0.15 ppb

Minimum Daily Average: 0.1 ppb on Aug 28
Minimum Diurnal Average: 0.1 ppb at hour 14
Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.1 $Q_1$ = 0.1 Median = 0.1 $Q_3$ = 0.2 $P_{90}$ = 0.3 $P_{99}$ = 0.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 708 |
| Hours of Missing Data: | 36 |
| Hours of Calibration: | 36 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.1 | 0.1 | 0.1 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 2-Aug | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 3-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 4-Aug | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 5-Aug | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 6-Aug | 0.0 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 |
| 7-Aug | 0.1 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.2 | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 8-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 |
| 9-Aug | Z | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.6 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.6 |
| 10-Aug | 0.1 | Z | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.5 |
| 11-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| 12-Aug | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 13-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| 14-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 |
| 15-Aug | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 16-Aug | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 17-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 18-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 1.0 | 0.2 | 0.1 | 0.2 | 1.0 |
| 19-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| 20-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.2 | 0.1 | 0.1 | 0.1 | C | C | C | C | C | 0.4 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 |
| 21-Aug | Z | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 22-Aug | 0.1 | Z | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 23-Aug | 0.2 | 0.2 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 24-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 25-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 26-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 27-Aug | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| 28-Aug | 0.1 | Z | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| 29-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 30-Aug | 0.1 | 0.1 | 0.1 | Z | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 |
| 31-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 |
| | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | Diurnal Average | |
| | 0.2 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 1.0 | 0.3 | 0.3 | Diurnal Maximum | |

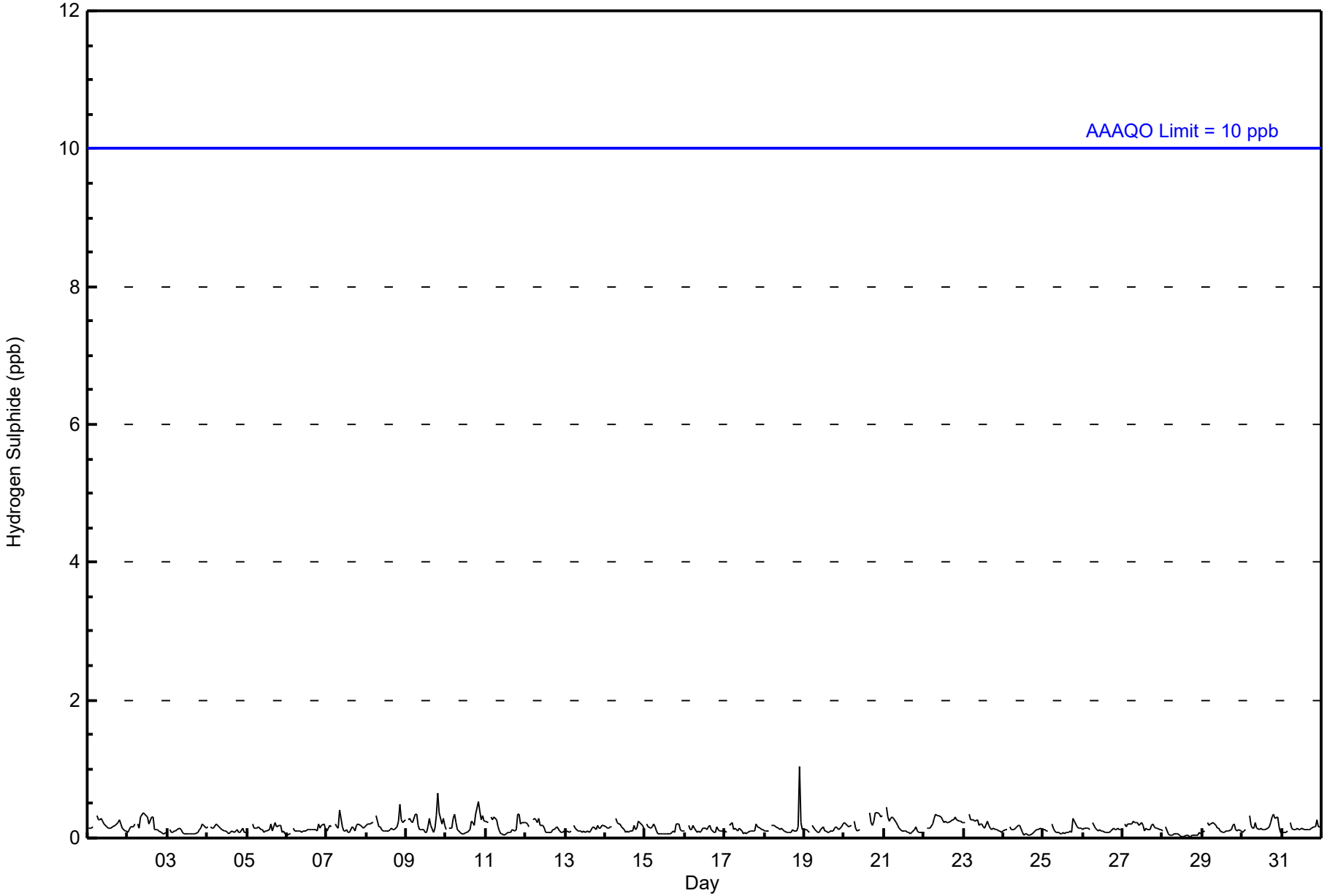
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Kirby North - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 708 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 708

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Kirby North - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 42 | 56 | 17 | 20 | 7 | 10 | 32 | 76 | 62 | 52 | 65 | 39 | 29 | 80 | 66 | 54 | 707 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 42 | 56 | 17 | 20 | 7 | 10 | 32 | 76 | 62 | 52 | 65 | 39 | 29 | 80 | 66 | 54 | 707 |

Total Number of Valid Hours: 707

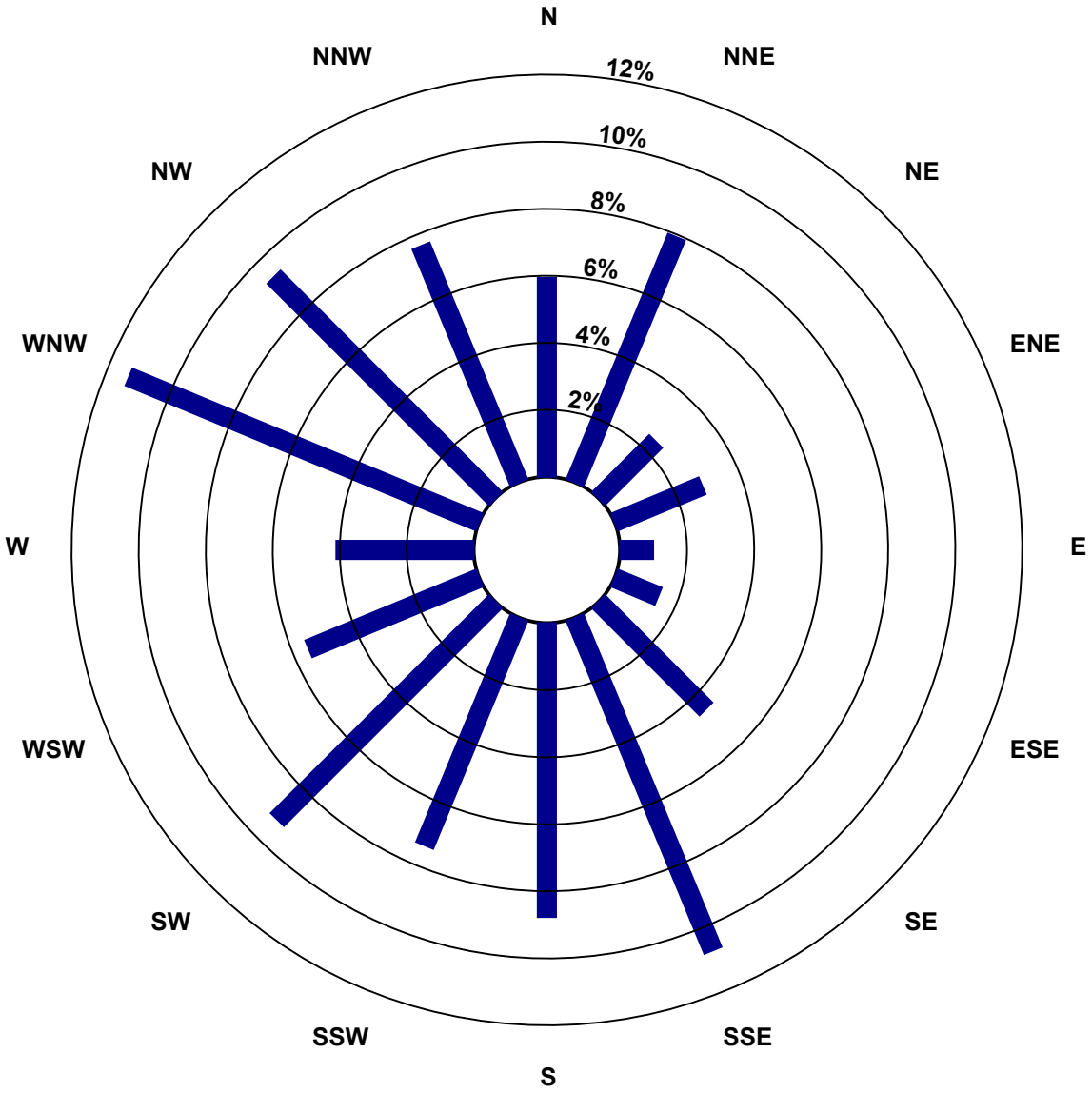
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

Kirby North




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

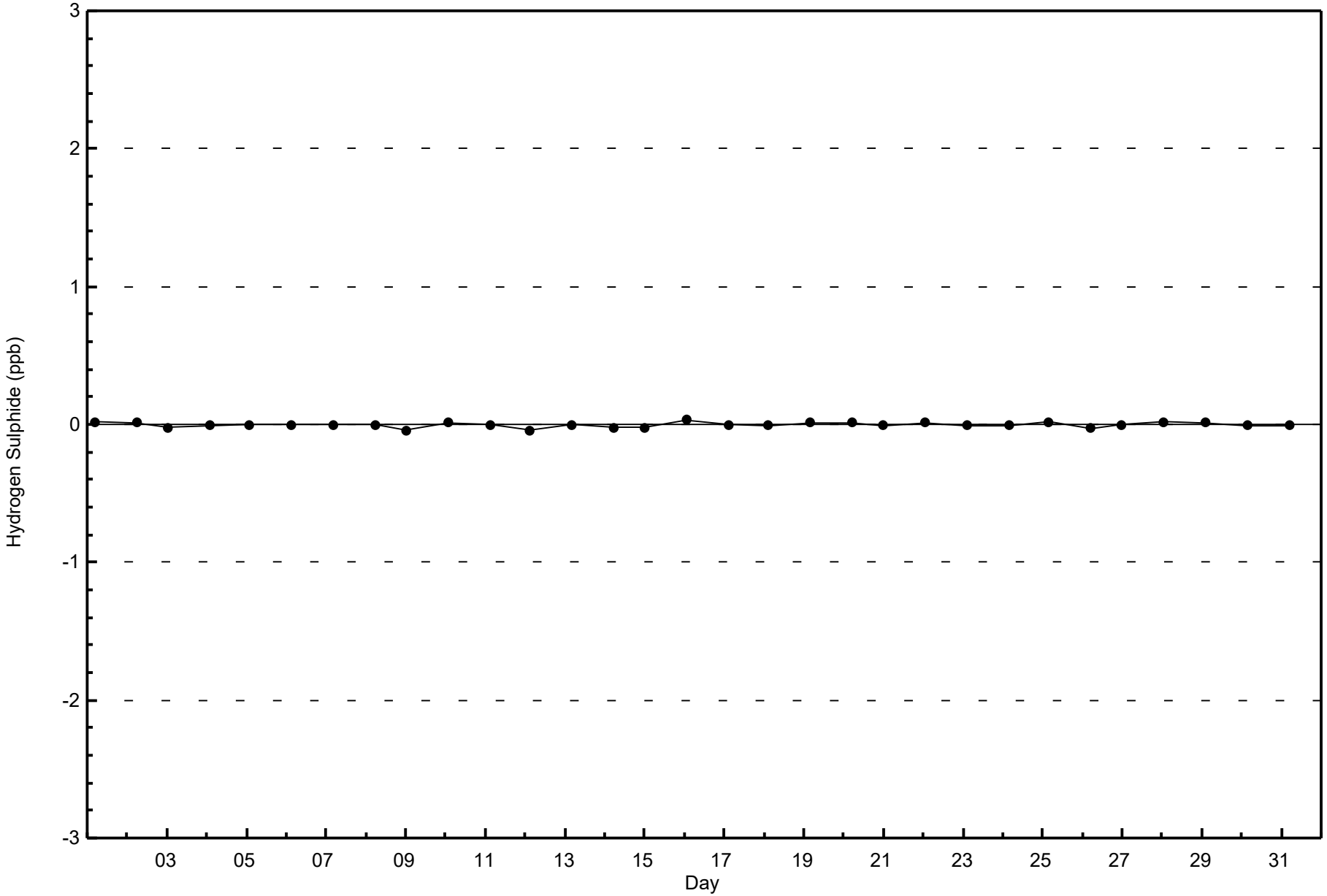
Total Number of Valid Hours: 707

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Kirby North - August 2026**

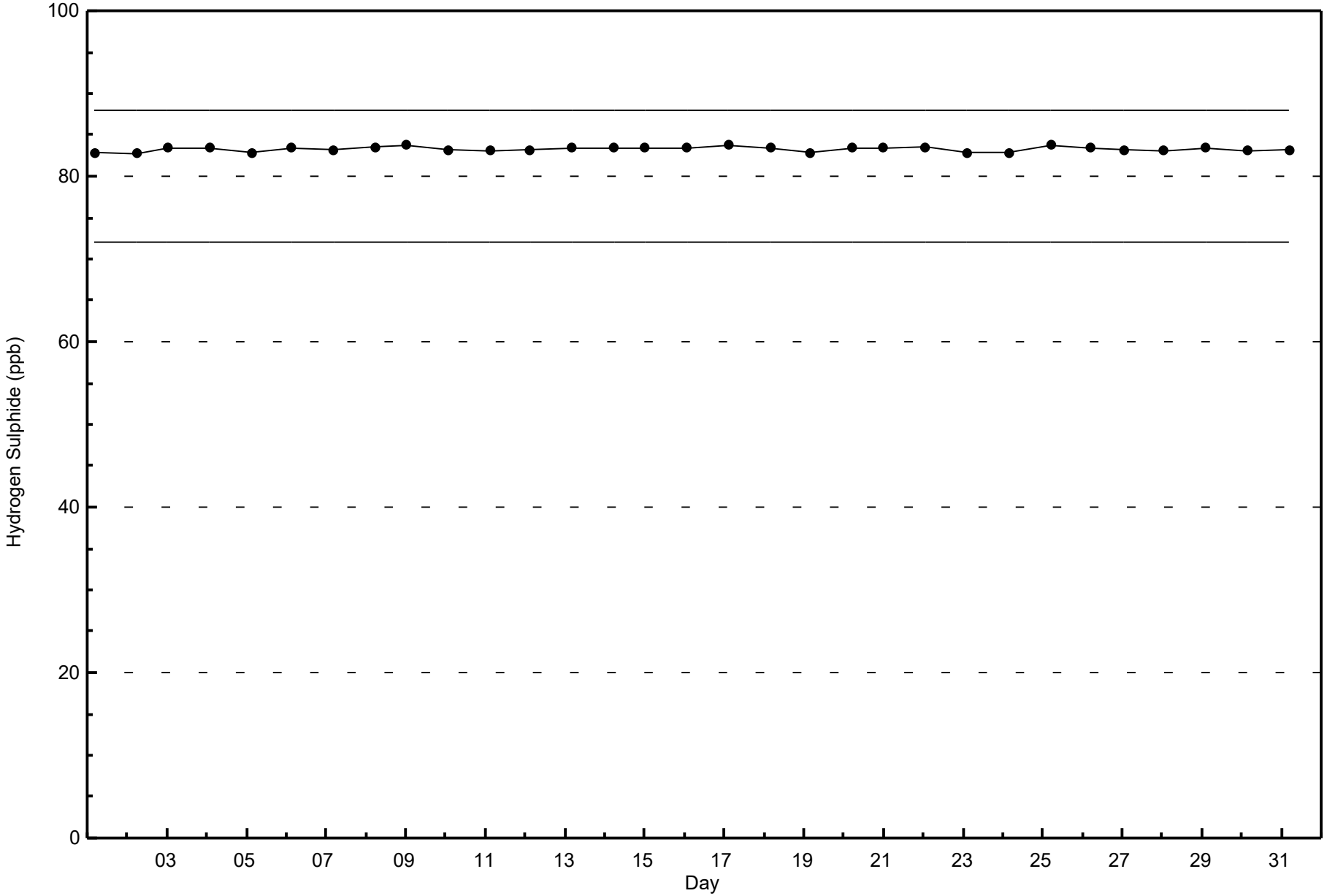


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**Kirby North - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Total Hydrocarbons (THC) - ppm

## Kirby North - August 2026

Maximum Value: 2.9 ppm on Aug 25 06:00

Maximum Daily Average: 2.4 ppm on Aug 15

Minimum Value: 2.1 ppm on Aug 11 14:00

Minimum Daily Average: 2.2 ppm on Aug 10

Maximum Diurnal Average: 2.4 ppm at hour 5

Minimum Diurnal Average: 2.2 ppm at hour 14

Monthly Average: 2.31 ppm

Percentiles: $P_1$ = 2.1 $P_{10}$ = 2.2 $Q_1$ = 2.2 Median = 2.3 $Q_3$ = 2.4 $P_{90}$ = 2.5 $P_{99}$ = 2.7

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 710 |
| Hours of Missing Data: | 34 |
| Hours of Calibration: | 34 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 2.4 | 2.4 | 2.4 | Z | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.5 |
| 2-Aug | 2.2 | 2.3 | 2.4 | 2.4 | Z | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 3-Aug | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 4-Aug | Z | 2.3 | 2.4 | 2.4 | 2.5 | 2.4 | 2.5 | 2.5 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 |
| 5-Aug | 2.2 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 |
| 6-Aug | 2.2 | 2.2 | Z | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | C | C | C | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 7-Aug | 2.3 | 2.3 | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 8-Aug | 2.4 | 2.5 | 2.5 | 2.4 | Z | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.5 |
| 9-Aug | 2.3 | 2.4 | 2.5 | 2.4 | 2.4 | Z | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.5 |
| 10-Aug | Z | 2.2 | 2.2 | 2.2 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.4 |
| 11-Aug | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | 2.3 | 2.5 |
| 12-Aug | 2.4 | 2.4 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 13-Aug | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 14-Aug | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.5 | 2.3 | 2.5 |
| 15-Aug | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | Z | 2.8 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.8 |
| 16-Aug | Z | 2.5 | 2.6 | 2.5 | 2.5 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.6 |
| 17-Aug | 2.6 | Z | 2.6 | 2.5 | 2.4 | 2.5 | 2.6 | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.6 |
| 18-Aug | 2.3 | 2.4 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 19-Aug | 2.4 | 2.5 | 2.5 | Z | 2.6 | 2.6 | 2.6 | 2.7 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.7 |
| 20-Aug | 2.4 | 2.5 | 2.5 | 2.5 | Z | 2.5 | 2.7 | 2.7 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.7 |
| 21-Aug | 2.4 | 2.5 | 2.5 | 2.5 | 2.7 | Z | 2.4 | 2.4 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.7 |
| 22-Aug | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 |
| 23-Aug | 2.4 | Z | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.6 | 2.8 | 2.7 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.2 | 2.4 | 2.5 | 2.3 | 2.3 | 2.3 | 2.2 | 2.4 | 2.8 |
| 24-Aug | 2.3 | 2.3 | Z | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.4 |
| 25-Aug | 2.3 | 2.3 | 2.6 | Z | 2.8 | 2.9 | 2.7 | 2.7 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.9 |
| 26-Aug | 2.3 | 2.4 | 2.4 | 2.4 | Z | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 |
| 27-Aug | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | Z | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 28-Aug | Z | 2.4 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.4 |
| 29-Aug | 2.3 | Z | 2.4 | 2.4 | 2.6 | 2.7 | 2.5 | 2.5 | 2.5 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.7 |
| 30-Aug | 2.3 | 2.3 | Z | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.2 | 2.3 | 2.5 |
| 31-Aug | 2.2 | 2.2 | 2.3 | Z | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.5 |
| | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | Diurnal Average | |
| | 2.6 | 2.5 | 2.6 | 2.6 | 2.8 | 2.9 | 2.8 | 2.8 | 2.6 | 2.8 | 2.7 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.5 | 2.4 | 2.5 | 2.5 | 2.5 | Diurnal Maximum | |

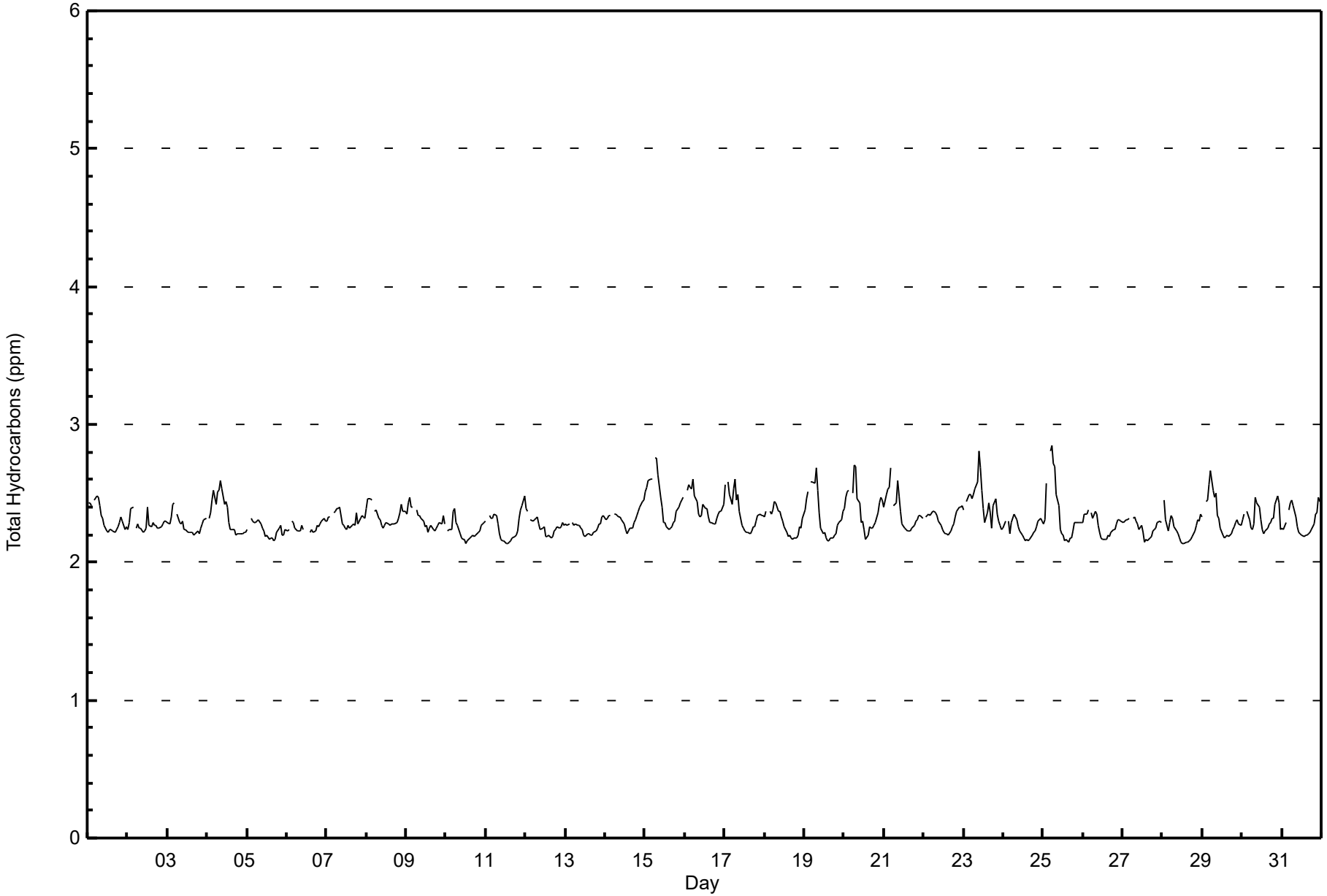
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Total Hydrocarbons (THC) - ppm**

**Kirby North - August 2026**



**Wood Buffalo Environmental Association**

**Cumulative Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Kirby North - August 2026**

| Concentration Ranges (ppm) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2.0 | 0 | 0.00 | 0.00 |
| 2.1 - 3.0 | 710 | 100.00 | 100.00 |
| 3.1 - 10.0 | 0 | 0.00 | 100.00 |
| > 10.0 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 710

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Total Hydrocarbons (THC) - ppm**

**Kirby North - August 2026**

| Concentration Ranges (ppm) | Wind Direction N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 - 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.1 - 3.0 | 42 | 54 | 20 | 20 | 8 | 10 | 32 | 75 | 60 | 52 | 65 | 41 | 29 | 80 | 66 | 55 | 709 |
| 3.1 - 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 10.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 42 | 54 | 20 | 20 | 8 | 10 | 32 | 75 | 60 | 52 | 65 | 41 | 29 | 80 | 66 | 55 | 709 |

Total Number of Valid Hours: 709

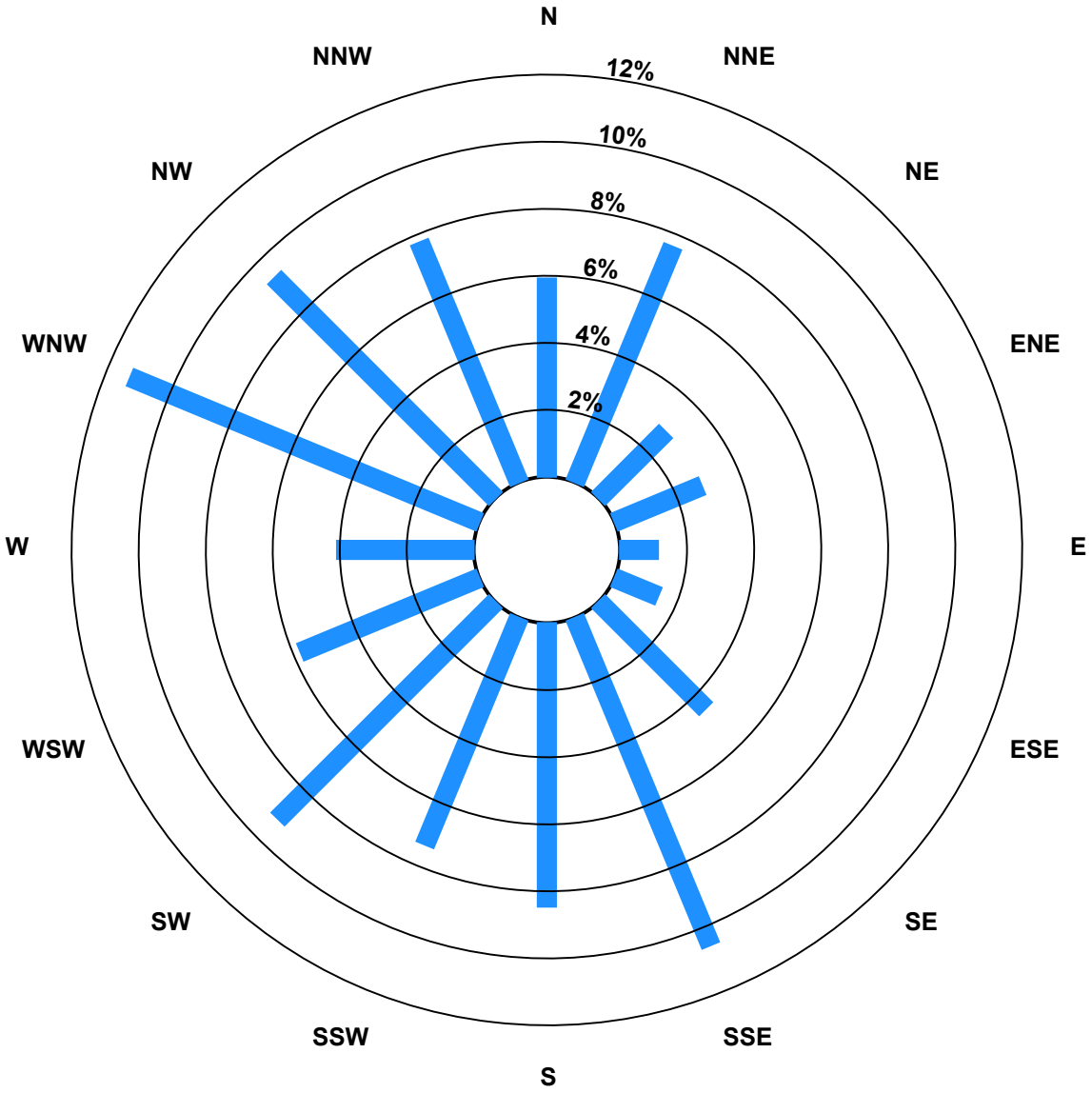
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Total Hydrocarbons (THC) - ppm

Kirby North




Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

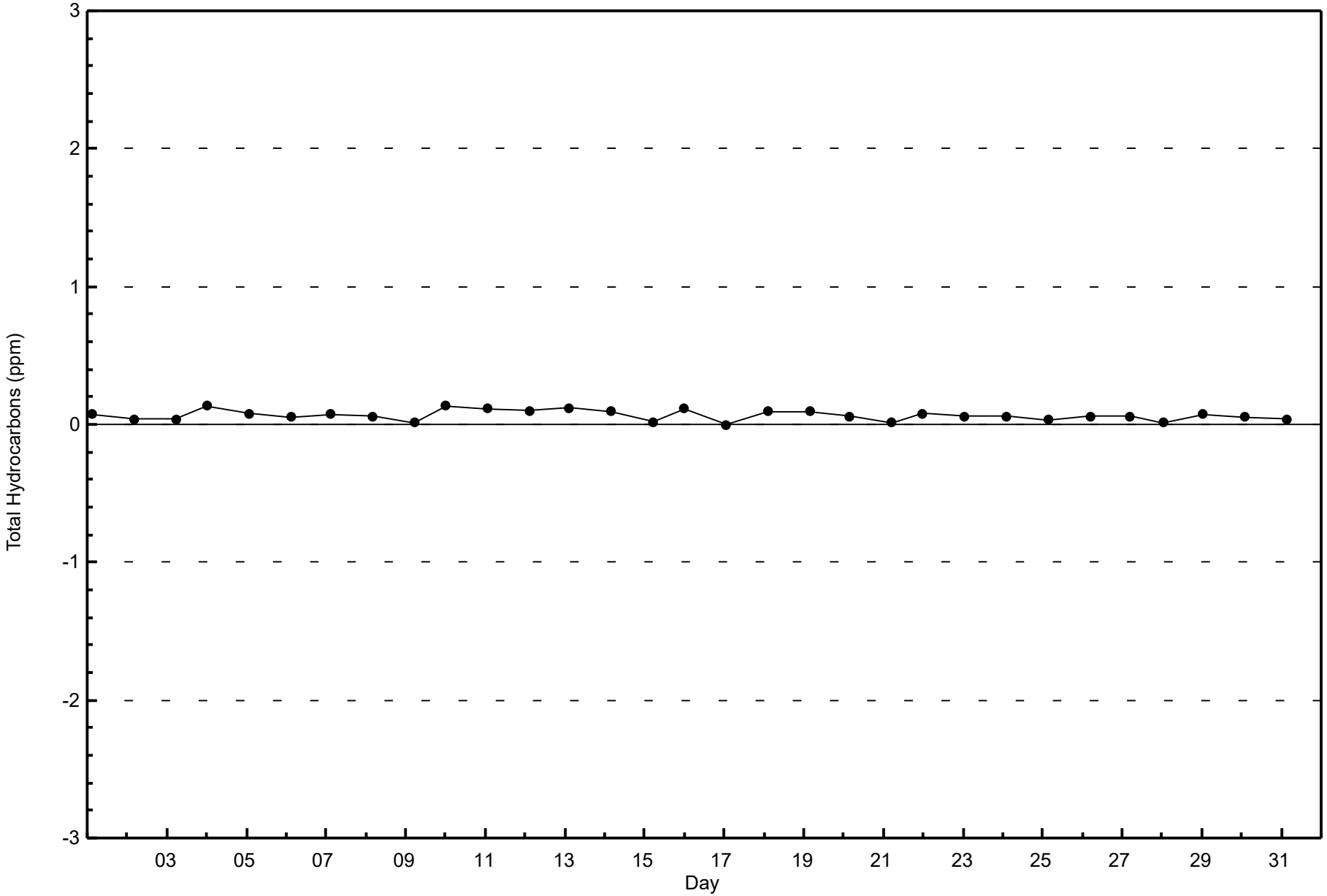
Total Number of Valid Hours: 709

**Wood Buffalo Environmental Association**

**Zero Responses**

**Total Hydrocarbons (THC) - ppm**

**Kirby North - August 2026**

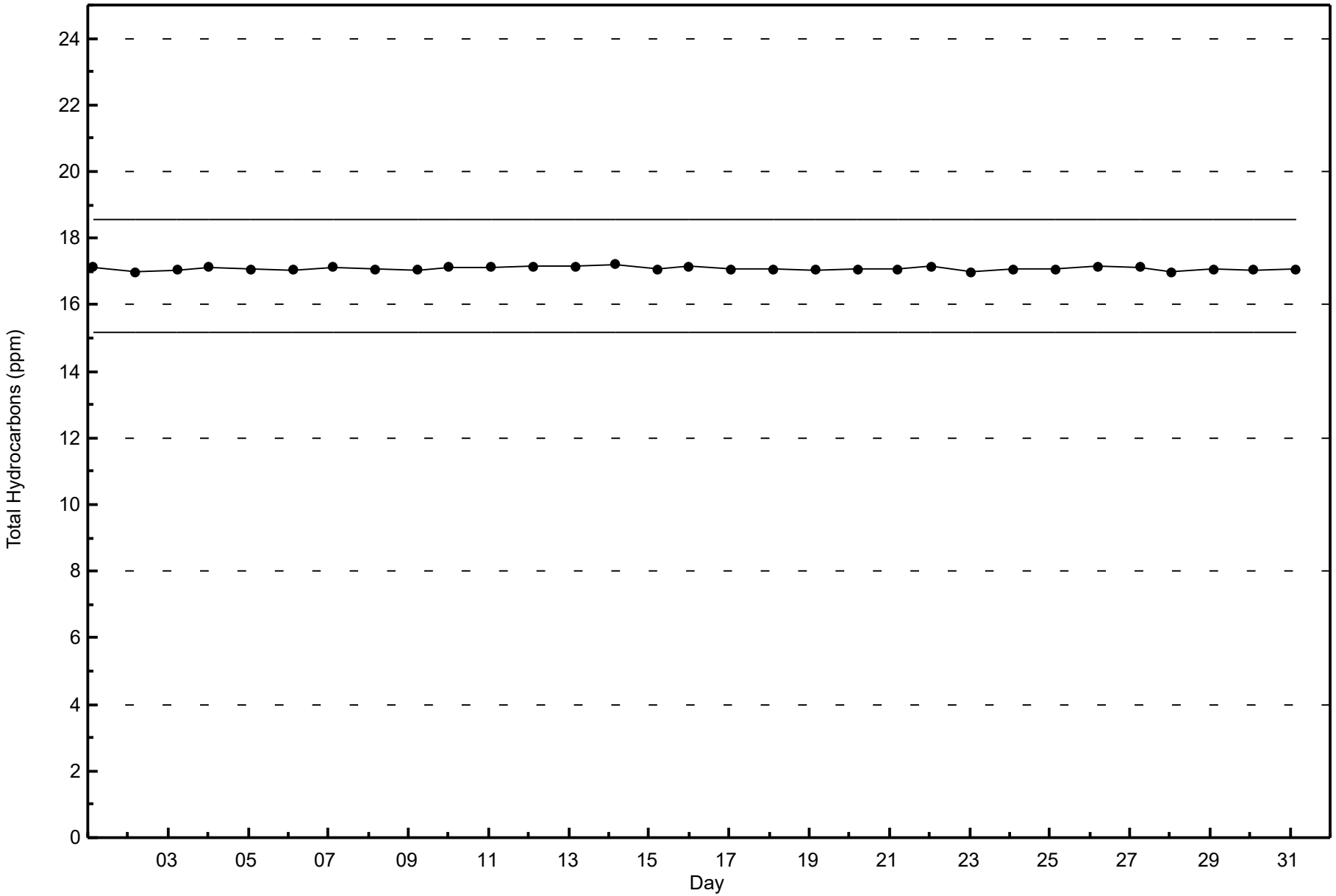


**Wood Buffalo Environmental Association**

**Span Responses**

**Total Hydrocarbons (THC) - ppm**

**Kirby North - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitric Oxide (NO) - ppb

## Kirby North - August 2026

Maximum Value: 5.7 ppb on Aug 2 11:00

Maximum Daily Average: 1.2 ppb on Aug 2

Minimum Value: 0.0 ppb on Aug 5 20:00

Minimum Daily Average: 0.0 ppb on Aug 26

Maximum Diurnal Average: 0.5 ppb at hour 11

Minimum Diurnal Average: 0.0 ppb at hour 19

Monthly Average: 0.25 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.1 $Q_3$ = 0.3 $P_{90}$ = 0.6 $P_{99}$ = 2.4

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 39 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.1 | 0.1 | 0.4 |
| 2-Aug | 0.1 | 0.1 | Z | 0.5 | 2.4 | 2.1 | 0.1 | 0.3 | 2.4 | 4.7 | 5.7 | 3.7 | 2.3 | 0.9 | 0.9 | 1.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 5.7 |
| 3-Aug | 0.0 | 0.0 | 0.1 | Z | 0.1 | 0.1 | 0.3 | 0.7 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 | 0.1 | 0.0 | 0.1 | 0.4 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.7 |
| 4-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.8 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.8 | 0.1 | 0.3 | 0.1 | 1.3 | 1.4 | 1.0 | 0.4 | 1.4 |
| 5-Aug | 0.2 | 0.0 | 0.1 | 0.1 | 0.4 | Z | 0.3 | 0.5 | 0.5 | 0.4 | C | C | C | C | C | C | C | C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 0.5 |
| 6-Aug | Z | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.5 | 0.4 | 0.2 | 0.1 | 0.3 | 0.2 | 0.6 | 0.7 | 1.8 | 0.6 | 1.2 | 0.2 | 1.4 | 0.5 | 1.4 | 2.7 | 3.8 | 0.7 | 3.8 |
| 7-Aug | 1.4 | Z | 1.8 | 1.8 | 4.0 | 2.9 | 1.2 | 0.9 | 0.8 | 0.7 | 0.3 | 0.8 | 1.4 | 0.2 | 0.8 | 0.5 | 0.3 | 0.2 | 0.1 | 0.0 | 0.1 | 0.5 | 0.9 | 0.0 | 0.9 | 4.0 |
| 8-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 9-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | 0.7 | 0.2 | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 |
| 10-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 11-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 12-Aug | Z | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.2 | 0.3 | 0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 13-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 14-Aug | 0.0 | 0.0 | Z | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.7 | 1.2 | 1.1 | 1.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 1.2 |
| 15-Aug | 0.2 | 0.2 | 0.0 | Z | 0.0 | 0.0 | 0.6 | 0.6 | 0.2 | 0.1 | 0.1 | 0.7 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 |
| 16-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.4 | 0.2 | 0.7 | 0.4 | 0.3 | 0.2 | 0.4 | 0.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.9 | 0.0 | 0.2 | 0.9 |
| 17-Aug | 0.0 | 0.0 | 0.1 | 0.3 | 2.1 | Z | 1.6 | 0.4 | 0.3 | 0.7 | 0.7 | 0.1 | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 2.1 |
| 18-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.6 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.2 | 0.5 | 0.3 | 0.7 | 0.5 | 0.0 | 0.3 | 0.7 |
| 19-Aug | 0.0 | Z | 0.0 | 0.0 | 0.4 | 0.2 | 0.4 | 0.5 | 0.1 | 0.5 | 0.7 | 1.0 | 0.9 | 1.2 | 0.7 | 0.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.2 |
| 20-Aug | 0.0 | 0.0 | Z | 0.0 | 0.2 | 0.4 | 1.1 | 0.4 | 0.4 | 0.6 | 0.1 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 |
| 21-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 22-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 |
| 23-Aug | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.8 | 1.8 | 1.0 | 0.7 | 0.1 | 0.1 | 0.1 | 0.6 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.8 |
| 24-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 25-Aug | 0.0 | Z | 0.0 | 1.0 | 0.0 | 0.1 | 0.1 | 0.4 | 0.2 | 0.1 | 0.5 | 0.2 | 0.6 | 0.2 | 0.5 | 1.5 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.5 |
| 26-Aug | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 27-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 28-Aug | 0.0 | 0.3 | 1.1 | 0.0 | Z | 0.1 | 0.3 | 0.6 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 1.1 |
| 29-Aug | 0.2 | 0.1 | 0.5 | 0.5 | 0.0 | Z | 0.4 | 0.6 | 0.5 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| 30-Aug | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.2 | 0.6 |
| 31-Aug | 0.0 | Z | 0.1 | 0.1 | 0.0 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 1.0 | 0.6 | 0.6 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.4 | 1.0 |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | Diurnal Average | |
| | 1.4 | 0.3 | 1.8 | 1.8 | 4.0 | 2.9 | 1.6 | 0.9 | 2.4 | 4.7 | 5.7 | 3.7 | 2.3 | 1.2 | 0.9 | 1.8 | 0.6 | 1.2 | 0.2 | 1.4 | 0.5 | 1.4 | 2.7 | 3.8 | Diurnal Maximum | |

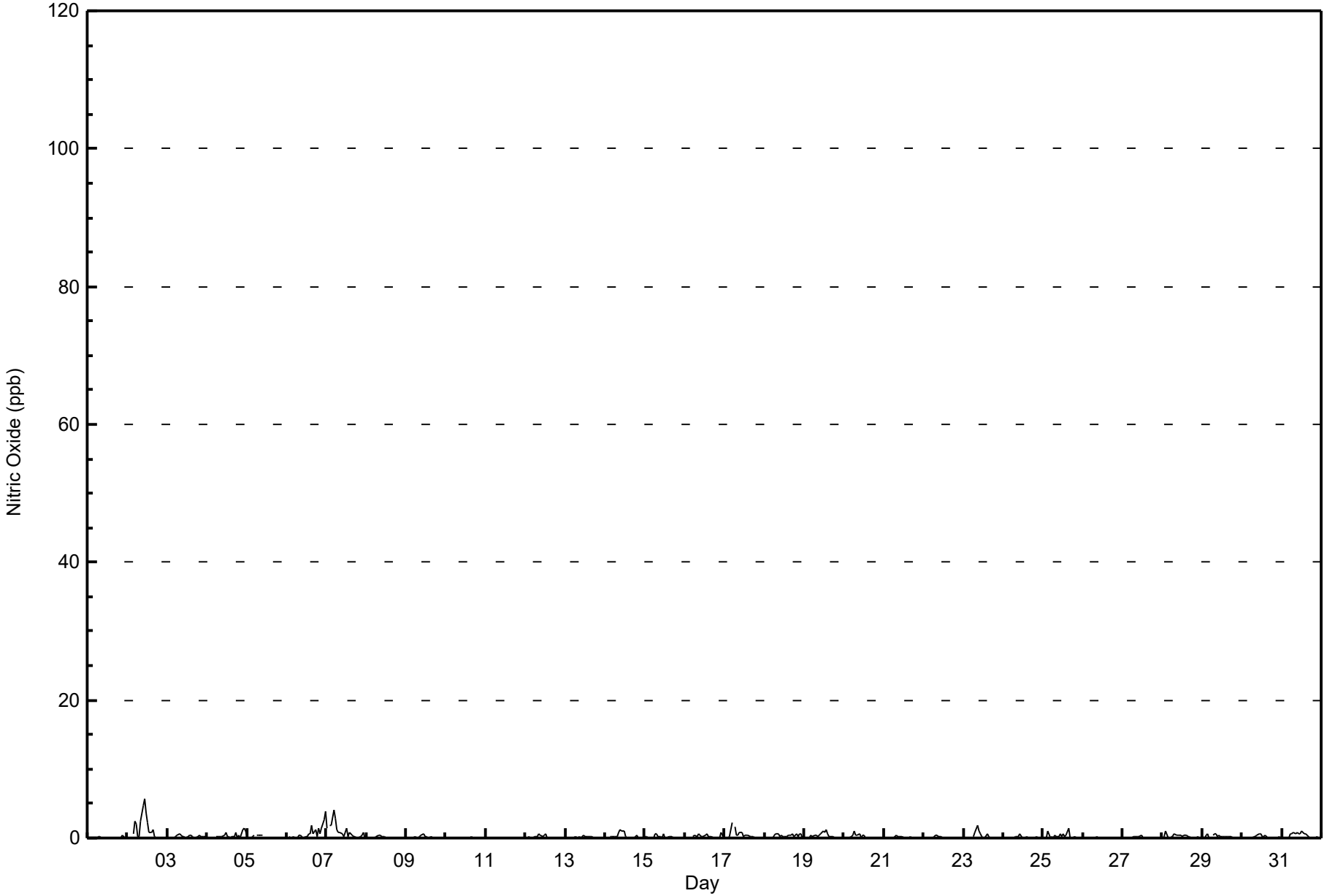
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**Kirby North - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**Kirby North - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 42 | 55 | 20 | 20 | 8 | 11 | 30 | 75 | 62 | 51 | 66 | 39 | 29 | 74 | 68 | 54 | 704 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 42 | 55 | 20 | 20 | 8 | 11 | 30 | 75 | 62 | 51 | 66 | 39 | 29 | 74 | 68 | 54 | 704 |

Total Number of Valid Hours: 704

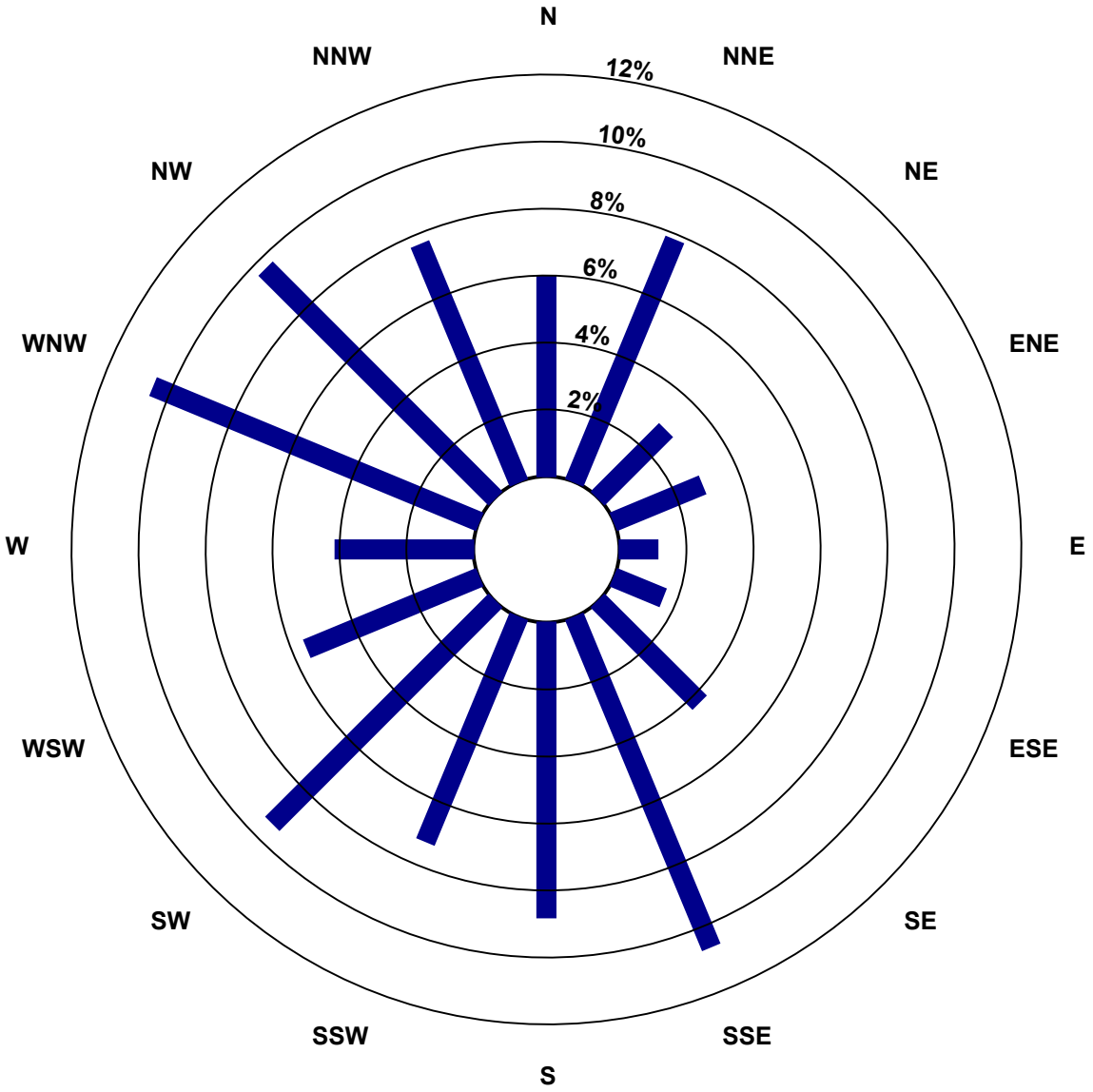
Total Number of Hours: 744

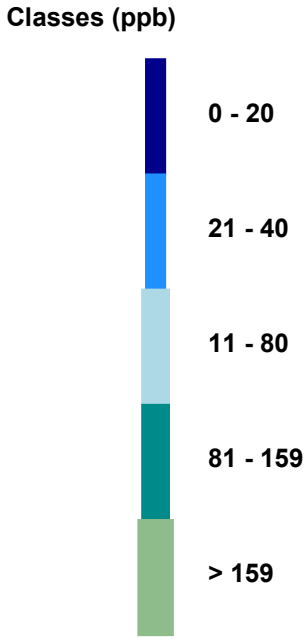
## Wood Buffalo Environmental Association

## Wind Rose Aug 2026

## Nitric Oxide (NO) - ppb

## Kirby North



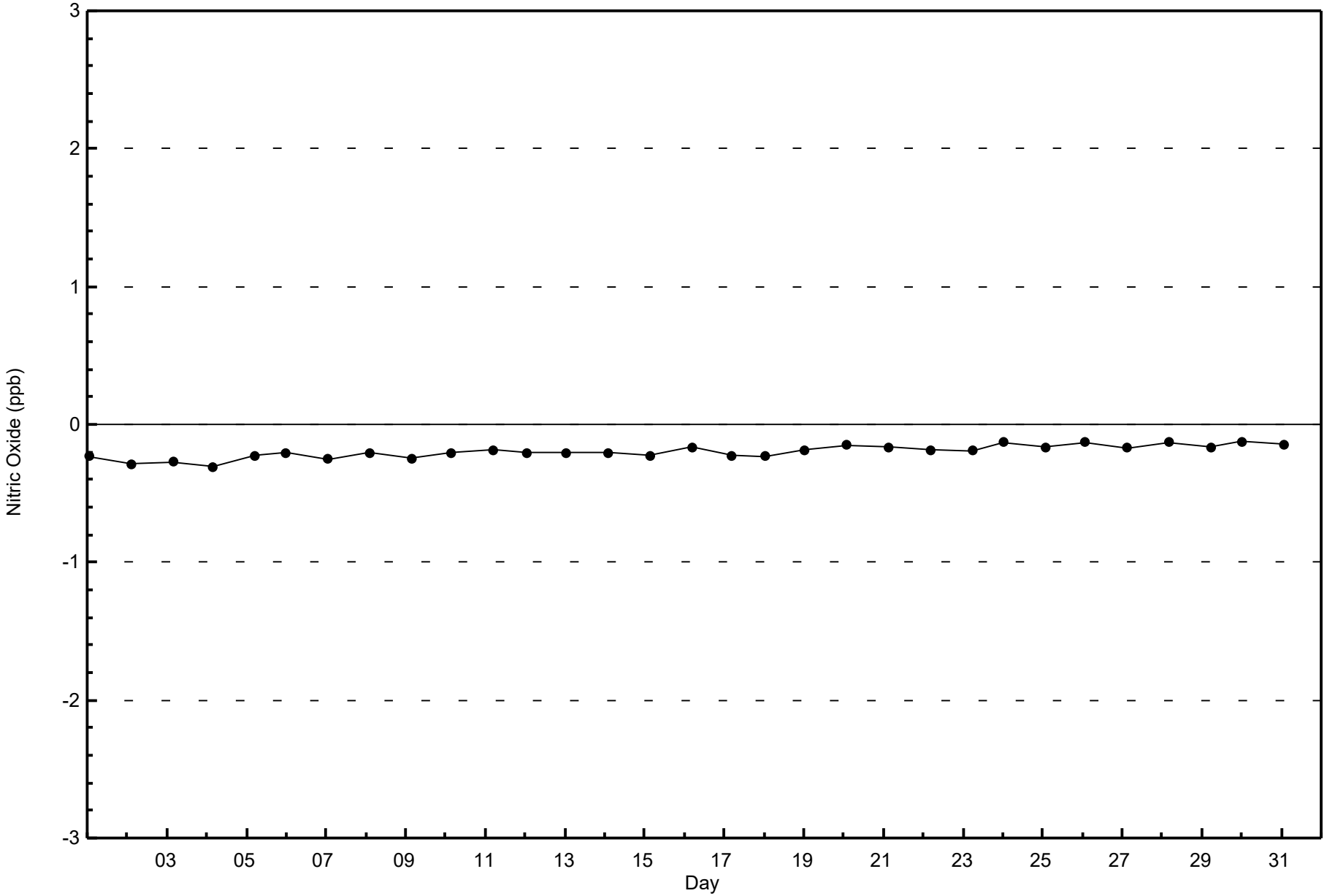

Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**Kirby North - August 2026**

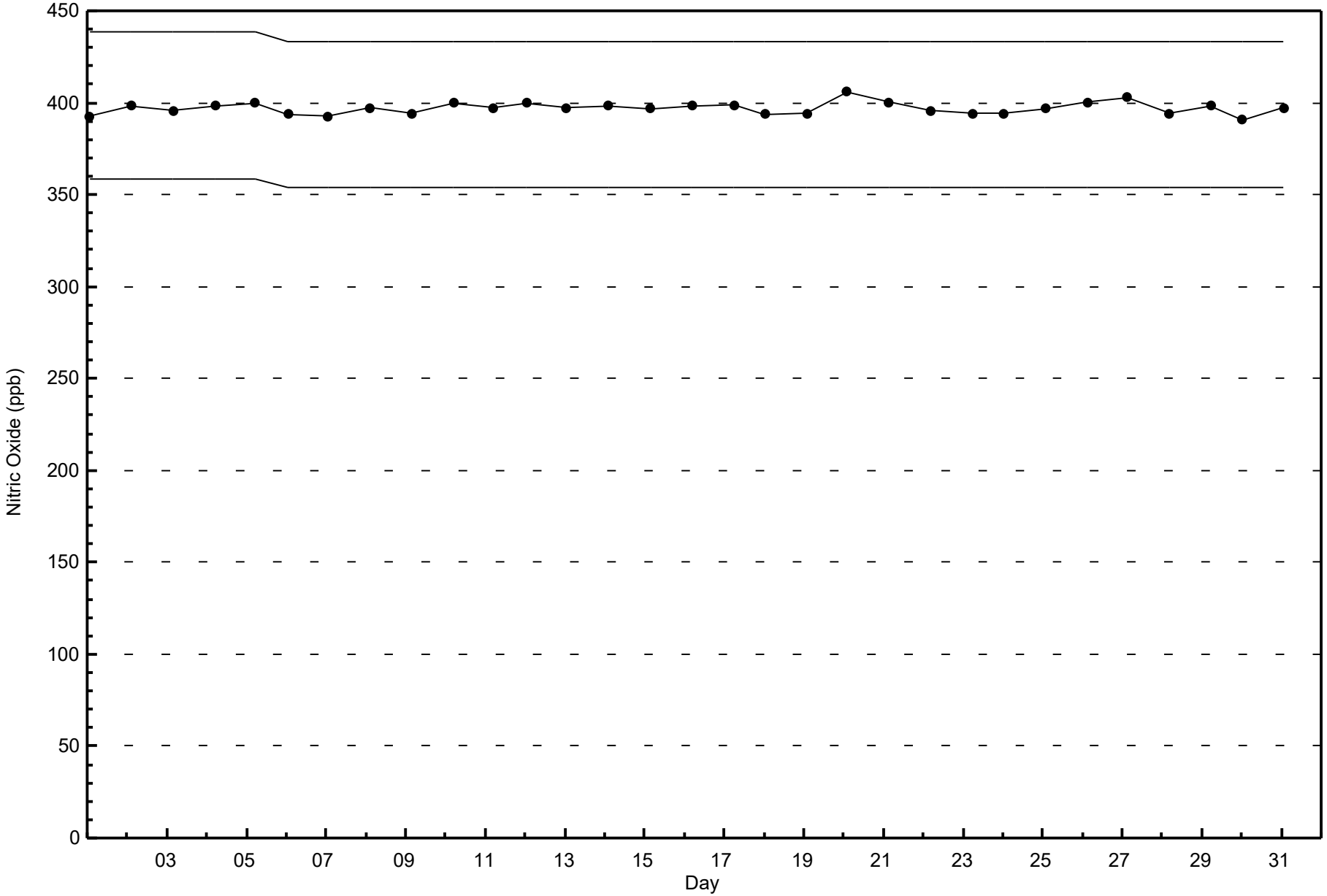


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**Kirby North - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## Kirby North - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.7 ppb on Aug 23 09:00 Maximum Daily Average: 1.4 ppb on Aug 23

Minimum Value: 0.1 ppb on Aug 2 19:00 Minimum Daily Average: 0.5 ppb on Aug 3
Maximum Diurnal Average: 1.3 ppb at hour 5 Minimum Diurnal Average: 0.6 ppb at hour 19
Monthly Average: 0.91 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 0.8 $Q_3 = 1.1$ $P_{90} = 1.6$ $P_{99} = 2.9$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 39 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.8 | Z | 1.5 | 1.1 | 1.4 | 1.5 | 1.4 | 1.2 | 0.8 | 0.7 | 0.8 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.9 | 0.9 | 2.1 | 2.6 | 1.3 | 1.1 | 2.6 |
| 2-Aug | 0.9 | 0.7 | Z | 1.3 | 2.3 | 2.4 | 0.7 | 0.6 | 2.6 | 3.6 | 4.4 | 3.3 | 2.2 | 1.2 | 1.0 | 1.5 | 0.5 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.3 | 4.4 |
| 3-Aug | 0.2 | 0.2 | 0.6 | Z | 0.6 | 0.5 | 0.6 | 0.8 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.5 | 0.6 | 0.3 | 0.2 | 0.2 | 0.4 | 0.7 | 0.7 | 0.4 | 0.7 | 0.6 | 0.5 | 0.8 |
| 4-Aug | 0.3 | 0.3 | 0.3 | 0.4 | Z | 0.7 | 0.7 | 0.3 | 0.3 | 0.4 | 0.6 | 1.1 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 2.5 | 1.1 | 1.1 | 0.5 | 2.4 | 2.2 | 1.7 | 0.8 | 2.5 |
| 5-Aug | 0.7 | 0.8 | 1.0 | 0.9 | 1.3 | Z | 1.0 | 1.2 | 0.9 | 0.8 | C | C | C | C | C | C | C | C | 0.4 | 0.3 | 0.4 | 0.4 | 0.9 | 0.9 | -- | 1.3 |
| 6-Aug | Z | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.1 | 0.3 | 0.3 | 0.5 | 0.4 | 1.0 | 0.6 | 1.0 | 0.3 | 1.3 | 0.5 | 1.2 | 2.1 | 2.1 | 0.6 | 2.1 |
| 7-Aug | 0.9 | Z | 1.3 | 1.4 | 2.2 | 1.6 | 0.8 | 0.6 | 0.7 | 0.7 | 0.6 | 1.4 | 2.0 | 0.6 | 1.2 | 1.2 | 0.9 | 0.7 | 0.4 | 0.4 | 0.5 | 0.9 | 1.5 | 0.4 | 1.0 | 2.2 |
| 8-Aug | 0.4 | 0.5 | Z | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 |
| 9-Aug | 0.7 | 0.8 | 0.6 | Z | 1.4 | 1.1 | 0.6 | 1.0 | 1.1 | 1.6 | 2.0 | 1.2 | 1.0 | 0.8 | 0.8 | 1.3 | 0.7 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.4 | 1.0 | 2.0 |
| 10-Aug | 0.3 | 0.3 | 0.3 | 0.4 | Z | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 1.0 | 1.1 | 1.8 | 0.7 | 0.8 | 0.7 | 1.0 | 2.2 | 1.7 | 2.8 | 2.6 | 0.9 | 2.8 |
| 11-Aug | 2.7 | 1.6 | 1.8 | 0.9 | 1.7 | Z | 0.9 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 1.5 | 1.1 | 1.0 | 0.8 | 0.7 | 0.9 | 2.7 |
| 12-Aug | Z | 1.0 | 1.1 | 1.2 | 0.9 | 2.0 | 1.4 | 0.8 | 1.2 | 1.3 | 0.9 | 1.0 | 0.8 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.5 | 0.8 | 2.0 |
| 13-Aug | 1.1 | Z | 0.7 | 0.6 | 0.6 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.7 | 0.8 | 0.7 | 0.5 | 0.7 | 0.6 | 0.5 | 0.3 | 0.6 | 0.3 | 0.9 | 0.6 | 0.3 | 0.6 | 1.1 |
| 14-Aug | 0.3 | 0.7 | Z | 2.0 | 2.4 | 1.6 | 1.0 | 0.9 | 1.6 | 2.2 | 1.9 | 1.8 | 0.7 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 1.8 | 0.8 | 1.4 | 1.5 | 0.8 | 1.1 | 2.4 |
| 15-Aug | 0.8 | 0.7 | 0.4 | Z | 0.5 | 0.3 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.3 | 0.3 | 0.4 | 0.5 | 0.8 | 0.4 | 0.3 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.8 |
| 16-Aug | 0.8 | 1.0 | 1.0 | 1.1 | Z | 1.1 | 1.3 | 0.6 | 1.2 | 1.1 | 1.1 | 0.9 | 0.7 | 1.0 | 0.8 | 0.9 | 1.1 | 0.6 | 0.4 | 0.4 | 0.6 | 0.4 | 1.0 | 0.7 | 0.9 | 1.3 |
| 17-Aug | 0.4 | 1.1 | 1.1 | 1.3 | 3.2 | Z | 2.6 | 0.9 | 0.7 | 1.2 | 1.2 | 0.4 | 0.9 | 0.8 | 1.0 | 0.7 | 0.9 | 0.4 | 0.3 | 0.6 | 0.3 | 0.5 | 0.4 | 0.2 | 0.9 | 3.2 |
| 18-Aug | Z | 0.2 | 0.4 | 0.8 | 1.0 | 1.3 | 1.7 | 1.7 | 1.5 | 1.3 | 1.5 | 1.1 | 0.9 | 0.7 | 0.6 | 0.9 | 0.9 | 1.3 | 0.8 | 1.4 | 0.8 | 1.6 | 1.5 | 0.6 | 1.1 | 1.7 |
| 19-Aug | 0.7 | Z | 0.6 | 0.4 | 2.3 | 1.6 | 1.4 | 1.0 | 0.5 | 0.7 | 1.1 | 1.5 | 1.2 | 1.4 | 0.9 | 0.5 | 0.7 | 1.0 | 0.8 | 0.6 | 0.9 | 0.8 | 0.7 | 0.7 | 1.0 | 2.3 |
| 20-Aug | 0.9 | 0.6 | Z | 0.8 | 0.9 | 1.0 | 1.5 | 0.8 | 0.9 | 0.8 | 0.5 | 0.9 | 1.0 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 1.3 | 2.7 | 2.4 | 1.9 | 0.9 | 2.7 |
| 21-Aug | 2.3 | 1.7 | 1.8 | Z | 1.7 | 1.5 | 1.6 | 2.6 | 1.2 | 1.1 | 1.1 | 1.0 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.5 | 1.2 | 2.6 |
| 22-Aug | 1.7 | 1.5 | 1.4 | 1.4 | Z | 1.5 | 1.4 | 1.4 | 1.2 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.4 | 1.3 | 1.2 | 1.3 | 1.5 | 1.7 | 1.3 | 1.2 | 1.7 |
| 23-Aug | 1.3 | 1.4 | 1.5 | 1.6 | 1.6 | Z | 1.9 | 3.0 | 4.7 | 2.1 | 2.1 | 1.2 | 1.0 | 1.0 | 2.6 | 1.7 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 1.4 | 4.7 |
| 24-Aug | Z | 0.4 | 0.7 | 0.7 | 2.0 | 1.2 | 0.7 | 1.0 | 1.3 | 1.5 | 1.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 | 0.4 | 2.4 | 2.0 | 0.7 | 0.3 | 0.8 | 2.4 |
| 25-Aug | 0.4 | Z | 0.6 | 1.2 | 0.6 | 0.4 | 0.5 | 0.7 | 0.6 | 0.5 | 1.0 | 0.6 | 1.1 | 0.7 | 0.9 | 1.0 | 0.1 | 0.2 | 0.2 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 1.2 |
| 26-Aug | 0.5 | 0.3 | Z | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.7 | 0.5 | 0.7 | 0.9 | 0.8 | 0.8 | 1.2 | 1.4 | 1.5 | 0.7 | 1.5 |
| 27-Aug | 1.6 | 1.5 | 1.4 | Z | 1.8 | 1.9 | 2.0 | 1.5 | 1.4 | 1.1 | 1.0 | 1.5 | 1.0 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.1 | 1.4 | 1.0 | 1.3 | 0.9 | 1.2 | 2.0 |
| 28-Aug | 1.1 | 1.5 | 2.6 | 0.9 | Z | 1.1 | 1.3 | 1.4 | 1.0 | 0.8 | 0.8 | 0.6 | 0.6 | 0.7 | 0.9 | 0.8 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 | 0.9 | 2.6 |
| 29-Aug | 0.9 | 0.6 | 1.0 | 1.2 | 0.6 | Z | 1.3 | 1.1 | 0.9 | 0.7 | 0.9 | 0.5 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 1.1 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.4 | 0.8 | 1.4 |
| 30-Aug | Z | 1.1 | 1.2 | 3.0 | 1.0 | 0.8 | 0.4 | 0.8 | 1.1 | 1.1 | 1.2 | 1.4 | 1.2 | 1.0 | 1.2 | 0.8 | 0.9 | 0.8 | 0.7 | 0.8 | 2.9 | 2.2 | 1.3 | 0.4 | 1.2 | 3.0 |
| 31-Aug | 0.3 | Z | 0.3 | 0.4 | 0.4 | 1.5 | 1.4 | 1.1 | 0.8 | 1.0 | 0.8 | 0.8 | 1.1 | 0.5 | 0.5 | 0.7 | 0.5 | 0.3 | 0.3 | 0.4 | 0.9 | 0.8 | 0.7 | 0.9 | 0.7 | 1.5 |
| | 0.9 | 0.8 | 1.0 | 1.0 | 1.3 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 0.6 | 0.7 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 | Diurnal Average | |
| | 2.7 | 1.7 | 2.6 | 3.0 | 3.2 | 2.4 | 2.6 | 3.0 | 4.7 | 3.6 | 4.4 | 3.3 | 2.2 | 1.4 | 2.6 | 1.8 | 1.1 | 2.5 | 1.3 | 1.8 | 2.9 | 2.7 | 2.8 | 2.6 | Diurnal Maximum | |

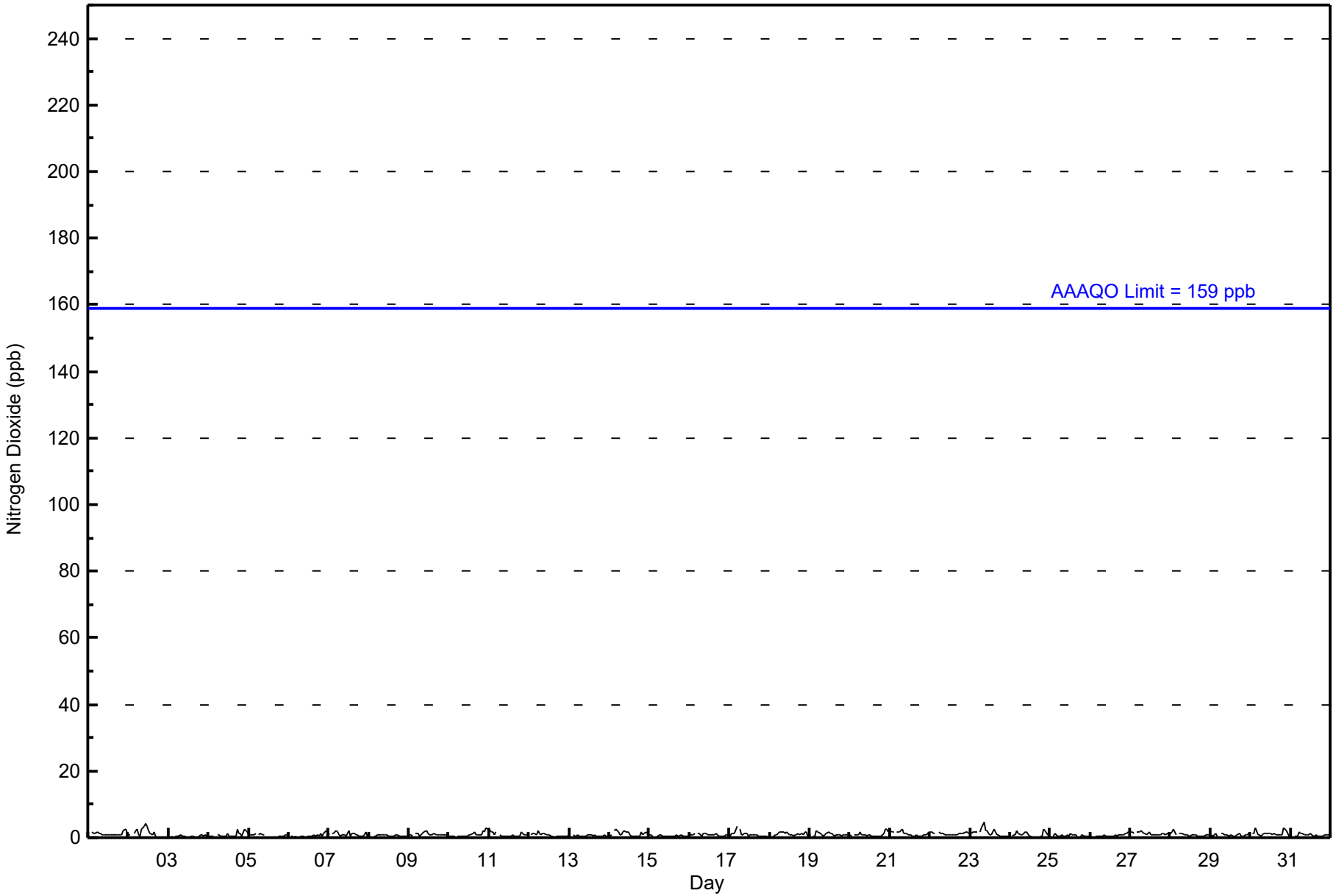
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Kirby North - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb
## Kirby North - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Kirby North - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 42 | 55 | 20 | 20 | 8 | 11 | 30 | 75 | 62 | 51 | 66 | 39 | 29 | 74 | 68 | 54 | 704 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 42 | 55 | 20 | 20 | 8 | 11 | 30 | 75 | 62 | 51 | 66 | 39 | 29 | 74 | 68 | 54 | 704 |

Total Number of Valid Hours: 704

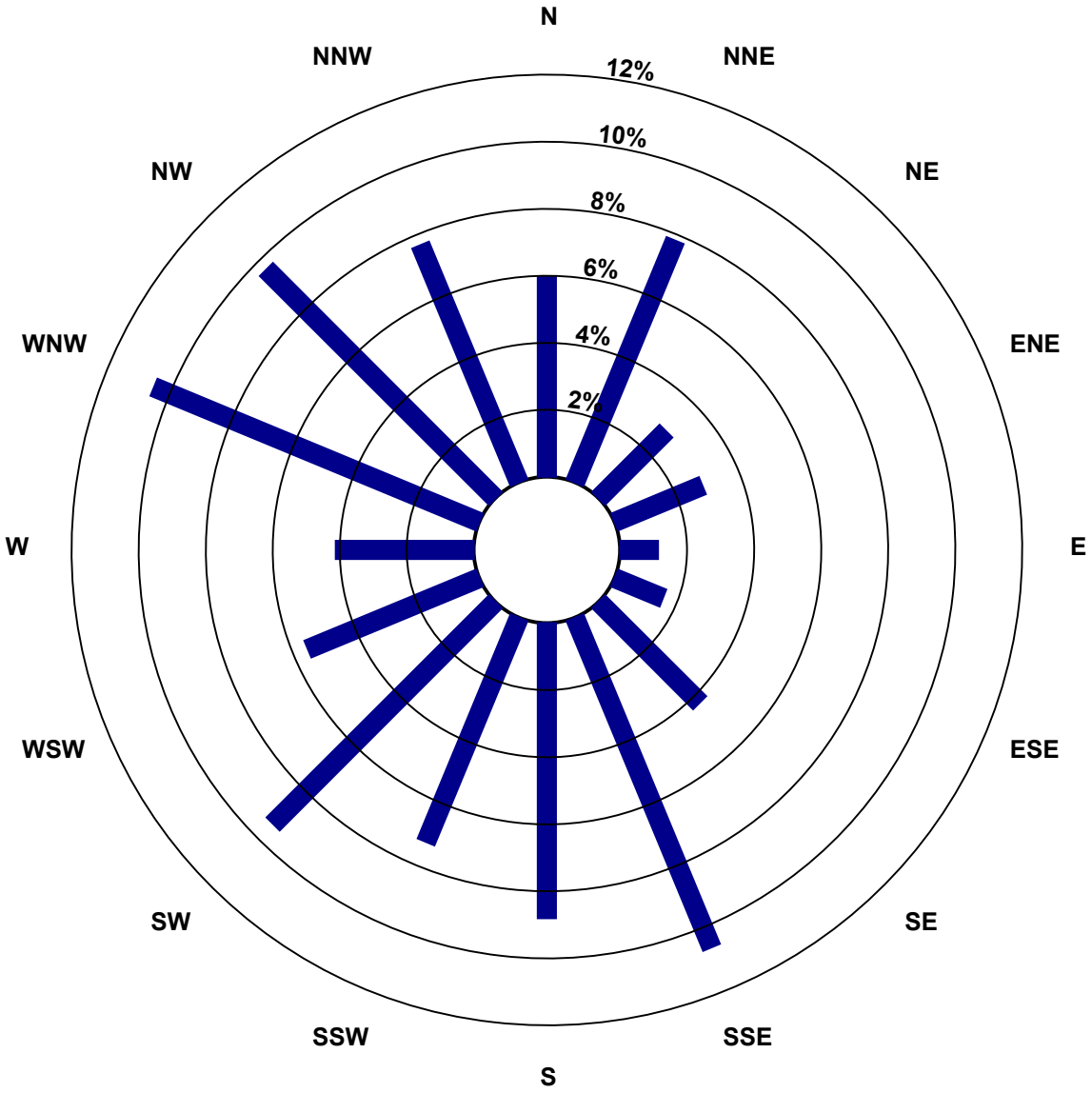
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

Kirby North




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

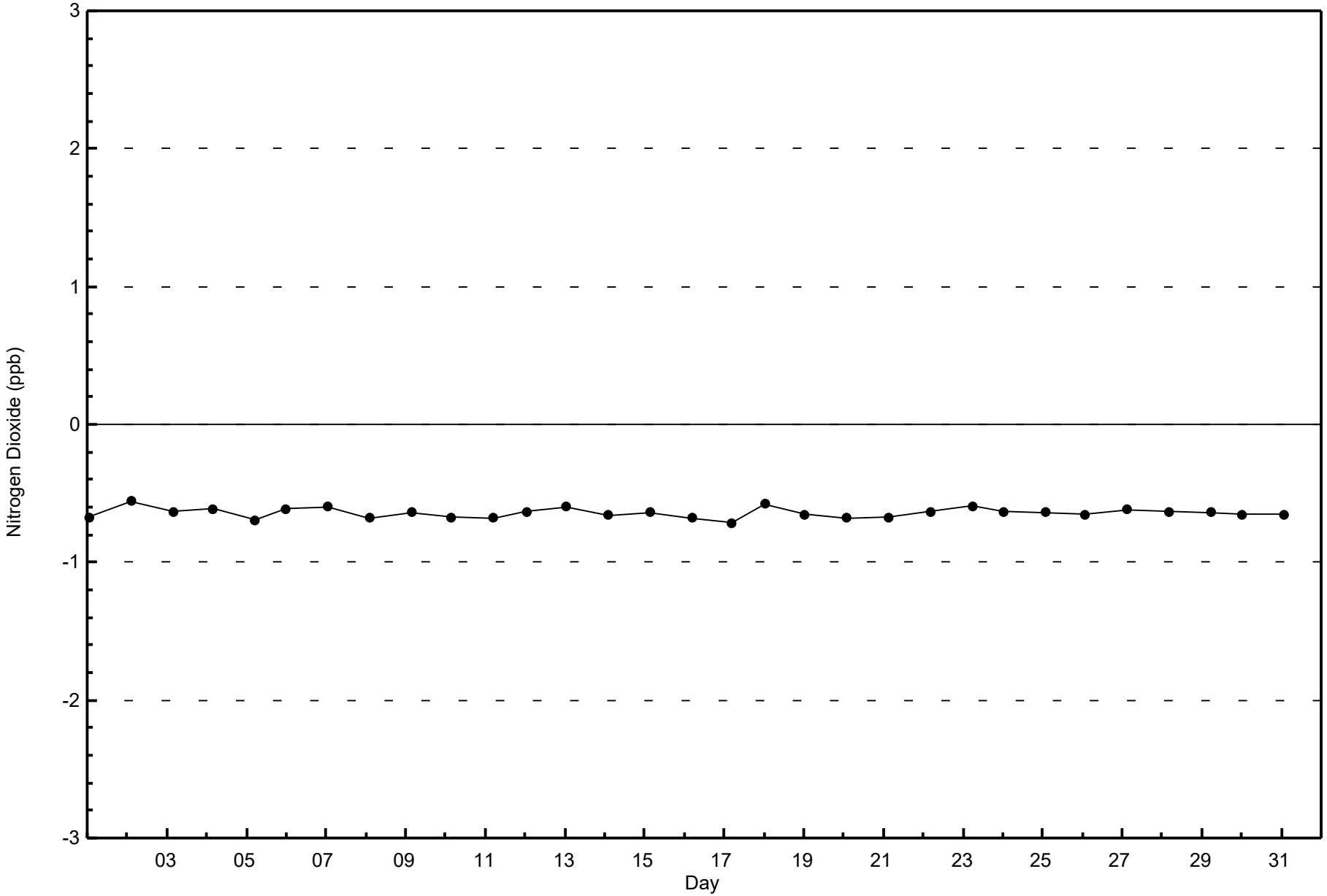
Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Kirby North - August 2026**

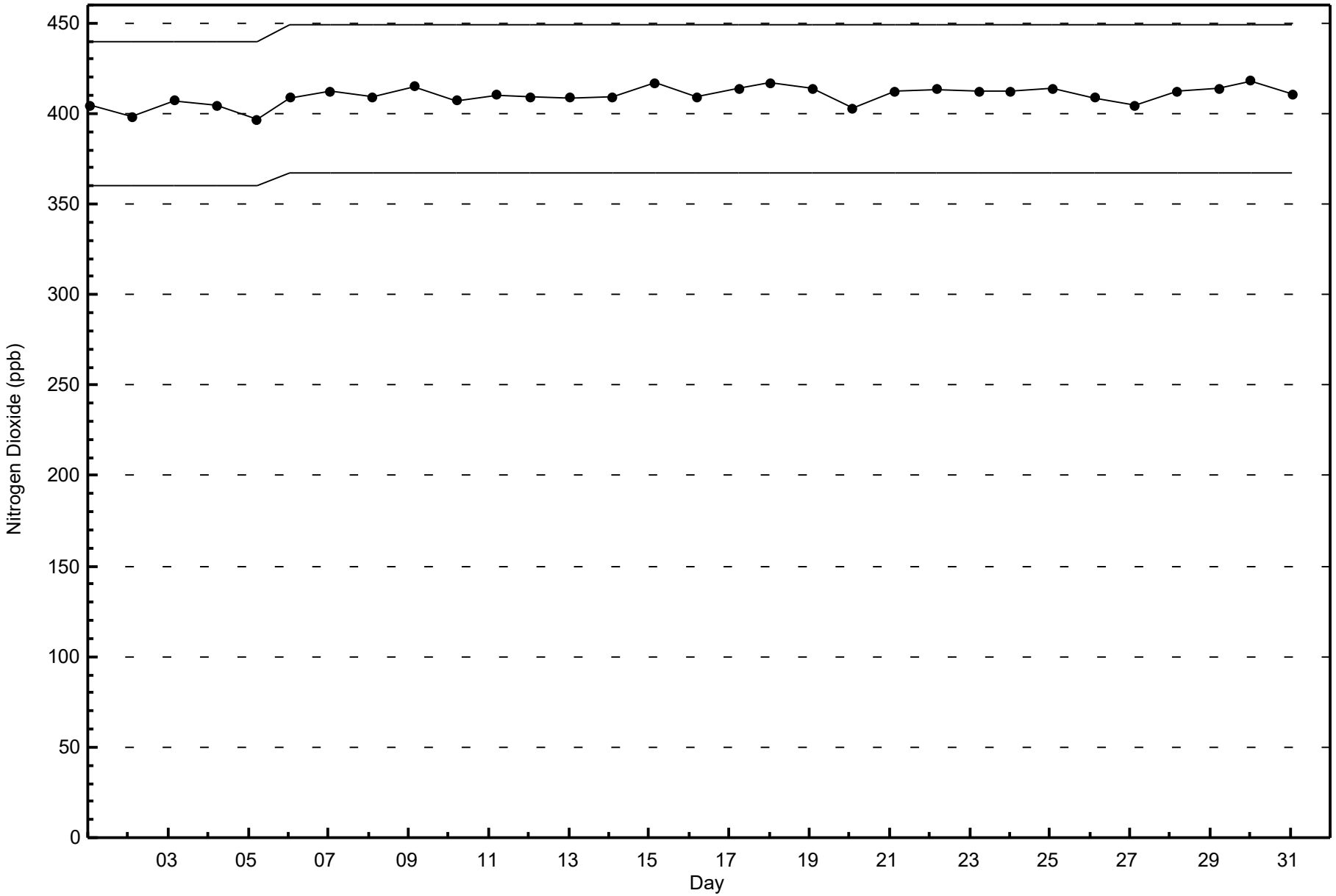


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**Kirby North - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## Kirby North - August 2026

Maximum Value: 10.1 ppb on Aug 2 11:00

Maximum Daily Average: 2.5 ppb on Aug 2

Minimum Value: 0.1 ppb on Aug 25 17:00

Minimum Daily Average: 0.6 ppb on Aug 3

Maximum Diurnal Average: 1.7 ppb at hour 5

Minimum Diurnal Average: 0.6 ppb at hour 19

Monthly Average: 1.15 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.4$ $Q_1 = 0.6$ Median = 0.9 $Q_3 = 1.4$ $P_{90} = 2.1$ $P_{99} = 5.0$

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 705 |
| Hours of Missing Data: | 39 |
| Hours of Calibration: | 39 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 1.8 | Z | 1.5 | 1.1 | 1.4 | 1.6 | 1.5 | 1.3 | 0.9 | 0.8 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.9 | 0.9 | 2.5 | 2.6 | 1.4 | 1.2 | 2.6 |
| 2-Aug | 1.0 | 0.8 | Z | 1.8 | 4.7 | 4.5 | 0.8 | 0.9 | 5.0 | 8.3 | 10.1 | 7.0 | 4.5 | 2.1 | 1.9 | 2.7 | 0.6 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 2.5 | 10.1 |
| 3-Aug | 0.2 | 0.2 | 0.7 | Z | 0.7 | 0.6 | 0.9 | 1.5 | 0.9 | 0.6 | 0.4 | 0.3 | 0.3 | 0.8 | 1.0 | 0.5 | 0.3 | 0.2 | 0.5 | 1.1 | 0.9 | 0.6 | 1.0 | 0.7 | 0.6 | 1.5 |
| 4-Aug | 0.4 | 0.4 | 0.4 | 0.5 | Z | 0.9 | 1.0 | 0.5 | 0.5 | 0.6 | 1.0 | 1.9 | 0.6 | 0.7 | 0.4 | 0.5 | 0.7 | 3.3 | 1.2 | 1.4 | 0.6 | 3.7 | 3.6 | 2.7 | 1.2 | 3.7 |
| 5-Aug | 0.9 | 0.8 | 1.1 | 1.0 | 1.7 | Z | 1.3 | 1.7 | 1.4 | 1.2 | C | C | C | C | C | C | C | C | 0.4 | 0.3 | 0.4 | 0.4 | 0.9 | 0.9 | -- | 1.7 |
| 6-Aug | Z | 0.5 | 0.3 | 0.2 | 0.6 | 0.2 | 0.2 | 0.8 | 0.7 | 0.5 | 0.2 | 0.6 | 0.5 | 1.1 | 1.1 | 2.8 | 1.2 | 2.2 | 0.5 | 2.7 | 1.0 | 2.6 | 4.8 | 5.9 | 1.4 | 5.9 |
| 7-Aug | 2.3 | Z | 3.1 | 3.2 | 6.2 | 4.5 | 2.0 | 1.5 | 1.5 | 1.4 | 0.9 | 2.2 | 3.4 | 0.8 | 2.0 | 1.7 | 1.2 | 0.9 | 0.5 | 0.4 | 0.6 | 1.4 | 2.4 | 0.4 | 1.9 | 6.2 |
| 8-Aug | 0.4 | 0.5 | Z | 0.4 | 0.6 | 0.8 | 1.1 | 1.3 | 1.3 | 1.1 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.3 |
| 9-Aug | 0.7 | 0.8 | 0.6 | Z | 1.5 | 1.3 | 0.7 | 1.1 | 1.3 | 2.0 | 2.7 | 1.4 | 1.2 | 0.8 | 0.9 | 1.5 | 0.8 | 0.9 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | 0.4 | 1.1 | 2.7 |
| 10-Aug | 0.3 | 0.3 | 0.3 | 0.4 | Z | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 1.0 | 1.1 | 2.0 | 0.7 | 0.8 | 0.7 | 1.0 | 2.2 | 1.7 | 2.8 | 2.6 | 0.9 | 2.8 |
| 11-Aug | 2.7 | 1.6 | 1.8 | 0.9 | 1.7 | Z | 0.9 | 0.7 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.5 | 0.8 | 0.4 | 0.4 | 0.4 | 0.5 | 1.5 | 1.1 | 1.0 | 0.8 | 0.8 | 0.9 | 2.7 |
| 12-Aug | Z | 1.1 | 1.2 | 1.2 | 0.9 | 2.2 | 1.6 | 1.0 | 1.8 | 1.7 | 1.1 | 1.3 | 1.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.5 | 0.9 | 2.2 |
| 13-Aug | 1.1 | Z | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 1.1 | 1.1 | 0.9 | 0.6 | 0.9 | 0.7 | 0.6 | 0.4 | 0.6 | 0.3 | 0.9 | 0.6 | 0.3 | 0.7 | 1.1 |
| 14-Aug | 0.3 | 0.7 | Z | 2.2 | 2.6 | 1.7 | 1.2 | 1.2 | 2.3 | 3.4 | 3.0 | 2.9 | 0.9 | 0.5 | 0.3 | 0.5 | 0.5 | 0.5 | 0.7 | 2.2 | 0.8 | 1.5 | 1.6 | 0.9 | 1.4 | 3.4 |
| 15-Aug | 1.0 | 0.9 | 0.4 | Z | 0.5 | 0.3 | 1.3 | 1.3 | 0.6 | 0.4 | 0.4 | 1.3 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 0.4 | 0.3 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 1.3 |
| 16-Aug | 0.8 | 1.0 | 1.0 | 1.1 | Z | 1.2 | 1.7 | 0.8 | 1.9 | 1.5 | 1.4 | 1.1 | 1.1 | 1.6 | 1.0 | 1.0 | 1.2 | 0.6 | 0.4 | 0.4 | 0.7 | 0.4 | 1.9 | 0.7 | 1.1 | 1.9 |
| 17-Aug | 0.4 | 1.1 | 1.2 | 1.6 | 5.3 | Z | 4.2 | 1.3 | 1.0 | 1.9 | 1.9 | 0.5 | 1.4 | 1.2 | 1.4 | 0.9 | 1.2 | 0.5 | 0.3 | 0.7 | 0.4 | 0.6 | 0.5 | 0.3 | 1.3 | 5.3 |
| 18-Aug | Z | 0.3 | 0.5 | 0.9 | 1.1 | 1.4 | 2.0 | 2.3 | 2.1 | 1.6 | 1.8 | 1.2 | 1.1 | 0.9 | 0.9 | 1.3 | 1.4 | 1.8 | 1.0 | 1.9 | 1.1 | 2.3 | 2.0 | 0.6 | 1.4 | 2.3 |
| 19-Aug | 0.7 | Z | 0.6 | 0.4 | 2.7 | 1.8 | 1.8 | 1.5 | 0.6 | 1.2 | 1.8 | 2.5 | 2.1 | 2.6 | 1.6 | 0.6 | 0.9 | 1.3 | 0.8 | 0.6 | 0.9 | 0.8 | 0.7 | 0.7 | 1.3 | 2.7 |
| 20-Aug | 0.9 | 0.6 | Z | 0.8 | 1.1 | 1.4 | 2.6 | 1.2 | 1.3 | 1.4 | 0.6 | 1.3 | 1.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 1.3 | 2.7 | 2.4 | 1.9 | 1.1 | 2.7 |
| 21-Aug | 2.3 | 1.7 | 1.8 | Z | 1.7 | 1.5 | 1.6 | 3.0 | 1.4 | 1.3 | 1.2 | 1.2 | 0.8 | 0.7 | 0.5 | 0.6 | 1.0 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.5 | 1.2 | 3.0 |
| 22-Aug | 1.7 | 1.5 | 1.4 | 1.4 | Z | 1.6 | 1.6 | 1.7 | 1.5 | 1.2 | 1.0 | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 | 1.0 | 1.4 | 1.3 | 1.2 | 1.3 | 1.6 | 1.7 | 1.4 | 1.3 | 1.7 |
| 23-Aug | 1.4 | 1.5 | 1.6 | 1.7 | 1.7 | Z | 2.1 | 3.8 | 6.5 | 3.1 | 2.8 | 1.3 | 1.1 | 1.1 | 3.2 | 1.9 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 1.7 | 6.5 |
| 24-Aug | Z | 0.4 | 0.7 | 0.7 | 2.0 | 1.2 | 0.8 | 1.2 | 1.5 | 1.7 | 2.1 | 0.6 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.4 | 0.4 | 2.7 | 2.0 | 0.7 | 0.3 | 0.9 | 2.7 |
| 25-Aug | 0.4 | Z | 0.6 | 2.2 | 0.6 | 0.5 | 0.6 | 1.1 | 0.8 | 0.6 | 1.5 | 0.8 | 1.7 | 0.9 | 1.4 | 2.5 | 0.1 | 0.2 | 0.2 | 1.1 | 0.6 | 0.5 | 0.4 | 0.5 | 0.9 | 2.5 |
| 26-Aug | 0.5 | 0.3 | Z | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.7 | 0.5 | 0.7 | 0.9 | 0.8 | 0.8 | 1.2 | 1.4 | 1.5 | 0.7 | 1.5 |
| 27-Aug | 1.6 | 1.5 | 1.4 | Z | 1.8 | 1.9 | 2.1 | 1.8 | 1.6 | 1.3 | 1.2 | 1.9 | 1.1 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.1 | 1.4 | 1.0 | 1.3 | 0.9 | 1.3 | 2.1 |
| 28-Aug | 1.1 | 1.8 | 3.7 | 0.9 | Z | 1.2 | 1.6 | 2.0 | 1.3 | 1.1 | 1.2 | 0.9 | 0.9 | 1.1 | 1.4 | 1.1 | 0.6 | 0.4 | 0.3 | 0.5 | 0.5 | 0.8 | 0.8 | 0.7 | 1.1 | 3.7 |
| 29-Aug | 1.1 | 0.7 | 1.5 | 1.7 | 0.6 | Z | 1.7 | 1.7 | 1.4 | 1.0 | 1.4 | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.9 | 1.2 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.4 | 1.0 | 1.7 |
| 30-Aug | Z | 1.2 | 1.2 | 3.0 | 1.0 | 0.8 | 0.4 | 1.0 | 1.3 | 1.4 | 1.8 | 1.9 | 1.5 | 1.3 | 1.5 | 0.9 | 1.0 | 0.8 | 0.7 | 0.8 | 3.0 | 2.3 | 1.5 | 0.4 | 1.3 | 3.0 |
| 31-Aug | 0.3 | Z | 0.4 | 0.5 | 0.4 | 2.1 | 2.0 | 1.8 | 1.5 | 1.8 | 1.5 | 1.4 | 2.1 | 1.1 | 1.1 | 1.2 | 0.7 | 0.3 | 0.3 | 0.4 | 0.9 | 1.1 | 0.8 | 1.0 | 1.1 | 2.1 |
| | 1.0 | 0.9 | 1.1 | 1.2 | 1.7 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.4 | 1.2 | 0.9 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.2 | 1.3 | 1.1 | Diurnal Average | |
| | 2.7 | 1.8 | 3.7 | 3.2 | 6.2 | 4.5 | 4.2 | 3.8 | 6.5 | 8.3 | 10.1 | 7.0 | 4.5 | 2.6 | 3.2 | 2.8 | 1.4 | 3.3 | 1.3 | 2.7 | 3.0 | 3.7 | 4.8 | 5.9 | Diurnal Maximum | |

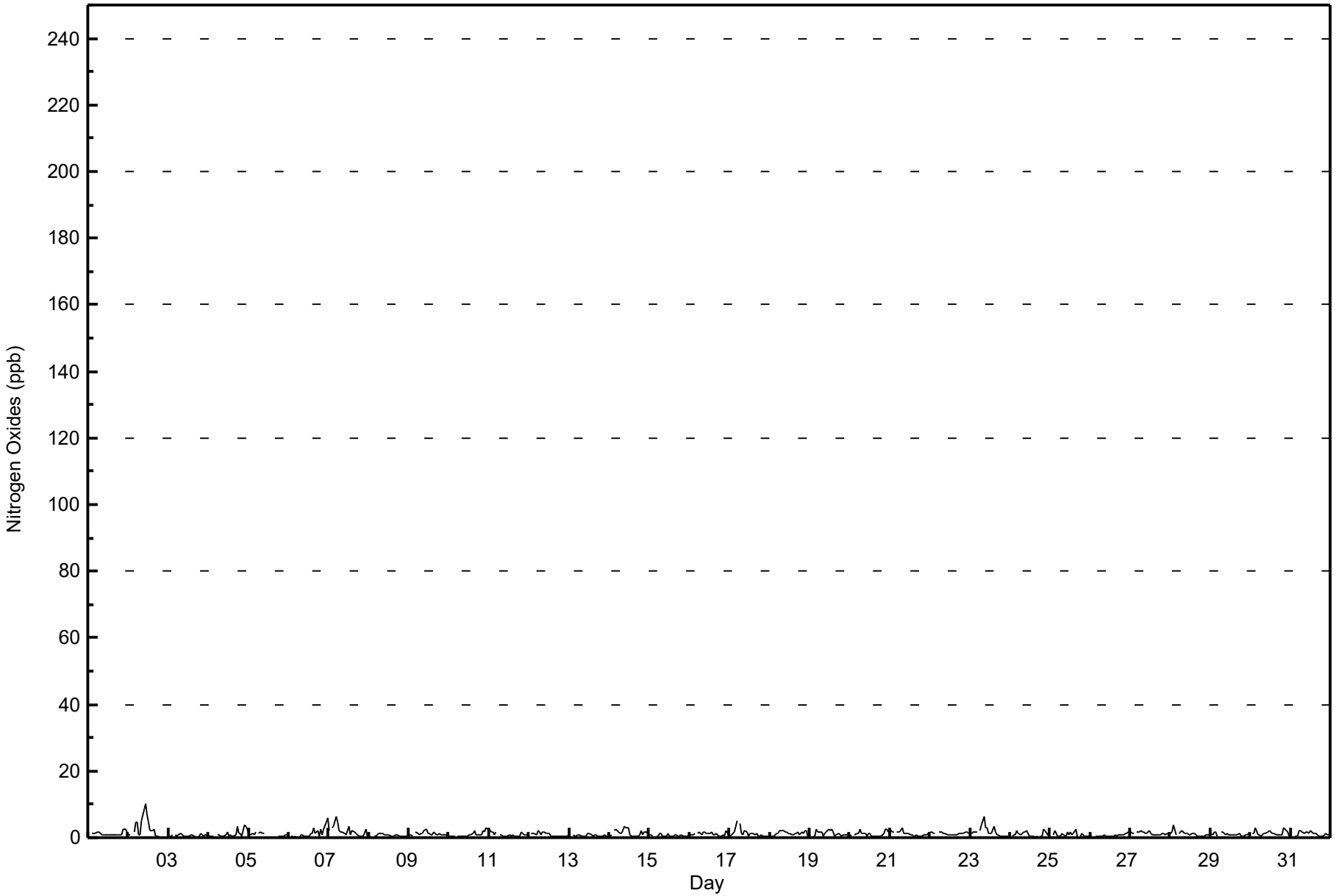
Z - zerospan C - Calibration

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**Kirby North - August 2026**



# Nitrogen Oxides ($NO_X$) - ppb
## Kirby North - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 705 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 705

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Oxides ($NO_X$) - ppb**

**Kirby North - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 42 | 55 | 20 | 20 | 8 | 11 | 30 | 75 | 62 | 51 | 66 | 39 | 29 | 74 | 68 | 54 | 704 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 42 | 55 | 20 | 20 | 8 | 11 | 30 | 75 | 62 | 51 | 66 | 39 | 29 | 74 | 68 | 54 | 704 |

Total Number of Valid Hours: 704

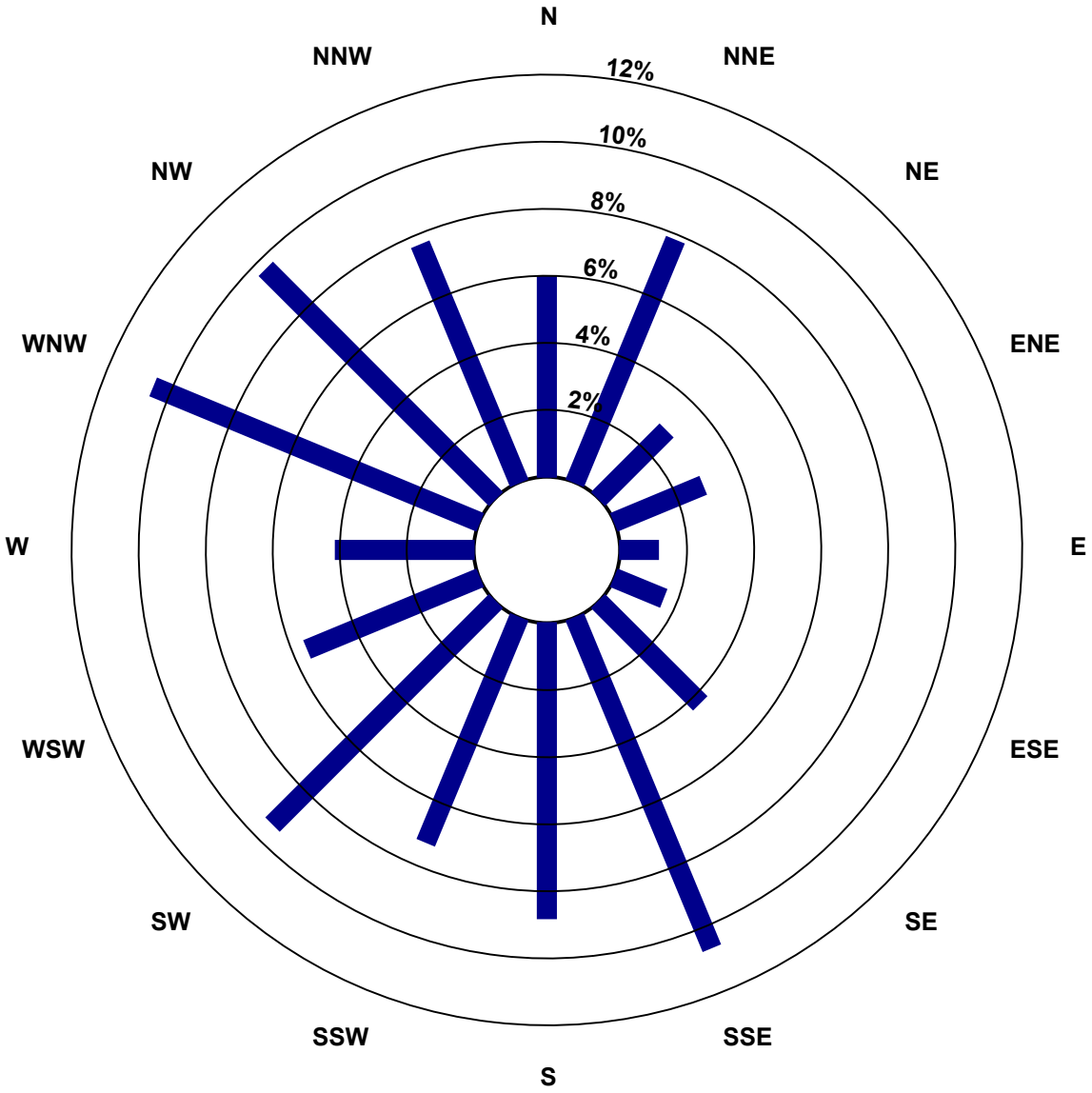
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

Kirby North




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

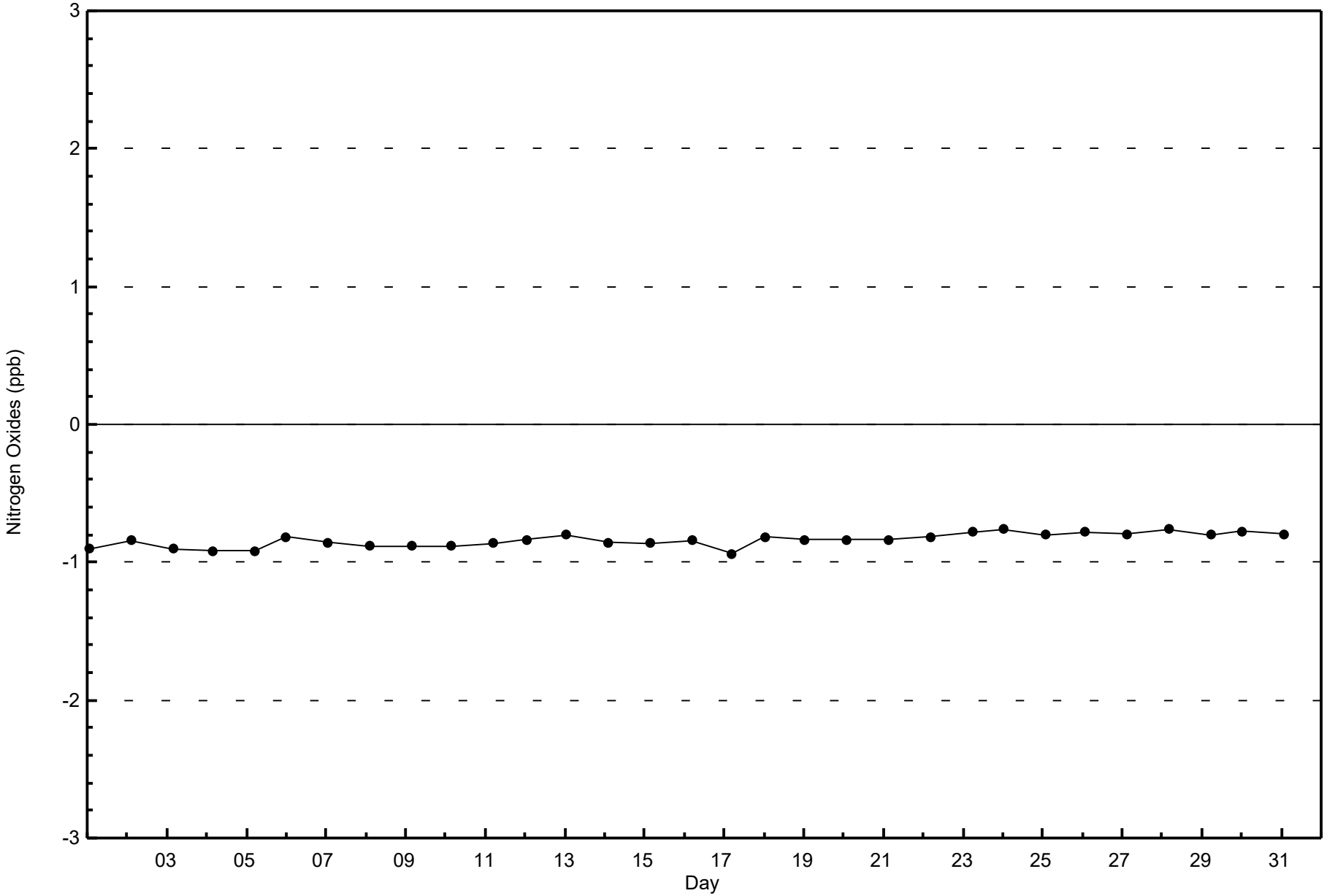
Total Number of Valid Hours: 704

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Kirby North - August 2026**

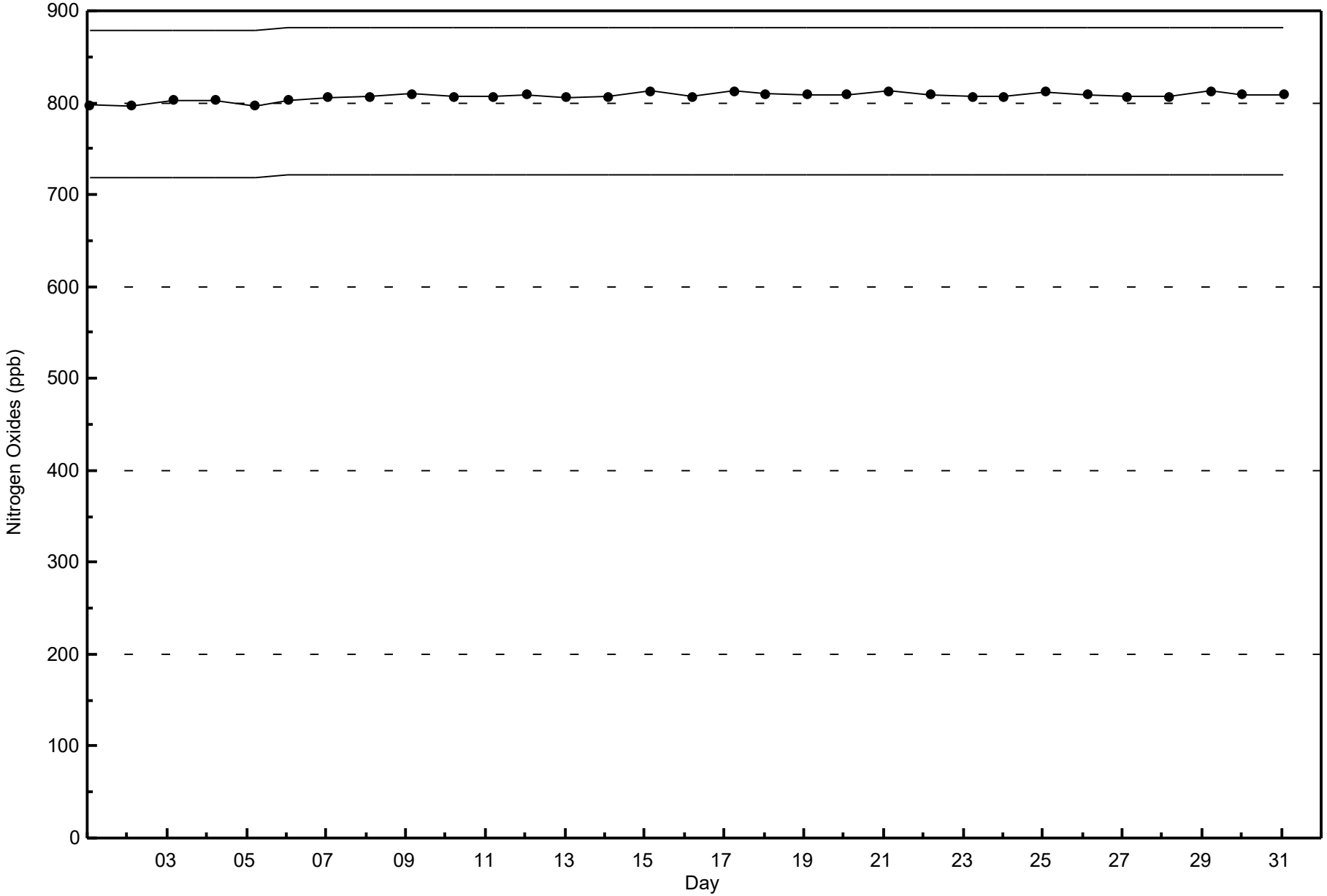


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**Kirby North - August 2026**



Maximum Value: 28.1 C on Aug 27 14:00

Maximum Daily Average: 21.5 C on Aug 1

Minimum Value: 5.2 C on Aug 4 05:00

Minimum Daily Average: 10.8 C on Aug 6

Maximum Diurnal Average: 19.9 C at hour 16

Minimum Diurnal Average: 10.9 C at hour 5

Monthly Average: 15.37 C

Percentiles: $P_1$ = 6.3 $P_{10}$ = 9.6 $Q_1$ = 12.0 Median = 15.0 $Q_3$ = 18.4 $P_{90}$ = 21.6 $P_{99}$ = 26.9

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

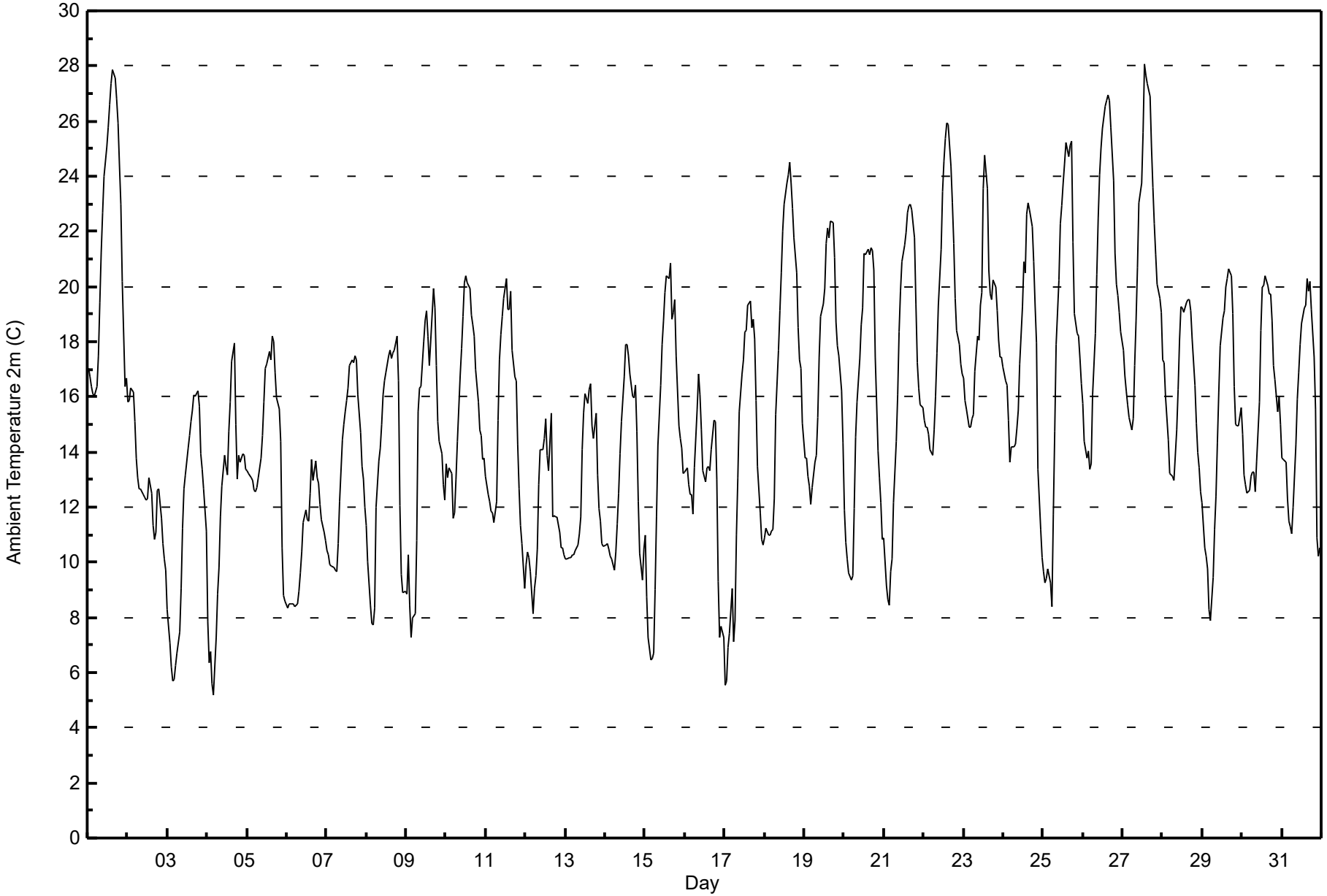
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 17.0 | 16.7 | 16.4 | 16.1 | 16.0 | 16.4 | 17.5 | 19.4 | 21.3 | 22.7 | 24.0 | 25.1 | 25.8 | 26.6 | 27.4 | 27.9 | 27.6 | 26.8 | 25.9 | 24.4 | 23.0 | 20.2 | 16.4 | 16.7 | 21.5 | 27.9 |
| 2-Aug | 15.8 | 15.9 | 16.3 | 16.2 | 15.1 | 13.8 | 13.1 | 12.7 | 12.7 | 12.4 | 12.3 | 12.3 | 12.3 | 13.1 | 12.5 | 11.4 | 10.8 | 11.1 | 12.6 | 12.7 | 11.6 | 10.7 | 10.1 | 9.7 | 12.8 | 16.3 |
| 3-Aug | 8.3 | 7.1 | 6.2 | 5.7 | 5.8 | 6.3 | 6.7 | 7.5 | 9.1 | 11.3 | 12.7 | 13.2 | 14.1 | 14.6 | 15.1 | 15.5 | 16.1 | 16.0 | 16.2 | 15.7 | 13.9 | 13.4 | 12.7 | 11.1 | 11.4 | 16.2 |
| 4-Aug | 7.8 | 6.4 | 6.7 | 5.6 | 5.2 | 7.3 | 8.9 | 9.8 | 11.7 | 12.8 | 13.9 | 13.5 | 13.2 | 14.8 | 15.8 | 17.3 | 17.9 | 15.0 | 13.0 | 13.9 | 13.6 | 13.9 | 13.9 | 13.4 | 11.9 | 17.9 |
| 5-Aug | 13.3 | 13.2 | 13.1 | 12.9 | 12.6 | 12.6 | 12.7 | 13.1 | 13.8 | 14.6 | 15.8 | 17.0 | 17.2 | 17.6 | 17.3 | 18.2 | 18.0 | 16.9 | 16.0 | 15.5 | 14.4 | 10.5 | 8.8 | 8.6 | 14.3 | 18.2 |
| 6-Aug | 8.3 | 8.5 | 8.5 | 8.5 | 8.5 | 8.4 | 8.5 | 9.0 | 9.6 | 10.4 | 11.5 | 11.9 | 11.5 | 11.5 | 12.5 | 13.7 | 13.0 | 13.7 | 13.1 | 12.9 | 12.1 | 11.6 | 11.1 | 10.8 | 10.8 | 13.7 |
| 7-Aug | 10.4 | 10.3 | 9.9 | 9.8 | 9.8 | 9.7 | 9.7 | 10.7 | 12.2 | 14.5 | 15.0 | 15.5 | 15.9 | 16.3 | 17.1 | 17.3 | 17.2 | 17.5 | 17.3 | 16.1 | 14.7 | 13.5 | 13.0 | 12.0 | 13.6 | 17.5 |
| 8-Aug | 11.4 | 10.0 | 8.4 | 7.8 | 7.8 | 8.3 | 12.0 | 13.7 | 14.1 | 15.0 | 16.1 | 16.6 | 16.9 | 17.5 | 17.7 | 17.4 | 17.6 | 17.7 | 18.2 | 16.6 | 12.0 | 9.6 | 8.9 | 9.0 | 13.3 | 18.2 |
| 9-Aug | 8.9 | 10.3 | 8.4 | 7.3 | 8.0 | 8.1 | 10.8 | 15.5 | 16.3 | 16.4 | 18.0 | 18.7 | 19.1 | 18.2 | 17.1 | 18.0 | 19.9 | 19.2 | 17.2 | 15.1 | 14.4 | 13.9 | 12.8 | 12.3 | 14.3 | 19.9 |
| 10-Aug | 13.6 | 13.1 | 13.4 | 13.2 | 11.6 | 11.8 | 13.0 | 14.4 | 16.8 | 17.7 | 18.9 | 20.1 | 20.4 | 20.1 | 19.9 | 19.0 | 18.6 | 18.2 | 17.0 | 15.8 | 14.8 | 14.6 | 13.7 | 13.8 | 16.0 | 20.4 |
| 11-Aug | 13.1 | 12.5 | 12.2 | 11.8 | 11.8 | 11.4 | 12.2 | 15.2 | 17.4 | 18.2 | 18.9 | 19.6 | 20.3 | 19.2 | 19.2 | 19.8 | 17.7 | 16.7 | 16.6 | 14.3 | 12.7 | 11.3 | 10.7 | 9.0 | 15.1 | 20.3 |
| 12-Aug | 9.9 | 10.3 | 10.2 | 9.7 | 8.1 | 9.1 | 9.5 | 10.5 | 12.8 | 14.1 | 14.1 | 14.5 | 15.2 | 13.9 | 13.3 | 15.4 | 11.6 | 11.7 | 11.7 | 11.6 | 11.1 | 10.5 | 10.5 | 10.3 | 11.6 | 15.4 |
| 13-Aug | 10.1 | 10.1 | 10.2 | 10.2 | 10.3 | 10.2 | 10.4 | 10.6 | 11.0 | 11.7 | 14.1 | 15.4 | 16.1 | 15.8 | 16.2 | 16.5 | 15.0 | 14.5 | 15.4 | 13.2 | 12.0 | 11.5 | 10.7 | 10.6 | 12.6 | 16.5 |
| 14-Aug | 10.6 | 10.7 | 10.5 | 10.2 | 10.1 | 9.7 | 10.4 | 11.4 | 12.5 | 13.9 | 15.1 | 16.7 | 17.9 | 17.9 | 17.5 | 16.8 | 16.0 | 15.9 | 16.4 | 14.7 | 12.2 | 10.3 | 9.4 | 10.5 | 13.2 | 17.9 |
| 15-Aug | 11.0 | 8.7 | 7.3 | 6.4 | 6.5 | 6.7 | 9.0 | 11.6 | 14.3 | 16.4 | 17.9 | 18.8 | 19.8 | 20.4 | 20.3 | 20.8 | 18.8 | 19.1 | 19.5 | 17.5 | 15.0 | 14.5 | 14.1 | 13.2 | 14.5 | 20.8 |
| 16-Aug | 13.3 | 13.4 | 12.8 | 12.5 | 12.5 | 11.8 | 13.4 | 15.6 | 16.8 | 16.1 | 14.8 | 13.3 | 12.9 | 13.4 | 13.5 | 13.3 | 14.1 | 15.1 | 15.1 | 13.0 | 9.3 | 7.3 | 7.7 | 7.2 | 12.8 | 16.8 |
| 17-Aug | 5.5 | 5.7 | 6.9 | 7.4 | 9.1 | 7.1 | 7.9 | 11.0 | 13.1 | 15.5 | 16.8 | 17.3 | 18.3 | 18.4 | 19.3 | 19.5 | 18.5 | 18.8 | 18.1 | 15.9 | 13.5 | 11.8 | 10.9 | 10.6 | 13.2 | 19.5 |
| 18-Aug | 10.9 | 11.2 | 11.0 | 11.0 | 11.1 | 11.2 | 12.3 | 15.4 | 17.7 | 19.1 | 20.5 | 22.0 | 23.0 | 23.7 | 24.1 | 24.5 | 23.7 | 22.8 | 21.8 | 20.5 | 18.5 | 17.4 | 17.0 | 15.0 | 17.7 | 24.5 |
| 19-Aug | 13.8 | 13.8 | 13.1 | 12.7 | 12.1 | 12.7 | 13.6 | 13.9 | 15.2 | 17.4 | 18.9 | 19.4 | 19.9 | 21.6 | 22.1 | 21.8 | 22.4 | 22.3 | 21.0 | 18.7 | 17.9 | 17.5 | 16.2 | 14.3 | 17.2 | 22.4 |
| 20-Aug | 11.9 | 10.8 | 10.1 | 9.6 | 9.3 | 9.5 | 12.0 | 14.5 | 15.8 | 17.4 | 18.6 | 19.2 | 21.2 | 21.2 | 21.4 | 21.1 | 21.4 | 21.3 | 20.6 | 17.4 | 14.0 | 13.1 | 12.2 | 10.9 | 15.6 | 21.4 |
| 21-Aug | 10.9 | 9.2 | 8.6 | 8.4 | 9.6 | 10.1 | 12.2 | 14.4 | 16.1 | 18.3 | 19.8 | 20.9 | 21.5 | 22.0 | 22.7 | 22.9 | 23.0 | 22.8 | 21.7 | 19.4 | 17.2 | 16.3 | 15.7 | 15.6 | 16.6 | 23.0 |
| 22-Aug | 15.2 | 14.9 | 14.9 | 14.6 | 14.1 | 13.9 | 14.8 | 16.0 | 17.6 | 19.3 | 21.4 | 23.5 | 24.6 | 25.3 | 26.0 | 25.9 | 24.3 | 23.0 | 21.6 | 19.6 | 18.4 | 17.9 | 17.2 | 16.8 | 19.2 | 26.0 |
| 23-Aug | 16.7 | 15.9 | 15.5 | 14.9 | 14.9 | 15.2 | 15.4 | 16.9 | 18.2 | 18.1 | 19.3 | 19.8 | 23.6 | 24.8 | 23.5 | 20.6 | 19.8 | 19.5 | 20.2 | 20.0 | 19.1 | 18.1 | 17.4 | 17.4 | 18.5 | 24.8 |
| 24-Aug | 17.1 | 16.6 | 16.4 | 15.1 | 13.6 | 14.2 | 14.2 | 14.3 | 14.8 | 15.5 | 17.2 | 19.3 | 20.9 | 20.5 | 22.6 | 23.0 | 22.8 | 22.2 | 20.9 | 19.3 | 17.9 | 13.4 | 11.2 | 10.2 | 17.2 | 23.0 |
| 25-Aug | 9.6 | 9.3 | 9.4 | 9.8 | 9.2 | 8.4 | 11.7 | 14.7 | 17.9 | 20.2 | 22.3 | 22.9 | 23.7 | 24.4 | 25.2 | 24.7 | 25.1 | 25.2 | 21.6 | 19.0 | 18.3 | 18.2 | 17.4 | 16.5 | 17.7 | 25.2 |
| 26-Aug | 15.8 | 14.4 | 13.8 | 14.1 | 13.4 | 13.6 | 16.1 | 18.3 | 20.4 | 22.5 | 24.0 | 25.0 | 25.7 | 26.5 | 26.8 | 26.9 | 26.7 | 25.8 | 23.8 | 21.2 | 20.1 | 19.7 | 19.1 | 18.3 | 20.5 | 26.9 |
| 27-Aug | 17.7 | 16.8 | 16.2 | 15.7 | 15.3 | 14.8 | 15.2 | 17.1 | 18.8 | 20.7 | 23.0 | 23.8 | 25.6 | 28.1 | 27.7 | 27.3 | 26.9 | 25.1 | 23.6 | 22.3 | 21.2 | 20.1 | 19.6 | 19.1 | 20.9 | 28.1 |
| 28-Aug | 17.3 | 17.3 | 16.0 | 14.5 | 13.2 | 13.2 | 13.1 | 13.0 | 14.8 | 16.3 | 18.1 | 19.3 | 19.2 | 19.1 | 19.4 | 19.5 | 19.5 | 19.1 | 18.1 | 16.4 | 15.1 | 14.0 | 13.4 | 12.6 | 16.3 | 19.5 |
| 29-Aug | 12.2 | 10.5 | 10.2 | 9.8 | 8.3 | 7.9 | 9.5 | 11.2 | 12.4 | 14.3 | 16.2 | 17.8 | 18.9 | 19.1 | 20.0 | 20.3 | 20.6 | 20.4 | 19.0 | 16.4 | 15.0 | 15.0 | 15.0 | 15.6 | 14.8 | 20.6 |
| 30-Aug | 14.6 | 13.1 | 12.8 | 12.5 | 12.6 | 13.1 | 13.3 | 13.3 | 12.6 | 13.7 | 15.8 | 18.4 | 20.0 | 20.0 | 20.4 | 20.0 | 19.7 | 19.7 | 18.8 | 17.1 | 16.6 | 15.5 | 16.0 | 15.0 | 16.0 | 20.4 |
| 31-Aug | 13.8 | 13.7 | 13.6 | 12.3 | 11.5 | 11.3 | 11.0 | 12.0 | 14.3 | 15.9 | 16.9 | 17.9 | 18.6 | 19.2 | 19.3 | 20.3 | 19.9 | 20.2 | 19.2 | 17.4 | 15.6 | 10.9 | 10.2 | 10.5 | 15.2 | 20.3 |
| | 12.4 | 11.9 | 11.6 | 11.2 | 10.9 | 10.9 | 11.9 | 13.4 | 14.9 | 16.2 | 17.5 | 18.3 | 19.1 | 19.5 | 19.8 | 19.9 | 19.5 | 19.1 | 18.4 | 16.9 | 15.3 | 14.1 | 13.3 | 12.8 | Diurnal Average | |
| | 17.7 | 17.3 | 16.4 | 16.2 | 16.0 | 16.4 | 17.5 | 19.4 | 21.3 | 22.7 | 24.0 | 25.1 | 25.8 | 28.1 | 27.7 | 27.9 | 27.6 | 26.8 | 25.9 | 24.4 | 23.0 | 20.2 | 19.6 | 19.1 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**Kirby North - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 88 | 11.83 | 11.83 |
| 10 - 20 | 539 | 72.45 | 84.27 |
| > 20 | 117 | 15.73 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

Maximum Value: 98.4 % on Aug 13 08:00

Maximum Daily Average: 90.6 % on Aug 4

Minimum Value: 32.7 % on Aug 26 15:00

Minimum Daily Average: 55.5 % on Aug 26

Maximum Diurnal Average: 90.7 % at hour 6

Minimum Diurnal Average: 54.9 % at hour 16

Monthly Average: 73.45 %

Percentiles: $P_1$ = 36.3 $P_{10}$ = 47.5 $Q_1$ = 58.9 Median = 76.3 $Q_3$ = 89.3 $P_{90}$ = 94.8 $P_{99}$ = 98.1

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 744 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

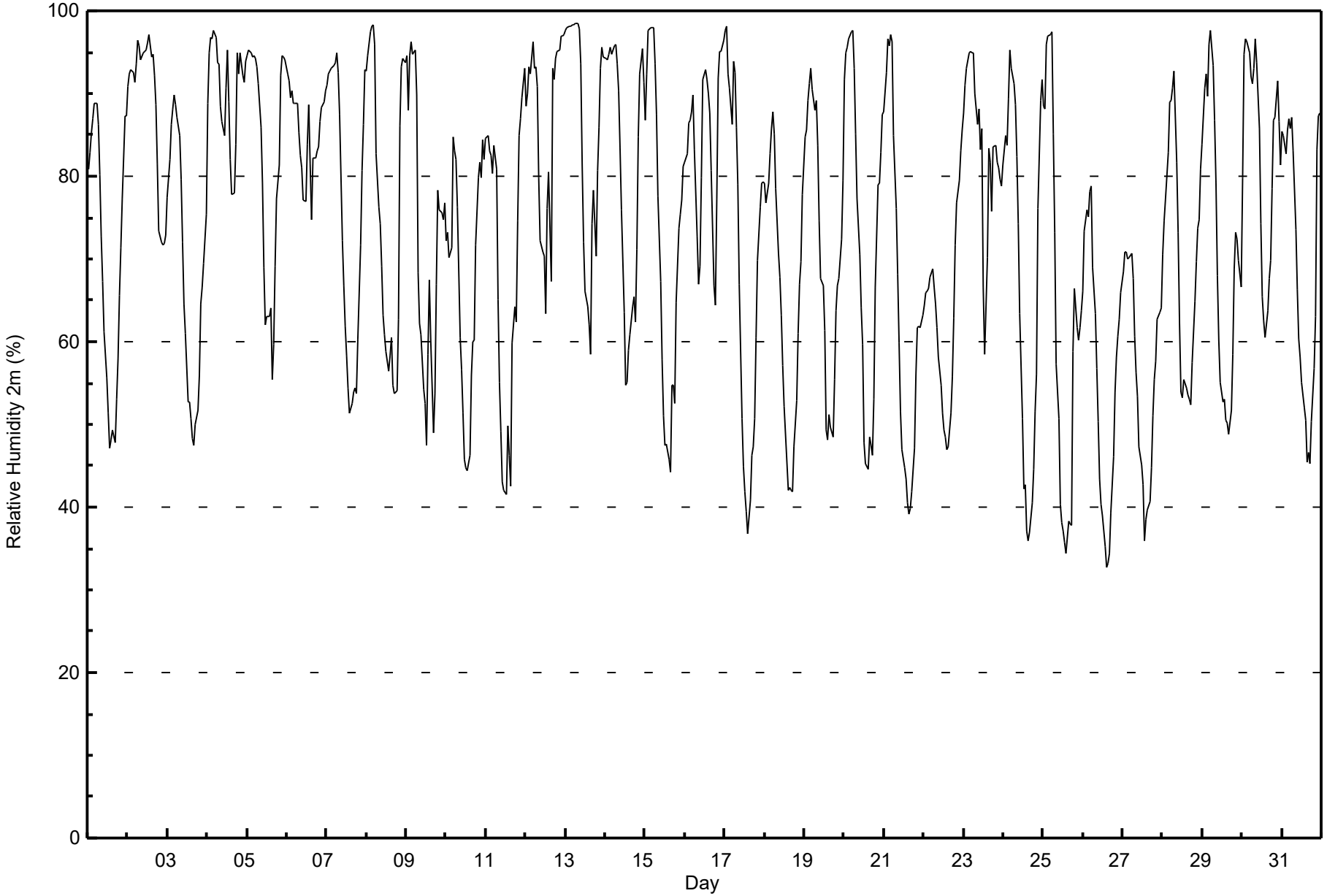
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | 80.9 | 82.9 | 85.2 | 87.0 | 88.8 | 88.9 | 86.3 | 80.1 | 72.8 | 67.4 | 61.1 | 55.6 | 51.3 | 47.1 | 48.1 | 49.4 | 47.9 | 53.0 | 57.9 | 65.5 | 71.4 | 77.2 | 87.2 | 87.2 | 70.0 | 88.9 |
| 2-Aug | 90.9 | 92.4 | 92.8 | 92.6 | 91.4 | 93.5 | 96.4 | 95.7 | 94.1 | 94.8 | 95.1 | 95.3 | 96.1 | 97.0 | 94.4 | 94.7 | 92.1 | 88.6 | 81.6 | 73.5 | 72.0 | 71.7 | 71.8 | 72.9 | 88.8 | 97.0 |
| 3-Aug | 77.5 | 82.1 | 86.3 | 88.2 | 89.8 | 88.7 | 87.2 | 84.9 | 79.7 | 72.0 | 64.5 | 60.9 | 52.6 | 52.7 | 50.7 | 48.3 | 47.5 | 50.0 | 51.7 | 55.9 | 64.6 | 66.7 | 69.6 | 75.5 | 68.6 | 89.8 |
| 4-Aug | 88.8 | 94.9 | 96.8 | 96.6 | 97.7 | 96.7 | 93.8 | 93.5 | 88.4 | 86.7 | 84.9 | 90.7 | 95.2 | 89.1 | 82.1 | 77.7 | 78.0 | 84.0 | 94.9 | 92.4 | 94.9 | 92.2 | 91.4 | 93.9 | 90.6 | 97.7 |
| 5-Aug | 94.5 | 95.2 | 94.9 | 94.5 | 94.6 | 94.3 | 93.2 | 91.2 | 86.0 | 79.2 | 69.0 | 62.1 | 63.0 | 63.1 | 64.0 | 55.4 | 59.6 | 69.2 | 77.3 | 81.3 | 92.2 | 94.5 | 94.4 | 94.1 | 81.5 | 95.2 |
| 6-Aug | 92.4 | 91.5 | 89.6 | 90.3 | 88.8 | 88.7 | 88.8 | 85.2 | 82.6 | 81.0 | 77.2 | 76.9 | 83.9 | 88.6 | 81.4 | 74.8 | 82.3 | 82.2 | 83.0 | 83.5 | 86.7 | 88.3 | 89.0 | 90.4 | 85.3 | 92.4 |
| 7-Aug | 91.0 | 92.3 | 92.6 | 93.1 | 93.4 | 93.7 | 94.9 | 92.5 | 87.5 | 72.2 | 66.8 | 61.9 | 58.3 | 54.5 | 51.4 | 52.6 | 53.9 | 54.4 | 53.7 | 60.4 | 71.7 | 80.7 | 86.4 | 92.9 | 75.1 | 94.9 |
| 8-Aug | 92.7 | 94.6 | 97.4 | 98.1 | 98.3 | 95.9 | 82.8 | 76.3 | 74.3 | 69.2 | 63.2 | 60.8 | 58.8 | 56.5 | 58.3 | 60.4 | 54.8 | 53.7 | 54.0 | 62.7 | 86.2 | 93.1 | 94.2 | 93.7 | 76.3 | 98.3 |
| 9-Aug | 94.5 | 88.0 | 94.6 | 96.3 | 94.8 | 95.2 | 89.8 | 68.2 | 62.2 | 60.8 | 54.3 | 52.5 | 47.4 | 58.5 | 67.5 | 60.1 | 48.9 | 53.8 | 67.0 | 78.3 | 76.0 | 75.6 | 74.7 | 76.8 | 72.3 | 96.3 |
| 10-Aug | 72.3 | 73.2 | 70.1 | 71.3 | 84.8 | 83.1 | 82.0 | 76.3 | 60.4 | 56.6 | 51.3 | 45.8 | 44.7 | 44.4 | 46.2 | 55.9 | 60.0 | 60.1 | 71.7 | 79.9 | 81.8 | 79.9 | 84.5 | 82.0 | 67.4 | 84.8 |
| 11-Aug | 84.6 | 84.9 | 83.1 | 82.5 | 80.4 | 83.8 | 80.9 | 65.1 | 55.0 | 49.1 | 43.0 | 42.0 | 41.6 | 49.8 | 46.3 | 42.6 | 59.8 | 64.3 | 62.4 | 74.7 | 84.9 | 87.0 | 89.4 | 93.1 | 67.9 | 93.1 |
| 12-Aug | 88.4 | 90.0 | 93.3 | 92.5 | 96.3 | 93.0 | 93.2 | 90.8 | 79.8 | 72.1 | 70.9 | 70.4 | 63.5 | 76.2 | 80.5 | 67.3 | 93.1 | 91.7 | 94.3 | 95.2 | 95.3 | 96.9 | 96.9 | 97.2 | 86.6 | 97.2 |
| 13-Aug | 97.7 | 98.0 | 98.1 | 98.2 | 98.3 | 98.3 | 98.4 | 98.4 | 97.8 | 93.6 | 81.4 | 72.0 | 66.1 | 64.2 | 62.0 | 58.5 | 74.3 | 78.3 | 70.3 | 80.7 | 85.9 | 93.0 | 95.7 | 94.4 | 85.6 | 98.4 |
| 14-Aug | 94.2 | 94.1 | 94.7 | 95.7 | 94.7 | 95.7 | 95.9 | 93.6 | 90.4 | 83.4 | 76.0 | 63.5 | 54.8 | 55.0 | 59.0 | 60.8 | 64.2 | 65.4 | 62.4 | 71.3 | 84.7 | 92.4 | 95.3 | 91.4 | 80.4 | 95.9 |
| 15-Aug | 86.8 | 92.4 | 97.7 | 97.9 | 98.0 | 97.9 | 93.5 | 87.5 | 77.7 | 67.3 | 57.8 | 51.0 | 47.5 | 47.6 | 45.8 | 44.3 | 54.8 | 54.7 | 52.6 | 64.8 | 73.7 | 75.3 | 77.1 | 81.2 | 71.9 | 98.0 |
| 16-Aug | 81.6 | 82.8 | 86.4 | 86.7 | 87.7 | 89.8 | 83.2 | 72.7 | 67.0 | 69.1 | 79.8 | 91.7 | 92.9 | 91.7 | 90.0 | 87.6 | 80.7 | 66.8 | 64.4 | 77.4 | 91.9 | 95.1 | 95.0 | 96.5 | 83.7 | 96.5 |
| 17-Aug | 97.7 | 98.1 | 92.4 | 90.7 | 86.2 | 93.9 | 92.6 | 85.9 | 78.9 | 67.0 | 50.7 | 45.0 | 41.9 | 39.5 | 36.7 | 40.8 | 46.2 | 47.3 | 50.7 | 60.6 | 69.8 | 76.2 | 79.1 | 79.4 | 68.6 | 98.1 |
| 18-Aug | 79.1 | 76.8 | 79.1 | 82.8 | 85.8 | 87.9 | 85.0 | 78.4 | 70.7 | 67.8 | 63.3 | 57.2 | 52.2 | 45.4 | 42.0 | 42.3 | 42.0 | 41.9 | 47.3 | 52.9 | 60.9 | 67.0 | 69.6 | 77.8 | 64.8 | 87.9 |
| 19-Aug | 84.7 | 85.7 | 89.1 | 91.2 | 93.1 | 90.5 | 88.0 | 89.2 | 83.7 | 74.6 | 67.6 | 66.8 | 61.3 | 49.3 | 48.2 | 51.2 | 49.7 | 48.5 | 55.5 | 63.7 | 66.8 | 67.7 | 72.4 | 79.4 | 71.6 | 93.1 |
| 20-Aug | 91.6 | 94.9 | 95.6 | 96.6 | 97.5 | 97.6 | 93.1 | 85.1 | 77.3 | 70.6 | 64.1 | 59.7 | 47.8 | 45.2 | 44.6 | 48.5 | 47.5 | 46.3 | 53.1 | 66.5 | 79.1 | 79.2 | 83.0 | 87.5 | 73.0 | 97.6 |
| 21-Aug | 87.9 | 92.5 | 96.7 | 95.7 | 97.2 | 96.3 | 85.0 | 76.1 | 68.1 | 59.9 | 51.6 | 47.0 | 44.7 | 43.4 | 40.6 | 39.1 | 39.8 | 41.9 | 47.1 | 56.0 | 61.7 | 61.9 | 61.7 | 63.2 | 64.8 | 97.2 |
| 22-Aug | 64.4 | 65.9 | 66.2 | 66.5 | 67.9 | 68.8 | 66.7 | 64.5 | 61.8 | 58.1 | 54.7 | 51.3 | 49.3 | 48.5 | 46.9 | 47.3 | 51.4 | 55.8 | 62.8 | 71.6 | 76.8 | 79.4 | 83.1 | 85.7 | 63.1 | 85.7 |
| 23-Aug | 87.6 | 91.1 | 93.0 | 94.8 | 95.1 | 95.0 | 94.9 | 90.1 | 86.3 | 88.1 | 83.2 | 85.8 | 66.6 | 58.5 | 70.1 | 83.4 | 81.7 | 75.7 | 83.5 | 83.8 | 81.7 | 80.9 | 79.6 | 78.8 | 83.7 | 95.1 |
| 24-Aug | 81.4 | 84.9 | 83.7 | 89.4 | 95.3 | 93.1 | 91.2 | 88.6 | 82.4 | 74.3 | 63.4 | 50.7 | 42.2 | 42.8 | 37.1 | 36.0 | 37.0 | 40.5 | 44.6 | 51.6 | 56.1 | 76.1 | 89.1 | 91.7 | 67.6 | 95.3 |
| 25-Aug | 88.5 | 88.2 | 96.0 | 97.0 | 97.2 | 97.4 | 85.1 | 73.2 | 57.3 | 50.6 | 40.3 | 38.1 | 37.2 | 35.8 | 34.3 | 38.3 | 37.9 | 37.8 | 58.8 | 66.4 | 61.7 | 60.2 | 61.8 | 63.8 | 62.6 | 97.4 |
| 26-Aug | 66.0 | 73.3 | 76.0 | 75.1 | 78.1 | 78.8 | 69.1 | 63.3 | 56.8 | 50.4 | 43.5 | 40.3 | 39.0 | 35.2 | 32.7 | 33.3 | 34.4 | 39.3 | 46.1 | 53.9 | 58.2 | 60.7 | 62.6 | 65.9 | 55.5 | 78.8 |
| 27-Aug | 68.5 | 70.9 | 70.8 | 70.0 | 70.2 | 70.7 | 67.5 | 60.7 | 56.2 | 53.4 | 47.2 | 45.2 | 42.7 | 35.9 | 38.5 | 39.7 | 40.7 | 44.8 | 51.1 | 55.4 | 57.7 | 62.7 | 63.5 | 64.1 | 56.2 | 70.9 |
| 28-Aug | 70.6 | 74.5 | 77.3 | 82.8 | 89.0 | 89.2 | 90.7 | 92.7 | 81.7 | 73.2 | 62.2 | 53.8 | 53.2 | 55.5 | 54.4 | 53.6 | 53.1 | 52.3 | 57.4 | 65.0 | 69.6 | 73.7 | 74.7 | 80.9 | 70.0 | 92.7 |
| 29-Aug | 83.9 | 90.7 | 92.4 | 89.6 | 96.0 | 97.6 | 93.4 | 86.7 | 79.1 | 68.0 | 60.2 | 55.1 | 52.6 | 53.0 | 50.5 | 50.1 | 48.8 | 51.6 | 58.5 | 68.8 | 73.2 | 72.4 | 69.8 | 66.6 | 71.2 | 97.6 |
| 30-Aug | 79.8 | 94.7 | 96.6 | 96.2 | 95.0 | 92.1 | 91.2 | 93.0 | 96.6 | 93.7 | 85.7 | 74.3 | 65.4 | 62.6 | 60.5 | 63.7 | 67.7 | 69.9 | 78.5 | 86.7 | 87.2 | 91.5 | 86.7 | 81.4 | 82.9 | 96.6 |
| 31-Aug | 85.4 | 84.9 | 82.6 | 85.6 | 86.9 | 85.7 | 87.1 | 83.1 | 73.6 | 66.2 | 60.3 | 58.1 | 55.1 | 52.1 | 50.5 | 45.4 | 46.7 | 45.2 | 50.3 | 56.7 | 63.1 | 83.2 | 87.3 | 87.6 | 69.3 | 87.6 |
| | 84.7 | 87.0 | 88.4 | 89.2 | 90.6 | 90.7 | 87.8 | 82.7 | 76.3 | 70.7 | 64.3 | 60.7 | 57.1 | 56.1 | 55.3 | 54.9 | 57.3 | 58.4 | 62.7 | 69.6 | 75.4 | 79.1 | 81.2 | 82.8 | Diurnal Average | |
| | 97.7 | 98.1 | 98.1 | 98.2 | 98.3 | 98.3 | 98.4 | 98.4 | 97.8 | 94.8 | 95.1 | 95.3 | 96.1 | 97.0 | 94.4 | 94.7 | 93.1 | 91.7 | 94.9 | 95.2 | 95.3 | 96.9 | 96.9 | 97.2 | Diurnal Maximum | |

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**Kirby North - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 23 | 3.09 | 3.09 |
| 40 - 60 | 168 | 22.58 | 25.67 |
| 60 - 80 | 223 | 29.97 | 55.65 |
| 80 - 100 | 330 | 44.35 | 100.00 |

Total Number of Valid Hours: 744

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## Kirby North - August 2026

Maximum Speed: 23 km/h on Aug 2 16:00

Maximum Daily Speed Average: 14.6 km/h on Aug 6

Minimum Speed Value: 0 km/h on Aug 30 19:00

Minimum Daily Speed Average: 1.5 km/h on Aug 30

Maximum Diurnal Speed Average: 5.7 km/h at hour 12

Minimum Diurnal Speed Average: 0.8 km/h at hour 21

Monthly Average Velocity: 2.7 km/h 263.9 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 4 $Q_1$ = 6 Median = 9 $Q_3$ = 12 $P_{90}$ = 15 $P_{99}$ = 20

Hours in Service: 744

Hours of Data: 743

Hours of Missing Data: 1

Percent Operational Time: 99.9

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | SSE8 | SSE8 | SSE8 | SSE9 | SSE8 | SSE10 | SSE9 | SSE12 | SSE16 | SSE16 | SE19 | SE18 | SE20 | SE19 | SE20 | SSE17 | S18 | SSE15 | SSE10 | SSE5 | SE8 | W9 | NNW12 | NNW14 | SSE9.7 | SE20 |
| 2-Aug | NNE11 | W7 | W9 | WSW8 | W15 | WSW17 | SW13 | SW13 | WSW14 | WSW18 | W18 | W15 | WNW14 | NNW13 | NNW21 | NNW23 | NW19 | NW20 | NW17 | NW18 | NW16 | NW16 | NW18 | NW17 | WNW12.3 | NNW23 |
| 3-Aug | NW12 | NW8 | WNW7 | WNW8 | WNW10 | WNW11 | WNW12 | NW10 | NW12 | NW14 | NW17 | NW15 | NW16 | NW15 | NW15 | NW14 | NNW14 | NW10 | NW9 | W7 | W6 | WSW8 | W9 | W6 | NW10.5 | NW17 |
| 4-Aug | SW2 | S5 | S5 | S2 | S6 | S8 | S8 | S9 | SSW10 | SSW9 | SSW11 | SW11 | SSW9 | SSW14 | SSW17 | SSW14 | SSW11 | WSW10 | S5 | WSW10 | WSW8 | W12 | WNW15 | WNW14 | SW7.6 | SSW17 |
| 5-Aug | WNW13 | WNW11 | WNW11 | WNW12 | WNW12 | WNW16 | WNW14 | WNW15 | WNW17 | WNW17 | WNW20 | WNW20 | WNW20 | WNW19 | WNW18 | WNW19 | W15 | WSW13 | SW11 | SSW8 | NNE2 | NNW21 | NNW13 | NW17 | WNW13.3 | NNW21 |
| 6-Aug | NW15 | NW15 | NW16 | WNW17 | WNW18 | NW20 | NW20 | NW21 | NW19 | NW17 | NW17 | NW17 | NW14 | WNW14 | WNW16 | WNW15 | WNW11 | W8 | WNW11 | WNW12 | WNW11 | W9 | W11 | W15 | WNW14.6 | NW21 |
| 7-Aug | WNW14 | WNW12 | W10 | W10 | W12 | W11 | WSW6 | WSW7 | WSW6 | WNW13 | WNW14 | WNW13 | WNW13 | WNW14 | WNW12 | WNW11 | WNW11 | NW8 | WNW11 | W8 | WSW9 | WSW11 | WNW11 | N5 | WNW10.0 | WNW14 |
| 8-Aug | NW5 | WNW2 | SSW2 | N3 | NNE7 | NE1 | ENE1 | NNE5 | N5 | NNW6 | NNW4 | NNW4 | NNW7 | NNW9 | N11 | N9 | N9 | N7 | NNW5 | NW3 | E2 | NNE3 | NE4 | E5 | N4.0 | N11 |
| 9-Aug | E6 | S6 | ESE2 | SE3 | S5 | SSE5 | SSE5 | SSE3 | SW5 | SW6 | NNE2 | NNW3 | W3 | NE5 | NE8 | ENE9 | ESE1 | NNE3 | NE6 | ENE5 | E5 | E5 | ENE9 | E8 | E2.5 | ENE9 |
| 10-Aug | ESE8 | ESE8 | SE7 | SE5 | NNE1 | NE4 | NNE2 | E5 | ESE7 | E7 | ENE6 | NNE7 | NNE7 | NNE6 | N5 | NNW5 | N6 | N6 | NNE4 | NNE4 | NNE5 | NNW4 | NNE4 | N5 | NE3.6 | ESE8 |
| 11-Aug | N5 | NNE6 | N6 | NNE6 | N5 | NNE6 | NNE4 | NNE7 | NNE6 | N6 | N7 | NW6 | NNW7 | NNE10 | NNW12 | N10 | NNW13 | NNE9 | N5 | SSE2 | WNW3 | NW4 | UO | NW3 | N5.8 | NNW13 |
| 12-Aug | NNW6 | NNW7 | N4 | N4 | N4 | N5 | N5 | NNW4 | NNW6 | NNW8 | NW9 | WNW10 | NNW10 | N11 | NNW6 | NNW11 | NNE6 | NNW7 | NNW4 | NNW5 | N8 | N6 | NNW6 | N7 | NNW6.3 | N11 |
| 13-Aug | N7 | N7 | N6 | N7 | NNE8 | NNE11 | NNE11 | NNE10 | NNE10 | NNE11 | NNE10 | NE11 | NE11 | NE18 | NE15 | NE11 | NNE9 | N5 | NNE11 | NE8 | ENE7 | NE5 | NNE6 | NNE6 | NNE8.7 | NE18 |
| 14-Aug | NNE6 | NNE5 | NNE5 | NNE6 | NNE5 | NNE6 | NNE7 | NNE5 | NNE5 | NNE4 | NNE5 | NNE5 | N4 | N11 | NNE18 | ENE11 | SSE9 | SSW6 | SW7 | WSW7 | NNE2 | SSE3 | ESE1 | SSW3 | NNE3.2 | NNE18 |
| 15-Aug | SW5 | SW5 | SSW5 | WSW4 | WSW2 | S4 | S3 | S5 | SSW7 | SSW9 | SSW8 | WSW11 | SSW12 | SSW13 | SW12 | SW12 | WNW12 | SW9 | SW8 | SSW6 | S6 | S7 | SSW8 | S8 | SSW6.7 | SSW13 |
| 16-Aug | S8 | SSW9 | SSW9 | SSW9 | SSW10 | SSW7 | SSW10 | SW12 | WNW12 | WNW13 | WNW14 | WNW13 | WNW12 | WNW12 | NNW11 | NNW11 | NNW11 | NNW10 | NNW8 | NNW5 | NW4 | S3 | SSW4 | SE2 | W5.2 | WNW14 |
| 17-Aug | SSE4 | S3 | SSW4 | SW5 | WSW10 | SSW7 | SSW5 | SW6 | WSW7 | WSW9 | NW9 | NW10 | NW8 | W4 | W5 | SW7 | SSW6 | SSW9 | SW8 | S6 | S7 | SSE7 | SSE7 | SSE7 | SW4.6 | NW10 |
| 18-Aug | SSE9 | SSE10 | SSE9 | SSE9 | SSE10 | SSE11 | SSE10 | S10 | S11 | SW12 | SW12 | SW11 | SW11 | SSW11 | SW10 | SW13 | WSW14 | W12 | WNW13 | WNW12 | WSW9 | W8 | WSW7 | SSW4 | SW7.8 | WSW14 |
| 19-Aug | SSE3 | S4 | SSW2 | SSW3 | SSW2 | SW4 | SW4 | SSW4 | SW7 | WSW9 | W12 | WSW12 | WNW15 | WNW15 | WNW16 | WNW13 | WNW14 | WNW15 | NW11 | NW6 | WNW8 | WNW8 | WNW7 | W5 | W6.8 | WNW16 |
| 20-Aug | W2 | S4 | SW1 | N1 | SSW1 | S5 | SSW7 | SW5 | WSW6 | WNW6 | NNW7 | W6 | WNW8 | NW13 | NW11 | NW9 | NNW11 | NNW9 | N6 | NNE6 | ENE7 | ENE7 | ENE6 | ENE7 | NW2.6 | NW13 |
| 21-Aug | NE5 | SSE3 | S5 | S6 | S8 | SSE7 | SSE7 | S7 | SSW10 | SW10 | SW10 | SW11 | WSW12 | SW10 | SW13 | SW11 | SW11 | SSW10 | S8 | S6 | SSE9 | SSE9 | SSE10 | SSE11 | SSW7.2 | SW13 |
| 22-Aug | SSE11 | SSE11 | SSE12 | SSE12 | SSE11 | SSE13 | SSE13 | S14 | S13 | S13 | S11 | SSE9 | SSE10 | SSE10 | SSE12 | SSE13 | SSE16 | S12 | S9 | S7 | S10 | S10 | S9 | S9 | SSE11.1 | SSE16 |
| 23-Aug | SSW10 | S10 | S9 | S7 | S5 | SSE7 | SE4 | S6 | SW4 | SW9 | NW7 | N10 | NNE10 | NE7 | S2 | SW9 | N8 | NNW11 | NNW9 | NNW12 | NNW11 | NNW8 | NNW10 | NW11 | WNW2.2 | NNW12 |
| 24-Aug | NW9 | NW6 | SSW1 | S8 | SSW4 | WNW7 | NNW9 | NNW9 | NNW10 | N11 | NNW13 | NNW15 | NNW17 | NNW14 | NNW19 | NW19 | NW19 | NW13 | NW9 | NW7 | NW8 | NE4 | NNE3 | ENE3 | NNW8.4 | NW19 |
| 25-Aug | SE3 | S5 | S7 | S6 | S6 | S4 | SW4 | SSW4 | SW7 | WSW8 | WNW8 | WSW8 | W7 | WSW9 | NW7 | N7 | NNE6 | NNE5 | ENE3 | SE4 | ESE8 | ESE9 | SE9 | SE9 | SSW1.9 | ESE9 |
| 26-Aug | SSE8 | SSE7 | SSE8 | SSE8 | SSE8 | SSE7 | SSE7 | SSE7 | S9 | SSE10 | SSE14 | SSE13 | S12 | S12 | SSW13 | S12 | S11 | SSE11 | SSE10 | SE9 | SE11 | SE14 | SE13 | SE12 | SSE9.9 | SE14 |
| 27-Aug | SSE13 | SSE12 | SSE11 | SSE12 | SSE12 | SSE11 | SSE12 | SSE14 | SSE13 | SSE12 | S12 | W7 | ENE6 | SE16 | SE17 | SE19 | SE18 | SE16 | SE11 | ESE12 | ESE12 | ESE15 | SE13 | SSE12 | SE11.8 | SE19 |
| 28-Aug | S6 | WSW11 | WNW15 | N3 | SSE7 | SW13 | SW12 | WSW13 | WSW14 | WSW17 | SW17 | SW20 | WSW22 | WSW20 | WSW20 | WSW18 | SW18 | SW16 | SW14 | SW12 | SW11 | SW10 | SW11 | SW10 | SW12.8 | WSW22 |
| 29-Aug | SW11 | SW10 | SW9 | WSW7 | S7 | SSW6 | SW9 | SW10 | SW11 | SW10 | SW12 | SW12 | SSW12 | SSW15 | SW14 | SW11 | SW9 | SSW7 | S6 | SSE6 | SE7 | SE7 | SE6 | SE10 | SSW7.9 | SSW15 |
| 30-Aug | SE9 | ENE2 | NNE7 | NE8 | ENE10 | ENE11 | ENE9 | ENE4 | NNE6 | NE6 | NNE4 | N3 | WSW3 | SW7 | SW8 | SSW7 | SSW5 | S1 | ENE0 | NE4 | NE4 | S2 | WNW12 | NW9 | NE1.5 | WNW12 |
| 31-Aug | N5 | N7 | NW9 | NW8 | NW8 | WNW10 | NW6 | WNW8 | NW11 | WNW13 | WNW14 | NW12 | NW14 | NW13 | WNW12 | WNW12 | NW9 | NW10 | WNW9 | WNW8 | WNW8 | SSW2 | SSE7 | SSE8 | NW7.8 | WNW14 |
| | WSW1.0 | SW2.1 | SW2.2 | SW1.9 | SW2.1 | SW2.4 | SW2.4 | SW3.0 | WSW3.7 | W4.7 | W5.2 | W5.7 | WNW5.3 | W3.9 | WNW4.7 | WNW4.1 | WNW4.1 | W3.7 | W2.9 | W2.1 | WSW0.8 | WSW1.1 | W1.6 | W1.1 | Diurnal Average | |
| | NW15 | NW15 | NW16 | WNW17 | WNW18 | NW20 | NW20 | NW21 | NW19 | WSW18 | WNW20 | SW20 | WSW22 | WSW20 | NNW21 | NNW23 | NW19 | NW20 | NW17 | NW18 | NW16 | NNW21 | NW18 | NW17 | Diurnal Maximum | |

UO - Unstable Operation

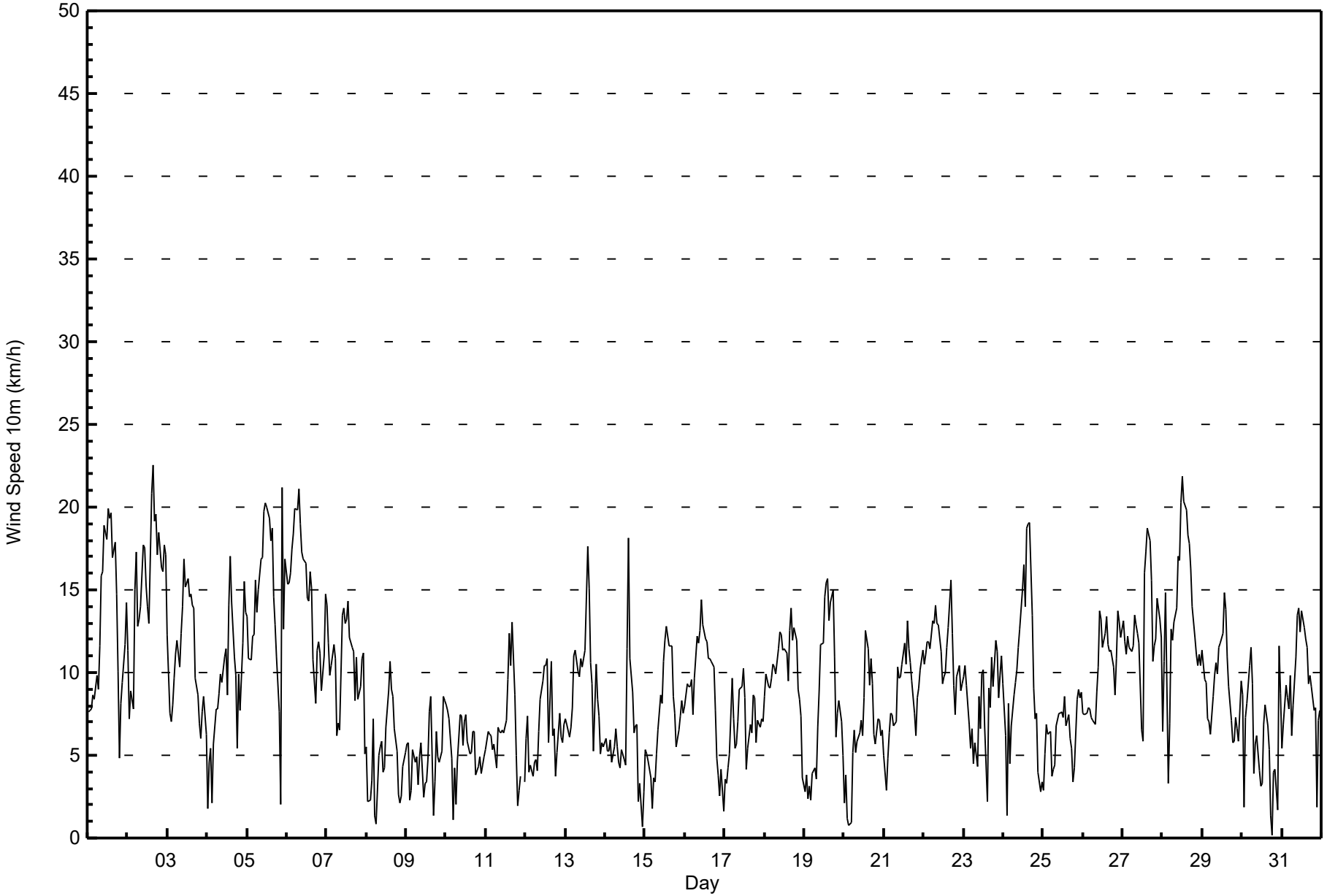
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**Kirby North - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 155 | 20.86 | 20.86 |
| 6 - 11 | 380 | 51.14 | 72.01 |
| 12 - 19 | 192 | 25.84 | 97.85 |
| 20 - 28 | 16 | 2.15 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 743

Total Number of Hours: 744




**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**Kirby North - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 19 | 24 | 9 | 7 | 5 | 3 | 6 | 10 | 19 | 17 | 11 | 3 | 5 | 2 | 5 | 10 | 155 |
| 6 - 11 | 25 | 33 | 9 | 13 | 3 | 5 | 12 | 49 | 38 | 30 | 36 | 24 | 18 | 27 | 29 | 29 | 380 |
| 12 - 19 | 0 | 1 | 2 | 0 | 0 | 3 | 12 | 23 | 9 | 8 | 19 | 11 | 8 | 51 | 32 | 13 | 192 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 0 | 3 | 4 | 3 | 16 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 44 | 58 | 20 | 20 | 8 | 11 | 32 | 82 | 66 | 55 | 67 | 41 | 31 | 83 | 70 | 55 | 743 |

Total Number of Valid Hours: 743

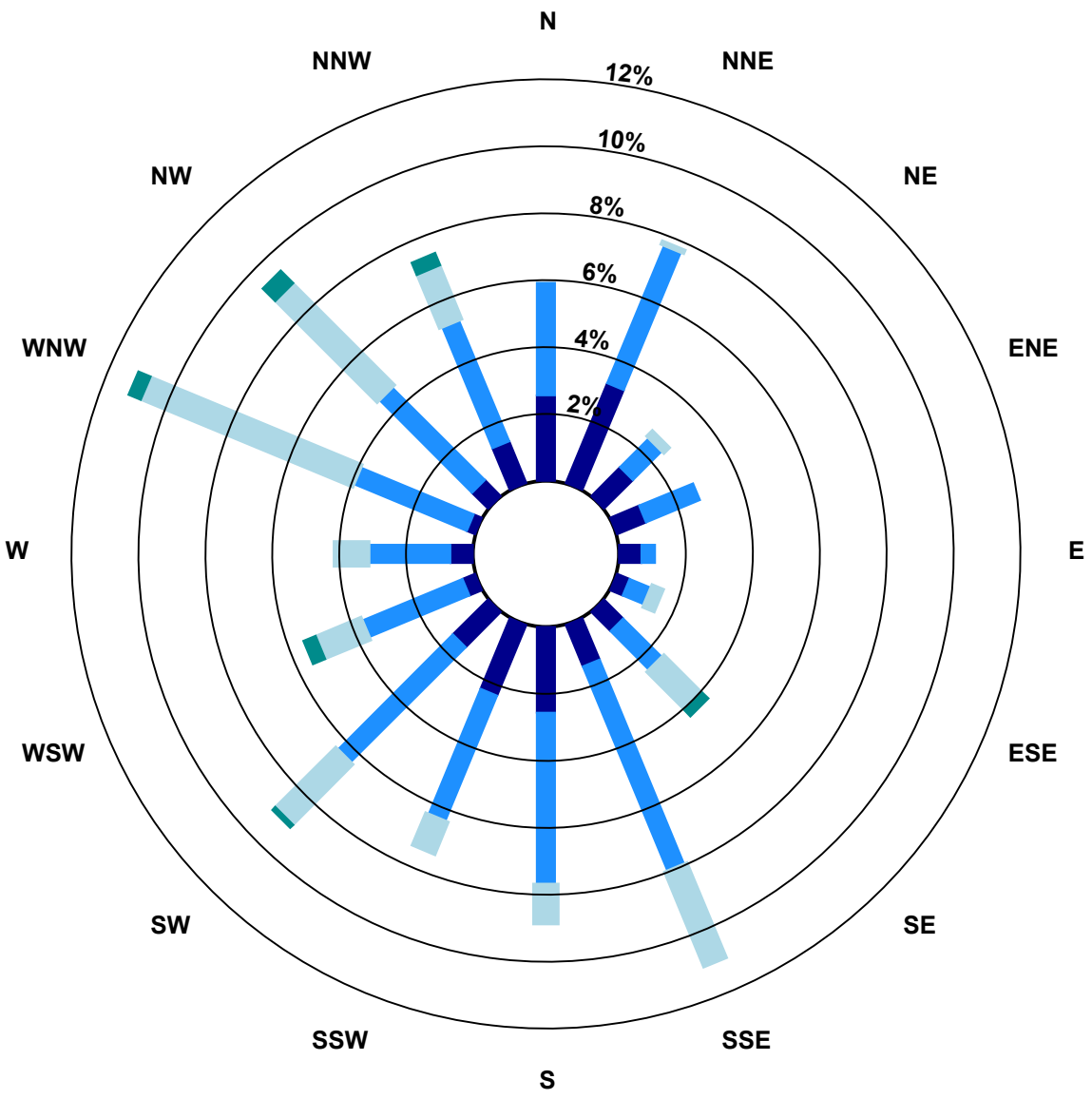
Total Number of Hours: 744

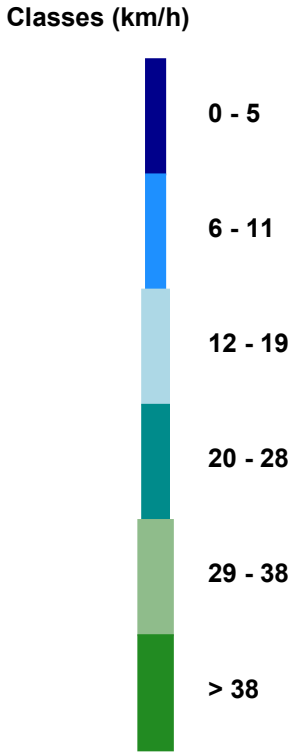
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**Kirby North**




**Total Number of Valid Hours: 743**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 9 km/h on Aug 1 22:00

Minimum Value: 0 km/h on Aug 13 23:00

Percentiles: $P_1$ = 1 $P_{10}$ = 1 $Q_1$ = 2 Median = 3 $Q_3$ = 4 $P_{90}$ = 4 $P_{99}$ = 6

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 2 | 9 | 3 | 5 | 9 |
| 2-Aug | 4 | 4 | 3 | 3 | 5 | 4 | 3 | 3 | 4 | 5 | 5 | 5 | 4 | 6 | 6 | 7 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 7 |
| 3-Aug | 4 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 4 |
| 4-Aug | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 8 | 4 | 3 | 3 | 4 | 4 | 4 | 8 |
| 5-Aug | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 2 | 8 | 5 | 5 | 8 |
| 6-Aug | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 6 |
| 7-Aug | 4 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 4 |
| 8-Aug | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 3 |
| 9-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 3 |
| 10-Aug | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 11-Aug | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 5 | 3 | 7 | 4 | 7 | 2 | 2 | 1 | 1 | 1 | UO | 2 | 7 |
| 12-Aug | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 3 | 3 | 5 | 2 | 5 | 3 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 5 |
| 13-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 5 | 4 | 3 | 4 | 2 | 4 | 2 | 1 | 2 | 0 | 1 | 5 |
| 14-Aug | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 7 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 7 |
| 15-Aug | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 4 |
| 16-Aug | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 4 |
| 17-Aug | 2 | 3 | 3 | 3 | 4 | 1 | 2 | 1 | 2 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 18-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 2 | 4 |
| 19-Aug | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 1 | 2 | 2 | 1 | 2 | 5 |
| 20-Aug | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 0 | 1 | 4 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 4 |
| 22-Aug | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 5 |
| 23-Aug | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 4 | 2 | 3 | 3 | 5 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 5 |
| 24-Aug | 3 | 2 | 2 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 5 | 4 | 2 | 1 | 1 | 2 | 1 | 1 | 6 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 4 |
| 26-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 5 |
| 27-Aug | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 5 | 4 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 5 |
| 28-Aug | 3 | 6 | 7 | 4 | 2 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 7 |
| 29-Aug | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 4 |
| 30-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 5 | 3 | 5 |
| 31-Aug | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 2 | 1 | 1 | 4 |
| | 4 | 6 | 7 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 7 | 7 | 8 | 4 | 4 | 4 | 9 | 5 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

Direction of Maximum Speed: 336 deg on Aug 2 16:00

Direction of Maximum Daily Speed Average: 300.9 deg on Aug 6

Direction of Minimum Speed: 65 deg on Aug 30 19:00

Direction of Minimum Daily Speed Average: 1.5 deg on Aug 30

Monthly Average Direction: 263.9 deg

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average |
| 1-Aug | 157 | 160 | 156 | 157 | 159 | 153 | 156 | 160 | 156 | 151 | 134 | 135 | 131 | 134 | 138 | 154 | 175 | 161 | 152 | 148 | 132 | 280 | 334 | 329 | 150.2 |
| 2-Aug | 13 | 268 | 272 | 258 | 267 | 247 | 229 | 232 | 251 | 258 | 270 | 280 | 286 | 335 | 341 | 336 | 325 | 325 | 321 | 322 | 324 | 322 | 323 | 324 | 300.3 |
| 3-Aug | 318 | 314 | 303 | 289 | 300 | 300 | 303 | 312 | 309 | 308 | 321 | 322 | 322 | 311 | 309 | 315 | 328 | 321 | 308 | 278 | 264 | 255 | 267 | 276 | 306.8 |
| 4-Aug | 218 | 170 | 172 | 178 | 173 | 173 | 171 | 182 | 193 | 210 | 212 | 227 | 201 | 209 | 204 | 212 | 203 | 247 | 179 | 251 | 240 | 271 | 285 | 286 | 217.7 |
| 5-Aug | 291 | 299 | 299 | 300 | 291 | 290 | 292 | 293 | 300 | 300 | 302 | 296 | 293 | 283 | 291 | 298 | 269 | 256 | 231 | 210 | 23 | 345 | 343 | 318 | 295.3 |
| 6-Aug | 312 | 310 | 304 | 301 | 302 | 307 | 308 | 309 | 315 | 312 | 320 | 306 | 314 | 300 | 297 | 293 | 295 | 266 | 290 | 282 | 284 | 269 | 276 | 281 | 300.9 |
| 7-Aug | 286 | 285 | 266 | 273 | 273 | 275 | 247 | 246 | 248 | 298 | 298 | 294 | 284 | 300 | 298 | 294 | 296 | 312 | 294 | 275 | 251 | 245 | 286 | 357 | 283.4 |
| 8-Aug | 308 | 300 | 203 | 358 | 29 | 45 | 67 | 29 | 357 | 341 | 341 | 333 | 331 | 345 | 6 | 10 | 6 | 3 | 346 | 308 | 81 | 30 | 55 | 88 | 1.3 |
| 9-Aug | 96 | 176 | 114 | 135 | 171 | 147 | 153 | 168 | 217 | 229 | 14 | 348 | 277 | 37 | 46 | 69 | 107 | 27 | 51 | 77 | 94 | 79 | 73 | 87 | 93.6 |
| 10-Aug | 109 | 116 | 124 | 135 | 23 | 37 | 30 | 81 | 107 | 81 | 62 | 25 | 17 | 21 | 3 | 339 | 354 | 360 | 19 | 26 | 31 | 340 | 16 | 355 | 45.3 |
| 11-Aug | 358 | 18 | 8 | 16 | 359 | 21 | 14 | 19 | 31 | 6 | 351 | 311 | 328 | 13 | 344 | 9 | 339 | 19 | 351 | 161 | 300 | 308 | UO | 308 | 357.5 |
| 12-Aug | 327 | 339 | 352 | 357 | 7 | 4 | 0 | 341 | 341 | 330 | 325 | 303 | 333 | 8 | 332 | 346 | 24 | 334 | 345 | 330 | 4 | 359 | 348 | 357 | 344.2 |
| 13-Aug | 356 | 11 | 4 | 6 | 16 | 22 | 27 | 20 | 21 | 23 | 31 | 56 | 41 | 52 | 43 | 47 | 18 | 355 | 15 | 45 | 78 | 53 | 12 | 22 | 29.8 |
| 14-Aug | 32 | 29 | 27 | 26 | 33 | 20 | 24 | 17 | 15 | 26 | 19 | 22 | 8 | 9 | 19 | 72 | 147 | 192 | 218 | 237 | 21 | 164 | 117 | 212 | 30.2 |
| 15-Aug | 226 | 215 | 202 | 249 | 257 | 184 | 169 | 191 | 208 | 206 | 212 | 237 | 207 | 205 | 226 | 215 | 286 | 231 | 224 | 193 | 179 | 189 | 192 | 189 | 213.4 |
| 16-Aug | 190 | 196 | 200 | 193 | 199 | 198 | 213 | 234 | 286 | 301 | 292 | 291 | 292 | 288 | 332 | 343 | 331 | 336 | 335 | 331 | 311 | 171 | 195 | 145 | 273.2 |
| 17-Aug | 168 | 170 | 210 | 235 | 258 | 210 | 213 | 224 | 239 | 255 | 304 | 310 | 306 | 260 | 273 | 225 | 211 | 212 | 215 | 188 | 174 | 161 | 156 | 153 | 226.5 |
| 18-Aug | 157 | 161 | 164 | 160 | 161 | 160 | 164 | 181 | 191 | 215 | 223 | 223 | 219 | 211 | 214 | 235 | 244 | 267 | 290 | 282 | 258 | 261 | 258 | 208 | 214.7 |
| 19-Aug | 165 | 184 | 209 | 204 | 200 | 216 | 224 | 201 | 215 | 238 | 260 | 258 | 291 | 286 | 299 | 302 | 299 | 291 | 315 | 316 | 293 | 291 | 290 | 280 | 276.9 |
| 20-Aug | 263 | 175 | 222 | 10 | 194 | 169 | 196 | 218 | 241 | 291 | 328 | 268 | 293 | 320 | 322 | 324 | 342 | 335 | 353 | 17 | 77 | 77 | 78 | 71 | 324.6 |
| 21-Aug | 51 | 163 | 182 | 170 | 172 | 165 | 168 | 180 | 198 | 217 | 235 | 225 | 239 | 222 | 228 | 215 | 221 | 203 | 189 | 171 | 159 | 157 | 158 | 161 | 194.9 |
| 22-Aug | 160 | 157 | 156 | 156 | 159 | 159 | 164 | 171 | 176 | 179 | 172 | 163 | 165 | 157 | 166 | 165 | 156 | 171 | 172 | 176 | 179 | 176 | 177 | 180 | 166.7 |
| 23-Aug | 193 | 182 | 185 | 182 | 175 | 163 | 139 | 178 | 233 | 230 | 307 | 355 | 22 | 48 | 170 | 235 | 359 | 346 | 337 | 329 | 327 | 342 | 332 | 326 | 302.0 |
| 24-Aug | 322 | 323 | 205 | 187 | 208 | 303 | 328 | 347 | 347 | 351 | 341 | 336 | 339 | 333 | 334 | 324 | 321 | 320 | 317 | 312 | 305 | 45 | 16 | 73 | 329.3 |
| 25-Aug | 141 | 185 | 177 | 188 | 180 | 171 | 224 | 205 | 235 | 247 | 292 | 257 | 270 | 242 | 306 | 5 | 22 | 21 | 78 | 124 | 110 | 119 | 125 | 137 | 192.4 |
| 26-Aug | 152 | 153 | 155 | 156 | 150 | 154 | 157 | 162 | 175 | 168 | 160 | 158 | 176 | 179 | 200 | 185 | 178 | 157 | 156 | 145 | 141 | 142 | 145 | 146 | 161.3 |
| 27-Aug | 149 | 152 | 157 | 157 | 152 | 148 | 151 | 151 | 152 | 152 | 184 | 260 | 76 | 131 | 131 | 138 | 140 | 138 | 135 | 122 | 112 | 119 | 135 | 151 | 142.7 |
| 28-Aug | 189 | 246 | 301 | 4 | 153 | 229 | 220 | 237 | 241 | 239 | 235 | 232 | 239 | 243 | 245 | 240 | 232 | 230 | 228 | 225 | 226 | 221 | 225 | 223 | 234.9 |
| 29-Aug | 234 | 217 | 233 | 240 | 183 | 192 | 217 | 220 | 222 | 218 | 236 | 218 | 210 | 208 | 219 | 229 | 215 | 207 | 183 | 155 | 135 | 134 | 124 | 129 | 207.1 |
| 30-Aug | 139 | 62 | 19 | 46 | 71 | 74 | 78 | 73 | 25 | 43 | 21 | 1 | 250 | 215 | 231 | 213 | 212 | 173 | 65 | 56 | 35 | 175 | 292 | 316 | 47.6 |
| 31-Aug | 11 | 3 | 319 | 313 | 307 | 296 | 307 | 299 | 305 | 303 | 301 | 311 | 309 | 304 | 303 | 303 | 307 | 317 | 295 | 296 | 299 | 193 | 164 | 160 | 305.1 |
| | 239.5 | 217.6 | 230.1 | 223.1 | 218.6 | 219.2 | 216.7 | 229.1 | 247.0 | 262.1 | 280.2 | 279.0 | 284.4 | 280.8 | 291.0 | 282.9 | 281.3 | 279.5 | 280.0 | 269.4 | 240.4 | 244.1 | 273.0 | 272.3 | |
| | Diurnal Average | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

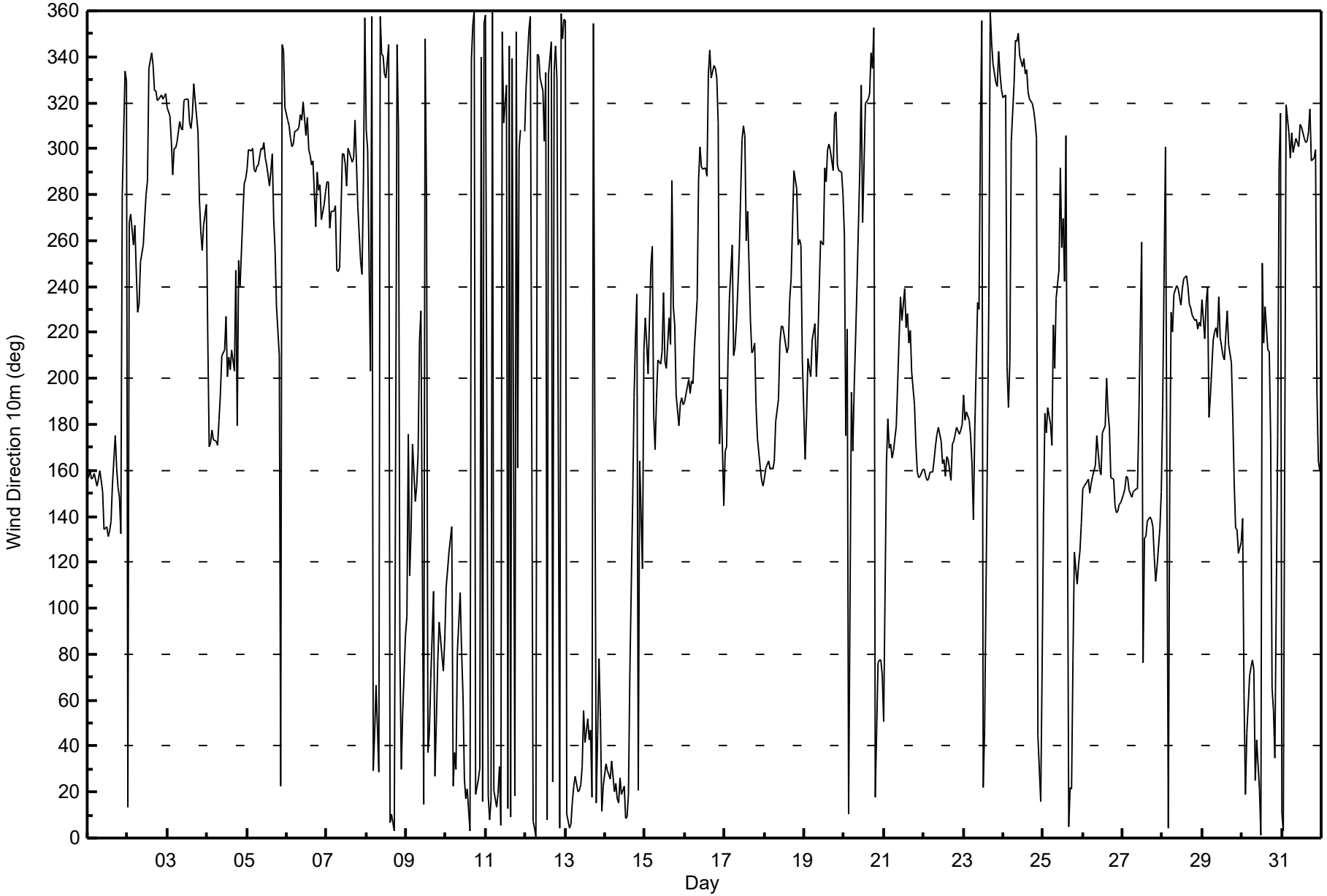
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**Kirby North - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## Kirby North - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 94 deg on Aug 20 05:00

Minimum Value: 3 deg on Aug 20 23:00

Percentiles: $P_1$ = 7 $P_{10}$ = 13 $Q_1$ = 16 Median = 20 $Q_3$ = 27 $P_{90}$ = 47 $P_{99}$ = 84

| | |
|---|---|
| Hours in Service: | 744 |
| Hours of Data: | 743 |
| Hours of Missing Data: | 1 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 99.9 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | 16 | 17 | 17 | 16 | 16 | 16 | 18 | 20 | 19 | 21 | 18 | 20 | 19 | 18 | 20 | 25 | 23 | 23 | 21 | 20 | 15 | 74 | 18 | 27 | 74 |
| 2-Aug | 23 | 57 | 27 | 38 | 23 | 17 | 15 | 15 | 19 | 16 | 19 | 24 | 22 | 26 | 17 | 17 | 16 | 15 | 15 | 14 | 14 | 14 | 14 | 15 | 57 |
| 3-Aug | 16 | 19 | 17 | 18 | 20 | 19 | 17 | 19 | 20 | 20 | 19 | 18 | 22 | 21 | 23 | 22 | 21 | 21 | 20 | 18 | 24 | 15 | 18 | 28 | 28 |
| 4-Aug | 50 | 17 | 24 | 28 | 15 | 12 | 18 | 18 | 22 | 29 | 20 | 21 | 24 | 19 | 19 | 18 | 21 | 39 | 50 | 27 | 23 | 22 | 16 | 16 | 50 |
| 5-Aug | 17 | 17 | 18 | 17 | 18 | 16 | 15 | 17 | 17 | 19 | 17 | 20 | 18 | 22 | 18 | 18 | 24 | 21 | 14 | 22 | 82 | 24 | 19 | 15 | 82 |
| 6-Aug | 16 | 18 | 16 | 17 | 17 | 16 | 17 | 17 | 19 | 20 | 18 | 19 | 18 | 17 | 18 | 20 | 28 | 25 | 19 | 19 | 18 | 22 | 20 | 17 | 28 |
| 7-Aug | 16 | 16 | 20 | 22 | 18 | 17 | 18 | 23 | 35 | 20 | 19 | 23 | 22 | 20 | 25 | 26 | 18 | 21 | 19 | 18 | 29 | 26 | 16 | 37 | 37 |
| 8-Aug | 12 | 66 | 57 | 67 | 15 | 78 | 45 | 25 | 46 | 56 | 70 | 52 | 32 | 28 | 19 | 21 | 18 | 18 | 21 | 42 | 26 | 23 | 17 | 18 | 78 |
| 9-Aug | 10 | 27 | 39 | 29 | 28 | 14 | 16 | 72 | 31 | 33 | 79 | 68 | 61 | 30 | 14 | 26 | 93 | 90 | 9 | 17 | 10 | 29 | 5 | 11 | 93 |
| 10-Aug | 14 | 13 | 14 | 29 | 92 | 24 | 62 | 33 | 23 | 28 | 52 | 60 | 49 | 56 | 14 | 15 | 15 | 16 | 12 | 17 | 12 | 12 | 7 | 14 | 92 |
| 11-Aug | 13 | 7 | 9 | 11 | 8 | 11 | 23 | 19 | 25 | 45 | 47 | 47 | 70 | 23 | 37 | 23 | 21 | 22 | 22 | 53 | 25 | 23 | UO | 15 | 70 |
| 12-Aug | 15 | 17 | 27 | 22 | 16 | 9 | 11 | 19 | 25 | 28 | 19 | 24 | 25 | 31 | 28 | 29 | 26 | 24 | 27 | 17 | 13 | 12 | 15 | 14 | 31 |
| 13-Aug | 15 | 12 | 12 | 11 | 12 | 13 | 14 | 13 | 15 | 17 | 22 | 24 | 29 | 18 | 21 | 20 | 20 | 24 | 23 | 24 | 11 | 36 | 6 | 10 | 36 |
| 14-Aug | 7 | 10 | 8 | 8 | 20 | 10 | 8 | 12 | 20 | 25 | 23 | 46 | 73 | 26 | 15 | 32 | 33 | 24 | 16 | 19 | 83 | 53 | 78 | 58 | 83 |
| 15-Aug | 22 | 23 | 19 | 32 | 70 | 20 | 29 | 28 | 23 | 25 | 33 | 27 | 27 | 27 | 26 | 23 | 27 | 18 | 17 | 13 | 13 | 13 | 15 | 15 | 70 |
| 16-Aug | 17 | 14 | 16 | 14 | 15 | 15 | 19 | 15 | 29 | 17 | 15 | 16 | 17 | 19 | 37 | 19 | 18 | 20 | 17 | 15 | 16 | 32 | 38 | 59 | 59 |
| 17-Aug | 27 | 57 | 44 | 54 | 27 | 14 | 27 | 26 | 22 | 27 | 35 | 26 | 47 | 72 | 73 | 62 | 28 | 20 | 16 | 15 | 12 | 9 | 7 | 11 | 73 |
| 18-Aug | 14 | 14 | 15 | 13 | 14 | 14 | 17 | 21 | 23 | 20 | 19 | 24 | 24 | 26 | 24 | 19 | 14 | 26 | 16 | 22 | 21 | 19 | 21 | 58 | 58 |
| 19-Aug | 75 | 72 | 63 | 62 | 68 | 64 | 43 | 53 | 24 | 22 | 26 | 24 | 19 | 22 | 22 | 19 | 21 | 18 | 31 | 27 | 14 | 14 | 13 | 27 | 75 |
| 20-Aug | 60 | 28 | 91 | 88 | 94 | 24 | 14 | 32 | 22 | 41 | 22 | 42 | 35 | 19 | 24 | 22 | 24 | 21 | 17 | 27 | 7 | 7 | 3 | 7 | 94 |
| 21-Aug | 9 | 47 | 14 | 11 | 6 | 7 | 12 | 20 | 18 | 22 | 22 | 24 | 22 | 30 | 25 | 29 | 23 | 23 | 21 | 17 | 16 | 16 | 16 | 18 | 47 |
| 22-Aug | 17 | 15 | 16 | 16 | 17 | 18 | 20 | 22 | 24 | 23 | 25 | 27 | 27 | 30 | 30 | 25 | 21 | 24 | 21 | 17 | 16 | 16 | 14 | 16 | 30 |
| 23-Aug | 14 | 15 | 17 | 21 | 31 | 24 | 21 | 51 | 55 | 23 | 33 | 21 | 28 | 21 | 62 | 28 | 67 | 18 | 16 | 16 | 15 | 19 | 17 | 18 | 67 |
| 24-Aug | 17 | 18 | 84 | 26 | 53 | 47 | 19 | 15 | 17 | 16 | 17 | 19 | 19 | 18 | 21 | 19 | 17 | 16 | 14 | 13 | 15 | 40 | 28 | 24 | 84 |
| 25-Aug | 37 | 13 | 12 | 15 | 9 | 16 | 31 | 27 | 20 | 20 | 35 | 43 | 44 | 39 | 49 | 31 | 28 | 18 | 27 | 33 | 12 | 10 | 10 | 9 | 49 |
| 26-Aug | 8 | 8 | 8 | 12 | 7 | 9 | 12 | 23 | 26 | 26 | 24 | 28 | 31 | 29 | 28 | 27 | 28 | 21 | 19 | 14 | 15 | 17 | 16 | 16 | 31 |
| 27-Aug | 19 | 17 | 18 | 17 | 15 | 14 | 16 | 17 | 17 | 22 | 35 | 56 | 64 | 22 | 19 | 19 | 19 | 16 | 15 | 13 | 12 | 14 | 16 | 18 | 64 |
| 28-Aug | 35 | 49 | 47 | 86 | 35 | 17 | 17 | 18 | 16 | 17 | 18 | 19 | 16 | 17 | 16 | 18 | 17 | 16 | 15 | 14 | 13 | 13 | 12 | 12 | 86 |
| 29-Aug | 12 | 11 | 24 | 45 | 15 | 14 | 13 | 16 | 19 | 23 | 24 | 27 | 28 | 22 | 23 | 19 | 25 | 27 | 18 | 16 | 6 | 9 | 9 | 14 | 45 |
| 30-Aug | 26 | 77 | 26 | 20 | 12 | 11 | 11 | 54 | 24 | 24 | 35 | 57 | 73 | 26 | 23 | 21 | 21 | 81 | 81 | 35 | 28 | 55 | 15 | 18 | 81 |
| 31-Aug | 37 | 23 | 20 | 15 | 17 | 17 | 20 | 18 | 18 | 21 | 22 | 24 | 25 | 22 | 21 | 29 | 19 | 18 | 15 | 13 | 8 | 66 | 13 | 11 | 66 |
| | 75 | 77 | 91 | 88 | 94 | 78 | 62 | 72 | 55 | 56 | 79 | 68 | 73 | 72 | 73 | 62 | 93 | 90 | 81 | 53 | 83 | 74 | 78 | 59 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

UO - Unstable Operation

# WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

## AMS513
## EBRT
## AUGUST 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

September 29, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - EBRT (AMS513)
AUGUST 2026

MONTHLY SUMMARY

| Parameter | Hours of Data | Hours of Calibration | Hours without Data | Operational Time | Maximum 1-Hour Value | 1-Hour Exceedances | Maximum 24-Hour Value | 24-Hour Exceedances |
|---|---|---|---|---|---|---|---|---|
| SO2 (ppb) Average | 465 | 24 | 24 | 100 | 18.1 | 0 | 1.7 | 0 |
| H2S (ppb) Average | 466 | 25 | 25 | 100 | 1.2 | 0 | 0.4 | 0 |
| NO2 (ppb) Average | 446 | 23 | 23 | 100 | 14 | 0 | 4.2 | - |
| NO (ppb) Average | 446 | 23 | 23 | 100 | 12 | - | 1.5 | - |
| NOX (ppb) Average | 446 | 23 | 23 | 100 | 20.6 | - | 5.7 | - |
| Temperature 2 m (C) Average | 466 | 0 | 0 | 100 | 27.4 | - | 21.9 | - |
| Relative Humidity (%) Average | 466 | 0 | 0 | 100 | 98.9 | - | 80.4 | - |
| Wind Speed 10 m (km/h) Average | 466 | 1 | 2 | 99.79 | 22 | - | 17 | - |
| Wind Direction 10 m (deg) Average | 466 | 1 | 2 | 99.79 | - | - | - | - |

Note : Operational time includes periods of data collection and instrument calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - EBRT (AMS513)
AUGUST 2026

MONTHLY SUMMARY FOR AIR QUALITY/ METEOROLOGICAL MONITORING MEASUREMENTS

| | | | | | Percentile | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Number | Mean | StnDev | Total | Min | P10 | Q1 | Median | Q3 | P90 | Max |
| SO2 (ppb) Average | 465 | 0.53 | 1.3 | - | 0 | 0 | 0 | 0.2 | 0.5 | 1.2 | 18.1 |
| H2S (ppb) Average | 466 | 0.23 | 0.2 | - | 0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 1.2 |
| NO2 (ppb) Average | 446 | 2.01 | 2.1 | - | 0 | 0.5 | 0.8 | 1.2 | 2.6 | 4.5 | 14 |
| NO (ppb) Average | 446 | 0.6 | 1.2 | - | 0 | 0 | 0 | 0.2 | 0.5 | 1.6 | 12 |
| NOX (ppb) Average | 446 | 2.6 | 2.9 | - | 0 | 0.6 | 0.8 | 1.5 | 3.4 | 6 | 20.6 |
| Temperature 2 m (C) Average | 466 | 16.49 | 5.1 | - | 2.6 | 9.8 | 12.9 | 16.5 | 20.2 | 23 | 27.4 |
| Relative Humidity (%) Average | 466 | 69.11 | 17.7 | - | 33.2 | 44.6 | 53.9 | 70 | 84.1 | 92.5 | 98.9 |
| Wind Speed 10 m (km/h) Average | 466 | 9.3 | 5 | - | 1 | 3 | 5 | 9 | 13 | 16 | 22 |
| Wind Direction 10 m (deg) Average | 466 | - | - | - | - | - | - | - | - | - | - |

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - EBRT (AMS513)
AUGUST 2026

OPERATIONAL NOTES

| Parameter | Period Start | Period End | Duration (Hours) | Notes |
|---|---|---|---|---|
| Wind Speed, Wind Direction | 14 Aug 2026 08:00 | 14 Aug 2026 08:00 | 1 | Flat line in sensor output signal |

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Sulphur Dioxide ($SO_2$) - ppb

## EBRT - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 18.1 ppb on Aug 21 10:00

Maximum Daily Average: 1.7 ppb on Aug 21

Minimum Value: 0.0 ppb on Aug 12 01:00

Minimum Daily Average: 0.0 ppb on Aug 12

Maximum Diurnal Average: 1.6 ppb at hour 10

Minimum Diurnal Average: 0.1 ppb at hour 23

Monthly Average: 0.53 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.2 $Q_3 = 0.5$ $P_{90} = 1.2$ $P_{99} = 5.0$

| | |
|---|---|
| Hours in Service: | 489 |
| Hours of Data: | 465 |
| Hours of Missing Data: | 24 |
| Hours of Calibration: | 24 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | C | C | C | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | -- | 0.2 |
| 12-Aug | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 14-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.9 | 1.4 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 1.4 |
| 15-Aug | 0.1 | 0.0 | Z | 0.3 | 0.2 | 0.2 | 0.4 | 3.2 | 3.1 | 4.4 | 2.4 | 3.4 | 5.1 | 2.9 | 3.3 | 2.4 | 1.8 | 0.9 | 0.6 | 0.5 | 0.2 | 0.2 | 0.2 | 0.3 | 1.6 | 5.1 |
| 16-Aug | 0.4 | 0.5 | 0.6 | Z | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| 17-Aug | 0.0 | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.0 | 3.7 | 1.4 | 0.8 | 2.6 | 0.8 | 0.2 | 0.2 | 0.1 | 0.0 | 1.3 | 3.9 | 1.7 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.8 | 3.9 |
| 18-Aug | 0.2 | 0.3 | 0.4 | 0.3 | 0.4 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.5 | 2.0 | 4.2 | 2.1 | 0.1 | 0.2 | 3.1 | 5.0 | 0.3 | 0.8 | 0.2 | 0.1 | 0.1 | 0.9 | 5.0 |
| 19-Aug | Z | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 1.1 | 2.1 | 3.3 | 3.9 | 1.4 | 0.5 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.6 | 3.9 |
| 20-Aug | 0.2 | Z | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.2 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.3 | 0.7 |
| 21-Aug | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 3.7 | 18.1 | 3.0 | 5.4 | 1.2 | 0.4 | 0.5 | 0.9 | 0.5 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 1.7 | 18.1 |
| 22-Aug | 0.5 | 0.4 | 0.5 | Z | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.5 | 0.7 | 1.1 |
| 23-Aug | 0.6 | 0.6 | 0.5 | 0.2 | Z | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 1.8 | 9.5 | 4.5 | 2.6 | 1.1 | 0.5 | 0.5 | 0.3 | 0.5 | 1.2 | 9.5 |
| 24-Aug | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | Z | 0.5 | 1.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 1.0 |
| 25-Aug | Z | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.5 |
| 26-Aug | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 27-Aug | 0.2 | 0.3 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.4 | 0.5 | 0.3 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.3 | 0.2 | 0.0 | 0.2 | 0.5 |
| 28-Aug | 0.0 | 0.0 | 0.0 | Z | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.7 | 0.1 | 0.0 | 0.4 | 0.5 | 0.8 | 0.5 | 0.1 | 1.5 | 0.2 | 0.1 | 1.4 | 0.3 | 1.5 |
| 29-Aug | 5.0 | 1.1 | 0.6 | 2.1 | Z | 0.8 | 0.6 | 0.5 | 0.8 | 1.1 | 1.7 | 1.2 | 1.4 | 0.8 | 1.9 | 1.7 | 0.7 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 1.0 | 5.0 |
| 30-Aug | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.4 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 31-Aug | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 3.3 | 4.4 | 4.3 | 1.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.6 | 4.4 |
| | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 | 0.8 | 1.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 0.9 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | Diurnal Average | |
| | 5.0 | 1.1 | 0.6 | 2.1 | 0.8 | 0.9 | 1.1 | 3.7 | 3.7 | 18.1 | 3.0 | 5.4 | 5.1 | 4.2 | 3.3 | 2.4 | 9.5 | 4.5 | 5.0 | 1.4 | 1.5 | 0.6 | 0.6 | 1.4 | Diurnal Maximum | |

Z - zerospan C - Calibration NS - Not in Service

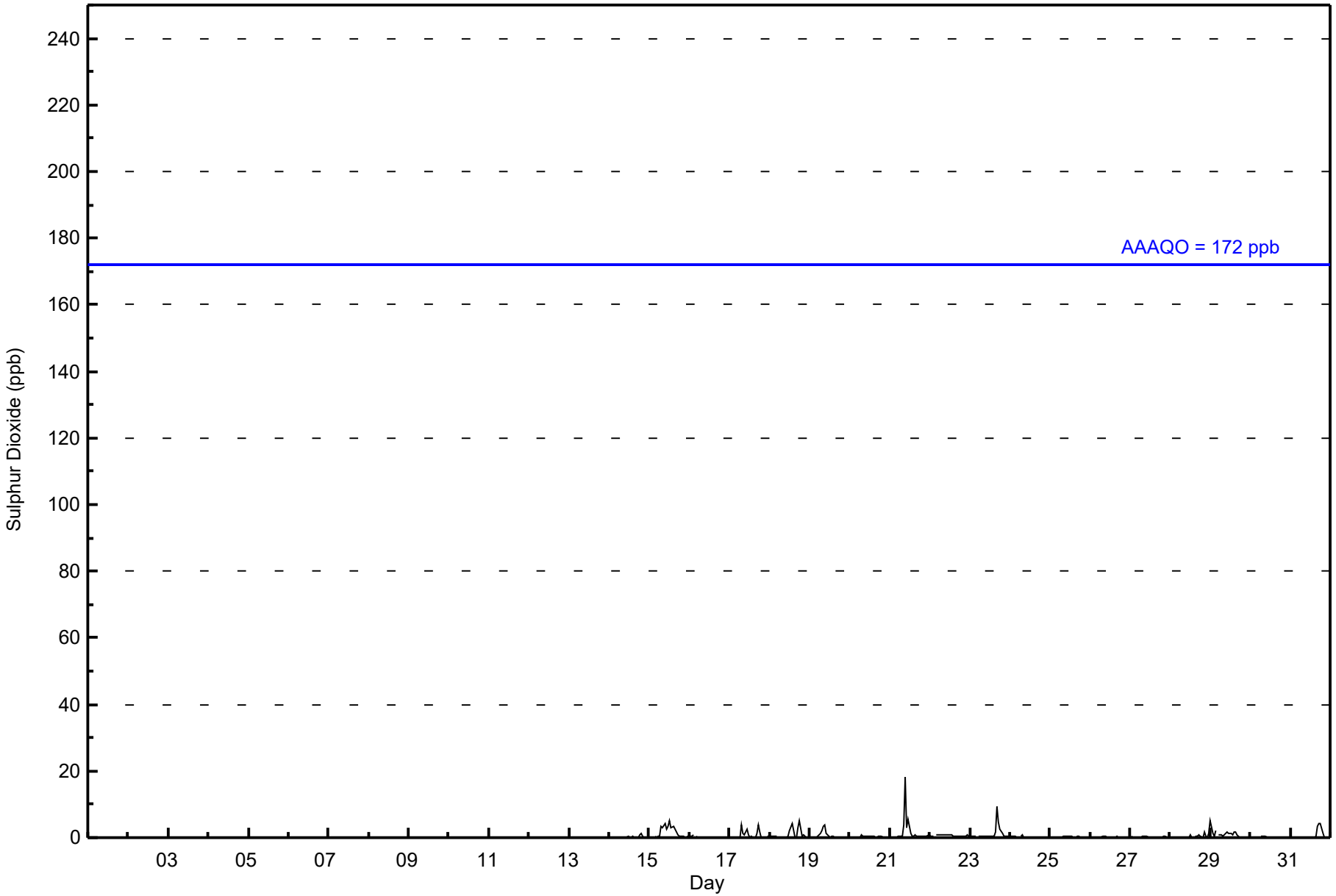
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Sulphur Dioxide ($SO_2$) - ppb**

**EBRT - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 10 | 464 | 99.78 | 99.78 |
| 11 - 20 | 1 | 0.22 | 100.00 |
| 21 - 60 | 0 | 0.00 | 100.00 |
| 61 - 110 | 0 | 0.00 | 100.00 |
| 111 - 172 | 0 | 0.00 | 100.00 |
| > 172 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 465

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Sulphur Dioxide ($SO_2$) - ppb**

**EBRT - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 10 | 30 | 30 | 15 | 11 | 10 | 16 | 53 | 75 | 27 | 37 | 32 | 35 | 16 | 11 | 13 | 35 | 446 |
| 11 - 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 21 - 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 - 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 - 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 30 | 30 | 15 | 11 | 10 | 16 | 53 | 75 | 27 | 37 | 33 | 35 | 16 | 11 | 13 | 35 | 447 |

Total Number of Valid Hours: 447

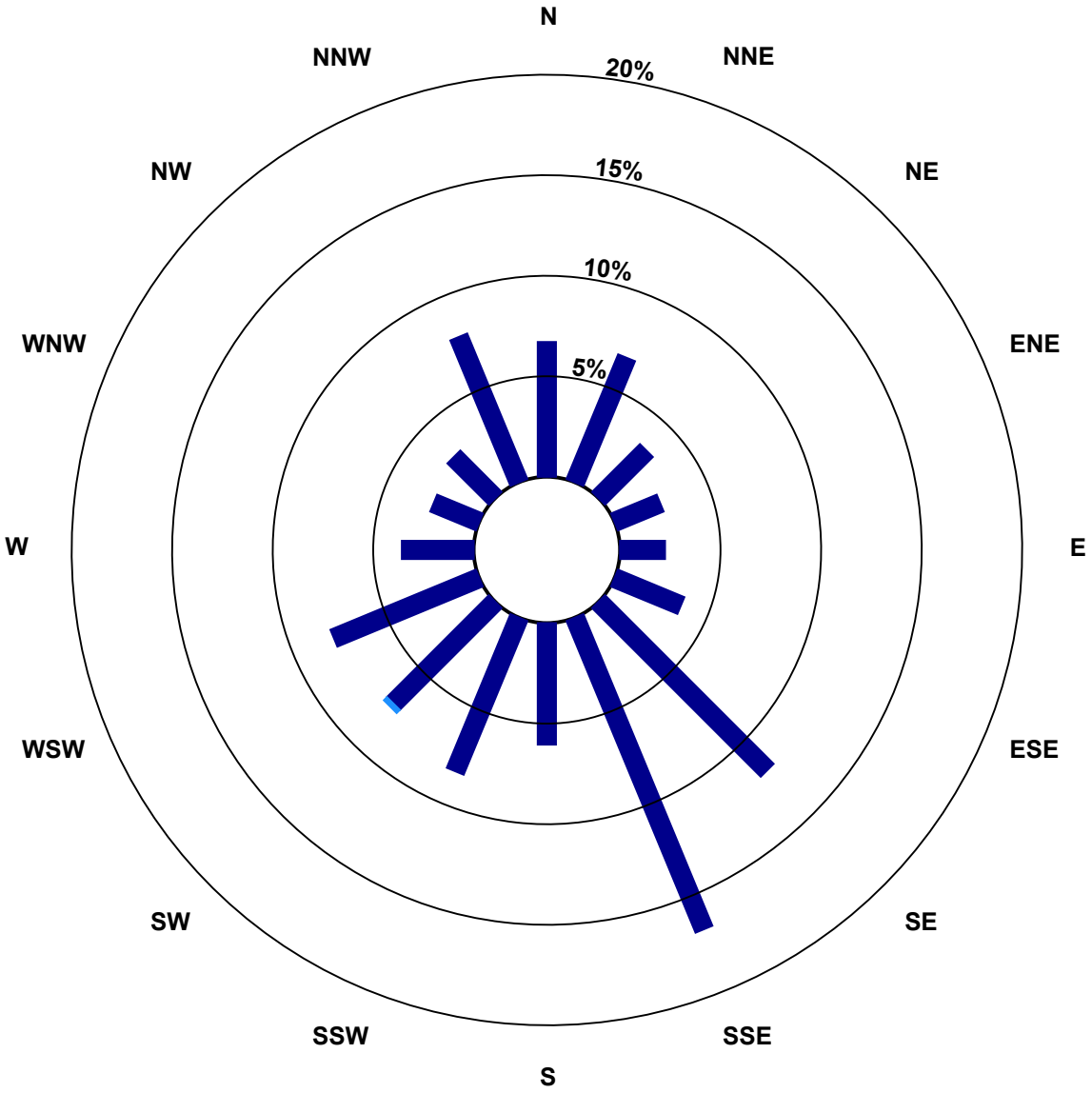
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Sulphur Dioxide ($SO_2$) - ppb

EBRT




Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

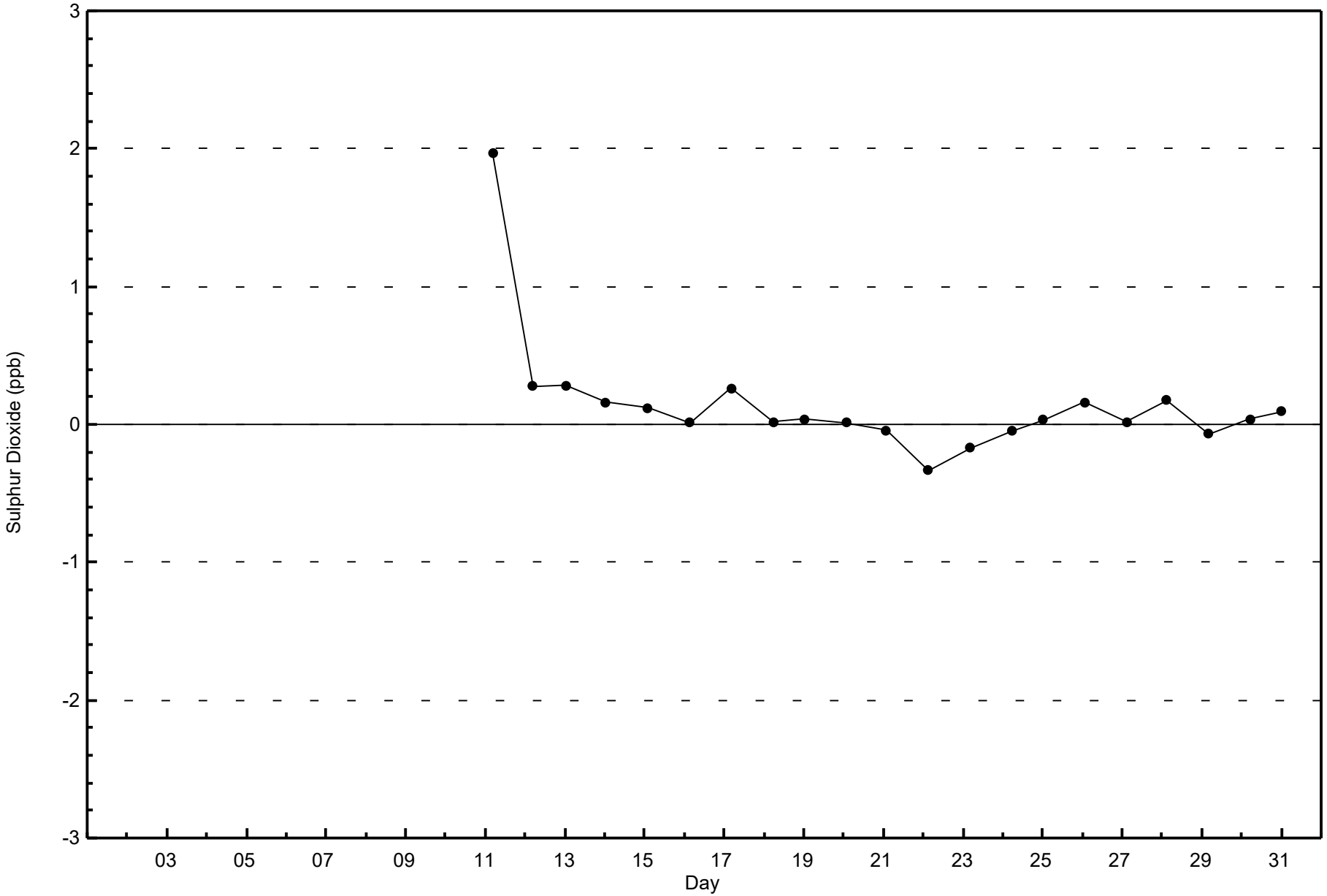
Total Number of Valid Hours: 447

**Wood Buffalo Environmental Association**

**Zero Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**EBRT - August 2026**

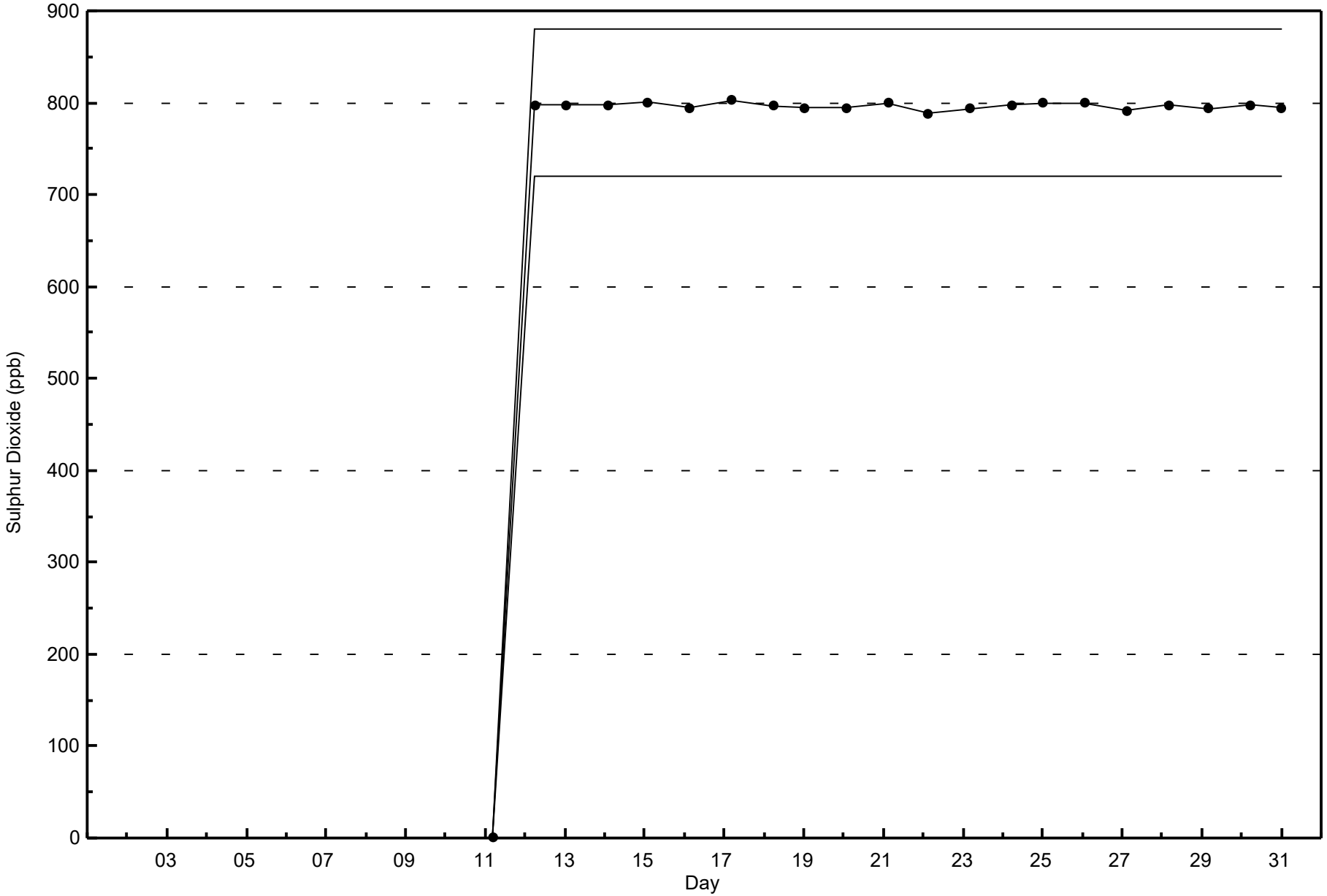


**Wood Buffalo Environmental Association**

**Span Responses**

**Sulphur Dioxide ($SO_2$) - ppb**

**EBRT - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Hydrogen Sulphide ($H_2S$) - ppb

## EBRT - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 1.2 ppb on Aug 17 11:00

Maximum Daily Average: 0.4 ppb on Aug 29

Minimum Value: 0.0 ppb on Aug 13 13:00

Minimum Daily Average: 0.1 ppb on Aug 26

Maximum Diurnal Average: 0.3 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 16

Monthly Average: 0.23 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.5$ $P_{99} = 1.0$

| | |
|---|---|
| Hours in Service: | 491 |
| Hours of Data: | 466 |
| Hours of Missing Data: | 25 |
| Hours of Calibration: | 25 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | C | C | C | C | 0.7 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | -- | 0.9 |
| 12-Aug | Z | 0.3 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.7 |
| 13-Aug | 0.2 | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.4 |
| 14-Aug | 0.2 | 0.2 | Z | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 | 1.1 | 0.8 | 0.7 | 0.3 | 0.2 | 0.3 | 1.1 |
| 15-Aug | 0.2 | 0.2 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.4 | 0.4 | 0.5 | 0.2 | 0.5 | 0.5 | 0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 |
| 16-Aug | 0.9 | 0.8 | 0.8 | 0.8 | Z | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 | 0.9 |
| 17-Aug | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 1.0 | 0.9 | 0.4 | 1.2 | 0.7 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 1.2 |
| 18-Aug | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.5 | 0.2 | 0.5 |
| 19-Aug | 0.3 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.5 | 1.0 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 1.0 |
| 20-Aug | 0.2 | 0.2 | Z | 0.3 | 0.1 | 0.1 | 0.2 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.5 |
| 21-Aug | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 22-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 |
| 23-Aug | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | Z | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.6 |
| 24-Aug | Z | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.5 |
| 25-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 26-Aug | 0.1 | 0.1 | Z | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 27-Aug | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 28-Aug | 0.1 | 0.1 | 0.1 | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.7 | 0.3 | 0.3 | 0.9 | 0.3 | 0.9 |
| 29-Aug | 0.4 | 0.4 | 1.1 | 0.4 | 0.9 | Z | 0.7 | 0.4 | 0.3 | 0.6 | 0.6 | 0.6 | 0.3 | 0.5 | 0.5 | 0.2 | 0.4 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 1.1 |
| 30-Aug | Z | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 31-Aug | 0.1 | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | Diurnal Average | |
| | 0.9 | 0.8 | 1.1 | 0.8 | 0.9 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 | 1.2 | 0.7 | 0.5 | 0.5 | 0.5 | 0.2 | 0.4 | 0.5 | 1.0 | 1.1 | 0.9 | 0.9 | 0.8 | 0.9 | Diurnal Maximum | |

Z - zerospan C - Calibration NS - Not in Service

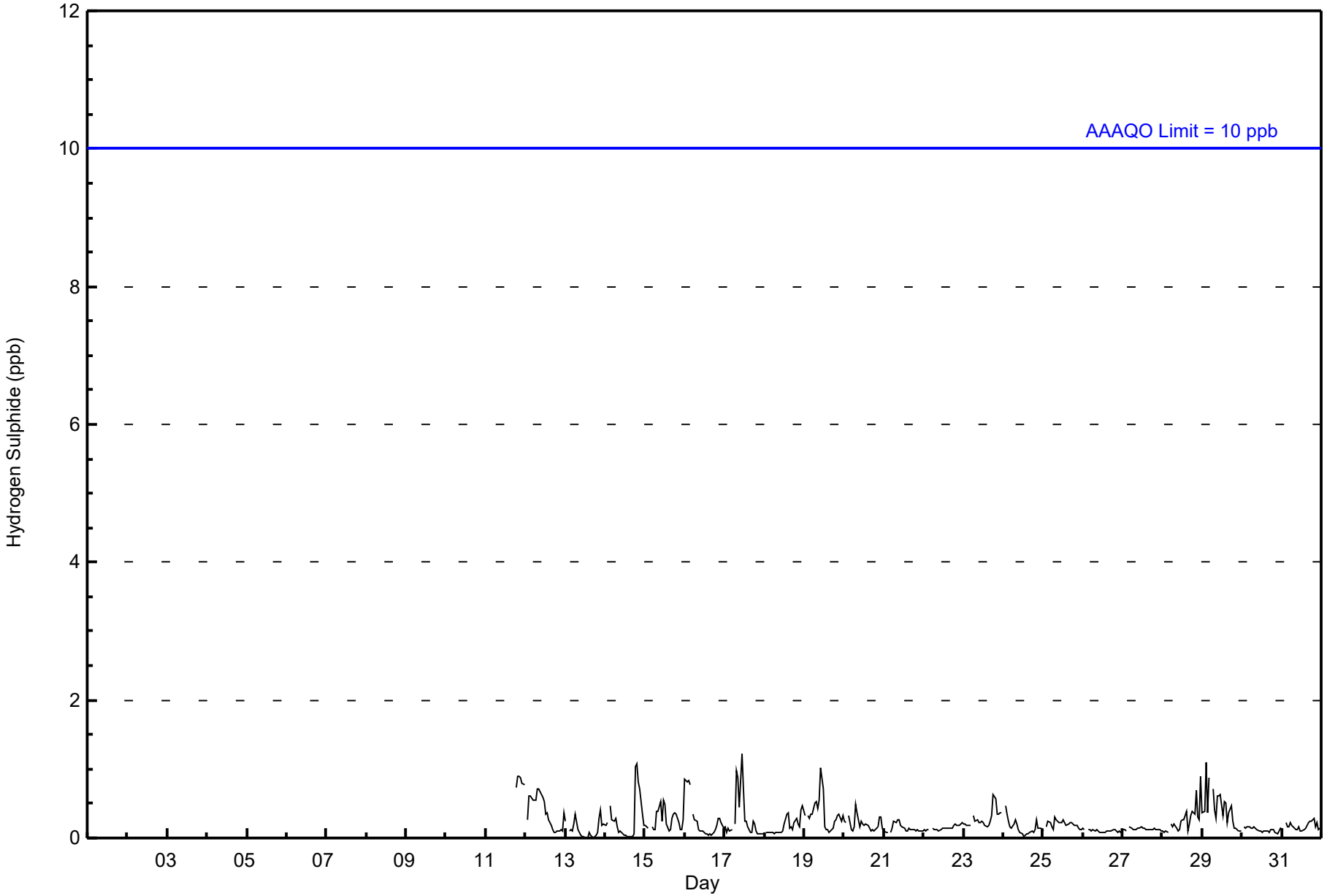
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Hydrogen Sulphide ($H_2S$) - ppb**

**EBRT - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 2 | 466 | 100.00 | 100.00 |
| 3 - 4 | 0 | 0.00 | 100.00 |
| 5 - 7 | 0 | 0.00 | 100.00 |
| 8 - 11 | 0 | 0.00 | 100.00 |
| > 11 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 466

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Hydrogen Sulphide ($H_2S$) - ppb**

**EBRT - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 2 | 30 | 30 | 15 | 10 | 12 | 17 | 53 | 74 | 27 | 36 | 33 | 35 | 17 | 11 | 13 | 34 | 447 |
| 3 - 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 - 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 - 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 30 | 30 | 15 | 10 | 12 | 17 | 53 | 74 | 27 | 36 | 33 | 35 | 17 | 11 | 13 | 34 | 447 |

Total Number of Valid Hours: 447

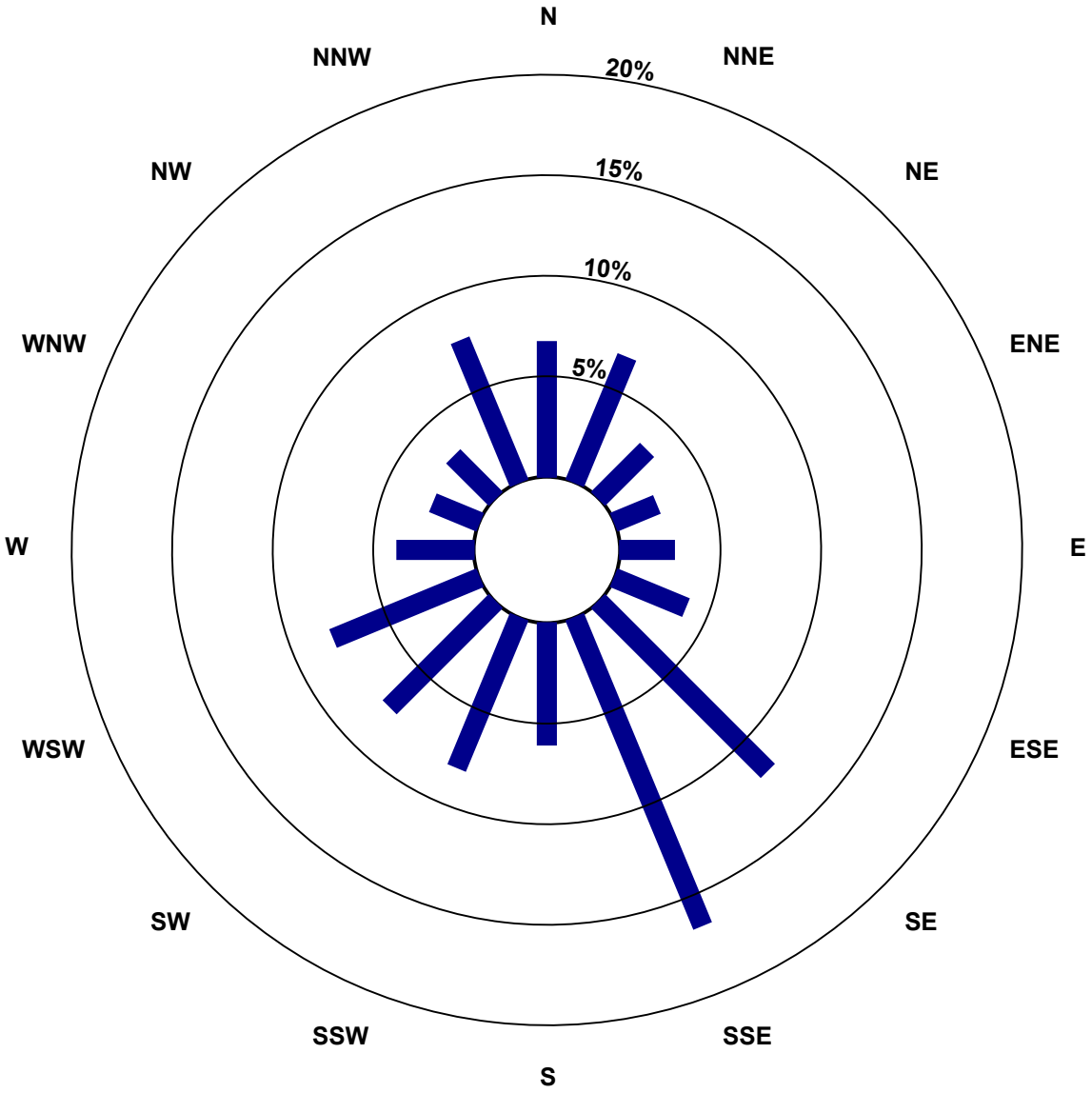
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Hydrogen Sulphide ($H_2S$) - ppb

EBRT




Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

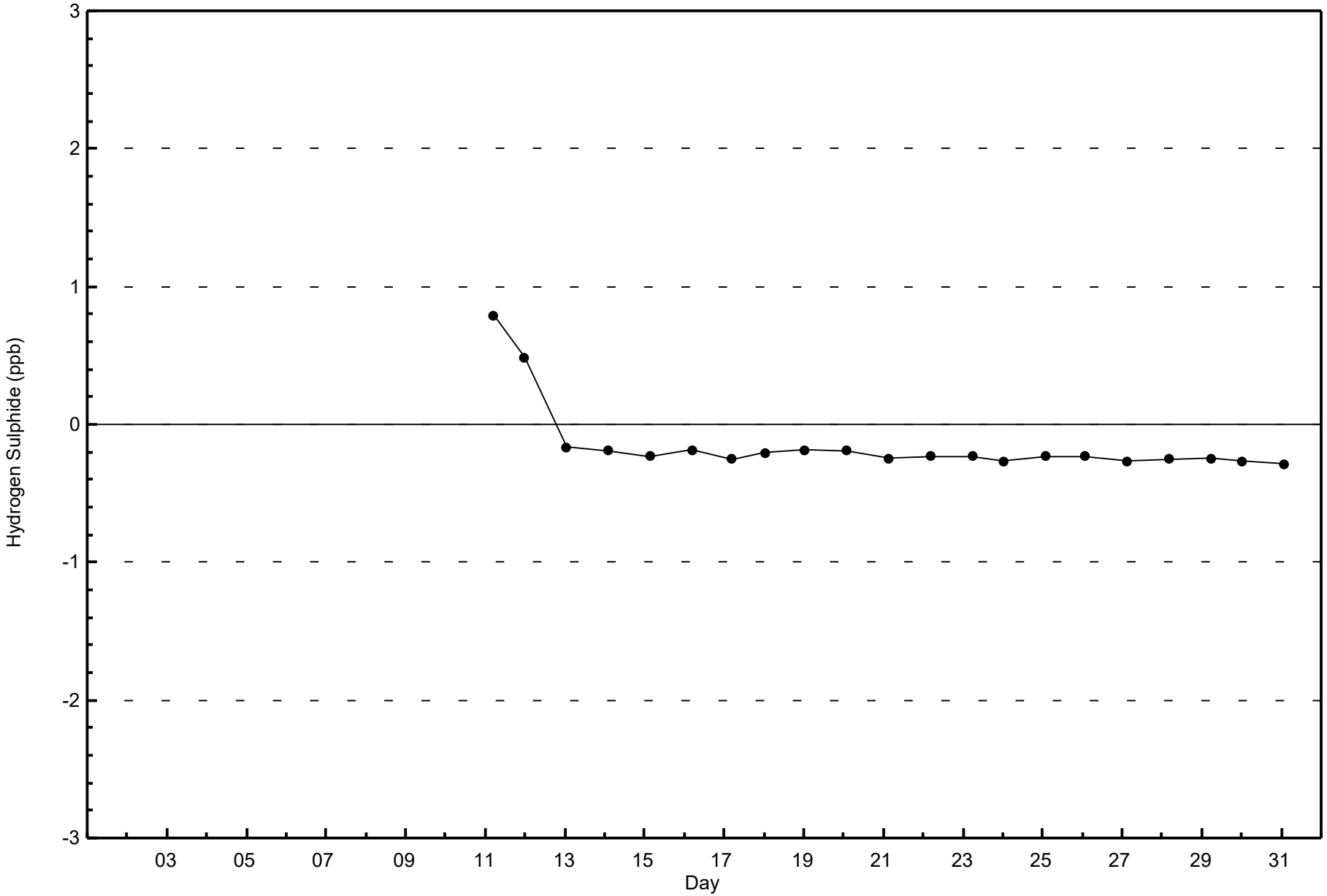
Total Number of Valid Hours: 447

**Wood Buffalo Environmental Association**

**Zero Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**EBRT - August 2026**

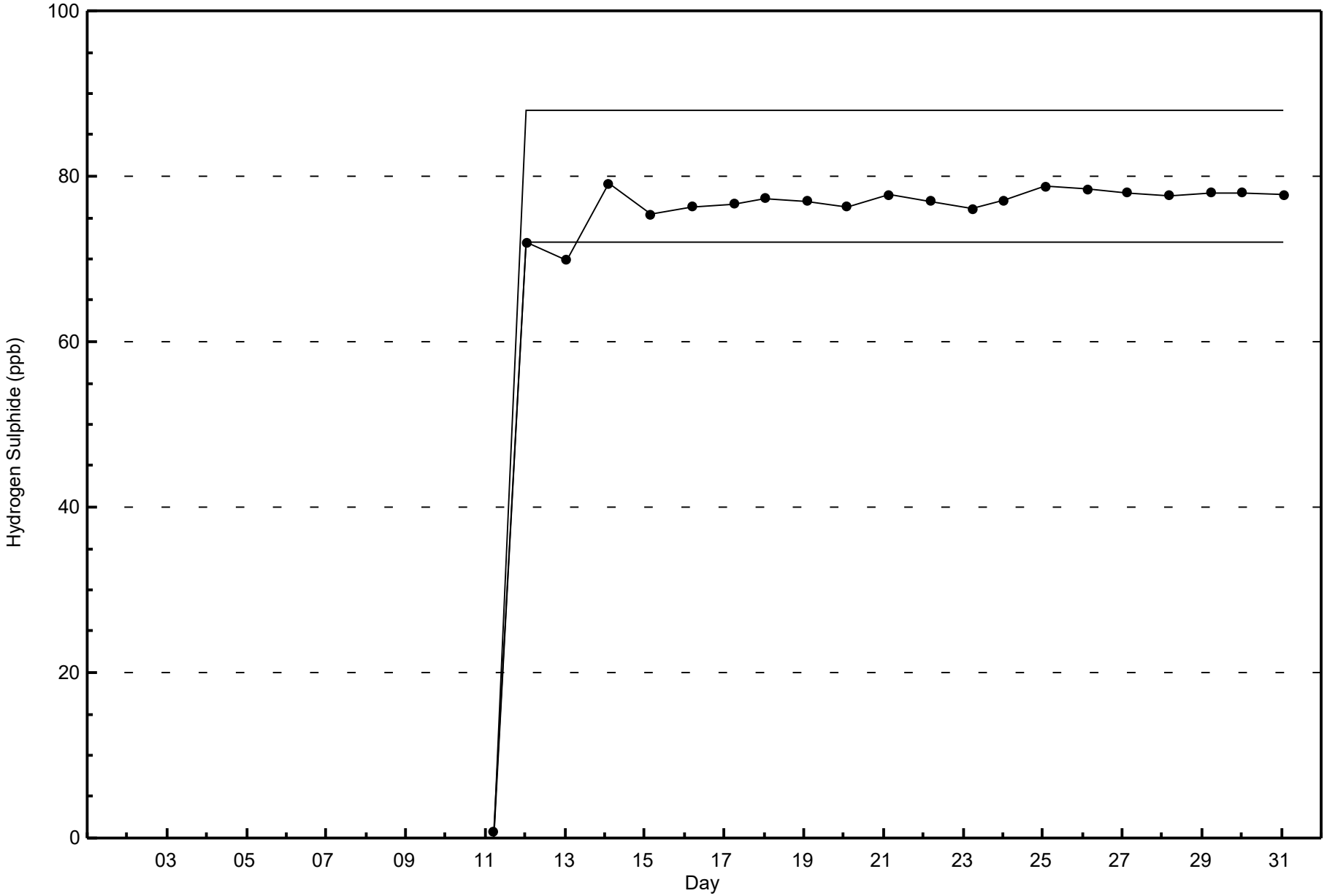


**Wood Buffalo Environmental Association**

**Span Responses**

**Hydrogen Sulphide ($H_2S$) - ppb**

**EBRT - August 2026**



# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Nitric Oxide (NO) - ppb

## EBRT - August 2026

Maximum Value: 12.0 ppb on Aug 13 15:00

Maximum Daily Average: 1.5 ppb on Aug 19

Minimum Value: 0.0 ppb on Aug 15 21:00

Minimum Daily Average: 0.1 ppb on Aug 22

Maximum Diurnal Average: 2.3 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 0.60 ppb

Percentiles: $P_1$ = 0.0 $P_{10}$ = 0.0 $Q_1$ = 0.0 Median = 0.2 $Q_3$ = 0.5 $P_{90}$ = 1.6 $P_{99}$ = 5.9

| | |
|---|---|
| Hours in Service: | 469 |
| Hours of Data: | 446 |
| Hours of Missing Data: | 23 |
| Hours of Calibration: | 23 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | C | C | C | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 4.4 | -- | 4.4 |
| 13-Aug | 2.6 | 0.1 | 0.0 | 0.0 | Z | 0.2 | 4.6 | 0.5 | 3.4 | 1.0 | 1.7 | 1.7 | 1.1 | 0.8 | 12.0 | 2.3 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.5 | 1.4 | 12.0 |
| 14-Aug | 0.5 | 0.1 | 0.0 | 0.0 | 0.3 | Z | 5.7 | 5.0 | 0.1 | 0.0 | 0.1 | 0.3 | 1.7 | 1.3 | 1.9 | 1.4 | 0.2 | 0.0 | 0.3 | 0.2 | 0.0 | 0.3 | 0.3 | 0.9 | 0.9 | 5.7 |
| 15-Aug | Z | 0.9 | 0.5 | 0.4 | 1.7 | 1.6 | 0.9 | 2.3 | 2.6 | 2.5 | 1.0 | 1.2 | 0.8 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 2.6 |
| 16-Aug | 0.0 | Z | 0.0 | 0.3 | 0.1 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.6 | 0.3 | 0.6 | 0.3 | 0.2 | 0.1 | 0.0 | 0.3 | 0.6 | 0.1 | 0.0 | 0.0 | 0.5 | 0.2 | 0.2 | 0.6 |
| 17-Aug | 0.2 | 0.2 | Z | 1.1 | 1.3 | 1.2 | 4.9 | 7.4 | 3.2 | 1.4 | 3.0 | 0.6 | 0.3 | 0.4 | 0.2 | 0.0 | 0.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 7.4 |
| 18-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.6 | 0.5 | 0.4 | 0.6 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.1 | 0.4 | 0.5 | 0.2 | 0.6 |
| 19-Aug | 1.1 | 0.9 | 0.7 | 1.7 | Z | 4.6 | 10.6 | 2.6 | 1.6 | 3.2 | 3.7 | 1.2 | 0.6 | 0.7 | 0.6 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.5 | 10.6 |
| 20-Aug | 0.4 | 0.5 | 0.2 | 0.2 | 0.2 | Z | 5.6 | 4.1 | 1.4 | 1.5 | 3.6 | 1.7 | 1.1 | 0.3 | 0.4 | 0.1 | 0.2 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.3 | 0.3 | 1.0 | 5.6 |
| 21-Aug | Z | 0.2 | 0.3 | 0.3 | 0.4 | 2.2 | 6.1 | 2.4 | 1.1 | 2.6 | 0.3 | 1.0 | 0.3 | 0.1 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.8 | 6.1 |
| 22-Aug | 0.0 | Z | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| 23-Aug | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.1 | 0.1 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| 24-Aug | 0.0 | 0.0 | 0.0 | Z | 0.0 | 0.1 | 0.5 | 1.5 | 0.9 | 0.6 | 2.2 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 2.2 |
| 25-Aug | 0.2 | 0.0 | 0.2 | 0.1 | Z | 0.1 | 0.6 | 6.4 | 2.8 | 0.6 | 1.0 | 1.5 | 1.6 | 0.3 | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.5 | 0.8 | 0.8 | 6.4 |
| 26-Aug | 1.8 | 2.2 | 1.4 | 0.5 | 0.5 | Z | 0.0 | 0.1 | 3.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 3.1 |
| 27-Aug | Z | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.7 | 0.4 | 0.3 | 0.1 | 0.2 | 0.1 | 0.2 | 0.9 |
| 28-Aug | 0.2 | Z | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 |
| 29-Aug | 0.1 | 0.0 | Z | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 0.5 | 0.9 | 0.8 | 0.5 | 0.5 | 0.2 | 0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.2 | 0.3 | 0.3 | 0.0 | 0.0 | 0.3 | 0.9 |
| 30-Aug | 0.0 | 0.1 | 0.1 | Z | 0.9 | 1.0 | 2.4 | 2.4 | 0.5 | 0.1 | 0.1 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.7 | 0.2 | 0.5 | 0.7 | 0.2 | 0.5 | 2.4 |
| 31-Aug | 1.0 | 0.1 | 0.5 | 0.3 | Z | 0.6 | 0.5 | 0.8 | 1.3 | 1.2 | 1.4 | 0.1 | 0.2 | 1.0 | 1.4 | 1.1 | 0.5 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.6 | 1.4 |
| | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.8 | 2.3 | 1.9 | 1.2 | 0.9 | 1.1 | 0.7 | 0.5 | 0.4 | 0.9 | 0.4 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.4 | Diurnal Average | |
| | 2.6 | 2.2 | 1.4 | 1.7 | 1.7 | 4.6 | 10.6 | 7.4 | 3.4 | 3.2 | 3.7 | 1.7 | 1.7 | 1.3 | 12.0 | 2.3 | 0.5 | 0.9 | 0.7 | 1.7 | 0.3 | 0.5 | 0.7 | 4.4 | Diurnal Maximum | |

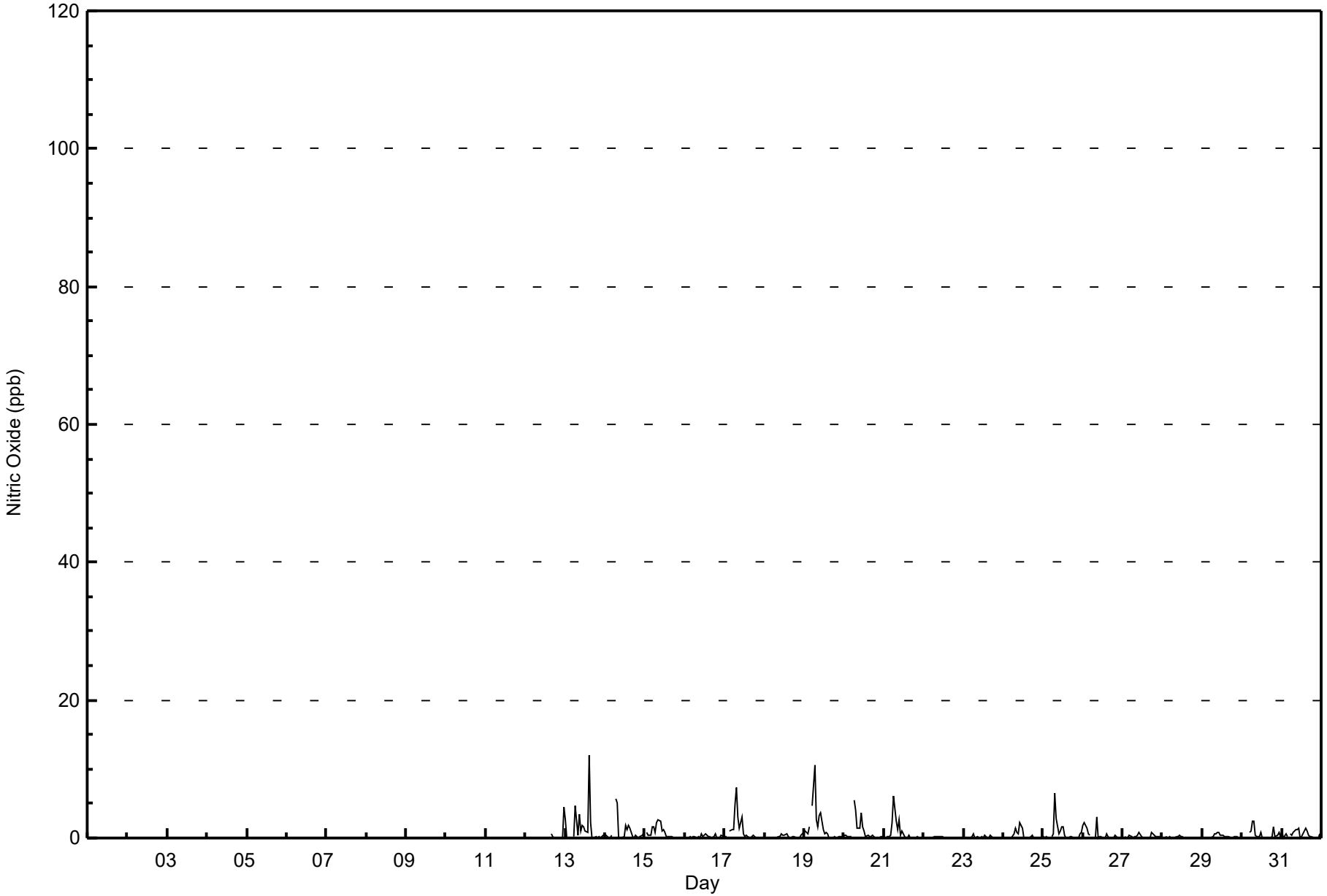
Z - zerospan C - Calibration NS - Not in Service

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitric Oxide (NO) - ppb**

**EBRT - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 446 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 446

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitric Oxide (NO) - ppb**

**EBRT - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 28 | 29 | 14 | 12 | 10 | 19 | 52 | 73 | 28 | 36 | 33 | 35 | 17 | 11 | 13 | 35 | 445 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 28 | 29 | 14 | 12 | 10 | 19 | 52 | 73 | 28 | 36 | 33 | 35 | 17 | 11 | 13 | 35 | 445 |

Total Number of Valid Hours: 445

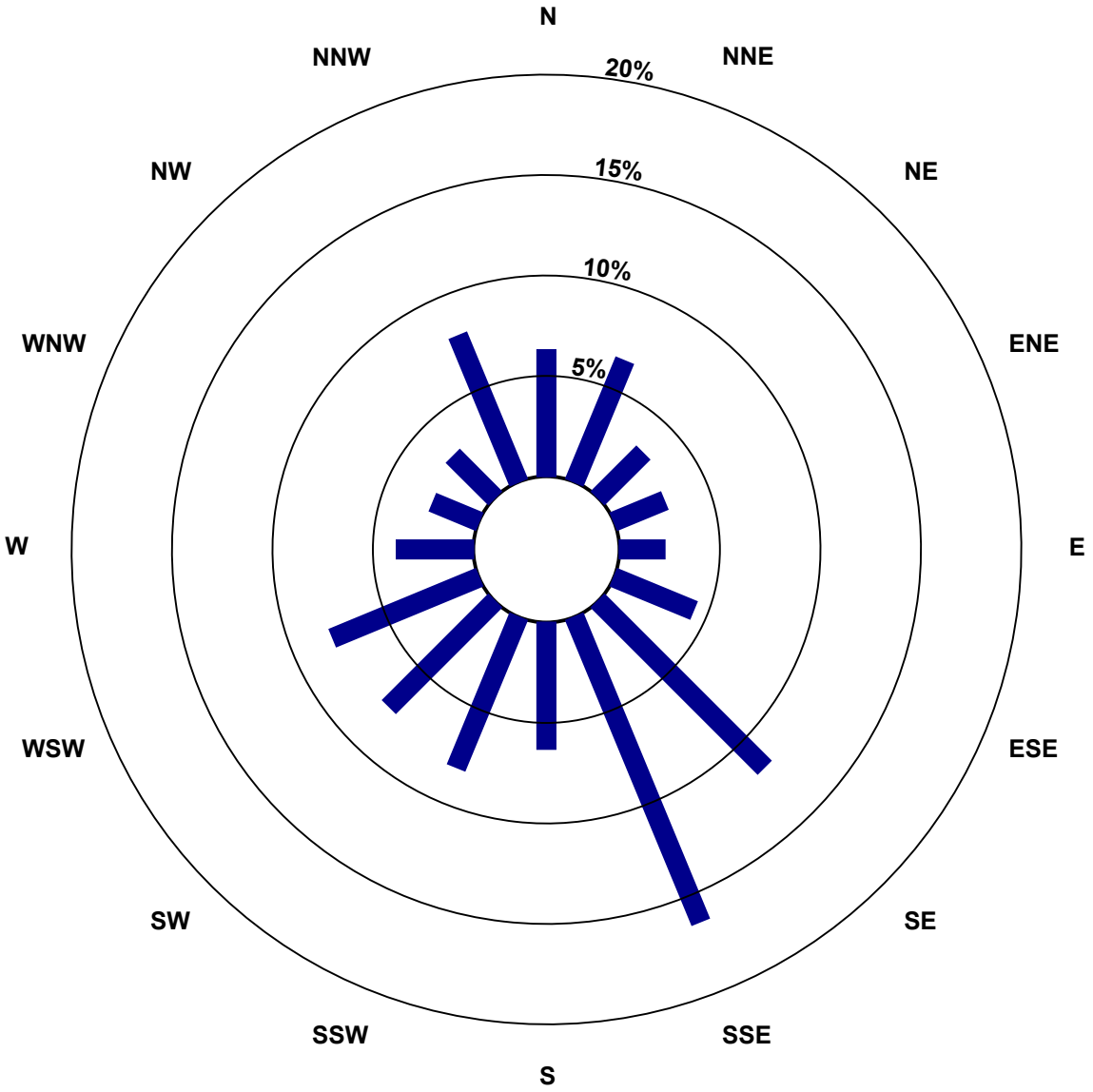
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitric Oxide (NO) - ppb

EBRT




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

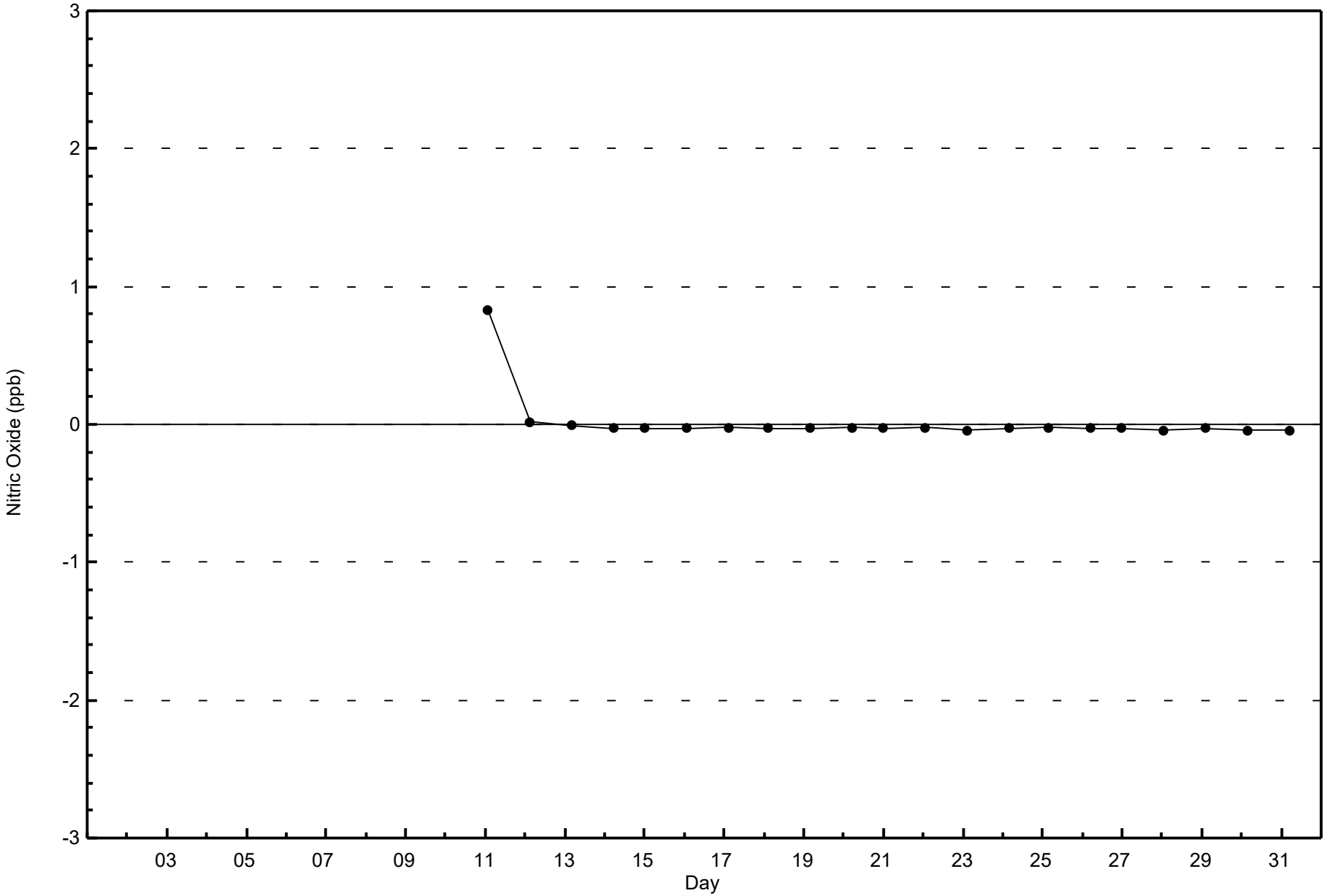
Total Number of Valid Hours: 445

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitric Oxide (NO) - ppb**

**EBRT - August 2026**

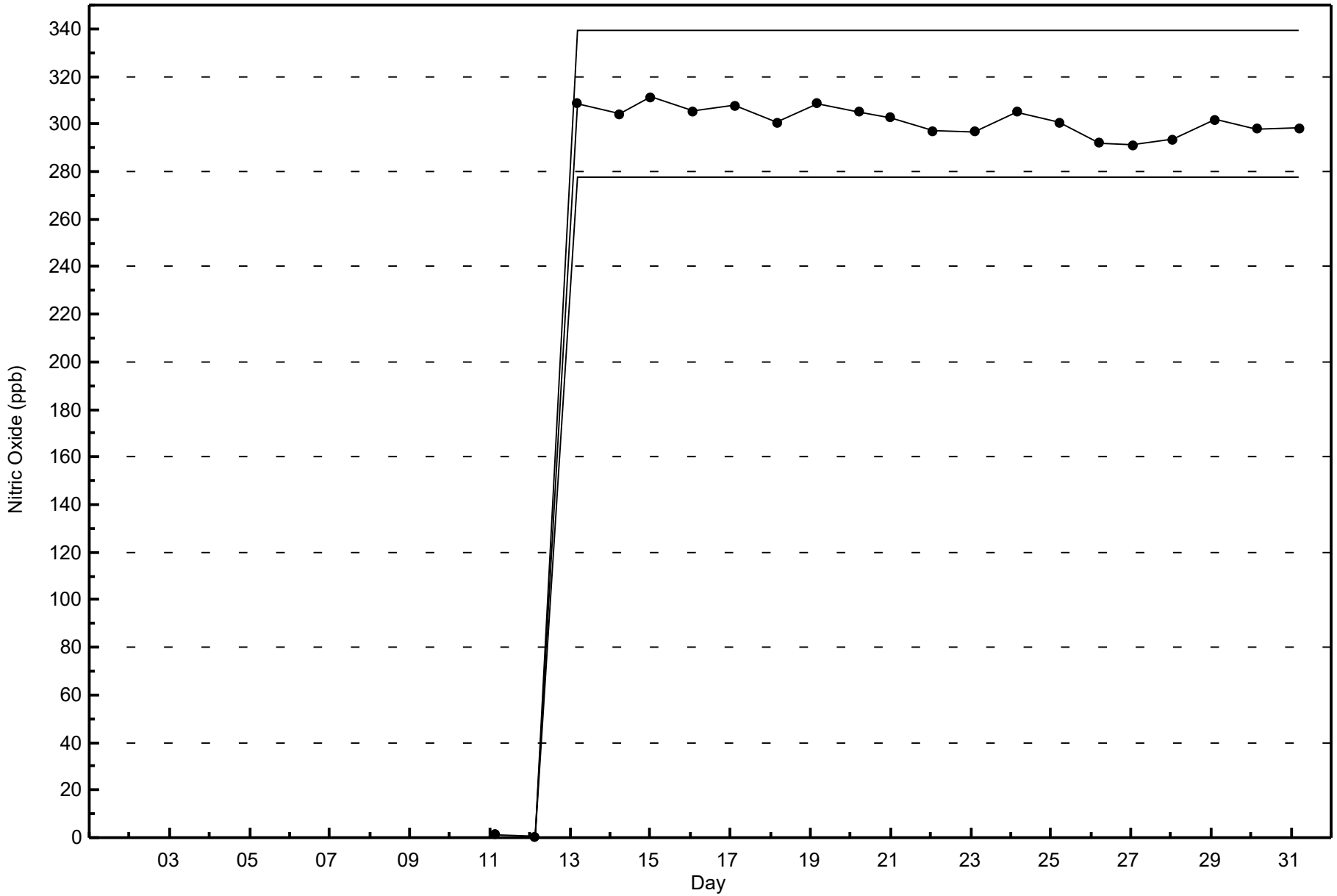


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitric Oxide (NO) - ppb**

**EBRT - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Dioxide ($NO_2$) - ppb

## EBRT - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14.0 ppb on Aug 13 00:00 Maximum Daily Average: 4.2 ppb on Aug 19

Minimum Value: 0.0 ppb on Aug 12 19:00 Minimum Daily Average: 1.0 ppb on Aug 27
Maximum Diurnal Average: 3.6 ppb at hour 1 Minimum Diurnal Average: 1.2 ppb at hour 17
Monthly Average: 2.01 ppb Percentiles: $P_1$ = 0.1 $P_{10}$ = 0.5 $Q_1$ = 0.8 Median = 1.2 $Q_3$ = 2.6 $P_{90}$ = 4.5 $P_{99}$ = 11.0

| | |
|---|---|
| Hours in Service: | 469 |
| Hours of Data: | 446 |
| Hours of Missing Data: | 23 |
| Hours of Calibration: | 23 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | C | C | C | 0.6 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 1.0 | 2.0 | 14.0 | -- | 14.0 |
| 13-Aug | 11.6 | 5.4 | 1.2 | 0.3 | Z | 1.4 | 3.2 | 0.9 | 2.6 | 1.5 | 1.8 | 1.7 | 1.0 | 0.3 | 5.4 | 2.1 | 0.2 | 0.2 | 0.6 | 0.6 | 1.5 | 0.8 | 1.5 | 4.5 | 2.2 | 11.6 |
| 14-Aug | 4.7 | 2.3 | 1.2 | 0.8 | 0.9 | Z | 2.6 | 4.8 | 0.4 | 0.3 | 0.4 | 0.7 | 2.9 | 2.2 | 3.6 | 2.3 | 1.5 | 0.6 | 3.4 | 4.5 | 2.4 | 2.2 | 1.8 | 2.8 | 2.1 | 4.8 |
| 15-Aug | Z | 2.8 | 2.2 | 2.5 | 4.1 | 5.7 | 2.7 | 3.5 | 3.4 | 3.7 | 2.1 | 2.9 | 2.6 | 1.5 | 1.6 | 1.4 | 1.4 | 1.2 | 1.1 | 0.9 | 1.0 | 3.3 | 10.2 | 13.0 | 3.3 | 13.0 |
| 16-Aug | 11.4 | Z | 5.2 | 3.3 | 3.3 | 5.7 | 4.2 | 0.6 | 1.6 | 0.6 | 1.7 | 1.0 | 1.4 | 1.0 | 0.5 | 0.7 | 1.1 | 3.3 | 3.8 | 2.6 | 3.0 | 1.7 | 1.4 | 0.8 | 2.6 | 11.4 |
| 17-Aug | 0.9 | 0.8 | Z | 2.7 | 3.0 | 2.2 | 6.6 | 8.0 | 4.4 | 3.2 | 5.6 | 2.1 | 1.3 | 1.8 | 1.1 | 0.5 | 1.0 | 2.7 | 3.2 | 1.0 | 0.5 | 0.4 | 0.4 | 0.4 | 2.3 | 8.0 |
| 18-Aug | 0.5 | 0.6 | 0.7 | Z | 0.9 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.4 | 1.5 | 2.1 | 2.9 | 1.4 | 0.6 | 0.7 | 1.7 | 2.5 | 0.5 | 0.8 | 0.9 | 2.2 | 3.3 | 1.2 | 3.3 |
| 19-Aug | 5.7 | 5.3 | 5.9 | 8.2 | Z | 10.6 | 10.0 | 6.5 | 4.6 | 5.9 | 5.4 | 2.5 | 1.9 | 2.2 | 2.4 | 1.3 | 0.6 | 0.6 | 2.0 | 2.5 | 5.6 | 3.2 | 1.6 | 1.0 | 4.2 | 10.6 |
| 20-Aug | 2.2 | 1.6 | 0.7 | 0.5 | 0.4 | Z | 1.8 | 5.1 | 4.3 | 4.1 | 5.1 | 2.9 | 2.3 | 1.1 | 1.2 | 0.8 | 1.0 | 1.5 | 2.4 | 2.3 | 2.1 | 1.1 | 0.6 | 0.5 | 2.0 | 5.1 |
| 21-Aug | Z | 0.6 | 0.9 | 1.2 | 3.0 | 4.1 | 5.5 | 4.4 | 3.1 | 5.8 | 1.6 | 2.6 | 1.4 | 0.8 | 0.8 | 1.8 | 1.0 | 0.7 | 0.5 | 0.5 | 0.9 | 0.5 | 0.5 | 0.6 | 1.9 | 5.8 |
| 22-Aug | 0.8 | Z | 1.1 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 1.0 | 0.8 | 0.9 | 1.0 | 0.9 | 1.0 | 1.5 |
| 23-Aug | 1.0 | 1.0 | Z | 1.1 | 0.9 | 1.2 | 1.6 | 0.9 | 1.0 | 1.0 | 1.1 | 1.3 | 1.2 | 2.7 | 1.4 | 1.8 | 4.6 | 3.8 | 4.5 | 4.8 | 3.5 | 4.9 | 4.8 | 6.8 | 2.5 | 6.8 |
| 24-Aug | 7.7 | 13.3 | 10.3 | Z | 2.2 | 3.1 | 4.7 | 5.2 | 2.8 | 2.2 | 5.2 | 3.3 | 0.3 | 0.4 | 0.2 | 0.2 | 0.5 | 1.6 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 2.9 | 13.3 |
| 25-Aug | 0.6 | 3.5 | 2.0 | 1.3 | Z | 0.5 | 1.0 | 7.2 | 4.2 | 1.6 | 2.6 | 3.9 | 4.5 | 2.2 | 1.1 | 1.3 | 2.3 | 3.0 | 2.6 | 1.2 | 0.7 | 0.9 | 1.9 | 2.3 | 2.3 | 7.2 |
| 26-Aug | 3.6 | 3.9 | 2.5 | 1.3 | 1.0 | Z | 0.7 | 0.7 | 1.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 1.0 | 0.7 | 0.7 | 0.6 | 1.6 | 1.0 | 0.5 | 0.4 | 0.6 | 1.1 | 3.9 |
| 27-Aug | Z | 1.4 | 0.8 | 0.7 | 1.4 | 0.9 | 0.7 | 1.0 | 1.0 | 1.1 | 1.4 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 2.0 | 1.9 | 1.3 | 1.0 | 0.7 | 0.8 | 0.8 | 1.0 | 2.0 |
| 28-Aug | 0.9 | Z | 0.8 | 0.6 | 0.8 | 0.8 | 0.6 | 0.8 | 0.9 | 1.1 | 1.6 | 0.9 | 1.0 | 0.6 | 0.7 | 0.7 | 0.9 | 1.6 | 1.7 | 1.0 | 1.9 | 0.8 | 0.7 | 1.7 | 1.0 | 1.9 |
| 29-Aug | 3.3 | 1.8 | Z | 2.3 | 2.6 | 2.2 | 2.0 | 2.0 | 1.2 | 1.4 | 1.6 | 1.3 | 1.2 | 0.9 | 1.0 | 1.0 | 0.8 | 0.5 | 0.5 | 0.7 | 1.2 | 0.9 | 0.4 | 0.5 | 1.4 | 3.3 |
| 30-Aug | 0.6 | 0.7 | 0.6 | Z | 2.8 | 2.8 | 3.7 | 2.4 | 0.8 | 0.7 | 0.7 | 1.2 | 0.4 | 0.5 | 0.8 | 0.8 | 0.5 | 0.6 | 1.0 | 3.8 | 0.9 | 1.0 | 1.7 | 0.8 | 1.3 | 3.8 |
| 31-Aug | 1.4 | 0.3 | 1.1 | 0.8 | Z | 0.7 | 0.8 | 1.9 | 1.5 | 2.0 | 2.3 | 0.3 | 0.9 | 2.9 | 4.9 | 5.7 | 3.3 | 2.8 | 2.6 | 2.0 | 3.7 | 1.5 | 0.8 | 1.5 | 2.0 | 5.7 |
| | 3.6 | 2.8 | 2.3 | 1.8 | 1.9 | 2.7 | 2.9 | 3.0 | 2.2 | 2.0 | 2.3 | 1.7 | 1.5 | 1.4 | 1.6 | 1.3 | 1.2 | 1.5 | 1.8 | 1.7 | 1.7 | 1.4 | 1.8 | 2.9 | Diurnal Average | |
| | 11.6 | 13.3 | 10.3 | 8.2 | 4.1 | 10.6 | 10.0 | 8.0 | 4.6 | 5.9 | 5.6 | 3.9 | 4.5 | 2.9 | 5.4 | 5.7 | 4.6 | 3.8 | 4.5 | 4.8 | 5.6 | 4.9 | 10.2 | 14.0 | Diurnal Maximum | |

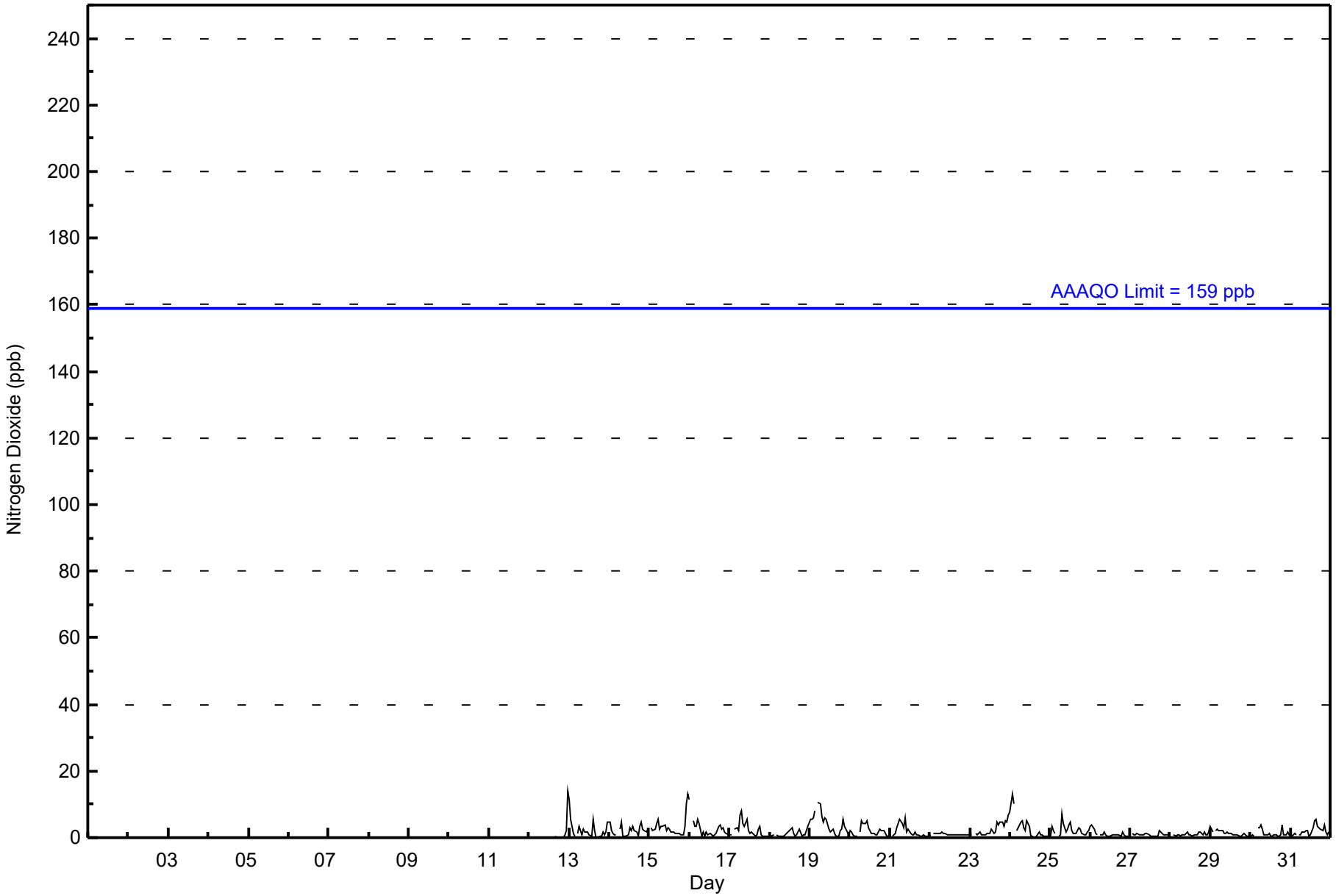
Z - zerospan C - Calibration NS - Not in Service
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Dioxide ($NO_2$) - ppb**

**EBRT - August 2026**



# Nitrogen Dioxide ($NO_2$) - ppb

## EBRT - August 2026

| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 446 | 100.00 | 100.00 |
| 21 - 40 | 0 | 0.00 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 446

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Nitrogen Dioxide ($NO_2$) - ppb**

**EBRT - August 2026**

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 28 | 29 | 14 | 12 | 10 | 19 | 52 | 73 | 28 | 36 | 33 | 35 | 17 | 11 | 13 | 35 | 445 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 28 | 29 | 14 | 12 | 10 | 19 | 52 | 73 | 28 | 36 | 33 | 35 | 17 | 11 | 13 | 35 | 445 |

Total Number of Valid Hours: 445

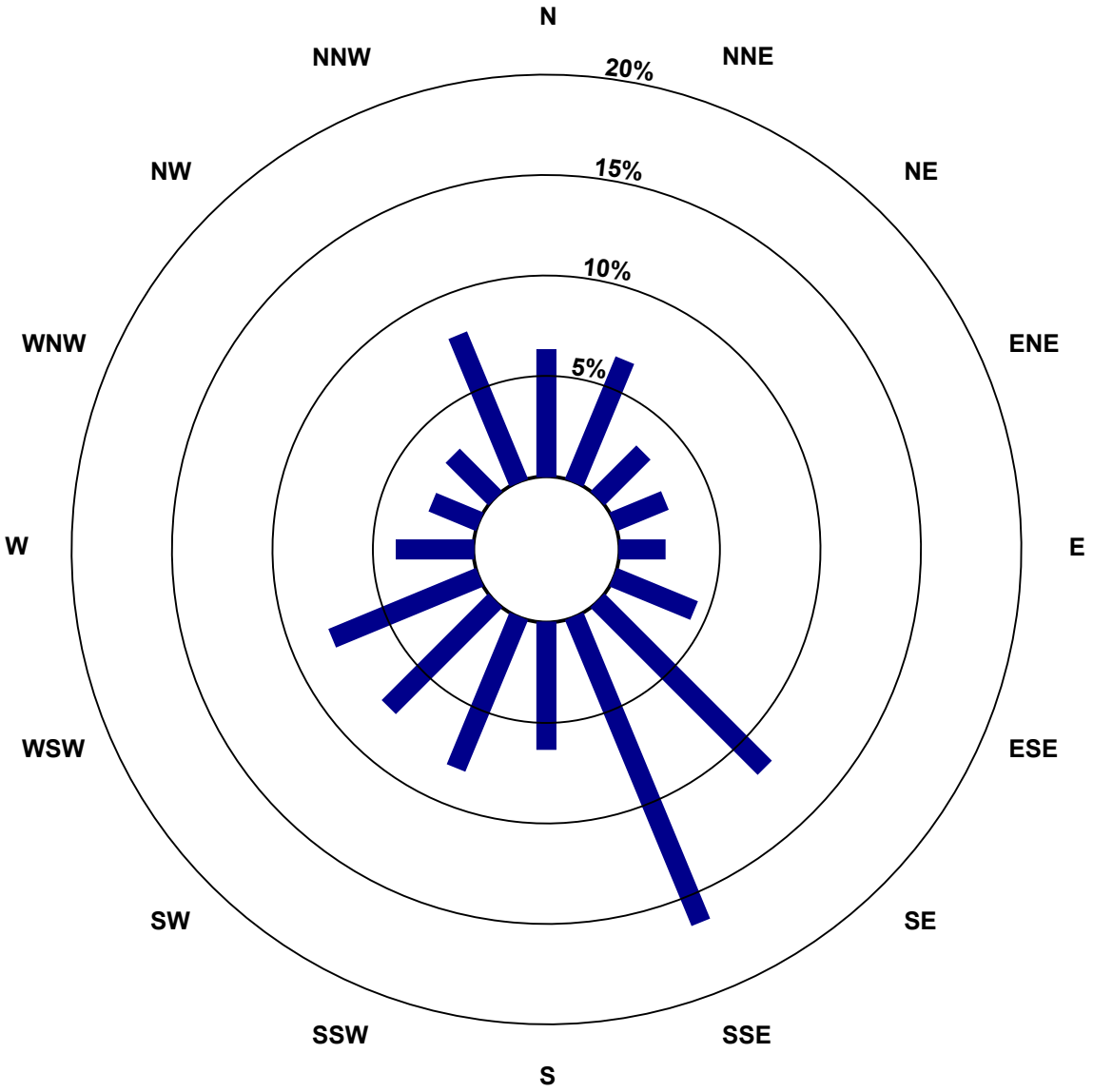
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Dioxide ($NO_2$) - ppb

EBRT




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

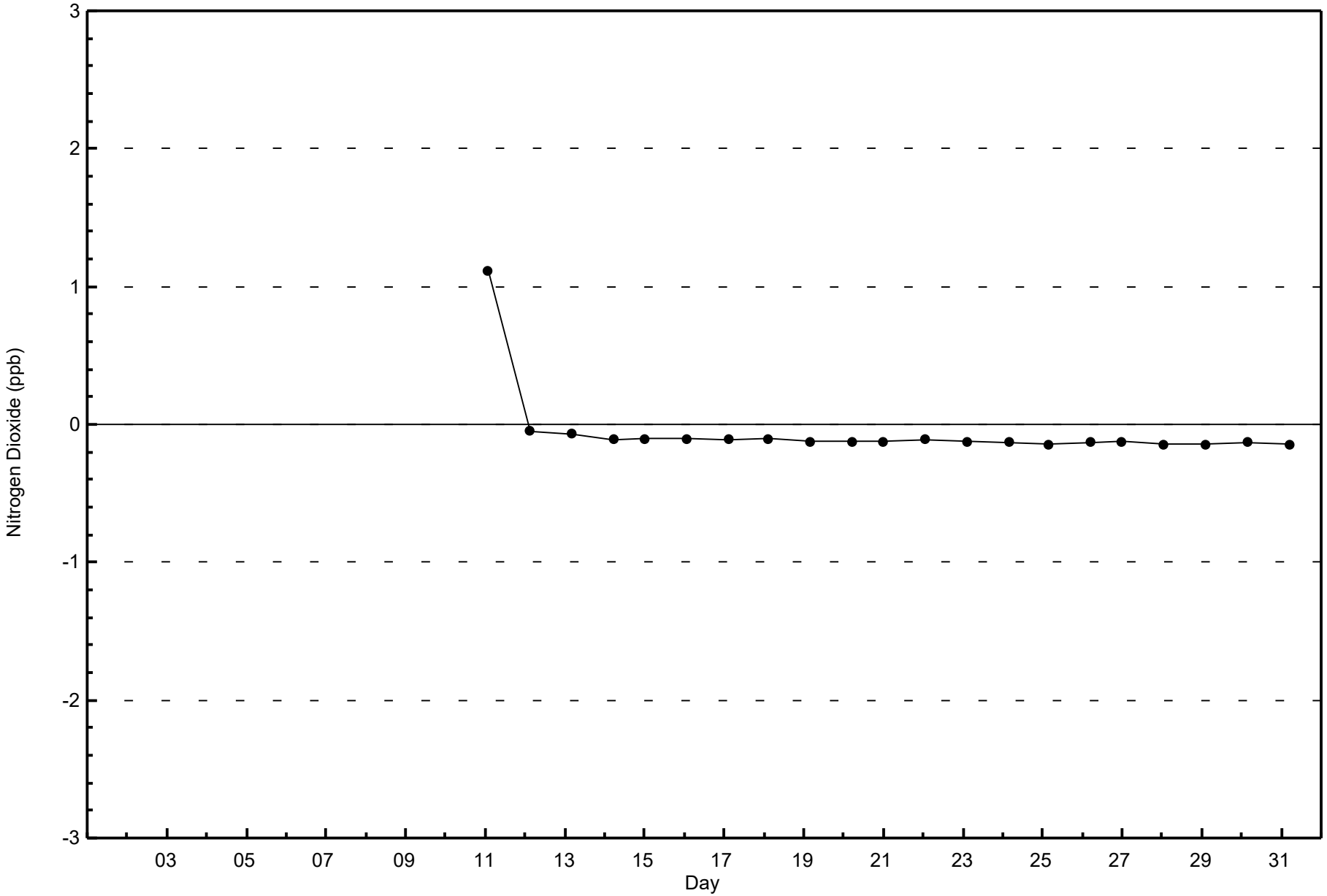
Total Number of Valid Hours: 445

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**EBRT - August 2026**

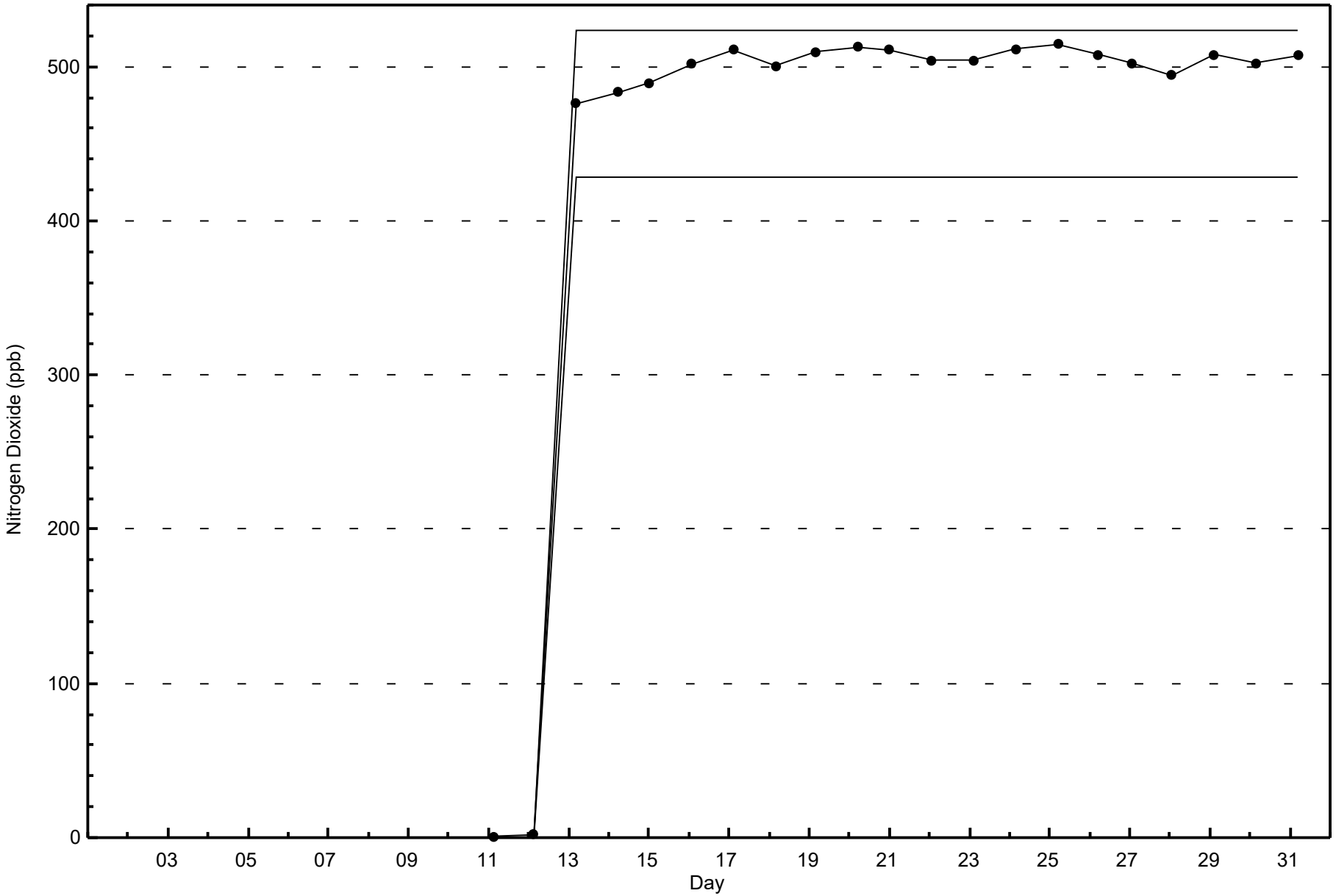


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Dioxide ($NO_2$) - ppb**

**EBRT - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Nitrogen Oxides ($NO_X$) - ppb

## EBRT - August 2026

Maximum Value: 20.6 ppb on Aug 19 07:00

Maximum Daily Average: 5.7 ppb on Aug 19

Minimum Value: 0.0 ppb on Aug 12 19:00

Minimum Daily Average: 1.1 ppb on Aug 22

Maximum Diurnal Average: 5.2 ppb at hour 7

Minimum Diurnal Average: 1.3 ppb at hour 17

Monthly Average: 2.60 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.6$ $Q_1 = 0.8$ Median = 1.5 $Q_3 = 3.4$ $P_{90} = 6.0$ $P_{99} = 14.7$

| | |
|---|---|
| Hours in Service: | 469 |
| Hours of Data: | 446 |
| Hours of Missing Data: | 23 |
| Hours of Calibration: | 23 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | C | C | C | 1.1 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 1.0 | 2.1 | 18.4 | -- | 18.4 |
| 13-Aug | 14.2 | 5.5 | 1.2 | 0.3 | Z | 1.6 | 7.8 | 1.4 | 6.0 | 2.5 | 3.5 | 3.4 | 2.1 | 1.1 | 17.4 | 4.4 | 0.2 | 0.3 | 0.7 | 0.6 | 1.6 | 0.8 | 1.7 | 5.0 | 3.6 | 17.4 |
| 14-Aug | 5.2 | 2.4 | 1.2 | 0.8 | 1.2 | Z | 8.3 | 9.8 | 0.5 | 0.3 | 0.5 | 1.0 | 4.6 | 3.5 | 5.5 | 3.7 | 1.7 | 0.6 | 3.7 | 4.7 | 2.4 | 2.5 | 2.1 | 3.7 | 3.0 | 9.8 |
| 15-Aug | Z | 3.7 | 2.7 | 2.9 | 5.8 | 7.3 | 3.6 | 5.8 | 6.0 | 6.2 | 3.1 | 4.1 | 3.4 | 1.8 | 1.9 | 1.6 | 1.6 | 1.3 | 1.1 | 0.9 | 1.0 | 3.3 | 10.2 | 13.0 | 4.0 | 13.0 |
| 16-Aug | 11.4 | Z | 5.2 | 3.6 | 3.4 | 5.9 | 4.4 | 0.6 | 1.7 | 0.7 | 2.3 | 1.3 | 2.0 | 1.3 | 0.7 | 0.8 | 1.1 | 3.6 | 4.4 | 2.7 | 3.0 | 1.7 | 1.9 | 1.0 | 2.8 | 11.4 |
| 17-Aug | 1.1 | 1.0 | Z | 3.8 | 4.3 | 3.4 | 11.5 | 15.4 | 7.6 | 4.6 | 8.6 | 2.7 | 1.6 | 2.2 | 1.3 | 0.5 | 1.1 | 3.0 | 3.4 | 1.0 | 0.5 | 0.4 | 0.4 | 0.4 | 3.5 | 15.4 |
| 18-Aug | 0.5 | 0.6 | 0.7 | Z | 0.9 | 0.6 | 0.6 | 0.6 | 0.7 | 1.0 | 2.0 | 2.0 | 2.5 | 3.5 | 1.5 | 0.6 | 0.7 | 1.9 | 2.8 | 0.5 | 0.8 | 1.0 | 2.6 | 3.8 | 1.4 | 3.8 |
| 19-Aug | 6.8 | 6.2 | 6.6 | 9.9 | Z | 15.2 | 20.6 | 9.1 | 6.2 | 9.1 | 9.1 | 3.7 | 2.5 | 2.9 | 3.0 | 1.4 | 0.6 | 0.6 | 2.2 | 2.5 | 5.7 | 3.4 | 1.7 | 1.1 | 5.7 | 20.6 |
| 20-Aug | 2.6 | 2.1 | 0.9 | 0.7 | 0.6 | Z | 7.4 | 9.2 | 5.7 | 5.6 | 8.7 | 4.6 | 3.4 | 1.4 | 1.6 | 0.9 | 1.2 | 1.8 | 2.7 | 2.4 | 2.1 | 1.1 | 0.9 | 0.8 | 3.0 | 9.2 |
| 21-Aug | Z | 0.8 | 1.2 | 1.5 | 3.4 | 6.3 | 11.6 | 6.8 | 4.2 | 8.4 | 1.9 | 3.6 | 1.7 | 0.9 | 0.9 | 2.1 | 1.0 | 0.7 | 0.5 | 0.5 | 1.1 | 0.5 | 0.5 | 0.6 | 2.6 | 11.6 |
| 22-Aug | 0.8 | Z | 1.1 | 1.1 | 1.3 | 1.4 | 1.6 | 1.8 | 1.5 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 1.1 | 0.8 | 0.9 | 1.0 | 0.9 | 1.1 | 1.8 |
| 23-Aug | 1.0 | 1.0 | Z | 1.1 | 1.0 | 1.4 | 2.1 | 1.0 | 1.1 | 1.1 | 1.2 | 1.4 | 1.3 | 3.1 | 1.5 | 1.9 | 5.1 | 3.9 | 4.5 | 4.8 | 3.5 | 4.9 | 4.8 | 6.8 | 2.6 | 6.8 |
| 24-Aug | 7.7 | 13.3 | 10.3 | Z | 2.2 | 3.2 | 5.2 | 6.7 | 3.7 | 2.8 | 7.4 | 4.6 | 0.3 | 0.4 | 0.2 | 0.2 | 0.6 | 1.9 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 3.2 | 13.3 |
| 25-Aug | 0.8 | 3.5 | 2.2 | 1.4 | Z | 0.6 | 1.6 | 13.6 | 7.0 | 2.2 | 3.6 | 5.4 | 6.1 | 2.5 | 1.1 | 1.4 | 2.6 | 3.3 | 2.7 | 1.2 | 0.7 | 1.0 | 2.4 | 3.1 | 3.0 | 13.6 |
| 26-Aug | 5.4 | 6.1 | 3.9 | 1.8 | 1.5 | Z | 0.7 | 0.8 | 4.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 1.3 | 1.2 | 0.7 | 0.7 | 0.6 | 1.9 | 1.1 | 0.5 | 0.4 | 0.6 | 1.6 | 6.1 |
| 27-Aug | Z | 1.5 | 0.9 | 0.8 | 1.7 | 1.0 | 0.8 | 1.2 | 1.1 | 1.4 | 2.2 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 2.9 | 2.6 | 1.7 | 1.3 | 0.8 | 1.0 | 0.9 | 1.2 | 2.9 |
| 28-Aug | 1.1 | Z | 0.9 | 0.6 | 0.9 | 0.9 | 0.7 | 0.8 | 1.0 | 1.3 | 2.0 | 1.1 | 1.2 | 0.7 | 0.7 | 0.8 | 1.0 | 1.6 | 1.7 | 1.0 | 1.9 | 0.8 | 0.7 | 1.7 | 1.1 | 2.0 |
| 29-Aug | 3.4 | 1.8 | Z | 2.3 | 2.6 | 2.2 | 2.2 | 2.7 | 1.7 | 2.3 | 2.4 | 1.8 | 1.7 | 1.1 | 1.3 | 1.3 | 1.0 | 0.6 | 0.5 | 0.9 | 1.5 | 1.2 | 0.4 | 0.5 | 1.6 | 3.4 |
| 30-Aug | 0.6 | 0.8 | 0.7 | Z | 3.7 | 3.8 | 6.1 | 4.8 | 1.3 | 0.8 | 0.8 | 2.0 | 0.4 | 0.5 | 0.8 | 0.8 | 0.5 | 0.6 | 1.2 | 5.5 | 1.1 | 1.5 | 2.4 | 1.0 | 1.8 | 6.1 |
| 31-Aug | 2.4 | 0.4 | 1.6 | 1.1 | Z | 1.3 | 1.3 | 2.7 | 2.8 | 3.2 | 3.7 | 0.4 | 1.1 | 3.9 | 6.3 | 6.8 | 3.8 | 3.1 | 2.8 | 2.0 | 3.7 | 1.5 | 0.9 | 2.2 | 2.6 | 6.8 |
| | 4.1 | 3.2 | 2.6 | 2.1 | 2.3 | 3.5 | 5.2 | 5.0 | 3.4 | 2.9 | 3.4 | 2.4 | 2.0 | 1.7 | 2.6 | 1.7 | 1.3 | 1.7 | 2.0 | 1.8 | 1.7 | 1.5 | 1.9 | 3.3 | Diurnal Average | |
| | 14.2 | 13.3 | 10.3 | 9.9 | 5.8 | 15.2 | 20.6 | 15.4 | 7.6 | 9.1 | 9.1 | 5.4 | 6.1 | 3.9 | 17.4 | 6.8 | 5.1 | 3.9 | 4.5 | 5.5 | 5.7 | 4.9 | 10.2 | 18.4 | Diurnal Maximum | |

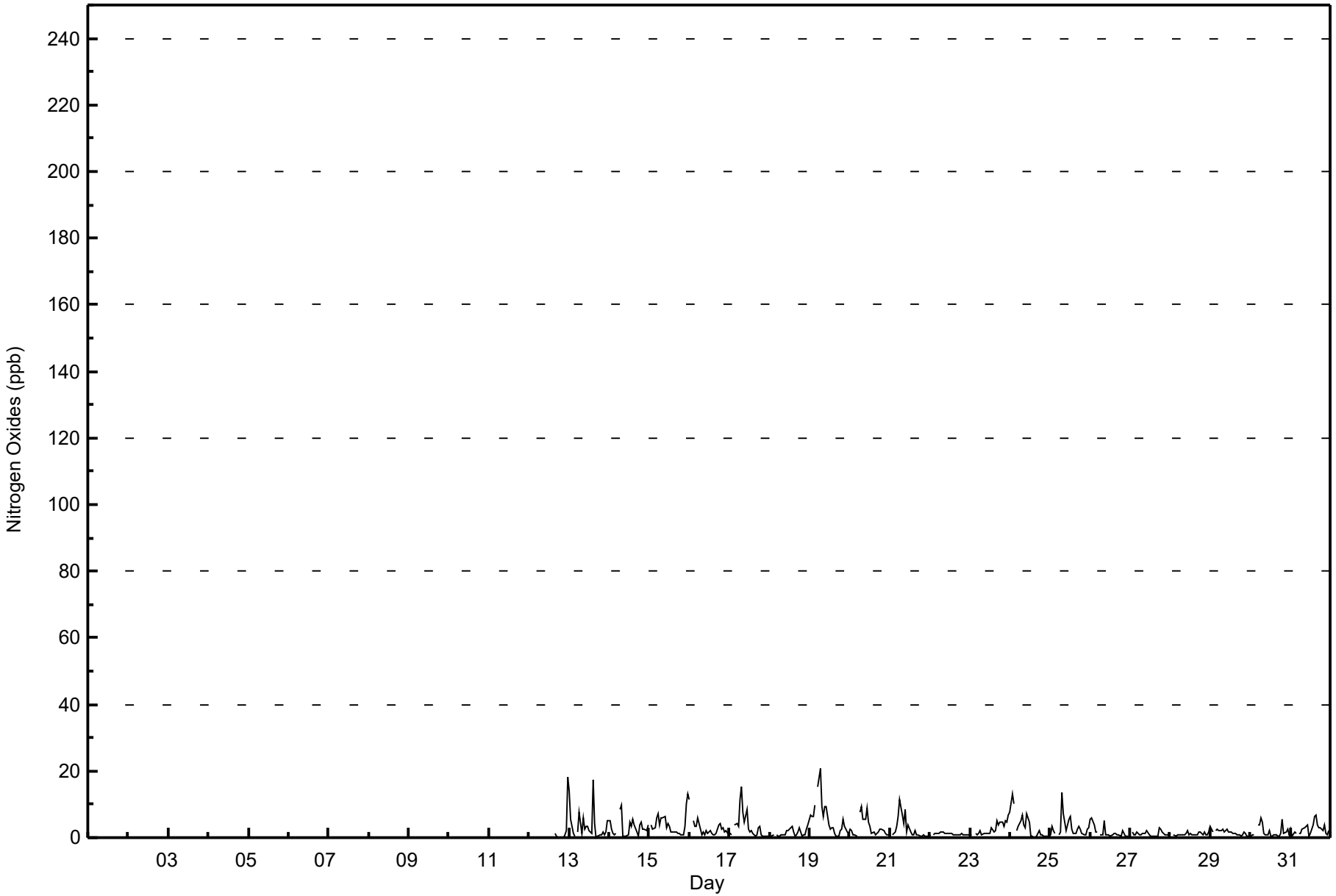
Z - zerospan C - Calibration NS - Not in Service

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Nitrogen Oxides ($NO_X$) - ppb**

**EBRT - August 2026**



| Concentration Ranges (ppb) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 445 | 99.78 | 99.78 |
| 21 - 40 | 1 | 0.22 | 100.00 |
| 11 - 80 | 0 | 0.00 | 100.00 |
| 81 - 159 | 0 | 0.00 | 100.00 |
| > 159 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 446

Total Number of Hours: 744

# Nitrogen Oxides ($NO_X$) - ppb

## EBRT - August 2026

| Concentration Ranges (ppb) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 20 | 28 | 29 | 14 | 12 | 10 | 19 | 51 | 73 | 28 | 36 | 33 | 35 | 17 | 11 | 13 | 35 | 444 |
| 21 - 40 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11 - 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 - 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 28 | 29 | 14 | 12 | 10 | 19 | 52 | 73 | 28 | 36 | 33 | 35 | 17 | 11 | 13 | 35 | 445 |

Total Number of Valid Hours: 445

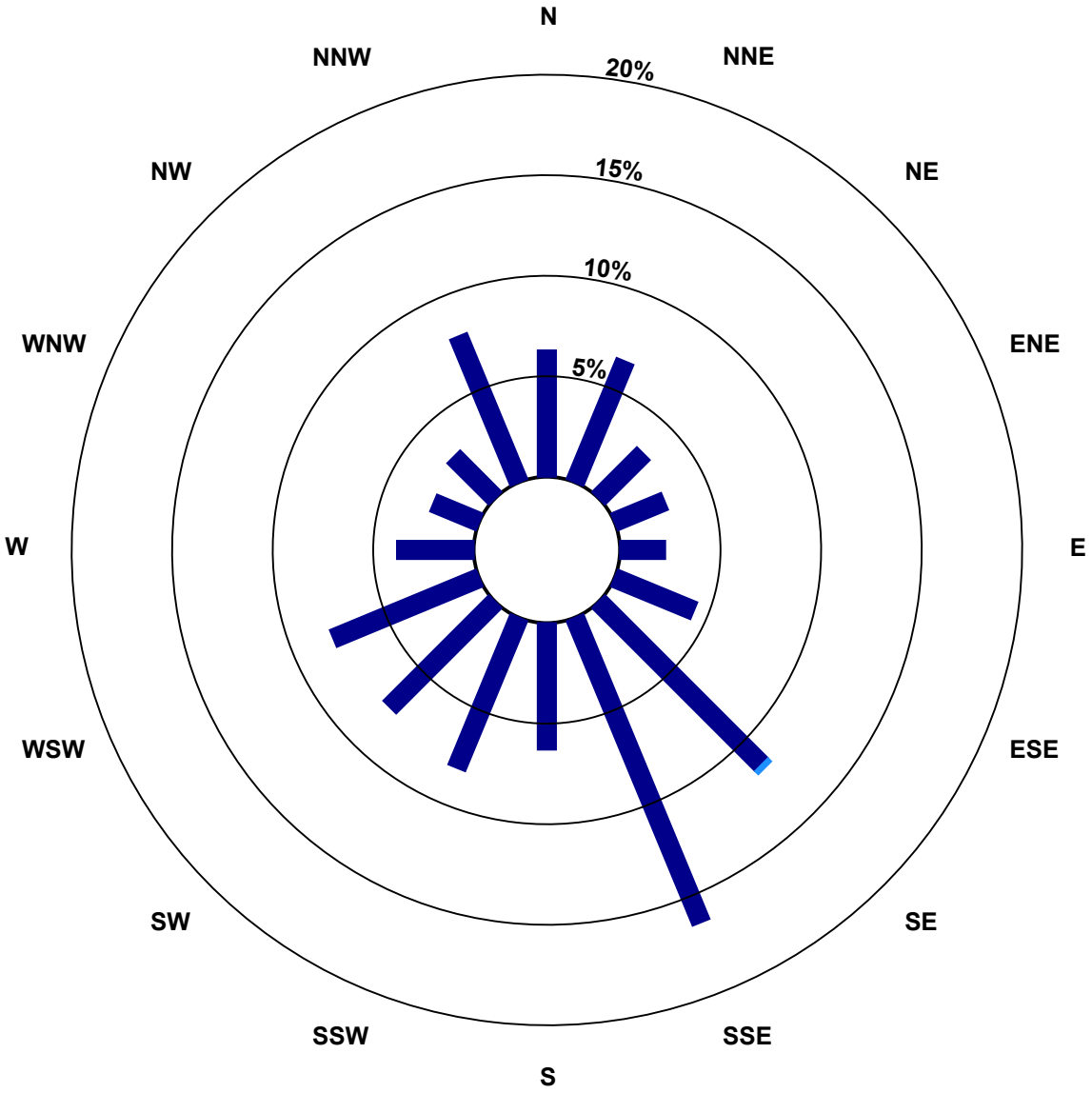
Total Number of Hours: 744

Wood Buffalo Environmental Association

Wind Rose Aug 2026

Nitrogen Oxides ($NO_X$) - ppb

EBRT




Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

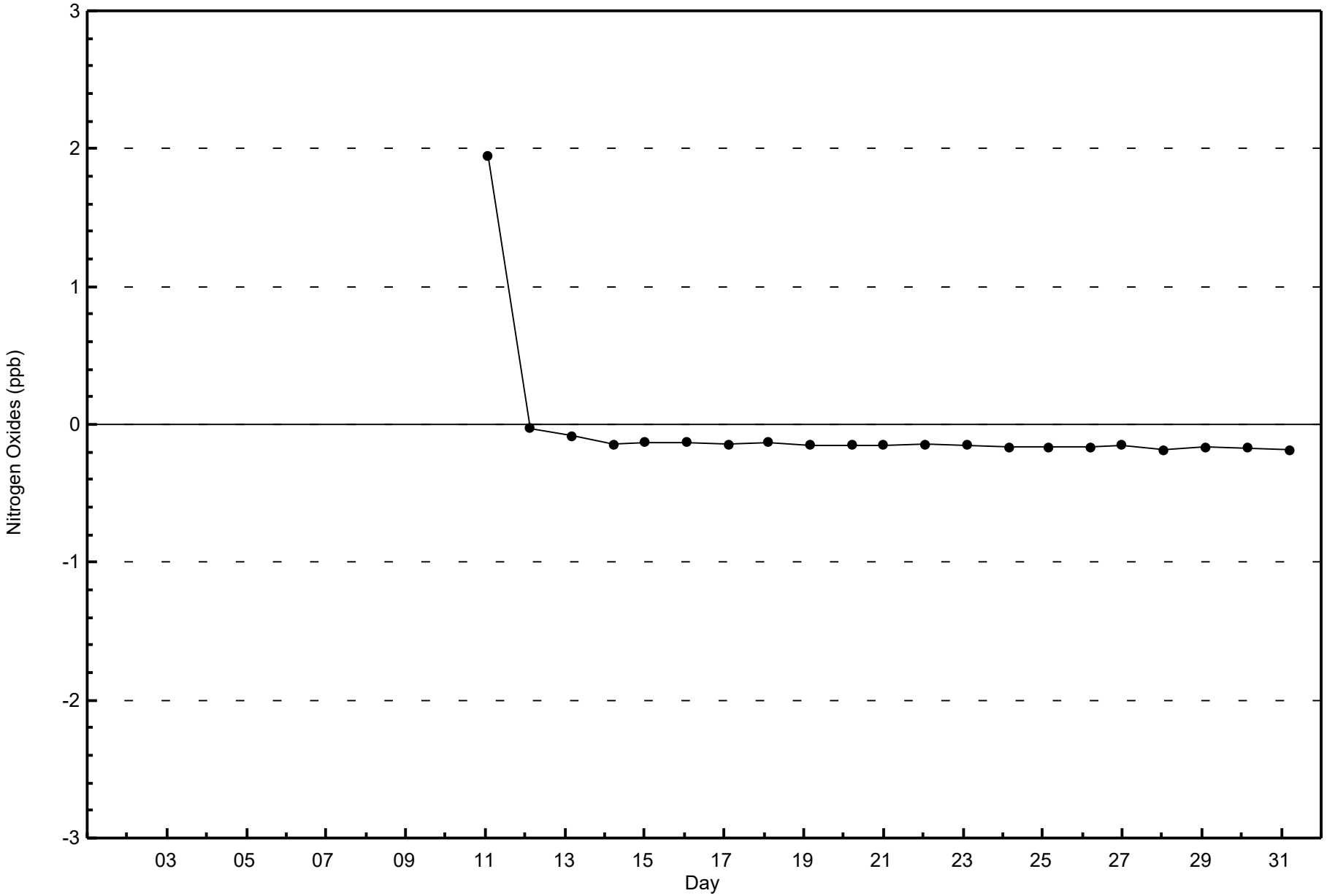
Total Number of Valid Hours: 445

**Wood Buffalo Environmental Association**

**Zero Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**EBRT - August 2026**

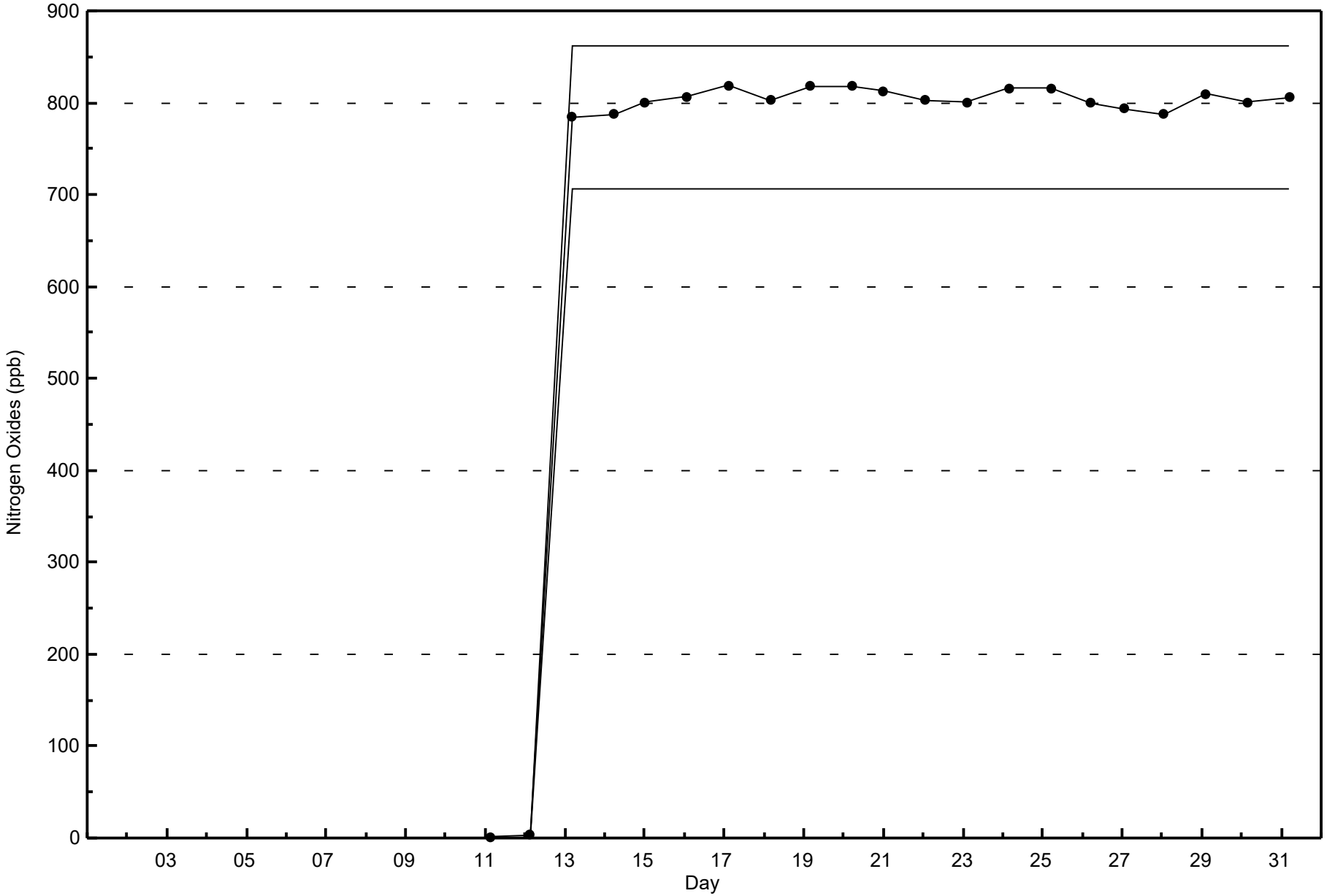


**Wood Buffalo Environmental Association**

**Span Responses**

**Nitrogen Oxides ($NO_X$) - ppb**

**EBRT - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Ambient Temperature 2m (AT2) - C

## EBRT - August 2026

Maximum Value: 27.4 C on Aug 26 16:00

Maximum Daily Average: 21.9 C on Aug 27

Minimum Value: 2.6 C on Aug 17 05:00

Minimum Daily Average: 12.7 C on Aug 16

Maximum Diurnal Average: 21.6 C at hour 16

Minimum Diurnal Average: 11.2 C at hour 6

Monthly Average: 16.49 C

Percentiles: $P_1$ = 4.6 $P_{10}$ = 9.8 $Q_1$ = 12.9 Median = 16.5 $Q_3$ = 20.2 $P_{90}$ = 23.0 $P_{99}$ = 26.9

| | |
|---|---|
| Hours in Service: | 466 |
| Hours of Data: | 466 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | 14.4 | 14.9 | 14.6 | 15.2 | 14.1 | 12.5 | 11.3 | 10.8 | 10.0 | 10.8 | -- | 15.2 |
| 13-Aug | 10.8 | 10.5 | 10.3 | 10.3 | 10.1 | 10.2 | 11.7 | 12.8 | 13.9 | 14.8 | 15.8 | 16.5 | 17.2 | 17.1 | 16.4 | 16.5 | 17.0 | 16.8 | 16.3 | 15.5 | 14.4 | 13.2 | 12.8 | 12.6 | 13.9 | 17.2 |
| 14-Aug | 12.6 | 12.4 | 12.2 | 11.5 | 11.5 | 11.4 | 12.0 | 13.7 | 14.7 | 15.6 | 16.7 | 18.3 | 18.3 | 17.8 | 19.1 | 18.9 | 16.0 | 17.9 | 17.8 | 16.5 | 12.7 | 11.0 | 9.8 | 9.5 | 14.5 | 19.1 |
| 15-Aug | 8.9 | 8.2 | 7.4 | 6.9 | 6.5 | 7.7 | 10.0 | 13.1 | 15.9 | 18.2 | 19.7 | 20.1 | 20.7 | 21.2 | 21.3 | 22.1 | 21.8 | 20.3 | 19.9 | 18.9 | 17.4 | 16.3 | 15.7 | 15.1 | 15.5 | 22.1 |
| 16-Aug | 13.9 | 13.6 | 12.6 | 11.1 | 11.8 | 11.9 | 12.5 | 12.3 | 11.7 | 11.9 | 12.7 | 14.1 | 15.1 | 15.5 | 16.4 | 16.8 | 16.2 | 14.0 | 14.5 | 13.2 | 11.3 | 9.3 | 7.2 | 5.9 | 12.7 | 16.8 |
| 17-Aug | 4.9 | 4.2 | 3.5 | 3.2 | 2.6 | 2.9 | 6.5 | 10.0 | 13.6 | 15.9 | 16.1 | 16.7 | 17.7 | 17.8 | 18.7 | 19.6 | 20.2 | 20.5 | 19.8 | 18.1 | 15.8 | 14.6 | 13.8 | 13.1 | 12.9 | 20.5 |
| 18-Aug | 12.9 | 12.5 | 12.3 | 12.0 | 12.3 | 12.9 | 14.3 | 16.1 | 17.6 | 19.4 | 21.1 | 22.1 | 22.7 | 23.7 | 24.1 | 24.6 | 23.9 | 24.2 | 23.1 | 20.5 | 18.9 | 17.1 | 15.1 | 14.5 | 18.3 | 24.6 |
| 19-Aug | 13.4 | 12.3 | 10.9 | 10.3 | 9.8 | 10.8 | 12.7 | 15.0 | 16.1 | 15.9 | 16.1 | 19.1 | 20.9 | 21.6 | 22.3 | 22.6 | 22.0 | 20.2 | 19.7 | 17.8 | 15.8 | 13.3 | 11.9 | 11.0 | 15.9 | 22.6 |
| 20-Aug | 12.6 | 11.8 | 9.9 | 8.7 | 7.7 | 7.5 | 10.1 | 14.0 | 16.2 | 17.0 | 17.1 | 18.4 | 18.9 | 19.6 | 19.7 | 20.1 | 20.1 | 19.8 | 19.0 | 17.4 | 13.9 | 11.5 | 9.1 | 8.1 | 14.5 | 20.1 |
| 21-Aug | 7.0 | 6.1 | 5.5 | 5.1 | 5.1 | 5.4 | 9.1 | 14.9 | 17.8 | 19.7 | 20.8 | 21.7 | 22.2 | 22.9 | 23.8 | 24.1 | 24.1 | 24.0 | 23.1 | 21.1 | 18.7 | 17.7 | 17.2 | 16.8 | 16.4 | 24.1 |
| 22-Aug | 16.3 | 15.8 | 15.7 | 15.0 | 14.5 | 14.3 | 15.8 | 17.0 | 18.4 | 19.6 | 19.9 | 21.4 | 23.2 | 24.5 | 26.1 | 26.8 | 27.1 | 27.1 | 25.9 | 23.9 | 22.4 | 21.5 | 20.0 | 18.6 | 20.5 | 27.1 |
| 23-Aug | 17.6 | 17.2 | 16.6 | 16.3 | 15.9 | 15.8 | 16.2 | 17.4 | 18.5 | 20.0 | 20.3 | 20.8 | 23.5 | 24.6 | 24.3 | 24.5 | 25.0 | 24.6 | 23.0 | 22.2 | 21.2 | 20.4 | 19.9 | 19.3 | 20.2 | 25.0 |
| 24-Aug | 18.6 | 18.2 | 17.5 | 16.8 | 16.5 | 15.9 | 16.2 | 17.2 | 18.0 | 17.9 | 18.7 | 20.1 | 20.8 | 21.6 | 22.0 | 22.3 | 22.6 | 22.7 | 21.7 | 18.7 | 13.8 | 12.0 | 10.6 | 9.2 | 17.9 | 22.7 |
| 25-Aug | 8.4 | 8.0 | 7.1 | 6.9 | 6.2 | 5.7 | 8.8 | 13.6 | 15.9 | 17.6 | 18.7 | 19.4 | 20.3 | 21.4 | 22.2 | 22.4 | 22.4 | 22.1 | 21.1 | 18.9 | 16.5 | 15.7 | 15.0 | 14.6 | 15.4 | 22.4 |
| 26-Aug | 13.9 | 13.5 | 13.8 | 14.0 | 14.2 | 14.1 | 15.3 | 17.7 | 20.2 | 22.3 | 24.1 | 25.4 | 26.3 | 26.9 | 27.0 | 27.4 | 27.3 | 26.9 | 25.8 | 23.3 | 21.5 | 20.7 | 19.9 | 18.9 | 20.8 | 27.4 |
| 27-Aug | 18.3 | 18.1 | 16.9 | 16.7 | 16.4 | 16.0 | 16.9 | 18.8 | 20.4 | 22.3 | 24.0 | 25.5 | 26.3 | 25.6 | 26.8 | 26.6 | 26.4 | 25.4 | 24.9 | 24.4 | 23.7 | 22.8 | 21.8 | 21.1 | 21.9 | 26.8 |
| 28-Aug | 20.3 | 19.5 | 18.9 | 18.0 | 17.0 | 16.0 | 16.2 | 16.0 | 14.7 | 15.0 | 16.0 | 18.3 | 19.1 | 19.7 | 18.4 | 17.7 | 17.6 | 16.3 | 15.4 | 14.2 | 12.8 | 12.0 | 11.5 | 10.6 | 16.3 | 20.3 |
| 29-Aug | 10.1 | 9.9 | 9.8 | 9.6 | 9.6 | 9.6 | 9.3 | 9.0 | 9.9 | 11.1 | 13.4 | 15.1 | 17.0 | 18.6 | 19.8 | 20.3 | 20.4 | 19.4 | 18.9 | 16.1 | 13.8 | 13.1 | 14.0 | 13.8 | 13.8 | 20.4 |
| 30-Aug | 13.2 | 13.1 | 13.0 | 12.7 | 12.7 | 12.9 | 13.8 | 15.8 | 17.3 | 18.6 | 20.5 | 21.4 | 21.9 | 22.5 | 22.1 | 22.5 | 23.1 | 22.4 | 22.3 | 20.0 | 17.6 | 16.4 | 15.7 | 14.5 | 17.7 | 23.1 |
| 31-Aug | 14.4 | 13.8 | 14.5 | 13.7 | 12.2 | 11.2 | 11.7 | 12.8 | 14.9 | 16.0 | 16.8 | 17.8 | 19.2 | 19.8 | 20.6 | 20.6 | 21.3 | 21.2 | 19.7 | 16.9 | 14.8 | 11.8 | 9.8 | 8.9 | 15.6 | 21.3 |
| | 13.1 | 12.6 | 12.0 | 11.5 | 11.2 | 11.2 | 12.6 | 14.6 | 16.1 | 17.3 | 18.3 | 19.6 | 20.6 | 21.2 | 21.3 | 21.6 | 21.4 | 21.0 | 20.3 | 18.5 | 16.4 | 15.1 | 14.0 | 13.3 | Diurnal Average | |
| | 20.3 | 19.5 | 18.9 | 18.0 | 17.0 | 16.0 | 16.9 | 18.8 | 20.4 | 22.3 | 24.1 | 25.5 | 26.3 | 26.9 | 27.0 | 27.4 | 27.3 | 27.1 | 25.9 | 24.4 | 23.7 | 22.8 | 21.8 | 21.1 | Diurnal Maximum | |

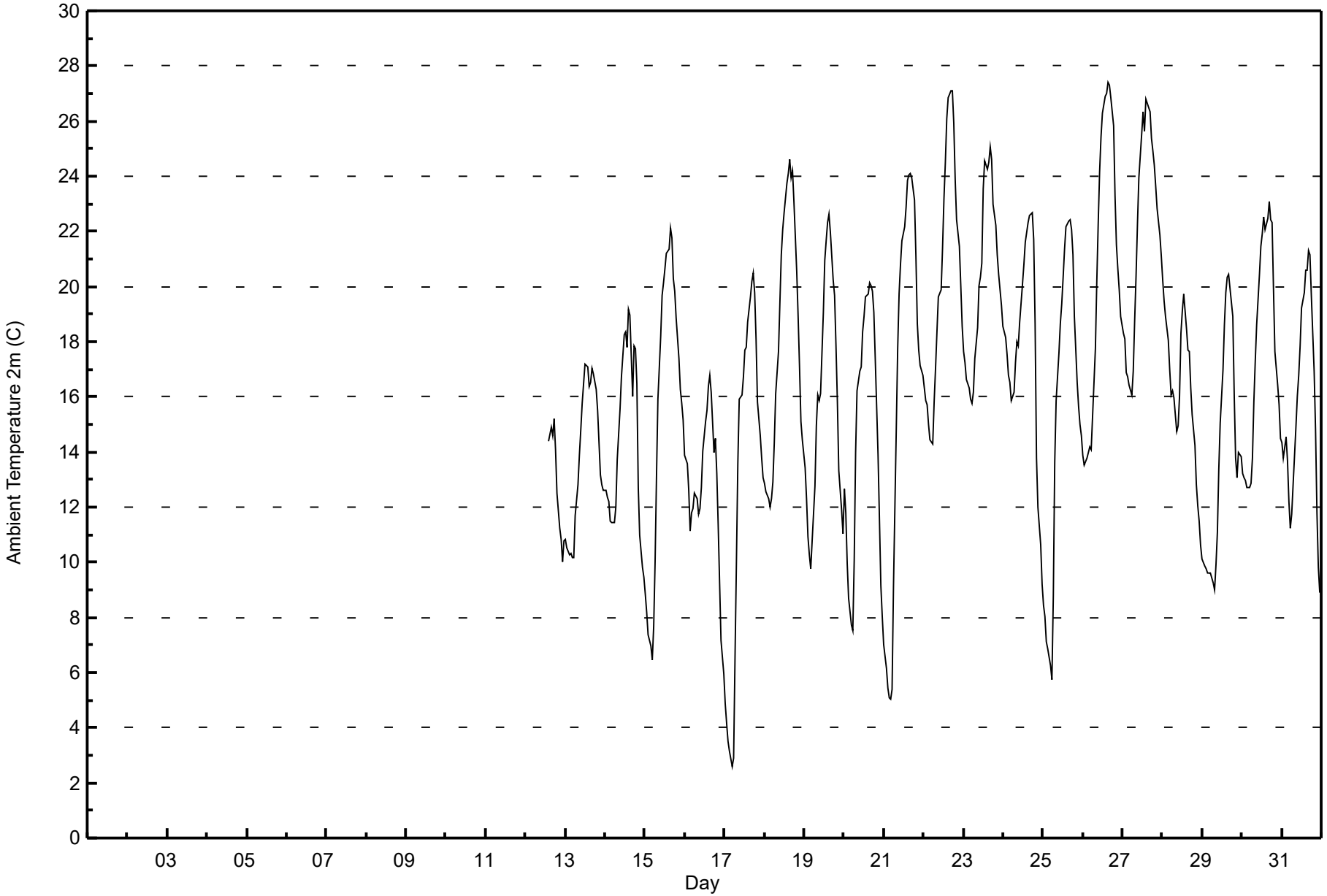
NS - Not in Service

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Ambient Temperature 2m (AT2) - C**

**EBRT - August 2026**



| Concentration Ranges (C) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| -50 - -20 | 0 | 0.00 | 0.00 |
| -20 - 0 | 0 | 0.00 | 0.00 |
| 0 - 10 | 51 | 10.94 | 10.94 |
| 10 - 20 | 292 | 62.66 | 73.61 |
| > 20 | 123 | 26.39 | 100.00 |

Total Number of Valid Hours: 466

Total Number of Hours: 744

## Wood Buffalo Environmental Association

## Summary of Hour Averages

## Relative Humidity 2m (RH2) - %

## EBRT - August 2026

Maximum Value: 98.9 % on Aug 16 08:00

Maximum Daily Average: 80.4 % on Aug 23

Minimum Value: 33.2 % on Aug 21 15:00

Minimum Daily Average: 53.5 % on Aug 26

Maximum Diurnal Average: 86.8 % at hour 6

Minimum Diurnal Average: 48.3 % at hour 16

Monthly Average: 69.11 %

Percentiles: $P_1$ = 35.2 $P_{10}$ = 44.6 $Q_1$ = 53.9 Median = 70.0 $Q_3$ = 84.1 $P_{90}$ = 92.5 $P_{99}$ = 97.6

| | |
|---|---|
| Hours in Service: | 466 |
| Hours of Data: | 466 |
| Hours of Missing Data: | 0 |
| Hours of Calibration: | 0 |
| Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Average | Maximum |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | 80.0 | 76.0 | 78.2 | 72.7 | 79.4 | 86.4 | 91.6 | 93.7 | 97.2 | 96.6 | -- | 97.2 |
| 13-Aug | 96.3 | 96.6 | 96.9 | 96.1 | 96.5 | 96.4 | 91.1 | 89.6 | 80.6 | 73.2 | 68.9 | 62.4 | 57.5 | 56.2 | 60.1 | 64.2 | 61.6 | 62.8 | 69.5 | 73.4 | 82.6 | 90.4 | 90.2 | 90.3 | 79.3 | 96.9 |
| 14-Aug | 88.5 | 89.8 | 88.6 | 91.8 | 91.0 | 89.8 | 89.2 | 81.2 | 76.2 | 72.6 | 66.5 | 54.5 | 52.3 | 50.3 | 42.8 | 44.5 | 69.8 | 54.9 | 57.9 | 67.0 | 85.4 | 88.9 | 91.5 | 94.2 | 74.1 | 94.2 |
| 15-Aug | 93.8 | 94.2 | 95.1 | 95.5 | 96.7 | 97.0 | 92.5 | 81.4 | 71.1 | 59.1 | 49.0 | 47.1 | 44.8 | 42.7 | 43.1 | 39.9 | 40.7 | 49.9 | 52.9 | 60.2 | 61.7 | 65.4 | 67.8 | 70.4 | 67.2 | 97.0 |
| 16-Aug | 75.8 | 74.7 | 78.2 | 86.8 | 87.5 | 96.3 | 98.2 | 98.9 | 97.2 | 93.8 | 83.6 | 71.9 | 59.0 | 56.4 | 50.0 | 47.5 | 51.4 | 66.9 | 63.2 | 70.7 | 80.8 | 87.6 | 92.5 | 93.1 | 77.6 | 98.9 |
| 17-Aug | 94.2 | 94.8 | 95.5 | 96.2 | 96.9 | 96.5 | 93.7 | 86.1 | 72.7 | 61.1 | 63.7 | 59.8 | 57.2 | 57.8 | 51.9 | 46.1 | 46.1 | 46.5 | 51.1 | 56.9 | 64.4 | 67.9 | 69.3 | 70.0 | 70.7 | 96.9 |
| 18-Aug | 69.9 | 71.1 | 73.6 | 76.2 | 77.1 | 77.7 | 75.3 | 71.8 | 69.1 | 66.2 | 61.5 | 58.4 | 55.5 | 46.9 | 43.0 | 39.9 | 42.4 | 42.8 | 46.9 | 58.2 | 64.7 | 72.4 | 80.2 | 81.6 | 63.4 | 81.6 |
| 19-Aug | 84.9 | 86.6 | 89.5 | 91.6 | 92.6 | 92.1 | 89.1 | 83.7 | 79.8 | 86.8 | 87.6 | 67.5 | 51.4 | 46.8 | 45.9 | 46.9 | 51.6 | 67.2 | 70.3 | 76.8 | 85.7 | 92.2 | 91.8 | 94.5 | 77.2 | 94.5 |
| 20-Aug | 93.1 | 94.7 | 95.1 | 94.7 | 94.5 | 94.8 | 89.9 | 85.7 | 73.4 | 68.5 | 69.1 | 61.5 | 59.2 | 53.6 | 51.7 | 49.4 | 46.1 | 43.6 | 46.5 | 55.4 | 71.2 | 79.7 | 86.5 | 87.5 | 72.7 | 95.1 |
| 21-Aug | 88.8 | 89.9 | 90.9 | 91.7 | 93.1 | 92.1 | 84.0 | 69.1 | 59.8 | 52.7 | 45.7 | 42.4 | 40.6 | 35.6 | 33.2 | 34.1 | 35.9 | 38.2 | 41.3 | 47.8 | 56.9 | 60.5 | 63.6 | 65.5 | 60.5 | 93.1 |
| 22-Aug | 68.1 | 70.8 | 72.0 | 73.4 | 73.5 | 72.1 | 67.0 | 64.4 | 60.4 | 57.6 | 58.6 | 56.4 | 53.6 | 51.6 | 46.4 | 44.8 | 43.1 | 46.2 | 50.8 | 57.8 | 63.4 | 66.8 | 72.9 | 78.7 | 61.3 | 78.7 |
| 23-Aug | 82.6 | 84.1 | 86.5 | 88.6 | 90.7 | 92.0 | 91.2 | 87.8 | 85.3 | 80.5 | 79.8 | 79.6 | 70.2 | 66.9 | 68.7 | 68.9 | 66.4 | 71.8 | 81.3 | 78.9 | 81.8 | 79.9 | 82.2 | 84.2 | 80.4 | 92.0 |
| 24-Aug | 84.6 | 76.5 | 71.3 | 72.1 | 67.5 | 66.5 | 63.1 | 58.7 | 52.4 | 53.9 | 47.5 | 42.9 | 38.5 | 36.9 | 37.1 | 34.7 | 33.8 | 34.4 | 38.4 | 51.4 | 73.1 | 77.5 | 78.2 | 82.3 | 57.2 | 84.6 |
| 25-Aug | 84.0 | 84.8 | 87.6 | 89.8 | 90.7 | 90.7 | 85.3 | 81.4 | 73.7 | 63.5 | 59.3 | 57.4 | 54.9 | 50.4 | 47.7 | 49.1 | 49.6 | 50.7 | 54.6 | 64.6 | 71.1 | 71.6 | 71.6 | 70.2 | 68.9 | 90.7 |
| 26-Aug | 70.0 | 69.3 | 69.1 | 68.8 | 68.2 | 68.3 | 68.3 | 63.6 | 58.7 | 53.3 | 44.0 | 38.8 | 37.5 | 35.5 | 36.2 | 36.0 | 37.4 | 38.6 | 41.1 | 48.3 | 53.2 | 55.9 | 61.0 | 63.6 | 53.5 | 70.0 |
| 27-Aug | 65.5 | 66.2 | 71.5 | 73.6 | 74.7 | 75.8 | 71.6 | 63.8 | 57.9 | 51.0 | 43.7 | 38.3 | 38.9 | 41.1 | 39.1 | 39.0 | 44.0 | 48.7 | 45.6 | 45.3 | 47.4 | 50.8 | 54.9 | 56.3 | 54.4 | 75.8 |
| 28-Aug | 58.3 | 62.4 | 66.1 | 70.4 | 77.1 | 84.7 | 84.2 | 87.2 | 96.8 | 96.3 | 90.8 | 74.5 | 60.6 | 57.4 | 60.7 | 61.9 | 63.8 | 73.4 | 77.3 | 76.4 | 79.5 | 79.2 | 81.8 | 81.6 | 75.1 | 96.8 |
| 29-Aug | 82.9 | 83.6 | 84.4 | 82.0 | 83.3 | 83.5 | 85.0 | 86.5 | 80.2 | 76.4 | 67.8 | 62.0 | 54.1 | 48.2 | 42.8 | 42.5 | 44.2 | 48.7 | 53.3 | 67.0 | 75.8 | 76.3 | 72.6 | 74.2 | 69.1 | 86.5 |
| 30-Aug | 77.7 | 79.0 | 80.3 | 81.5 | 83.3 | 83.6 | 81.6 | 76.2 | 71.7 | 66.7 | 57.7 | 51.4 | 50.8 | 48.4 | 52.9 | 49.6 | 45.3 | 49.3 | 51.8 | 61.8 | 72.0 | 77.7 | 84.1 | 89.3 | 67.7 | 89.3 |
| 31-Aug | 90.7 | 93.3 | 93.4 | 95.7 | 98.2 | 98.8 | 98.2 | 95.8 | 80.7 | 74.1 | 69.9 | 63.9 | 58.2 | 56.0 | 51.8 | 51.7 | 46.8 | 47.2 | 51.9 | 62.8 | 78.7 | 87.2 | 89.2 | 92.1 | 76.1 | 98.8 |
| | 81.6 | 82.2 | 83.4 | 85.1 | 86.0 | 86.8 | 84.1 | 79.6 | 73.6 | 68.8 | 63.9 | 57.4 | 52.4 | 49.4 | 49.3 | 48.3 | 49.9 | 52.7 | 56.3 | 63.3 | 72.0 | 76.1 | 79.0 | 80.8 | Diurnal Average | |
| | 96.3 | 96.6 | 96.9 | 96.2 | 98.2 | 98.8 | 98.2 | 98.9 | 97.2 | 96.3 | 90.8 | 79.6 | 70.2 | 66.9 | 80.0 | 76.0 | 78.2 | 73.4 | 81.3 | 86.4 | 91.6 | 93.7 | 97.2 | 96.6 | Diurnal Maximum | |

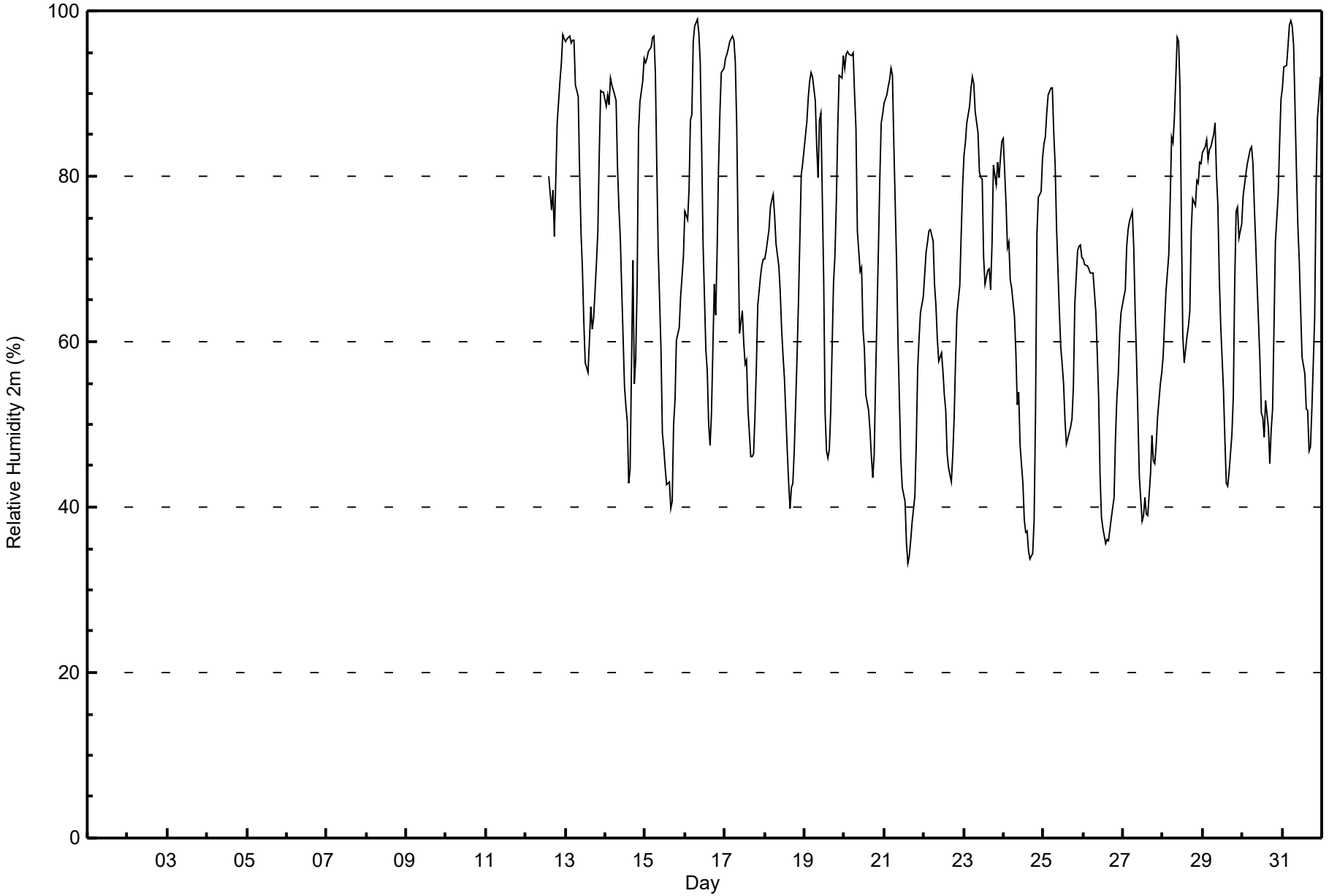
NS - Not in Service

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Relative Humidity 2m (RH2) - %**

**EBRT - August 2026**



| Concentration Ranges (%) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 20 | 0 | 0.00 | 0.00 |
| 20 - 40 | 25 | 5.36 | 5.36 |
| 40 - 60 | 131 | 28.11 | 33.48 |
| 60 - 80 | 159 | 34.12 | 67.60 |
| 80 - 100 | 151 | 32.40 | 100.00 |

Total Number of Valid Hours: 466

Total Number of Hours: 744

# Wood Buffalo Environmental Association

## Summary of Hour Averages

## Wind Speed 10m (WS10) - km/h

## EBRT - August 2026

Maximum Speed: 22 km/h on Aug 28 16:00

Maximum Daily Speed Average: 14.6 km/h on Aug 27

Minimum Speed Value: 1 km/h on Aug 19 22:00

Minimum Daily Speed Average: 0.7 km/h on Aug 14

Maximum Diurnal Speed Average: 5.7 km/h at hour 13

Minimum Diurnal Speed Average: 1.3 km/h at hour 20

Monthly Average Velocity: 2.6 km/h 197.0 deg

Percentiles: $P_1$ = 1 $P_{10}$ = 3 $Q_1$ = 5 Median = 9 $Q_3$ = 13 $P_{90}$ = 16 $P_{99}$ = 20

Hours in Service: 468

Hours of Data: 466

Hours of Missing Data: 2

Percent Operational Time: 99.8

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | ---- | ---- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | N14 | N14 | N15 | NNE14 | NNE15 | NE10 | NNE5 | NNE4 | NNW5 | N6 | NNE7 | ---- | NNE15 |
| 13-Aug | NNE5 | NNE4 | NE4 | NE4 | NNE6 | NE7 | ENE5 | NNE5 | NNE7 | NNE8 | NNE10 | NNE9 | NNE13 | NE14 | NE14 | NE9 | NE8 | NNE7 | N5 | N5 | NNE3 | NNE2 | ENE1 | ENE3 | NNE6.3 | NE14 |
| 14-Aug | NE3 | ENE2 | ENE5 | NE1 | ESE3 | E3 | ESE3 | UO | NW3 | W3 | W3 | NW4 | NNE8 | ENE8 | E7 | NNE5 | NNW6 | WSW6 | WSW9 | WSW4 | SE2 | SSE5 | SSE4 | SE5 | ENE0.7 | WSW9 |
| 15-Aug | SE5 | SE5 | SE5 | SSE5 | SSE5 | SSE6 | SSE6 | SSW6 | SSW7 | SW8 | WSW10 | W12 | WSW13 | WSW14 | WSW13 | WSW14 | WSW12 | SW9 | SW7 | SW5 | SSW7 | SSW7 | SSW6 | SSW6 | SW6.7 | WSW14 |
| 16-Aug | SSW6 | SSW7 | SW4 | W3 | NNW6 | NNE6 | NNW12 | NNW16 | N16 | NNW18 | NNW16 | NNW15 | N15 | NNW14 | NNW15 | NW14 | NNW15 | N8 | N8 | N5 | NNW5 | NNE3 | SE2 | SE3 | NNW7.7 | NNW18 |
| 17-Aug | SE4 | SE4 | SSE3 | SE4 | ESE5 | SE5 | SSE5 | S5 | SSW5 | W8 | WNW10 | WNW12 | W11 | W9 | W8 | W9 | W7 | SW9 | SSW8 | S7 | SSE8 | SSE10 | SSE10 | SSE9 | SW3.8 | WNW12 |
| 18-Aug | SSE10 | SSE11 | SSE11 | SSE11 | SSE12 | SSE11 | SSE12 | S14 | S14 | S15 | SSW16 | SSW15 | SW14 | WSW13 | SSW14 | WSW14 | WSW11 | W15 | W13 | SW5 | SW6 | SSW4 | SSE4 | S5 | SSW9.5 | SSW16 |
| 19-Aug | S5 | S4 | SE5 | ESE5 | SSE4 | SE6 | SE4 | S6 | SSW6 | SSW8 | WSW8 | WNW11 | NW13 | NW11 | NW11 | NW12 | NNW14 | NNW12 | NNW10 | NNW9 | NE3 | SSE1 | E3 | NW2 | NW2.5 | NNW14 |
| 20-Aug | SE2 | E4 | ESE3 | E2 | ESE2 | E4 | ESE3 | SE2 | NNE8 | N12 | NNW15 | N13 | NNW14 | NNW14 | NNW14 | NNW15 | N14 | N14 | N11 | N6 | NNE5 | NE4 | SSE2 | SE3 | N6.0 | NNW15 |
| 21-Aug | SE4 | SE4 | ESE4 | ESE5 | ESE5 | ESE5 | SE5 | S7 | SSW9 | SW9 | W9 | WSW10 | SW10 | SW9 | SW10 | SW11 | SSW12 | SSW12 | S11 | SSE9 | SE9 | SE11 | SSE10 | SSE10 | S6.1 | SSW12 |
| 22-Aug | SSE11 | SSE11 | SSE12 | SSE12 | SE11 | SE11 | SSE11 | SSE10 | SSE11 | S10 | S13 | SSE13 | S14 | S13 | SSW14 | S13 | S13 | S13 | SSE12 | SE8 | SSE11 | S13 | SSE11 | S9 | SSE11.3 | S14 |
| 23-Aug | SSE10 | SSE8 | SSE9 | SSE9 | SSE9 | SSE9 | SSE7 | SSE9 | SSE10 | S13 | SSW15 | SSE10 | SSW10 | SSW14 | SSW7 | W3 | WSW4 | WSW6 | W6 | NNW11 | NNW10 | NNE7 | N7 | NNW7 | S4.4 | SSW15 |
| 24-Aug | N5 | N8 | N9 | N9 | N10 | N9 | N9 | N8 | NNW10 | NW8 | NW10 | NNW12 | NNW14 | NNW17 | NNW17 | NNW16 | NNW15 | N13 | N8 | NNE4 | ESE1 | ESE2 | E4 | E3 | NNW8.3 | NNW17 |
| 25-Aug | E3 | ENE6 | ENE4 | NE5 | NE4 | ENE3 | ENE4 | N5 | N7 | N6 | NW8 | WNW9 | WNW9 | NW8 | WNW8 | NW7 | NNE8 | NNE8 | NE6 | ENE6 | ENE7 | E6 | E6 | ESE8 | NNE3.5 | WNW9 |
| 26-Aug | ESE8 | SE9 | SE9 | SE10 | SE11 | SE9 | SSE10 | SSE10 | S10 | S11 | SSW13 | SSW16 | S14 | SSW16 | SSW15 | S15 | SSE16 | SSE16 | SSE11 | SE9 | SE10 | SE12 | SSE12 | SSE11 | SSE10.7 | SSE16 |
| 27-Aug | SSE11 | SSE10 | SE10 | SE11 | SE9 | SE11 | SE11 | SSE12 | SSE13 | SE12 | SE16 | SSE20 | SSE21 | SSE22 | SSE20 | SSE19 | SSE12 | SE12 | ESE15 | SE18 | SE18 | SE19 | SE18 | SE18 | SE14.6 | SSE22 |
| 28-Aug | SE16 | SE15 | SE17 | SSE19 | SSE15 | S8 | S16 | S13 | SSW14 | SSW16 | SSW15 | SW19 | SW19 | SW20 | WSW19 | WSW22 | WSW19 | SW15 | WSW21 | WSW22 | WSW17 | WSW17 | WSW17 | WSW15 | SW13.4 | WSW22 |
| 29-Aug | WSW12 | SW13 | SW14 | WSW14 | SW15 | SW17 | SW15 | SSW15 | SW19 | SW18 | SW18 | WSW17 | SW18 | SW18 | WSW19 | WSW17 | SW16 | WSW11 | SSW7 | SSE4 | SE5 | SE6 | SSE9 | SSE9 | SW12.5 | WSW19 |
| 30-Aug | SSE9 | SSE9 | SSE9 | SE9 | SE9 | SE7 | SE8 | SSE6 | SSW7 | SW9 | SSW8 | SSE7 | W7 | WSW6 | WNW6 | WSW3 | SW3 | SW4 | SE2 | SE6 | SSE7 | SSE7 | SSE3 | E2 | S4.7 | SSE9 |
| 31-Aug | ESE4 | SSW2 | SSE5 | SSW3 | NNE2 | NE2 | SSE1 | NNW5 | NNE10 | NNW11 | NNW9 | NNW8 | WNW9 | WNW8 | W5 | WNW6 | WSW1 | SW4 | SW6 | SW7 | WNW4 | NNE4 | ESE4 | ESE5 | NW2.0 | NNW11 |
| | SSE4.8 | SSE4.7 | SSE5.0 | SSE4.7 | SE4.1 | SE4.2 | SSE4.2 | S3.9 | SSW3.2 | SW4.1 | WSW5.0 | WSW4.9 | WSW5.7 | WSW5.2 | W4.9 | W5.2 | W3.3 | WSW2.3 | SW2.1 | S1.3 | SSE2.5 | SSE3.9 | SSE4.3 | SSE3.9 | | Diurnal Average |
| | SE16 | SE15 | SE17 | SSE19 | SSE15 | SW17 | S16 | NNW16 | SW19 | NNW18 | SW18 | SSE20 | SSE21 | SSE22 | SSE20 | WSW22 | WSW19 | SSE16 | WSW21 | WSW22 | SE18 | SE19 | SE18 | SE18 | | Diurnal Maximum |

C - Calibration UO - Unstable Operation NS - Not in Service

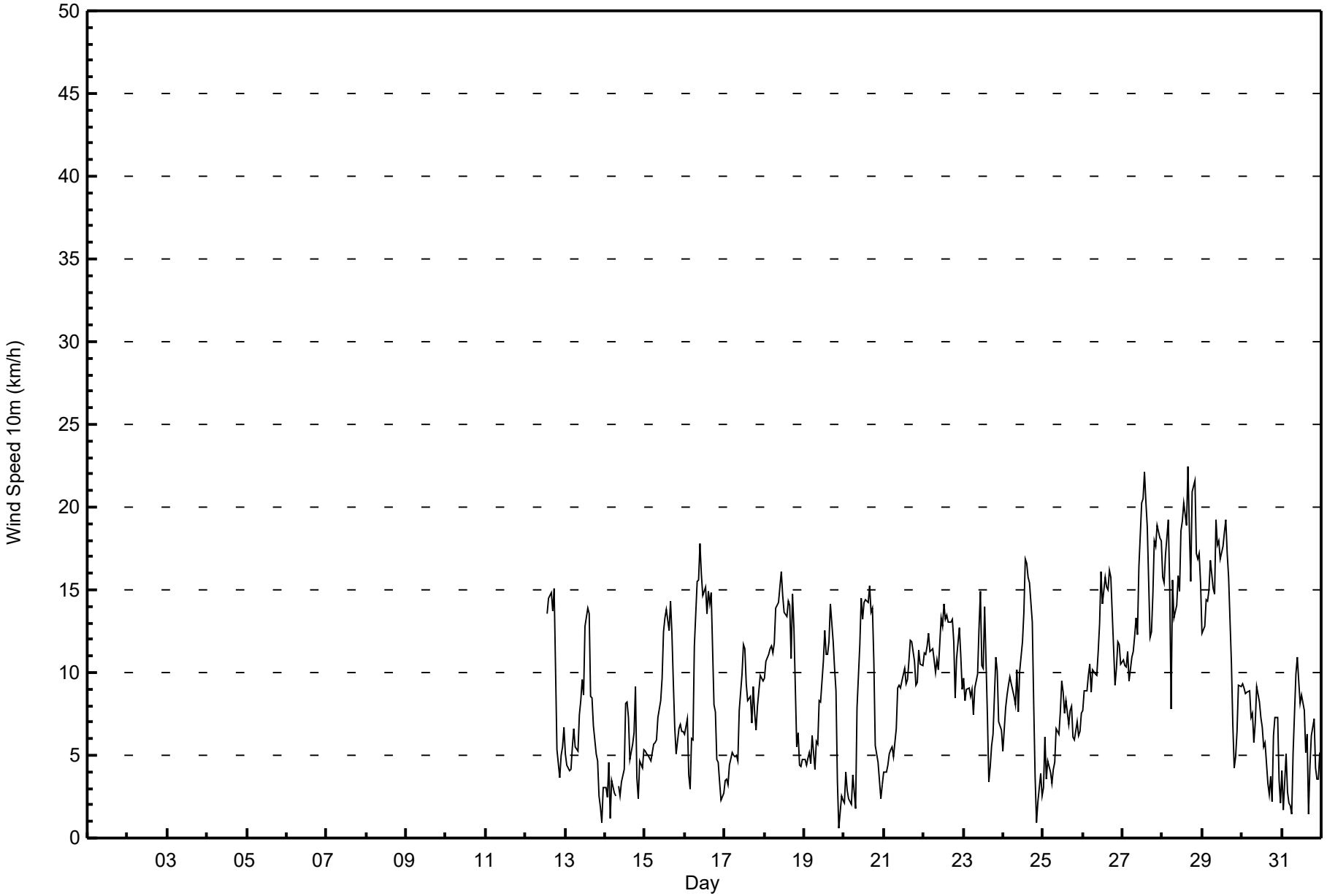
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Speed 10m (WS10) - km/h**

**EBRT - August 2026**



| Wind Speed Ranges (km/h) | Number of Hours | % | Cumulative % |
|---|---|---|---|
| 0 - 5 | 125 | 26.82 | 26.82 |
| 6 - 11 | 198 | 42.49 | 69.31 |
| 12 - 19 | 135 | 28.97 | 98.28 |
| 20 - 28 | 8 | 1.72 | 100.00 |
| 29 - 38 | 0 | 0.00 | 100.00 |
| > 38 | 0 | 0.00 | 100.00 |

Total Number of Valid Hours: 466

Total Number of Hours: 744

**Wood Buffalo Environmental Association**

**Frequency Distribution**

**Wind Speed 10m (WS10) - km/h**

**EBRT - August 2026**

| Wind Speed Ranges (km/h) | Wind Direction | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | NNE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | **Totals** |
| 0 - 5 | 5 | 14 | 8 | 8 | 9 | 16 | 21 | 14 | 4 | 4 | 6 | 4 | 5 | 1 | 3 | 3 | 125 |
| 6 - 11 | 16 | 14 | 5 | 4 | 3 | 2 | 24 | 46 | 9 | 17 | 12 | 10 | 9 | 9 | 7 | 11 | 198 |
| 12 - 19 | 10 | 3 | 2 | 0 | 0 | 1 | 12 | 15 | 15 | 16 | 15 | 18 | 3 | 1 | 3 | 21 | 135 |
| 20 - 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 8 |
| 29 - 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 31 | 31 | 15 | 12 | 12 | 19 | 57 | 79 | 28 | 37 | 34 | 35 | 17 | 11 | 13 | 35 | 466 |

Total Number of Valid Hours: 466

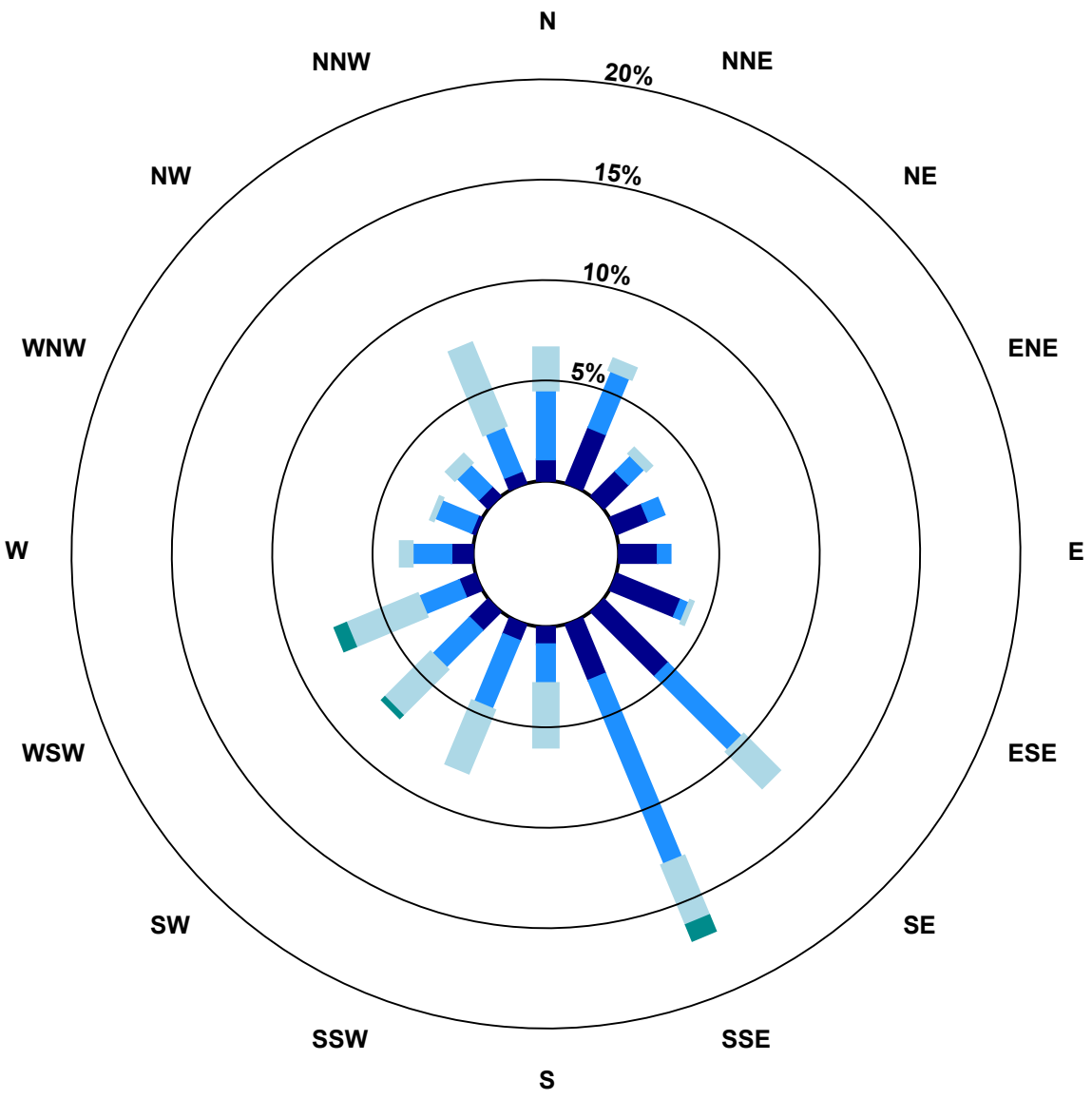
Total Number of Hours: 744

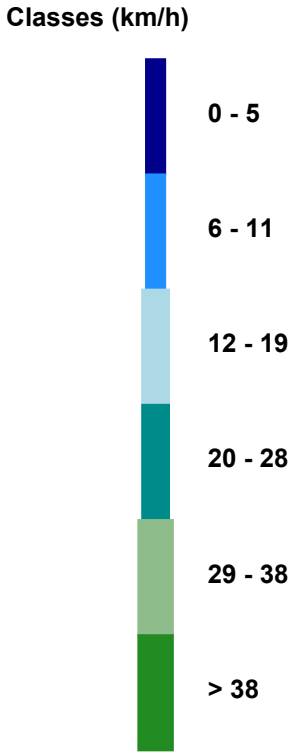
**Wood Buffalo Environmental Association**

**Wind Rose Aug 2026**

**Wind Speed 10m (WS10) - km/h**

**EBRT**




**Total Number of Valid Hours: 466**

## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Speed 10m (WS10) - km/h

## EBRT - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6 km/h on Aug 14 17:00

Minimum Value: 0 km/h on Aug 25 00:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 1$ Median = 2 $Q_3 = 3$ $P_{90} = 4$ $P_{99} = 6$

| | |
|---|---|
| Hours in Service: | 468 |
| Hours of Data: | 466 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 99.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | 4 | 4 | 4 | 4 | 5 | 4 | 1 | 1 | 1 | 1 | 1 | 5 |
| 13-Aug | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 5 | 4 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 5 |
| 14-Aug | 1 | 1 | 2 | 1 | 1 | 1 | 1 | UO | 1 | 1 | 1 | 2 | 4 | 4 | 3 | 4 | 6 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 6 |
| 15-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 4 | 4 | 3 | 5 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 5 |
| 16-Aug | 1 | 1 | 2 | 1 | 3 | 2 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 5 |
| 17-Aug | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 3 |
| 18-Aug | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 4 |
| 19-Aug | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 4 |
| 20-Aug | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 2 | 1 | 1 | 4 |
| 21-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 3 |
| 22-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 4 |
| 23-Aug | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 5 | 3 | 3 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 5 |
| 24-Aug | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 3 | 1 | 1 | 1 | 1 | 0 | 5 |
| 25-Aug | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| 26-Aug | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 4 |
| 27-Aug | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 5 | 4 | 5 | 5 | 5 | 5 | 3 | 3 | 4 | 5 | 5 | 5 | 4 | 5 | 5 |
| 28-Aug | 4 | 4 | 5 | 5 | 5 | 5 | 3 | 3 | 5 | 4 | 4 | 5 | 6 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 6 |
| 29-Aug | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 2 | 1 | 1 | 2 | 2 | 1 | 5 |
| 30-Aug | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 4 |
| 31-Aug | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 3 |
| | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 6 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration UO - Unstable Operation NS - Not in Service

# Wood Buffalo Environmental Association

## Summary of Hour Averages

# Wind Direction 10m (WD10) - deg

## EBRT - August 2026

Direction of Maximum Speed: 246 deg on Aug 28 16:00
Direction of Maximum Daily Speed Average: 146.1 deg on Aug 27

Direction of Minimum Speed: 163 deg on Aug 19 22:00

Direction of Minimum Daily Speed Average: 0.7 deg on Aug 14

Monthly Average Direction: 197.0 deg

| | |
|---|---|
| Hours in Service: | 468 |
| Hours of Data: | 466 |
| Hours of Missing Data: | 2 |
| Percent Operational Time: | 99.8 |

| Day | Hourly Period Ending At (MST) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | 8 | 356 | 3 | 21 | 33 | 36 | 33 | 15 | 346 | 4 | 17 | -- |
| 13-Aug | 24 | 27 | 46 | 47 | 21 | 50 | 65 | 23 | 31 | 20 | 12 | 27 | 27 | 41 | 51 | 39 | 41 | 19 | 4 | 3 | 14 | 13 | 78 | 67 | 32.2 |
| 14-Aug | 56 | 62 | 77 | 47 | 106 | 97 | 104 | UO | 307 | 279 | 268 | 311 | 13 | 71 | 80 | 27 | 332 | 251 | 250 | 256 | 139 | 151 | 147 | 146 | 58.1 |
| 15-Aug | 143 | 145 | 141 | 153 | 166 | 158 | 167 | 196 | 201 | 218 | 250 | 261 | 246 | 243 | 242 | 246 | 238 | 229 | 227 | 215 | 201 | 199 | 207 | 205 | 218.2 |
| 16-Aug | 205 | 207 | 231 | 279 | 342 | 26 | 344 | 338 | 351 | 344 | 348 | 341 | 349 | 340 | 336 | 326 | 330 | 9 | 355 | 1 | 348 | 15 | 136 | 128 | 341.0 |
| 17-Aug | 132 | 135 | 151 | 130 | 115 | 131 | 160 | 184 | 202 | 279 | 282 | 285 | 271 | 279 | 278 | 276 | 274 | 222 | 198 | 172 | 165 | 162 | 162 | 161 | 214.3 |
| 18-Aug | 163 | 166 | 168 | 165 | 165 | 166 | 165 | 191 | 188 | 191 | 194 | 211 | 229 | 243 | 212 | 239 | 241 | 263 | 260 | 235 | 231 | 195 | 167 | 175 | 202.6 |
| 19-Aug | 180 | 173 | 137 | 122 | 160 | 141 | 127 | 171 | 202 | 211 | 240 | 282 | 317 | 305 | 320 | 319 | 343 | 346 | 338 | 345 | 34 | 163 | 92 | 309 | 303.9 |
| 20-Aug | 133 | 90 | 106 | 92 | 117 | 98 | 108 | 139 | 15 | 356 | 345 | 0 | 347 | 348 | 344 | 344 | 351 | 354 | 351 | 3 | 24 | 47 | 154 | 131 | 2.4 |
| 21-Aug | 124 | 130 | 122 | 118 | 105 | 110 | 125 | 188 | 200 | 221 | 263 | 250 | 236 | 229 | 215 | 216 | 208 | 199 | 181 | 155 | 141 | 145 | 151 | 158 | 184.1 |
| 22-Aug | 156 | 153 | 156 | 150 | 144 | 145 | 151 | 150 | 163 | 172 | 178 | 167 | 185 | 190 | 201 | 185 | 173 | 171 | 163 | 146 | 159 | 171 | 168 | 170 | 166.4 |
| 23-Aug | 162 | 158 | 158 | 162 | 157 | 157 | 155 | 166 | 165 | 175 | 197 | 158 | 203 | 205 | 196 | 279 | 250 | 257 | 261 | 335 | 346 | 21 | 1 | 341 | 185.5 |
| 24-Aug | 349 | 351 | 349 | 4 | 3 | 355 | 354 | 356 | 338 | 310 | 318 | 336 | 330 | 331 | 327 | 343 | 343 | 351 | 11 | 24 | 119 | 115 | 85 | 81 | 345.8 |
| 25-Aug | 85 | 68 | 73 | 49 | 46 | 57 | 62 | 359 | 356 | 358 | 317 | 299 | 298 | 316 | 299 | 321 | 22 | 25 | 37 | 59 | 75 | 92 | 99 | 104 | 19.0 |
| 26-Aug | 114 | 126 | 132 | 136 | 137 | 138 | 154 | 167 | 171 | 184 | 202 | 205 | 188 | 193 | 196 | 174 | 168 | 164 | 161 | 142 | 139 | 145 | 156 | 156 | 164.5 |
| 27-Aug | 161 | 148 | 144 | 146 | 139 | 141 | 144 | 148 | 161 | 146 | 136 | 149 | 159 | 168 | 161 | 167 | 149 | 125 | 114 | 129 | 136 | 140 | 138 | 140 | 146.1 |
| 28-Aug | 135 | 137 | 143 | 156 | 162 | 171 | 179 | 187 | 195 | 208 | 203 | 219 | 228 | 234 | 237 | 246 | 246 | 233 | 241 | 244 | 246 | 245 | 249 | 258 | 214.3 |
| 29-Aug | 237 | 229 | 234 | 242 | 232 | 231 | 230 | 213 | 231 | 231 | 234 | 240 | 234 | 230 | 239 | 247 | 234 | 237 | 213 | 164 | 136 | 145 | 164 | 164 | 226.9 |
| 30-Aug | 161 | 156 | 150 | 140 | 137 | 135 | 139 | 167 | 202 | 216 | 199 | 165 | 262 | 247 | 283 | 253 | 231 | 222 | 146 | 135 | 154 | 149 | 149 | 100 | 171.5 |
| 31-Aug | 123 | 193 | 152 | 199 | 28 | 44 | 153 | 340 | 16 | 344 | 333 | 332 | 302 | 294 | 281 | 296 | 255 | 214 | 225 | 236 | 302 | 19 | 105 | 116 | 312.3 |
| Diurnal Average | 151.8 | 149.3 | 148.8 | 148.4 | 142.8 | 140.0 | 152.7 | 181.5 | 200.6 | 227.8 | 241.8 | 247.0 | 257.9 | 257.6 | 259.4 | 270.3 | 273.7 | 252.8 | 233.5 | 175.9 | 153.5 | 152.2 | 154.8 | 153.9 | |

C - Calibration  UO - Unstable Operation  NS - Not in Service

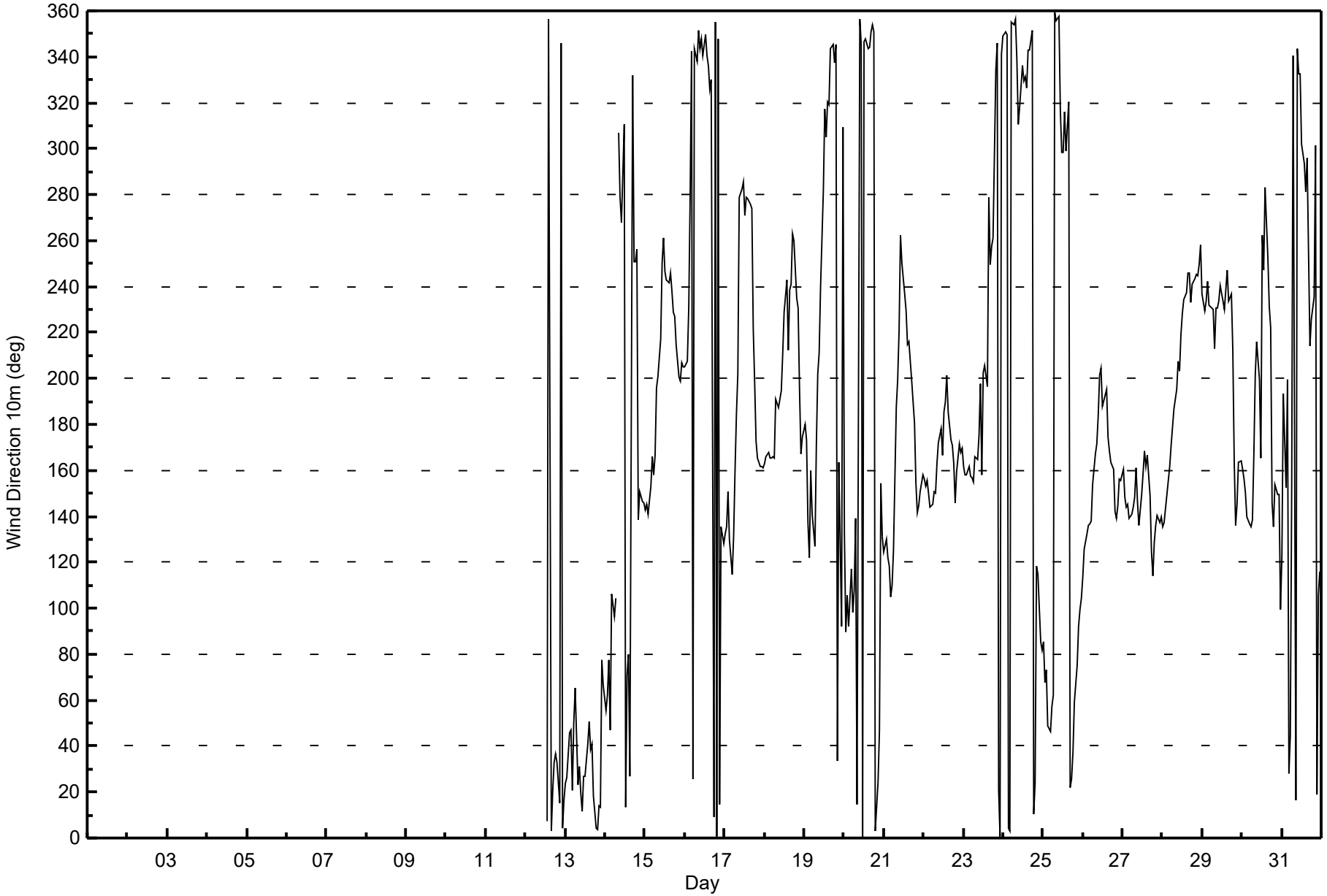
All monthly, daily, and diurnal averages have been calculated using vector methods

**Wood Buffalo Environmental Association**

**Hourly Averages**

**Wind Direction 10m (WD10) - deg**

**EBRT - August 2026**



## Wood Buffalo Environmental Association

## Summary of Hour Standard Deviations

## Wind Direction 10m (WD10) - deg

## EBRT - August 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 94 deg on Aug 14 17:00

Minimum Value: 6 deg on Aug 25 04:00

Percentiles: $P_1$ = 9 $P_{10}$ = 11 $Q_1$ = 14 Median = 19 $Q_3$ = 25 $P_{90}$ = 39 $P_{99}$ = 80

| | |
|---|---|
| Hours in Service: | 468 |
| Hours of Data: | 466 |
| Hours of Missing Data: | 2 |
| Hours of Calibration: | 1 |
| Percent Operational Time: | 99.8 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Maximum |
| 1-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 2-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 3-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 4-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 5-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 6-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 7-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 8-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 9-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 10-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 11-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | -- |
| 12-Aug | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | C | 26 | 26 | 26 | 23 | 22 | 20 | 20 | 32 | 16 | 12 | 19 | 32 |
| 13-Aug | 21 | 24 | 20 | 26 | 23 | 14 | 16 | 32 | 21 | 23 | 30 | 30 | 26 | 21 | 18 | 20 | 20 | 21 | 18 | 16 | 39 | 19 | 68 | 46 | 68 |
| 14-Aug | 47 | 33 | 12 | 66 | 23 | 29 | 20 | UO | 27 | 27 | 36 | 63 | 69 | 29 | 34 | 58 | 94 | 15 | 19 | 43 | 13 | 12 | 11 | 11 | 94 |
| 15-Aug | 10 | 12 | 13 | 14 | 9 | 9 | 11 | 17 | 19 | 24 | 31 | 28 | 27 | 27 | 23 | 23 | 21 | 15 | 15 | 12 | 13 | 12 | 10 | 8 | 31 |
| 16-Aug | 10 | 9 | 52 | 23 | 31 | 45 | 20 | 19 | 21 | 20 | 22 | 26 | 23 | 25 | 26 | 28 | 26 | 23 | 23 | 15 | 12 | 32 | 21 | 11 | 52 |
| 17-Aug | 11 | 19 | 14 | 12 | 12 | 13 | 19 | 18 | 26 | 26 | 22 | 22 | 22 | 25 | 25 | 27 | 29 | 25 | 11 | 12 | 9 | 10 | 10 | 10 | 29 |
| 18-Aug | 10 | 11 | 11 | 10 | 12 | 12 | 12 | 18 | 15 | 16 | 14 | 22 | 19 | 22 | 24 | 21 | 18 | 16 | 16 | 19 | 12 | 25 | 13 | 9 | 25 |
| 19-Aug | 14 | 11 | 13 | 9 | 26 | 11 | 26 | 18 | 40 | 24 | 19 | 30 | 28 | 29 | 26 | 29 | 20 | 21 | 17 | 18 | 44 | 90 | 12 | 65 | 90 |
| 20-Aug | 72 | 26 | 28 | 33 | 46 | 14 | 12 | 71 | 24 | 25 | 22 | 28 | 26 | 26 | 28 | 23 | 25 | 23 | 20 | 20 | 16 | 44 | 25 | 14 | 72 |
| 21-Aug | 7 | 9 | 29 | 6 | 14 | 10 | 14 | 16 | 15 | 24 | 25 | 27 | 27 | 39 | 28 | 22 | 17 | 18 | 15 | 11 | 11 | 11 | 12 | 12 | 39 |
| 22-Aug | 11 | 11 | 12 | 11 | 12 | 13 | 15 | 15 | 16 | 20 | 17 | 18 | 19 | 21 | 19 | 20 | 22 | 14 | 13 | 12 | 12 | 11 | 11 | 11 | 22 |
| 23-Aug | 11 | 11 | 12 | 13 | 14 | 18 | 19 | 15 | 13 | 15 | 12 | 25 | 29 | 16 | 17 | 37 | 30 | 18 | 25 | 28 | 18 | 24 | 21 | 21 | 37 |
| 24-Aug | 19 | 16 | 17 | 22 | 20 | 18 | 18 | 19 | 20 | 27 | 21 | 24 | 20 | 20 | 19 | 21 | 20 | 23 | 22 | 16 | 69 | 36 | 10 | 20 | 69 |
| 25-Aug | 24 | 9 | 23 | 6 | 12 | 15 | 10 | 25 | 28 | 50 | 38 | 38 | 33 | 41 | 38 | 58 | 41 | 24 | 15 | 18 | 14 | 16 | 15 | 15 | 58 |
| 26-Aug | 14 | 13 | 14 | 15 | 14 | 15 | 13 | 12 | 13 | 14 | 19 | 19 | 29 | 25 | 25 | 19 | 17 | 15 | 13 | 15 | 13 | 12 | 12 | 11 | 29 |
| 27-Aug | 11 | 12 | 11 | 12 | 15 | 14 | 13 | 16 | 16 | 20 | 20 | 17 | 17 | 15 | 15 | 14 | 16 | 16 | 18 | 18 | 17 | 16 | 16 | 16 | 20 |
| 28-Aug | 17 | 16 | 16 | 15 | 29 | 58 | 18 | 25 | 30 | 14 | 15 | 18 | 16 | 18 | 19 | 18 | 17 | 15 | 16 | 15 | 17 | 16 | 15 | 15 | 58 |
| 29-Aug | 16 | 14 | 17 | 18 | 15 | 15 | 15 | 15 | 16 | 16 | 20 | 20 | 20 | 20 | 19 | 20 | 19 | 17 | 15 | 22 | 12 | 16 | 9 | 10 | 22 |
| 30-Aug | 11 | 12 | 10 | 16 | 15 | 15 | 15 | 23 | 21 | 20 | 37 | 47 | 46 | 59 | 26 | 47 | 69 | 25 | 45 | 18 | 11 | 11 | 69 | 87 | 87 |
| 31-Aug | 77 | 82 | 19 | 51 | 62 | 73 | 78 | 30 | 27 | 24 | 26 | 45 | 40 | 42 | 54 | 31 | 94 | 51 | 18 | 20 | 24 | 38 | 17 | 10 | 94 |
| | 77 | 82 | 52 | 66 | 62 | 73 | 78 | 71 | 40 | 50 | 38 | 63 | 69 | 59 | 54 | 58 | 94 | 51 | 45 | 43 | 69 | 90 | 69 | 87 | |
| | Diurnal Maximum | | | | | | | | | | | | | | | | | | | | | | | | |

C - Calibration UO - Unstable Operation NS - Not in Service

# Appendix 1 - Summary of Ambient Air Quality Objectives (AAAQOs) and Ambient Air Quality Guidelines (AAAQGs) in August 2026

| Site | Parameter | Date/Time | Reference | Period | Reported | Final | Status |
|---|---|---|---|---|---|---|---|
| Mannix | H2S | 1Aug26, 10:00 | 456964 | 1-hr | 32 | 32.2 | exc |
| Pihew Point | H2S | 3Aug26, 05:00 | 456999 | 1-hr | 10 | 9.7 | nae |
| Pihew Point | H2S | 5Aug26, 01:00 | 457094 | 1-hr | 10 | 10.5 | exc |
| Pihew Point | H2S | 6Aug26, 24:00 | 457206 | 24-hr | 3 | 3.3 | exc |
| Pihew Point | H2S | 8Aug26, 04:00 | 457260 | 1-hr | 13 | 13.0 | exc |
| Pihew Point | H2S | 8Aug26, 05:00 | 457262 | 1-hr | 15 | 14.7 | exc |
| Pihew Point | H2S | 8Aug26, 06:00 | 457262 | 1-hr | 11 | 11.0 | exc |
| Pihew Point | H2S | 11Aug26, 01:00 | 457379 | 1-hr | 19 | 18.4 | exc |
| Pihew Point | H2S | 11Aug26, 09:00 | 457399 | 1-hr | 14 | 13.8 | exc |
| Pihew Point | H2S | 11Aug26, 24:00 | 457440 | 24-hr | 3 | - | ret |
| Pihew Point | H2S | 12Aug26, 06:00 | 457444 | 1-hr | 15 | 15.1 | exc |
| Bertha Ganter | TRS | 17Aug26, 21:00 | | 30-min | 10 | 9.9 | exc |
| Ells River | TRS | 18Aug26, 06:30 | | 30-min | 5 | 5.4 | exc |
| Ells River | TRS | 18Aug26, 07:00 | | 30-min | 5 | 5.2 | exc |
| Bertha Ganter | TRS | 18Aug26, 07:30 | | 30-min | 7 | 7.0 | exc |
| Ft. McKay S | TRS | 18Aug26, 08:00 | | 30-min | 7 | 6.5 | exc |
| Bertha Ganter | TRS | 18Aug26, 08:00 | | 30-min | 6 | 5.9 | exc |
| Fort Chip | PM2.5 | 19Aug26, 18:00 | | 1-hr | 98 | 98.1 | exc |
| Fort Chip | PM2.5 | 19Aug26, 19:00 | | 1-hr | 128 | 128.0 | exc |
| Fort Chip | PM2.5 | 19Aug26, 20:00 | | 1-hr | 107 | 107.2 | exc |
| Fort Hills | PM2.5 | 19Aug26, 20:00 | | 1-hr | 97 | 97.5 | exc |
| Barge Landing | PM2.5 | 19Aug26, 21:00 | | 1-hr | 99 | 98.9 | exc |
| Barge Landing | PM2.5 | 19Aug26, 22:00 | | 1-hr | 98 | 97.8 | exc |
| Wapasu | PM2.5 | 19Aug26, 22:00 | | 1-hr | 81 | 80.5 | exc |
| Barge Landing | PM2.5 | 19Aug26, 23:00 | | 1-hr | 93 | 92.8 | exc |
| Fort Chip | PM2.5 | 19Aug26, 24:00 | 458493 | 24-hr | 32 | 32.4 | exc |
| Pihew Point | H2S | 20Aug26, 03:00 | 457800 | 1-hr | 15 | 14.5 | exc |
| Fort Chip | PM2.5 | 20Aug26, 24:00 | | 1-hr | 100 | 100.4 | exc |
| Fort Chip | PM2.5 | 21Aug26, 01:00 | | 1-hr | 104 | 103.9 | exc |
| Fort Chip | PM2.5 | 21Aug26, 02:00 | | 1-hr | 93 | 92.7 | exc |
| Fort Chip | PM2.5 | 21Aug26, 04:00 | | 1-hr | 83 | 82.6 | exc |
| Barge Landing | TRS | 21Aug26, 20:30 | | 30-min | 7 | 6.7 | exc |
| Ells River | TRS | 21Aug26, 22:30 | | 30-min | 12 | 12.0 | exc |
| Ells River | TRS | 21Aug26, 23:00 | | 30-min | 12 | 12.2 | exc |
| Ells River | TRS | 21Aug26, 23:30 | | 30-min | 9 | 8.6 | exc |
| Fort Chip | PM2.5 | 21Aug26, 24:00 | 458493 | 24-hr | 50 | 51.1 | exc |
| Ells River | TRS | 22Aug26, 06:30 | | 30-min | 6 | 5.8 | exc |
| Ells River | TRS | 22Aug26, 07:00 | | 30-min | 12 | 11.8 | exc |
| Ells River | TRS | 22Aug26, 07:30 | | 30-min | 8 | 7.9 | exc |
| Ells River | TRS | 22Aug26, 08:30 | | 30-min | 6 | 5.8 | exc |
| Ells River | TRS | 22Aug26, 09:00 | | 30-min | 5 | 5.4 | exc |
| Ft. McKay S | TRS | 23Aug26, 08:30 | | 30-min | 11 | 10.7 | exc |
| Ft. McKay S | TRS | 23Aug26, 10:00 | | 30-min | 10 | 10.2 | exc |
| Ft. McKay S | TRS | 23Aug26, 10:30 | | 30-min | 8 | 7.6 | exc |
| Ft. McKay S | TRS | 23Aug26, 11:30 | | 30-min | 6 | 5.9 | exc |
| Pihew Point | H2S | 23Aug26, 24:00 | 457960 | 1-hr | 11 | 10.7 | exc |
| Pihew Point | H2S | 24Aug26, 01:00 | 457960 | 1-hr | 10 | 9.9 | nae |
| Fort Hills | PM2.5 | 24Aug26, 21:00 | | 1-hr | 101 | 100.8 | exc |
| Pihew Point | H2S | 25Aug26, 05:00 | 458020 | 1-hr | 27 | 27.1 | exc |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Fort Chip | TRS | 25Aug26, 10:30 | | 30-min | 7.791 | - | ret |
| Buffalo Viewpoint | PM2.5 | 25Aug26, 24:00 | 458494 | 24-hr | 36 | 36.2 | exc |
| Wapasu | PM2.5 | 25Aug26, 24:00 | 458495 | 24-hr | 29 | 29.2 | exc |
| Fort Hills | PM2.5 | 25Aug26, 24:00 | 458496 | 24-hr | 40 | 39.6 | exc |
| Fort Hills | PM2.5 | 26Aug26, 04:00 | | 1-hr | 90 | 89.7 | exc |
| Fort Hills | PM2.5 | 26Aug26, 05:00 | | 1-hr | 84 | 84.4 | exc |
| Fort Hills | TRS | 26Aug26, 08:00 | | 30-min | 5 | 4.8 | nae |
| Fort Hills | TRS | 26Aug26, 08:30 | | 30-min | 5 | 4.9 | nae |
| Fort Hills | TRS | 26Aug26, 09:00 | | 30-min | 8 | 7.6 | exc |
| Fort Hills | TRS | 26Aug26, 09:30 | | 30-min | 6 | 5.7 | exc |
| Ells River | TRS | 26Aug26, 22:30 | | 30-min | 9 | 9.3 | exc |
| Ells River | TRS | 26Aug26, 23:00 | | 30-min | 10 | 9.6 | exc |
| Barge Landing | TRS | 26Aug26, 23:00 | | 30-min | 5 | 5.0 | nae |
| Ells River | TRS | 26Aug26, 23:30 | | 30-min | 11 | 11.3 | exc |
| Barge Landing | TRS | 26Aug26, 23:30 | | 30-min | 6 | 5.7 | exc |
| Fort Hills | PM2.5 | 26Aug26, 24:00 | 458496 | 24-hr | 30 | 30.0 | exc |
| Ells River | TRS | 27Aug26, 00:00 | | 30-min | 7 | 7.2 | exc |
| Ft. McKay S | TRS | 27Aug26, 00:30 | | 30-min | 5 | 5.5 | exc |
| Ft. McKay S | TRS | 27Aug26, 01:00 | | 30-min | 8 | 8.0 | exc |
| Ft. McKay S | TRS | 27Aug26, 02:00 | | 30-min | 6 | 6.4 | exc |
| Ft. McKay S | TRS | 27Aug26, 04:30 | | 30-min | 6 | 5.6 | exc |
| Ft. McKay S | TRS | 27Aug26, 06:30 | | 30-min | 6 | 6.5 | exc |
| Bertha Ganter | H2S | 27Aug26, 07:00 | 458127 | 1-hr | 12 | 12.1 | exc |
| Ft. McKay S | TRS | 27Aug26, 07:00 | | 30-min | 9 | 9.4 | exc |
| Ft. McKay S | TRS | 27Aug26, 07:30 | | 30-min | 5 | 5.4 | exc |
| Ells River | TRS | 27Aug26, 08:00 | | 30-min | 5 | 5.4 | exc |
| Ells River | TRS | 27Aug26, 08:30 | | 30-min | 6 | 6.1 | exc |
| Ft. McKay S | TRS | 27Aug26, 15:30 | | 30-min | 5 | 4.9 | nae |
| Lower Camp | H2S | 27Aug26, 22:00 | 458177 | 1-hr | 14 | 14.0 | exc |
| Lower Camp | H2S | 27Aug26, 24:00 | 458177 | 24-hr | 3 | 2.9 | nae |
| Janvier | PM2.5 | 27Aug26, 24:00 | 458497 | 24-hr | 43 | 43.2 | exc |
| Ft. McKay S | TRS | 28Aug26, 09:00 | | 30-min | 5 | 5.1 | exc |
| Patricia McInnes | PM2.5 | 28Aug26, 19:00 | | 1-hr | 97 | 97.2 | exc |
| Athabasca Valley | PM2.5 | 28Aug26, 19:00 | | 1-hr | 97 | 96.5 | exc |
| Athabasca Valley | PM2.5 | 28Aug26, 20:00 | | 1-hr | 89 | 88.9 | exc |
| Janvier | PM2.5 | 28Aug26, 20:00 | | 1-hr | 160 | 160.5 | exc |
| Janvier | PM2.5 | 28Aug26, 21:00 | | 1-hr | 178 | 178.4 | exc |
| Janvier | PM2.5 | 28Aug26, 22:00 | | 1-hr | 153 | 153.4 | exc |
| Janvier | PM2.5 | 28Aug26, 23:00 | | 1-hr | 104 | 104.4 | exc |
| Janvier | PM2.5 | 28Aug26, 24:00 | | 1-hr | 150 | 149.6 | exc |
| Janvier | PM2.5 | 28Aug26, 24:00 | 458497 | 24-hr | 63 | 62.6 | exc |
| Janvier | PM2.5 | 29Aug26, 01:00 | | 1-hr | 176 | 176.0 | exc |
| Janvier | PM2.5 | 29Aug26, 02:00 | | 1-hr | 155 | 154.8 | exc |
| Janvier | PM2.5 | 29Aug26, 03:00 | | 1-hr | 156 | 155.9 | exc |
| Janvier | PM2.5 | 29Aug26, 04:00 | | 1-hr | 156 | 155.6 | exc |
| Janvier | PM2.5 | 29Aug26, 05:00 | | 1-hr | 150 | 150.1 | exc |
| Janvier | PM2.5 | 29Aug26, 06:00 | | 1-hr | 124 | 123.9 | exc |
| Janvier | PM2.5 | 29Aug26, 07:00 | | 1-hr | 91 | 91.2 | exc |
| Janvier | PM2.5 | 29Aug26, 08:00 | | 1-hr | 84 | 84.5 | exc |
| Janvier | PM2.5 | 29Aug26, 24:00 | 458497 | 24-hr | 72 | 72.2 | exc |
| Pihew Point | H2S | 31Aug26, 04:00 | 458264 | 1-hr | 12 | 11.5 | exc |
| Pihew Point | H2S | 31Aug26, 05:00 | 458265 | 1-hr | 19 | 18.6 | exc |
| Pihew Point | H2S | 31Aug26, 06:00 | 458266 | 1-hr | 15 | 14.6 | exc |
| Pihew Point | H2S | 31Aug26, 24:00 | 458316 | 24-hr | 3 | 3.2 | exc |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Fort Hills | PM2.5 | 17Aug26, 24:00 | 458496 | 24-hr | 30.4 | 30.4 | late |
| Ells River | PM2.5 | 25Aug26, 24:00 | 459028 | 24-hr | 29.2 | 29.2 | late |

*status legend:

| | |
|---|---|
| late | exceedance, raw values were not found to be in exceedance in real time, and/or were not reported, but final values were found to be an exceedance after data processing. |
| exc | exceedance, raw values reported in real time were confirmed to be in exceedance after data processing. |
| nae | not an exceedance, raw values reported in real time were found not in exceedance after data processing. |
| ret | retracted, reported exceedance was found to be not an exceedance after investigation of measurement system status and/or validation of raw data in conjunction with all associated measurement |

**ELECTRONIC TRANSFER SYSTEM**
**AIRDATA**
**SUBMISSION REPORT**

September 28, 2026
10:45:04 AM
Request # 4977251

**Submitted by:** EN6138_PARAM_KAUR
**Submission Date:** Sep 28, 2026 10:44:58 AM

| File Type | File Name |
|---|---|
| Calibration Report | CAL-WBEA-202608.pdf |

**Total Number of Files: 1**

*** End of Report ***

**ELECTRONIC TRANSFER SYSTEM**
**AIRDATA**
**SUBMISSION REPORT**

September 29, 2026
9:44:37 AM
Request # 4977708

**Submitted by:** EN6138_DENNY
**Submission Date:** Sep 29, 2026 9:43:49 AM

| File Type | File Name |
|---|---|
| Ambient Data | AMB-WBEA-202608-V01.xml |

**Total Number of Files: 1**

*** End of Report ***



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**ELECTRONIC TRANSFER SYSTEM**
**AIRDATA**
**SUBMISSION REPORT**

September 29, 2026
10:37:23 AM
Request # 4977778

**Submitted by:** EN6138_PARAM_KAUR
**Submission Date:** Sep 29, 2026 10:37:14 AM

| File Type | File Name |
|---|---|
| Ambient Data | AMB-WBEA-202608-EBRT.xml |

**Total Number of Files: 1**

*** End of Report ***



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**ELECTRONIC TRANSFER SYSTEM**
**AIRDATA**
**SUBMISSION REPORT**

October 07, 2026
8:25:56 AM
Request # 4983032

**Submitted by:** EN6138_DENNY
**Submission Date:** Oct 07, 2026 8:25:24 AM

| File Type | File Name |
|---|---|
| Airshed Monitoring Report | WBEA-202608-R01.pdf |

**Total Number of Files: 1**

*** End of Report ***




End of Report